Deloitte.

Technology Industry Accounting Guide

March 2023

About Deloitte

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee ("DTTL"), its network of member firms, and their related entities. DTTL and each of its member firms are legally separate and independent entities. DTTL (also referred to as "Deloitte Global") does not provide services to clients. In the United States, Deloitte refers to one or more of the US member firms of DTTL, their related entities that operate using the "Deloitte" name in the United States and their respective affiliates. Certain services may not be available to attest clients under the rules and regulations of public accounting. Please see www.deloitte.com/us/about to learn more about our global network of member firms.

Other Deloitte Publications

Other Deloitte publications, such as our Roadmap Series, are available on the Deloitte Accounting Research Tool (DART), a comprehensive online library of accounting and financial disclosure literature. The Roadmap series includes titles on the following topics:

Business Acquisitions — SEC Reporting Considerations

Business Combinations

Carve-Out Transactions

Comparing IFRS Accounting Standards and U.S. GAAP

Consolidation — Identifying a Controlling Financial Interest

Contingencies, Loss Recoveries, and Guarantees

Contracts on an Entity's Own Equity

Convertible Debt (Before Adoption of ASU 2020-06)

Current Expected Credit Losses

Debt

Distinguishing Liabilities From Equity

Earnings per Share

Environmental Obligations and Asset Retirement Obligations

Equity Method Investees — SEC Reporting Considerations

Equity Method Investments and Joint Ventures

Fair Value Measurements and Disclosures (Including the Fair Value Option)

Foreign Currency Matters

Guarantees and Collateralizations — SEC Reporting Considerations

Hedge Accounting

Impairments and Disposals of Long-Lived Assets and Discontinued Operations

Income Taxes

Initial Public Offerings

Leases

Noncontrolling Interests

Non-GAAP Financial Measures and Metrics

Revenue Recognition

SEC Comment Letter Considerations, Including Industry Insights

Segment Reporting

Share-Based Payment Awards

Statement of Cash Flows

Transfers and Servicing of Financial Assets

Contents

Preface xiii

Contacts xiv

Chapter 1 — 2023 Technology Industry Outlook 1

Chapter 2 — Revenue Recognition 3

2.1 Overview 3

2.1.1 Applying the Revenue Standard 3

2.1.2 Applying the Guidance Consistently to Contracts With Similar Characteristics and in Similar Circumstances 5

2.1.3 Portfolio Approach 5

2.1.3.1 Deciding Whether a Portfolio Approach May Be Used 5

2.1.3.2 Applying the Portfolio Approach to Some, but Not Other, Similar Contracts 7

2.2 Scope 9

2.2.1 Scope of the Licensing Guidance 12

2.2.2 Guarantees 13

2.2.2.1 Performance Guarantees 14

2.2.2.2 Profit Margin Guarantees 15

2.2.3 Barter Credit Transactions 16

2.2.4 Determining Whether the Counterparty Is a Customer or Vendor in a Contract 17

2.2.5 Contracts That Include Both Revenue and Nonrevenue Elements 17

2.3 Identify the Contract (Step 1) 18

2.3.1 Each Party Has Approved the Contract and Is Committed to Perform 19

2.3.2 The Entity Can Identify Each Party's Rights 21

2.3.3 Identifying the Payment Terms 21

2.3.4 The Contract Has Commercial Substance 22

2.3.5 Collectibility Is Probable 22

2.3.5.1 Price Concessions 22

2.3.5.2 Evaluating Credit Risk 23

2.3.5.3 Collectibility Assessment — Other Considerations 23

2.3.5.4 Whether to Assess Collectibility at the Portfolio Level or the Individual Contract Level 24

2.3.6 Contract Term 25

2.3.6.1 Termination Clauses and Penalties 25

2.3.7 Reassessing the Criteria for Identifying a Contract 30

2.3.8 Consideration Received When the Criteria for Identifying a Contract Are Not Met 31

2.3.9 Whether a Receivable Can Be Recorded When a Contract Fails Step 1 Because Collectibility Is Not Probable 31

2.3.10 Combining Contracts 32

2.3.11 Contract Modifications 32

2.3.11.1 Contract Modification Accounted for as a Separate Contract 35

2.3.11.2 Contract Modification Not Accounted for as a Separate Contract 35

2.3.11.3 Blend-and-Extend Modifications Related to a SaaS Arrangement 37

2.3.11.4 Differentiating Changes in the Transaction Price From Contract Modifications 39

2.3.11.5 Accounting for Contract Assets as Part of a Contract Modification 40

2.4 Identify the Performance Obligations (Step 2) 44

2.4.1 Immaterial Promised Goods or Services 46

2.4.2 Shipping and Handling Activities 46

2.4.3 Criteria to Be Distinct 47

2.4.3.1 Capable of Being Distinct 48

2.4.3.2 Distinct Within the Context of the Contract 48

2.4.4 Scope of the Licensing Guidance 53

2.4.4.1 Software in a Hosting Arrangement 53

2.4.5 Identifying Performance Obligations in Licensing Arrangements 55

2.4.5.1 Identifying Performance Obligations in a Hybrid Software Arrangement 61

2.4.6 Identifying Performance Obligations in a Cloud Computing Arrangement That Includes Implementation Services 66

2.4.6.1 Identifying Whether Implementation Services Are a Promised Good or Service 66

2.4.6.2 Identifying Whether Implementation Services Are a Distinct Performance Obligation 68

2.4.7 Identifying Performance Obligations in Arrangements That Include Smart Devices, Updates, and Cloud-Based Services 69

2.4.8 Accounting for Virtual Goods 75

2.4.9 Series Guidance 76

2.4.10 Stand-Ready Obligations 77

2.4.10.1 Determining Whether a Contract Includes a Stand-Ready Obligation or an Obligation to Provide a Defined Amount of Goods or Services 78

2.4.10.2 Determining Whether a SaaS Arrangement Represents a Stand-Ready Obligation or an Obligation to Provide a Specified Amount of Services 79

2.4.11 Warranties 80

2.4.11.1 Determining Whether a Warranty Is a Performance Obligation (Service-Type Warranties) 81

2.4.11.2 Warranties Within the Scope of Other Guidance (Assurance-Type Warranties) 82

2.4.11.3 Implicit Warranty Beyond the Contractual Period 83

2.4.12 Customer Options for Additional Goods or Services 83

2.4.12.1 Likelihood That an Option for Additional Goods or Services Will Be Exercised 84

2.4.12.2 Determining Whether an Option for Additional Goods or Services Represents a Material Right 84

2.4.12.3 Customer's Exercise of a Material Right 91

2.4.12.4 Distinguishing an Option to Acquire Additional Rights From Provisions Giving Rise to Variable Consideration in the Form of a Sales- or Usage-Based Royalty 92

2.4.12.5 Nonrefundable Up-Front Fees 98
2.4.12.6 Accounting for Cloud Conversion or Switching Rights 103

2.5 Determine the Transaction Price (Step 3) 116

2.5.1 Effect of a Customer's Credit Risk on the Determination of the Transaction Price 116
2.5.2 Variable Consideration 116
2.5.2.1 Distinguishing Between Optional Purchases and Variable Consideration 117
2.5.2.2 Methods of Estimating Variable Consideration 119
2.5.2.3 Constraining Estimates of Variable Consideration 119
2.5.2.4 Volume-Based Rebates 120
2.5.2.5 Sales- or Usage-Based Royalty Exception 122
2.5.3 Significant Financing Components 124
2.5.4 Noncash Consideration 126
2.5.4.1 Noncash Consideration in the Form of Internet Advertisement Space in the Advertisement Technology Industry 126
2.5.5 Consideration Payable to a Customer 127
2.5.5.1 Scope of the Guidance on Consideration Payable to a Customer 129
2.5.5.2 Applying the Guidance on Consideration Payable to a Customer 134
2.5.5.3 Accounting for Up-Front Payments to Customers 140
2.5.5.4 Warranty Payments Versus Variable Consideration 143
2.5.5.5 Applying the Guidance on Consideration Received From a Vendor 145
2.5.5.6 Sales Taxes and Similar Taxes Collected From Customers 148

2.6 Allocate the Transaction Price to the Performance Obligations (Step 4) 149

2.6.1 Stand-Alone Selling Price of PCS Based on a Stated Renewal Percentage 150
2.6.2 Residual Approach to Estimating Stand-Alone Selling Prices 150
2.6.2.1 Appropriateness of Using the Residual Approach 151
2.6.2.2 Allocating the Transaction Price When a Value Relationship Exists 154
2.6.2.3 Material Right 157
2.6.3 Using a Range When Estimating a Stand-Alone Selling Price 157
2.6.3.1 Determining the Appropriate Range 158
2.6.3.2 Allocation Considerations When the Stand-Alone Selling Price Is Established as a Range 159
2.6.4 Methods for Establishing the Stand-Alone Selling Price for Term Licenses and PCS 160
2.6.5 Allocating Variable Consideration in Cloud-Based or Hosted Software Arrangements 167
2.6.5.1 Applying the "Invoice Practical Expedient" to Stand-Ready SaaS Arrangements With Usage-Based Variable Consideration 168
2.6.5.2 Applying the Variable Consideration Allocation Exception to Stand-Ready SaaS Arrangements With Usage-Based Variable Consideration 169
2.6.6 Sales- or Usage-Based Royalties 174
2.6.6.1 Whether to Apply the Sales- or Usage-Based Royalty Exception to Only Part of the Royalties 174
2.6.6.2 Allocating Fixed Consideration and Sales- or Usage-Based Royalties in a Licensing Arrangement With More Than One Performance Obligation 175
2.6.7 Allocation of Consideration to a Material Right 183
2.6.7.1 Renewal Options 183

2.6.8 Changes in the Transaction Price 187
2.6.8.1 Allocating Changes in the Transaction Price 187
2.6.8.2 Differentiating Changes in the Transaction Price From Contract Modifications 188
2.7 Determine When to Recognize Revenue (Step 5) 190
2.7.1 Transfer of Control in Software Licensing Arrangements 192
2.7.1.1 Electronic Delivery of Software 192
2.7.1.2 When Control Is Transferred in Reseller Arrangements 194
2.7.1.3 Functional IP 195
2.7.2 License Renewals and Modifications 196
2.7.2.1 Early Renewal of a Term-Based License 196
2.7.2.2 Unspecified Future Goods or Services in a Software Arrangement — Timing of Revenue Recognition 198
2.7.2.3 Renewals of PCS in a Software Arrangement 199
2.7.3 Interaction of Sales- or Usage-Based Royalty Exception With Measuring Progress Toward Satisfaction of a Performance Obligation 202
2.7.4 Measuring Progress — Stand-Ready Obligations 203
2.7.5 Use of a Multiple Attribution Approach (as Compared With a Single Method for Measuring Progress) 206
2.7.6 Recognizing Revenue Related to Commissions Earned by an Agent 206
2.7.7 Recognition of Revenue Associated With Material Rights 209
2.7.7.1 Customer’s Exercise of a Material Right 209
2.7.7.2 Recognition of Revenue Related to Options That Do Not Expire 212
2.7.7.3 Amortization Period of Material Rights 214
2.8 Principal-Versus-Agent Considerations 216
2.8.1 Identifying the Specified Goods or Services 216
2.8.2 Determining Whether the Entity Controls the Goods or Services Before They Are Transferred to the Customer 217
2.8.3 Controlling a Good Before Transferring It to a Customer 218
2.8.4 Controlling the Right to a Service 219
2.8.5 Integrating a Good or Service From a Third Party With a Good or Service Controlled by the Entity 221
2.8.6 Indicators That an Entity Is Acting as a Principal 222
2.8.6.1 Primary Responsibility 223
2.8.6.2 Inventory Risk 223
2.8.6.3 Discretion in Establishing Pricing 224
2.8.7 Codification Examples of Promised Goods or Services for Which an Entity Is a Principal (ASC 606-10-55-320 Through 55-329) 225
2.8.8 Determining Whether an Entity Is Acting as an Agent 228
2.8.8.1 Codification Examples of Promised Goods or Services for Which an Entity Is an Agent (ASC 606-10-55-317 Through 55-319 and ASC 606-10-55-330 Through 55-334) 229
2.8.9 Contracts in Which the Entity Is a Principal and an Agent 231
2.8.9.1 Illustrative Examples of Contracts in Which an Entity Is Both a Principal and an Agent 231
2.8.10 Estimating Gross Revenue as a Principal 233
2.8.11 Digital Advertising Industry 233
2.8.12 Payment Processors and Facilitators 235

2.9 Presentation **236**
2.9.1 Contract Liabilities 236
2.9.2 Refund Liabilities 237
2.9.3 Contract Assets 238
2.9.4 Receivables 239
2.9.5 Classification as Current or Noncurrent 244
2.9.5.1 Contract Assets and Contract Liabilities 244
2.9.5.2 Refund Liabilities 244
2.9.5.3 Capitalized Contract Costs 245
2.9.6 Balance Sheet Offsetting 245
2.9.6.1 Offsetting Contract Assets and Contract Liabilities Against Other Assets and Liabilities 245
2.9.6.2 Offsetting Refund Liabilities Against Accounts Receivable 245
2.9.7 Interaction Between ASC 606 and SEC Regulation S-X, Rule 5-03(b) 246
2.9.8 Income Statement Classification of Amortized Contract Costs 246
2.10 Disclosure Requirements **247**
2.10.1 Impact of Termination Provisions on Disclosure 249
2.10.1.1 Effect of Termination Provisions on Disclosures Related to Remaining Performance Obligations 249
2.10.1.2 Supplemental Disclosures Related to Termination Provisions 250
2.10.1.3 Effect of Termination Provisions on Contract Balance Disclosures 250
2.11 SEC Comment Letter Trends **250**

Chapter 3 — Contract Costs 252

3.1 Costs of Obtaining a Contract **252**
3.1.1 Considerations for Identifying Incremental Costs of Obtaining a Contract With a Customer 252
3.1.2 Sales Commissions and Compensation Structures 253
3.1.2.1 Tiered Commissions 258
3.1.2.2 Fringe Benefits 262
3.1.3 Practical Expedient in ASC 340-40-25-4 for Expensing Contract Acquisition Costs 262
3.1.4 Using the Portfolio Approach When Accounting for Contract Costs 263
3.1.5 Determining When to Recognize and How to Measure Incremental Costs 264
3.2 Costs of Fulfilling a Contract **264**
3.2.1 Variable Consideration and Uncertain Transaction Price 267
3.2.2 Initial Losses and Expected Future Profits 268
3.2.3 Contracts Satisfied Over Time 269
3.2.3.1 Recognition of Fulfillment Costs Incurred Before the Transfer of Goods or Services When Revenue Is Recognized Over Time 269
3.2.3.2 Costs Incurred to Fulfill a Combined Performance Obligation Satisfied Over Time 270
3.2.3.3 Labor Costs Incurred to Fulfill a Contract for Goods or Services When Revenue Is Recognized Over Time 272

3.3 Amortization and Impairment of Contract Costs 273
3.3.1 Amortization 273
3.3.1.1 Allocation Among Performance Obligations 274
3.3.1.2 Determining the Amortization Period of an Asset Recognized for the Incremental Costs of Obtaining a Contract With a Customer 275
3.3.1.3 Accounting for Unamortized Contract Costs Upon Modification 281
3.3.2 Impairment 282
3.4 Onerous Performance Obligations 283
3.4.1 Separately Priced Extended Warranty and Product Maintenance Contracts 283
3.4.2 Construction- and Production-Type Contracts 283
3.4.3 Certain Software Arrangements 284
3.5 SEC Comment Letter Trends 284

Chapter 4 — Software and Software-Related Costs 285
4.1 Background 285
4.2 Scope Considerations 286
4.2.1 On-Premise Licensed Software 286
4.2.1.1 Software Product 287
4.2.1.2 Software That Is Part of a Product or Process 287
4.2.1.3 Software Sold as Part of a Hosting Arrangement 288
4.2.2 Internal-Use Software 289
4.2.2.1 Software Is Purchased for Internal Use as Part of a Hosting Arrangement 291
4.2.2.2 No Substantive Plan to Market the Software Externally 292
4.2.2.3 Software Is Marketed or Sold Only as a Cloud-Based (or Hosting) Arrangement 293
4.2.3 Transition Between Internal-Use Software and On-Premise Licensed Software 294
4.2.3.1 Transition to Licensing Software Externally 294
4.2.3.2 Transition to Providing Software Through a Cloud-Based Arrangement 295
4.2.4 Hybrid Cloud-Based Software Solutions 295
4.2.5 Cloud-Based (or Hosting) Service Arrangements 296
4.2.6 Multiple-Element Arrangements 296
4.2.7 Other Guidance to Consider 297
4.2.7.1 Web Site Development Costs 297
4.2.7.2 Software Used for Research and Development Activities 297
4.2.7.3 Significant Production, Modification, or Customization of Software 298
4.2.7.4 Business Process Reengineering Activities 298
4.2.8 Flowchart for Determining the Appropriate Guidance 298
4.2.9 Importance of Ongoing Reassessment of Software Costs 300
4.3 On the Horizon 300
4.4 SEC Comment Letter Trends 300

Chapter 5 — Other Accounting and Financial Reporting Topics 301

5.1 Acquisitions and Divestitures 301

5.1.1 Definition of a Business 301

5.1.2 Asset Acquisitions 301

5.1.3 Business Combinations 304

5.1.3.1 Acquired Revenue Contracts 304

5.1.3.2 Acquired Technology and IPR&D 304

5.1.3.3 Reacquired Rights 304

5.1.3.4 Compensation Arrangements 305

5.1.3.5 SEC Reporting Requirements 305

5.1.4 Divestitures 305

5.1.4.1 Disposals of Long-Lived Assets and Discontinued Operations 306

5.1.4.2 Carve-Out Financial Statements 306

5.1.5 Common-Control Transactions 306

5.1.6 Equity Method Investments and Joint Ventures 307

5.1.6.1 Equity Method Investments 307

5.1.6.2 Joint Ventures 308

5.1.6.3 SEC Reporting Requirements 309

5.1.7 SEC Comment Letter Trends 309

5.2 Consolidation 310

5.2.1 Consolidation Decision Trees 310

5.2.2 Voting Interest Entity Model Versus VIE Model 312

5.2.3 VIE Consolidation Issues 313

5.2.3.1 Scope Exceptions 313

5.2.3.2 Identifying Variable Interests 314

5.2.3.3 Determining Whether a Legal Entity Is a VIE 314

5.2.3.4 Determining the Primary Beneficiary 315

5.2.4 SEC Comment Letter Trends 315

5.3 Inventory 316

5.3.1 Hardware and Components 316

5.3.1.1 Hardware and Services — Combined Performance Obligation 316

5.3.1.2 Leased Hardware 317

5.3.2 Software 317

5.3.3 SEC Comment Letter Trends 318

5.4 Stock-Based Compensation 318

5.4.1 Valuation Considerations 318

5.4.1.1 Cheap Stock 319

5.4.1.2 Internal Revenue Code Section 409A 319

5.4.2 Common-Stock Repurchase Transactions 319

5.4.2.1 Nonpublic Entity Purchases Shares From Grantees 319

5.4.2.2 Investor Purchases of Shares From Grantees 320

5.4.2.3 Tax Considerations 321

5.4.3 SEC Comment Letter Trends 321

5.5 Leases 321
5.5.1 Scope 322
5.5.1.1 Cloud Computing Arrangements 324
5.5.1.2 Intangible Assets 325
5.5.2 Components of a Contract 325
5.5.3 Lessee Considerations 326
5.5.3.1 Lease Classification 326
5.5.3.2 Practical Expedient 326
5.5.3.3 Cloud Computing Arrangements 326
5.5.4 Lessor Considerations 329
5.5.4.1 Variable Payments 330
5.5.4.2 Practical Expedient 330
5.5.5 Discount Rate 334
5.5.6 Additional Considerations Related to ASC 842 334
5.5.7 SEC Comment Letter Trends 335
5.6 Financial Instruments 335
5.6.1 Liability Classification 336
5.6.2 Redeemable Equity Securities 336
5.6.3 Conversion Features of Preferred Stock and Debt 337
5.6.4 Warrants and Debt 338
5.6.5 Accelerated Share Repurchase Programs 339
5.6.6 Derivatives 339
5.6.6.1 Embedded Derivatives 339
5.6.6.2 Contracts on an Entity's Own Equity 339
5.6.7 Fair Value 340
5.6.8 Sales of Future Revenue 340
5.6.9 Current Expected Credit Losses 342
5.6.10 Reference Rate Reform 342
5.6.11 Modification or Exchange of a Freestanding Equity-Classified Written Call Option 342
5.6.12 SEC Comment Letter Trends 343
5.6.12.1 Debt and Equity 343
5.6.12.2 Earnings per Share 343
5.6.12.3 Fair Value 343
5.6.12.4 Embedded Derivatives 344
5.7 Income Taxes 344
5.7.1 Scope Considerations 344
5.7.2 Intra-Entity Transfers of IP 345
5.7.3 Transfer Pricing 345
5.7.4 Research and Development 345
5.7.5 Cost-Sharing Arrangements 346
5.7.6 Valuation Allowances 346
5.7.7 IRC Section 382 Limitations on NOL Carryforwards 346
5.7.8 SEC Comment Letter Trends 347

5.8 Contingencies and Loss Recoveries 347
5.8.1 Loss Contingencies 348
5.8.1.1 Elements of a Litigation Settlement 348
5.8.1.2 Incurrence of a Future Cost of Doing Business 348
5.8.2 Gain Contingencies 349
5.8.3 Loss Recoveries 349
5.8.4 SEC Comment Letter Trends 350
5.9 Digital Assets 351
5.9.1 AICPA Practice Aid 351
5.9.1.1 Accounting for Digital Assets Classified as Indefinite-Lived Intangible Assets 351
5.9.1.2 Stablecoins 352
5.9.1.3 Mining 352
5.9.2 NFTs 353
5.9.2.1 Issuer's or Developer's Accounting for NFTs 353
5.9.2.2 Investor's or Purchaser's Accounting for NFTs 355
5.9.3 SEC Staff Views on the Accounting for Certain Crypto Lending Arrangements 356
5.9.4 Staff Accounting Bulletin No. 121 356
5.9.5 On the Horizon 356
5.10 Non-GAAP Financial Measures and Metrics 358
5.10.1 Non-GAAP Financial Measures 358
5.10.2 Metrics and KPIs 359
5.10.3 SEC Comment Letter Trends 360
5.11 Initial Public Offerings 361
5.11.1 Types of Issuers 362
5.11.1.1 Smaller Reporting Companies 362
5.11.1.2 Emerging Growth Companies 363
5.11.2 Types of IPOs 364
5.11.2.1 Special-Purpose Acquisition Companies 365
5.11.2.2 Offerings Made in Accordance With Regulation A 365
5.11.3 The IPO Registration Statement 365
5.11.4 Identifying the Required Financial Statements for the Registration Statement 366
5.11.5 Accounting Matters 367
5.11.6 Audit Considerations 368

Appendix A — Titles of Standards and Other Literature 370

Appendix B — Abbreviations 375

Preface

We are pleased to present the inaugural edition of Deloitte's *Technology Industry Accounting Guide* (the "Guide").

The technology industry ecosystem encompasses a wide array of entities, from enterprise software and software-as-a-service (SaaS) providers to hardware and semiconductor manufacturers. The technology industry has also experienced convergence with other types of businesses, creating subsectors such as fintech, health tech, energy tech, education tech, and auto tech, to name a few. Many entities have fueled the significant growth of the technology industry by embracing emerging technologies such as artificial intelligence (AI) and machine learning, everything as a service (XaaS) powered by the cloud, robotics, the Internet of Things (IoT), blockchain, and edge computing. Continuous innovation by technology entities produces novel business models while introducing potentially complex accounting and financial reporting matters.

Finance and accounting professionals in the technology industry face complex issues and must exercise significant judgment in applying existing rules to matters such as revenue recognition, software-related costs, acquisitions and divestitures, consolidation, stock-based compensation, leases, financial instruments, income taxes, digital assets, initial public offerings (IPOs), and disclosures of non-GAAP measures and metrics. To help technology entities work through some of the more difficult accounting and financial reporting issues related to these and other relevant topics, this Guide includes interpretive guidance, illustrative examples, and discussion of recent standard-setting developments (through February 28, 2023).

Appendix A lists the titles of standards and other literature we cited, and Appendix B defines the abbreviations we used.

We hope this Guide is helpful in navigating the various accounting and reporting challenges that technology entities face. We encourage clients to contact their Deloitte team for additional information and assistance.

Contacts

Sandie Kim
National Office Senior Consultation Partner, Accounting and Reporting Services
Technology Deputy Industry Professional Practice Director
Deloitte & Touche LLP
+1 415 783 4848
sandkim@deloitte.com

Michael Wraith
Audit & Assurance Partner
Technology Industry Professional Practice Director
Deputy Managing Partner — Monitoring
Deloitte & Touche LLP
+1 619 237 6552
mwraith@deloitte.com

Dan Le
Audit & Assurance Partner
Technology Deputy Industry Professional Practice Director
Deloitte & Touche LLP
+1 206 716 6015
dle@deloitte.com

Christie Simons
Audit & Assurance Partner
U.S. Audit & Assurance TMT Industry Leader
Global Semiconductor Industry Leader
Deloitte & Touche LLP
+1 415 783 4777
csimons@deloitte.com

Jean-Denis Ncho Oguie
Audit & Assurance Partner
U.S. Audit & Assurance Technology Industry Leader
Deloitte & Touche LLP
+1 415 783 6600
jnchooguie@deloitte.com

Chapter 1 — 2023 Technology Industry Outlook[1]

The technology industry has not just weathered the pandemic-driven disruptions of the past few years but has flourished. The pandemic thrust many organizations into the future, accelerating digital transformation and changing work models dramatically. As supply networks struggled, Deloitte urged technology leaders to evaluate where and how manufacturing happens; to focus on improving transparency, flexibility, and resiliency of their supply chains; and to prepare proactively for future uncertainty and other systemic risks.[2] We recommended that technology entities ramp up innovation and transformation by doubling down on cloud and XaaS.[3] We advised leaders to bolster their talent bench in critical capabilities such as AI, robotic process automation, and cybersecurity.[4]

While many leaders appear to have heeded the advice, in 2023 the technology industry will most likely continue to grapple with issues related to supply chains, the workforce, and innovation — now exacerbated by considerable macroeconomic and global uncertainties. A recent Deloitte survey revealed technology decision makers' top strategic concerns for the next two to three years: macroeconomic uncertainty topped the rankings, followed by workforce issues and then the competitive landscape.[5] Geopolitical and regulatory uncertainties also worry the respondents, though not as intensely.

While technology stocks outperformed during the pandemic pressures of 2020–2021, the sector led considerable stock market declines in 2022.[6] A major challenge now for technology entities is how to weather a potential economic slowdown by trimming costs, increasing efficiency, and growing revenues. At the same time, it is likely that many of them are looking for ways to remain innovative and build a strong, competitive position for the future.

1. Adapted from the Executive Summary of Deloitte's *2023 Technology Industry Outlook*.
2. See Deloitte's *2022 Technology Industry Outlook* and *2021 Outlook for the US Technology Industry*.
3. See footnote 2.
4. See Deloitte's May 2020 *COVID-19 Outlook for the US Technology Industry*.
5. In late 2022, Deloitte surveyed over 100 technology decision makers; 20 percent of respondents were in the C-suite, 30 percent were vice presidents/senior vice presidents, 30 percent were directors/senior directors, 11 percent were managers/senior managers, and 10 percent were heads of business units/departments. Respectively, 83 percent, 72 percent, and 67 percent of surveyed technology leaders ranked macroeconomic uncertainty, workforce issues, and the competitive landscape within the top three strategic concerns for their companies over the next two to three years.
6. S&P 500 technology sector stocks lost nearly 32 percent of their value from January 1 through September 30, 2022. See Jan Varsava, "Visualizing S&P 500 Performance in 2022, by Sector," *Visual Capitalist*, November 1, 2022; and Gunjan Banerji and Hannah Miao, "Rate Squeeze Punishes Once-Triumphant Tech Stocks," *Wall Street Journal*, October 30, 2022.

Some of the specific themes we see playing a critical role in 2023 and beyond include:

- *Leading through macroeconomic uncertainty* — Beleaguered by softening consumer spending, lower product demand, and falling market capitalizations, technology entities' C-suites are feeling the urgency to increase margins and grow revenues. Beyond workforce adjustments, approaches may include making business processes more efficient, relying more heavily on intelligent automation, reducing technology debt by implementing best practices for software development, modernizing legacy architectures by migrating to the cloud and XaaS, and considering strategic mergers and acquisitions (M&As).
- *Navigating global uncertainties* — As technology entities confront heightened global challenges — including geopolitical tensions, supply-chain volatility, raw material shortages, semiconductor supply concerns, and new regulations — they should work to mitigate risks and build more resilient systems. Leaders should think strategically about their choices of partners, where they are located, and where and how production takes place.
- *Transforming other industries through technology* — On a hunt for new revenue opportunities, the technology sector is extending its reach into other industries, using digital advancements to support innovation and transformation. A primary example of this convergence is technology and health care. Technology entities are also seeking to improve efficiency and spur innovation in other areas that are ripe for transformation, including real estate, manufacturing, and retail.
- *Adapting to new regulations* — Climate change and social impacts are having an increasing effect on the operations of technology entities. At the same time, governments and shareholders around the world are pushing entities to increase transparency related to environmental footprints and tax payments and to commit to reducing carbon emissions. New and proposed regulations are expected to require updates to business management software tools, enabling entities to achieve real-time visibility and to grant authorities access to data they will need for increasingly complex compliance processes.

Economic headwinds seem to be gathering for business in general and for the technology industry specifically. But there are many regulatory incentives that may spur innovation and growth in 2023 and beyond. To survive and thrive, technology entities should rededicate their efforts to improving supply operations, modernizing infrastructure, and leveraging growth opportunities.

For a detailed discussion about the opportunities and challenges facing technology entities, see the full version of Deloitte's *2023 Technology Industry Outlook*.

Chapter 2 — Revenue Recognition

2.1 Overview

In May 2014, the FASB and the International Accounting Standards Board (IASB®) issued their final standard on revenue from contracts with customers (the "revenue standard" or the "standard"). Issued by the FASB as ASU 2014-09 (codified primarily in ASC 606) and by the IASB as IFRS 15 and subsequently amended, the standard outlines a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers. Further, the standard supersedes most legacy revenue recognition guidance, including industry-specific guidance.

ASU 2014-09 states that the core principle of the revenue recognition guidance is that an "entity shall recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services." This main principle outlines the answers to the following key questions that always arise when a revenue transaction is evaluated:

- *When (i.e., recognition)* — When is it appropriate to recognize revenue?
- *How much (i.e., measurement)* — What specific amount of revenue should an entity recognize?

The core principle's answers to these questions are discussed below.

Core principle: Recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services.

The entity satisfies a performance obligation by transferring a good or service to the customer.

Amount to which the entity expects to be entitled (i.e., transaction price) allocated to the distinct goods or services.

2.1.1 Applying the Revenue Standard

ASU 2014-09 indicates that an entity should perform the following five steps in recognizing revenue:

- "Identify the contract(s) with a customer" (step 1).
- "Identify the performance obligations in the contract" (step 2).
- "Determine the transaction price" (step 3).
- "Allocate the transaction price to the performance obligations in the contract" (step 4).
- "Recognize revenue when (or as) the entity satisfies a performance obligation" (step 5).

The following graphic summarizes the five-step model for recognizing revenue under ASC 606:

Step	Description

1. Identify the contract with a customer	• A contract is an agreement between two or more parties that creates enforceable rights and obligations.
	• A contract can be written, oral, or implied by an entity's customary business practices.
	• For a contract to exist under ASC 606, the following five criteria must be met:
	  ○ The parties to the contract have approved the contract.
	  ○ The entity can identify each party's rights.
	  ○ The entity can identify the payment terms.
	  ○ The contract has commercial substance.
	  ○ It is probable that the entity will collect the amount to which it expects to be entitled.

2. Identify the performance obligations	• A performance obligation is the promise to transfer to the customer a good or service (or bundle of goods or services) that is distinct. • Distinct goods and services should be accounted for as separate units of account. • Entities need to determine whether a good or service (or bundle of goods or services) is "capable of being distinct" and "distinct in the context of the contract." • A series of substantially the same goods or services for which control transfers over time and that have the same pattern of transfer is accounted for as a single performance obligation.

3. Determine the transaction price	• The transaction price is the amount the entity expects to be entitled to in exchange for transferring promised goods or services to the customer.
	• The transaction price may include fixed amounts, variable amounts, or both.
	• To determine the transaction price, entities should consider the effects of:
	  ○ Variable consideration.
	  ○ The constraint on estimates of variable consideration.
	  ○ Significant financing components.
	  ○ Noncash consideration.
	  ○ Consideration payable to the customer.

4. Allocate the transaction price	• The transaction price (from step 3) is allocated to each performance obligation identified (from step 2).
	• On the basis of its specific circumstances, an entity would use one of the following approaches to allocate the transaction price to the performance obligations:
	  ○ Allocate according to each performance obligation's stand-alone selling price.
	  ○ Allocate a discount or variable amount to a specific performance obligation (or bundle of specific performance obligations) if certain criteria are met.

5. Recognize revenue when (or as) performance obligations are satisfied	Requires consideration of: • Revenue recognition when (or as) control of the good or service is passed to the customer. • The criteria for satisfying performance obligations and recognizing revenue over time. • Measurement of progress toward satisfying performance obligations to determine a pattern of revenue recognition over time. • Indicators of when performance obligations are satisfied and when to recognize revenue at a point in time.

In addition, ASU 2014-09 requires significant disclosures about revenue recognition, including both quantitative and qualitative information about (1) the amount, timing, and uncertainty of revenue (and related cash flows) from contracts with customers; (2) the judgment, and changes in judgment, exercised in the application of the revenue standard; and (3) the assets recognized from costs incurred to obtain or fulfill a contract with a customer.

2.1.2 Applying the Guidance Consistently to Contracts With Similar Characteristics and in Similar Circumstances

When the FASB was developing the detailed recognition and measurement guidance, it found many instances in which estimates and judgments would be required. In each of those instances, the Board believed that entities should consider all relevant facts and circumstances in applying those estimates and judgments. As a result, in the "General" section of ASC 606-10-10, the Board outlined requirements that should be applicable throughout the standard. One of those requirements entails applying the guidance "consistently to contracts with similar characteristics and in similar circumstances."

For example, the guidance on allocating the transaction price to performance obligations in accordance with step 4 provides that if the stand-alone selling price of a good or service is not directly observable, an entity is required to estimate the stand-alone selling price by choosing an appropriate method (e.g., the adjusted market assessment approach, the expected cost plus a margin approach, or, in limited circumstances, the residual approach). Once an entity decides which method to use, it is required to apply the same method consistently to similar contracts in accordance with the general guidance in ASC 606-10-10-3 on consistency in application. Rather than repeat this general requirement throughout the detailed guidance on recognition and measurement, the Board decided to state it once at the beginning of the standard to make it applicable to the standard's guidance overall.

2.1.3 Portfolio Approach

The revenue standard should generally be applied on an individual contract basis. However, as a practical expedient, a portfolio approach is permitted if it is reasonably expected that the approach's impact on the financial statements will not be materially different from the impact of applying the revenue standard on an individual contract basis. Further, as noted in paragraph BC69 of ASU 2014-09, the boards "indicated that they did not intend for an entity to quantitatively evaluate each outcome and, instead, the entity should be able to take a reasonable approach to determine the portfolios that would be appropriate for its types of contracts."

2.1.3.1 Deciding Whether a Portfolio Approach May Be Used

Some entities manage a very large number of customer contracts and offer an array of product combination options (e.g., some entities in the technology industry may offer a wide selection of software solutions and service offerings). For these entities, it would take significant effort to apply some of the requirements of ASC 606, such as the requirement to allocate the stand-alone selling price to the identified performance obligations, on an individual contract basis, and the capability of information technology (IT) systems to capture the relevant information may be limited.

An entity in this situation may want to use a portfolio approach as a practical expedient in accordance with ASC 606-10-10-4. However, a portfolio approach would be appropriate only if (1) it is applied to a group of contracts (or performance obligations) with "similar characteristics" and (2) the entity "reasonably expects" that the effects on the financial statements of applying ASC 606 to the portfolio "would not differ materially" from the effects of applying guidance to the individual contracts (or performance obligations) in that portfolio.

ASC 606 does not provide explicit guidance on how to (1) evaluate "similar characteristics" and (2) establish a reasonable expectation that the effects of using a portfolio approach would not differ materially from those of applying the guidance at a contract or performance obligation level. Accordingly, an entity will need to exercise significant judgment in determining that the contracts or performance obligations it has segregated into portfolios have similar characteristics at a sufficiently granular level to ensure that the outcome of using a particular portfolio approach can reasonably be expected not to differ materially from the results of applying the guidance to each contract or performance obligation in the portfolio individually.

In segregating contracts (or performance obligations) with similar characteristics into portfolios, an entity should apply objective criteria associated with the particular contracts or performance obligations and their accounting consequences. When determining whether particular contracts have similar characteristics, the entity may find it helpful to focus particularly on those characteristics that have the most significant accounting consequences under ASC 606 in terms of their effect on the timing of revenue recognition or the amount of revenue recognized. Accordingly, the assessment of which characteristics are most important for determining similarity will depend on the entity's specific facts and circumstances. However, there may be practical constraints on the entity's ability to use existing systems to analyze a portfolio of contracts, and these constraints could affect its determination of how the portfolio should be segregated.

The table below lists objective factors that entities may consider when assessing whether particular contracts or performance obligations have similar characteristics in accordance with ASC 606-10-10-4. Since any of the requirements in ASC 606 could have significant consequences for a particular portfolio of contracts, the list provided is not exhaustive.

Objective Factors	Examples
Contract deliverables	Mix of products and services; options to acquire additional goods and services; warranties; promotional programs
Contract duration	Short-term, long-term, committed, or expected term of contract
Terms and conditions of the contract	Rights of return, shipping terms, bill and hold, consignment, cancellation privileges, and other similar clauses
Amount, form, and timing of consideration	Fixed, time and materials, variable, up-front fees, noncash, significant financing component
Characteristics of the customers	Size, type, creditworthiness, geographic location
Characteristics of the entity	Volume of contracts that include the various characteristics; historical information available
Timing of transfer of goods or services	Over time; at a point in time

Customer contracts could involve various layers of complexity, such as (1) different contract durations; (2) different product and service offerings (including bundled offerings); (3) different pricing schemes (e.g., fixed or variable pricing based on usage); (4) different promotional programs, options, and incentives; and (5) contract modifications. Accounting for such contracts could be further complicated by the high pace of change in product offerings, which is common for technology entities.

In general, the more specific the factors an entity uses to segregate its contracts or performance obligations into portfolios (i.e., the "greater" the extent of disaggregation), the easier it should be for the entity to conclude that the results of applying the guidance to a particular portfolio are not expected to differ materially from the results of applying the guidance to each individual contract (or performance obligation) in the portfolio. However, further disaggregation into separate sub-portfolios is likely to improve the overall accuracy of estimates only if those sub-portfolios have some different characteristics. For instance, segregating on the basis of geographic location may not be beneficial if similar combinations of products and services that have similar terms and conditions are sold to a similar group of customers in different geographic areas. Likewise, segregating on the basis of whether contract terms allow a right of return may not be necessary if the returns are not expected to be significant.

While there is no requirement in ASC 606 to "quantitatively evaluate"[1] whether using a portfolio approach would produce an outcome materially different from that of applying the guidance at the contract or performance obligation level, an entity should be able to demonstrate why it reasonably expects the two outcomes not to differ materially. The entity may do so by various means depending on its specific facts and circumstances (subject to the constraints of a cost-benefit analysis). Such means include, but are not limited to, the following:

- Data analytics based on reliable assumptions and underlying data (internally or externally generated) related to the portfolio.
- A sensitivity analysis that evaluates the characteristics of the contracts or performance obligations in the portfolio and the assumptions the entity used to determine a range of potential differences in applying the different approaches.
- A limited quantitative analysis, supplemented by a more extensive qualitative assessment that may be performed when the portfolios are disaggregated.

Typically, some level of objective and verifiable information would be necessary to demonstrate that using a portfolio approach would not result in a materially different outcome. An entity may also wish to (1) consider whether the costs of performing this type of analysis potentially may outweigh the benefits of accounting on a portfolio basis and (2) assess whether it is preferable to invest in systems solutions that would allow accounting on an individual contract basis.

2.1.3.2 Applying the Portfolio Approach to Some, but Not Other, Similar Contracts

The practical expedient in ASC 606-10-10-4 is available only if it is reasonably expected that the financial statement effects of applying ASC 606 to a portfolio of contracts would not differ materially from the effects of applying ASC 606 to the individual contracts within that portfolio. Accordingly, it is possible for entities to prepare their consolidated financial statements by using a mixture of approaches because the resulting accounting effects are not reasonably expected to differ materially.

As discussed in Section 2.1.2, entities are required to apply the revenue standard consistently to similar contracts. In light of this, an entity that uses the portfolio approach to account for some of its contracts may wonder whether it is required to use the same approach to account for all of its contracts. The example below illustrates a situation in which it is acceptable for an entity to apply the portfolio approach to some contracts and not apply it to others.

[1] Paragraph BC69 of ASU 2014-09 states that the FASB and the IASB "acknowledged that an entity would need to apply judgment in selecting the size and composition of the portfolio in such a way that the entity reasonably expects that application of the revenue recognition model to the portfolio would not differ materially from the application of the revenue recognition model to the individual contracts or performance obligations in that portfolio. In their discussions, the Boards indicated that they did not intend for an entity to quantitatively evaluate each outcome and, instead, the entity should be able to take a reasonable approach to determine the portfolios that would be appropriate for its types of contracts."

Example 2-1

Assume the following facts:

- Entity A consolidates Subsidiary B and Subsidiary C, both of which have a large number of contracts with customers with similar characteristics.
- Subsidiary B has elected to use a portfolio approach under ASC 606-10-10-4 when accounting for revenue from those contracts and does not have computer systems that would enable it to recognize revenue on a contract-by-contract basis.
- Subsidiary C does not elect to use a portfolio approach specified in ASC 606-10-10-4 when accounting for revenue from those contracts; instead, it has developed specialized computer systems that enable it to recognize revenue on a contract-by-contract basis.

In its consolidated financial statements, A may apply a portfolio approach to contracts with B's customers without applying that approach to contracts with C's customers if it reasonably expects that the use of that approach would not differ materially from applying ASC 606 on a contract-by-contract basis. In these circumstances, B and C are materially applying the same accounting policy to A's revenue contracts that have similar characteristics.

Connecting the Dots

A question was raised regarding the use of the portfolio approach when an entity applies the guidance on estimating and constraining variable consideration. Specifically, the transition resource group (TRG) for revenue recognition discussed at its July 13, 2015, meeting whether an entity is using the portfolio practical expedient when it evaluates evidence from other similar contracts in applying the expected value method of estimating variable consideration. Q&A 39 of the FASB's *Revenue Recognition Implementation Q&As* (the "Implementation Q&As") specifies that an entity's use of a portfolio of data to establish an estimate is not the same process as using the portfolio expedient in ASC 606-10-10-4.

The next sections discuss some key accounting considerations under the revenue standard for technology entities. For more detailed information about the revenue standard, see Deloitte's Roadmap *Revenue Recognition*. For more information about SEC comment letter themes related to revenue recognition and the technology industry, see Sections 2.18 and 6.5.1.3 of Deloitte's Roadmap *SEC Comment Letter Considerations, Including Industry Insights*.

2.2 Scope

ASC 606-10

Entities

15-1 The guidance in this Subtopic applies to all entities.

Transactions

15-2 An entity shall apply the guidance in this Topic to all contracts with customers, except the following:

a. Lease contracts within the scope of Topic 840, Leases.
b. Contracts within the scope of Topic 944, Financial Services — Insurance.
c. Financial instruments and other contractual rights or obligations within the scope of the following Topics:
    1. Topic 310, Receivables
    2. Topic 320, Investments — Debt Securities
    2a. Topic 321, Investments — Equity Securities
    3. Topic 323, Investments — Equity Method and Joint Ventures
    4. Topic 325, Investments — Other
    5. Topic 405, Liabilities
    6. Topic 470, Debt
    7. Topic 815, Derivatives and Hedging
    8. Topic 825, Financial Instruments
    9. Topic 860, Transfers and Servicing.
d. Guarantees (other than product or service warranties) within the scope of Topic 460, Guarantees.
e. Nonmonetary exchanges between entities in the same line of business to facilitate sales to customers or potential customers. For example, this Topic would not apply to a contract between two oil companies that agree to an exchange of oil to fulfill demand from their customers in different specified locations on a timely basis. Topic 845 on nonmonetary transactions may apply to nonmonetary exchanges that are not within the scope of this Topic.

ASC 606-10 (continued)

Pending Content (Transition Guidance: ASC 842-10-65-1)

15-2 An entity shall apply the guidance in this Topic to all contracts with customers, except the following:

a. Lease contracts within the scope of Topic 842, Leases.
b. Contracts within the scope of Topic 944, Financial Services — Insurance.
c. Financial instruments and other contractual rights or obligations within the scope of the following Topics:
  1. Topic 310, Receivables
  2. Topic 320, Investments — Debt Securities
  2a. Topic 321, Investments — Equity Securities
  3. Topic 323, Investments — Equity Method and Joint Ventures
  4. Topic 325, Investments — Other
  5. Topic 405, Liabilities
  6. Topic 470, Debt
  7. Topic 815, Derivatives and Hedging
  8. Topic 825, Financial Instruments
  9. Topic 860, Transfers and Servicing.
d. Guarantees (other than product or service warranties) within the scope of Topic 460, Guarantees.
e. Nonmonetary exchanges between entities in the same line of business to facilitate sales to customers or potential customers. For example, this Topic would not apply to a contract between two oil companies that agree to an exchange of oil to fulfill demand from their customers in different specified locations on a timely basis. Topic 845 on nonmonetary transactions may apply to nonmonetary exchanges that are not within the scope of this Topic.

ASC 606-10 — Glossary

Contract

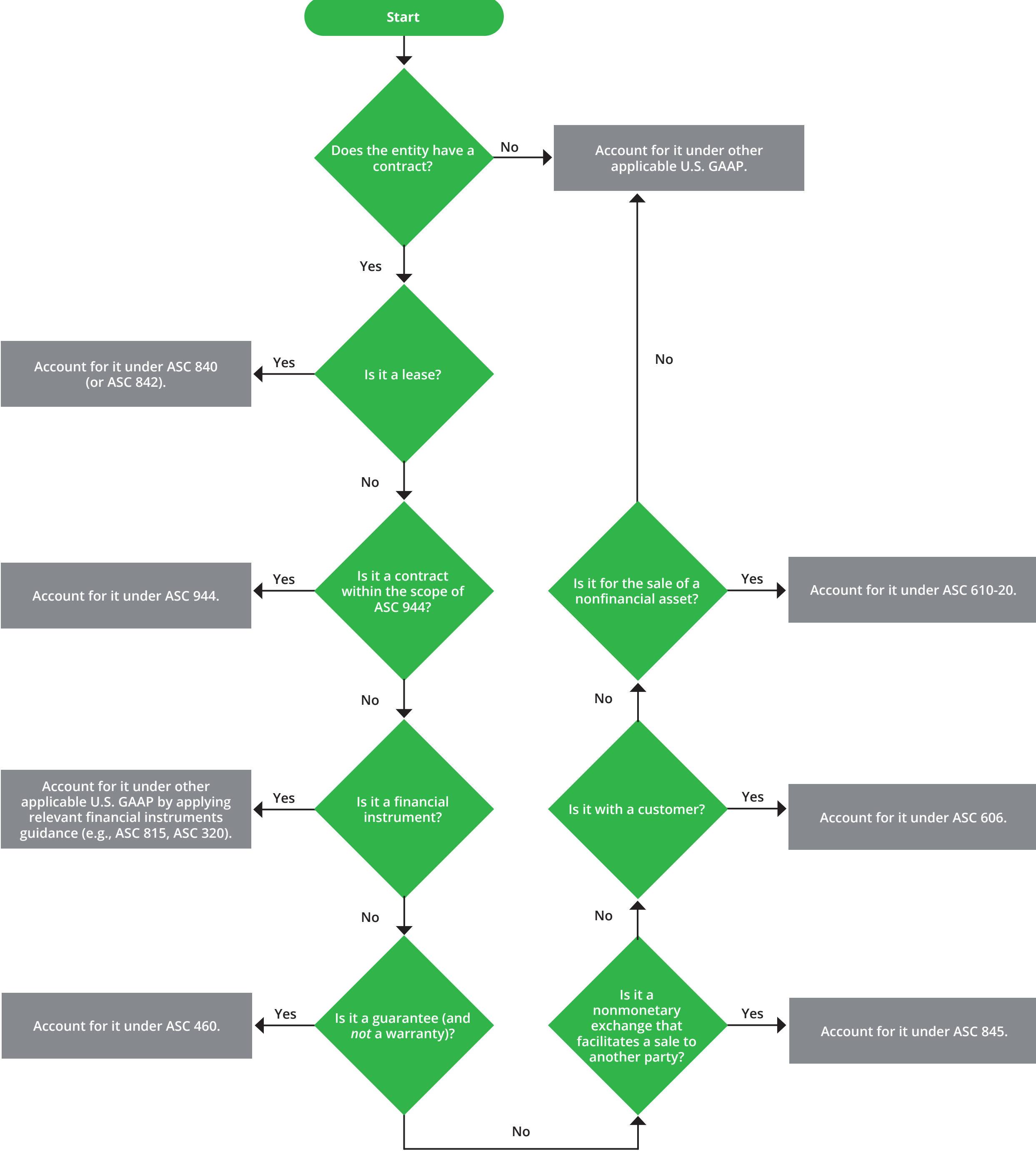
An agreement between two or more parties that creates enforceable rights and obligations.

Customer

A party that has contracted with an entity to obtain goods or services that are an output of the entity's ordinary activities in exchange for consideration.

The revenue standard applies to all contracts with customers as defined in the standard except those that are within the scope of other topics in the *FASB Accounting Standards Codification* (the "Codification"). For example, the revenue standard does not apply to contracts within the scope of ASC 840 and ASC 842 (leases). In addition, certain provisions in the revenue standard also apply to transfers of nonfinancial assets, including in-substance nonfinancial assets that are not an output of an entity's ordinary activities (e.g., intangible assets such as intellectual property [IP] rights). Such provisions include guidance on recognition (including determining the existence of a contract and control principles) and measurement.

The decision tree below illustrates how an entity would determine whether to apply ASC 606 or other U.S. GAAP.



2.2.1 Scope of the Licensing Guidance

Under the revenue standard, the framework used to account for licensing of IP is essentially the same as the framework used to account for a sale of goods or services. That is, the five-step model is generally applied to licensing transactions as well. However, licensing of IP can take many forms, and the economics and substance of such transactions can often be difficult to identify. Determining how to account for licensing transactions will often depend on the specific facts and circumstances and will require professional judgment. To help preparers exercise such judgment, the revenue standard provides supplemental guidance on recognizing revenue from contracts related to the licensing of IP to customers. The scope of the guidance includes all licenses that provide a customer with rights to IP, except for certain software hosting arrangements that are accounted for as a service.

Although ASC 606-10-55-54 provides examples of licenses of IP (specifically, software and technology; motion pictures, music, and other forms of media and entertainment; franchises; and patents, trademarks, and copyrights), the term "intellectual property" is not formally defined in U.S. GAAP. However, paragraph BC51 of ASU 2016-10 states that "intellectual property is inherently different from other goods or services because of its uniquely divisible nature," noting that "intellectual property can be licensed to multiple customers at the same time . . . and can continue to be used by the entity during the license period for its own benefit." Identification of IP will require judgment.

Connecting the Dots

The licensing guidance in the revenue standard applies to licenses of IP that are an output of an entity's ordinary activities (and, therefore, contracts to provide licenses of IP to customers). In some instances, an entity whose ordinary activities do not involve the licensing of IP may enter into a contract to provide a license of IP to a third party. Because the contract is not with a customer, the licensing guidance in the revenue standard is not directly applicable. Further, because a derecognition event does not occur in a licensing transaction (i.e., there is no sale of the IP itself), the guidance in ASC 610-20 on accounting for gains and losses on the derecognition of nonfinancial assets is also not directly applicable. That is, a license of IP is outside the scope of ASC 610-20 since the license does not result in the transfer of the underlying IP when the entity still controls the IP.

We believe that an entity could apply the licensing guidance in the revenue standard by analogy to account for the measurement and recognition of licenses of IP that are outside the scope of ASC 606 (i.e., licenses of IP that are not an output of the entity's ordinary activities). For example, an entity could apply ASC 606 to determine whether a license of IP to a noncustomer represents a license to functional or symbolic IP. In addition, a license of IP to a noncustomer could include sales- or usage-based royalties, in which case an entity could apply the sales- or usage-based royalty exception in ASC 606. However, while an entity could apply aspects of ASC 606 by analogy, any gain or loss should not be presented or disclosed as revenue from contracts with customers.

If an entity entered into an agreement with a noncustomer to sell the underlying IP instead of licensing the IP (i.e., the entity transferred control of the IP and derecognized it), the sale would be within the scope of ASC 610-20. In that case, the sales- or usage-based royalty exception would not apply (because the exception applies only to *licenses* of IP). Rather, the entity would need to estimate and constrain royalties when determining the gain or loss it should record on the transfer of control of the IP.

2.2.2 Guarantees

ASC 460-10

15-4 Except as provided in paragraph 460-10-15-7, the provisions of this Topic apply to the following types of guarantee contracts:

a. Contracts that contingently require a guarantor to make payments (as described in the following paragraph) to a guaranteed party based on changes in an underlying that is related to an asset, a liability, or an equity security of the guaranteed party. For related implementation guidance, see paragraph 460-10-55-2.
b. Contracts that contingently require a guarantor to make payments (as described in the following paragraph) to a guaranteed party based on another entity's failure to perform under an obligating agreement (performance guarantees). For related implementation guidance, see paragraph 460-10-55-12.
c. Indemnification agreements (contracts) that contingently require an indemnifying party (guarantor) to make payments to an indemnified party (guaranteed party) based on changes in an underlying that is related to an asset, a liability, or an equity security of the indemnified party.
d. Indirect guarantees of the indebtedness of others, even though the payment to the guaranteed party may not be based on changes in an underlying that is related to an asset, a liability, or an equity security of the guaranteed party.

15-7 The guidance in this Topic does not apply to the following types of guarantee contracts:

a. A guarantee or an indemnification that is excluded from the scope of Topic 450 (see paragraph 450-20-15-2 — primarily employment-related guarantees)
b. A lessee's guarantee of the residual value of the leased property at the expiration of the lease term, if the lessee (guarantor) accounts for the lease as a capital lease under Subtopic 840-30
c. A contract that meets the characteristics in paragraph 460-10-15-4(a) but is accounted for as contingent rent under Subtopic 840-30
d. A guarantee (or an indemnification) that is issued by either an insurance entity or a reinsurance entity and accounted for under Topic 944 (including guarantees embedded in either insurance contracts or investment contracts)
e. A contract that meets the characteristics in paragraph 460-10-15-4(a) but provides for payments that constitute a vendor rebate (by the guarantor) based on either the sales revenues of, or the number of units sold by, the guaranteed party
f. A contract that provides for payments that constitute a vendor rebate (by the guarantor) based on the volume of purchases by the buyer (because the underlying relates to an asset of the seller, not the buyer who receives the rebates)
g. A guarantee or an indemnification whose existence prevents the guarantor from being able to either account for a transaction as the sale of an asset that is related to the guarantee's underlying or recognize in earnings the profit from that sale transaction
h. A registration payment arrangement within the scope of Subtopic 825-20 (see Section 825-20-15)
i. A guarantee or an indemnification of an entity's own future performance (for example, a guarantee that the guarantor will not take a certain future action)
j. A guarantee that is accounted for as a credit derivative at fair value under Topic 815.
k. A sales incentive program in which a manufacturer contractually guarantees to reacquire the equipment at a guaranteed price or guaranteed prices at a specified time, or at specified time periods (for example, the entity is obligated to reacquire the equipment or the entity is obligated at the customer's request to reacquire the equipment). That program shall be evaluated in accordance with Topic 606 on revenue from contracts with customers, specifically the implementation guidance on repurchase agreements in paragraphs 606-10-55-66 through 55-78.

For related implementation guidance, see Section 460-10-55.

ASC 460-10 (continued)

Pending Content (Transition Guidance: ASC 842-10-65-1)

15-7 The guidance in this Topic does not apply to the following types of guarantee contracts:

a. A guarantee or an indemnification that is excluded from the scope of Topic 450 (see paragraph 450-20-15-2 — primarily employment-related guarantees)
b. A lessee's guarantee of the residual value of the underlying asset at the expiration of the lease term under Topic 842
c. A contract that meets the characteristics in paragraph 460-10-15-4(a) but is accounted for as variable lease payments under Topic 842
d. A guarantee (or an indemnification) that is issued by either an insurance entity or a reinsurance entity and accounted for under Topic 944 (including guarantees embedded in either insurance contracts or investment contracts)
e. A contract that meets the characteristics in paragraph 460-10-15-4(a) but provides for payments that constitute a vendor rebate (by the guarantor) based on either the sales revenues of, or the number of units sold by, the guaranteed party
f. A contract that provides for payments that constitute a vendor rebate (by the guarantor) based on the volume of purchases by the buyer (because the underlying relates to an asset of the seller, not the buyer who receives the rebates)
g. A guarantee or an indemnification whose existence prevents the guarantor from being able to either account for a transaction as the sale of an asset that is related to the guarantee's underlying or recognize in earnings the profit from that sale transaction
h. A registration payment arrangement within the scope of Subtopic 825-20 (see Section 825-20-15)
i. A guarantee or an indemnification of an entity's own future performance (for example, a guarantee that the guarantor will not take a certain future action)
j. A guarantee that is accounted for as a credit derivative at fair value under Topic 815.
k. A sales incentive program in which a manufacturer contractually guarantees to reacquire the equipment at a guaranteed price or guaranteed prices at a specified time, or at specified time periods (for example, the entity is obligated to reacquire the equipment or the entity is obligated at the customer's request to reacquire the equipment). That program shall be evaluated in accordance with Topic 606 on revenue from contracts with customers, specifically the implementation guidance on repurchase agreements in paragraphs 606-10-55-66 through 55-78.

For related implementation guidance, see Section 460-10-55.

Contracts with customers that are guarantees (other than product or service warranties) within the scope of ASC 460 are specifically excluded from the scope of ASC 606. However, as discussed in the next section and Section 2.2.2.2, certain guarantees are within the scope of ASC 606 because they are specifically excluded from the scope of ASC 460.

2.2.2.1 Performance Guarantees

Many performance guarantees would be outside the scope of ASC 460 or would not be subject to the recognition and measurement requirements in ASC 460. Specifically, ASC 460-10-15-7(i) states that a guarantee or indemnification of an entity's own future performance is not within the scope of ASC 460. Therefore, performance guarantees would typically be accounted for as assurance-type warranties (i.e., product warranties that are subject to the disclosure requirements in ASC 460 but not the recognition and measurement requirements), service-type warranties that represent a performance obligation within the scope of ASC 606, or a form of variable consideration within the scope of ASC 606.

Example 2-2

Entity X has entered into a contract with a customer to operate a call center. The contract includes a service level agreement guaranteeing that the average service call response time will be less than five minutes. If the call center does not meet the guaranteed five-minute average wait time, X will have to pay the customer $1 million.

This service level guarantee is not within the scope of ASC 460 because it is guaranteeing X's own future performance under the contract. Therefore, the obligation to operate the call center would be accounted for as a performance obligation within the scope of ASC 606, and the potential payment of $1 million to the customer would be treated as variable consideration.

Some performance guarantees or indemnification agreements would be within the scope of ASC 460, particularly if they are not a guarantee or indemnification of an entity's own future performance. For example, if an entity guarantees the performance of a third party by agreeing to pay the indemnified party if that third party fails to perform, the guarantee would most likely be subject to the recognition and measurement provisions of ASC 460.

Connecting the Dots

Because the general recognition and measurement requirements that apply to guarantees in ASC 460 differ significantly from the recognition and measurement requirements for product warranties, it is important for entities to appropriately determine whether an arrangement is subject to the guidance that applies to product warranties. On the basis of informal discussions, we understand that the SEC's Office of the Chief Accountant (OCA) objected to an SEC registrant's conclusion that its guarantee to a customer of the functionality of a security service provided by another customer was a product warranty. Although the guarantee was part of a revenue arrangement with multiple promised goods or services, the SEC staff believed that a guarantee of a service provided to a customer by another entity cannot be a product warranty because the guarantor was not the entity that provided the service. In the staff's view, such an arrangement should be accounted for in accordance with the general recognition and measurement guidance in ASC 460 that applies to guarantee obligations.

2.2.2.2 Profit Margin Guarantees

Profit margin guarantees typically do not contain a guarantee within the scope of ASC 460 because they qualify for scope exceptions under ASC 460-10-15-7 — specifically, ASC 460-10-15-7(e) (vendor rebates by the guarantor based on either the sales revenues of, or the number of units sold by, the guaranteed party) or, in certain circumstances, ASC 460-10-15-7(g) (guarantees that prevent the guarantor from being able to recognize in earnings the profit from a sale transaction). Therefore, profit margin guarantees should be accounted for as a form of variable consideration within the scope of ASC 606.

Example 2-3

A hardware manufacturer sells devices to a retail store (the "retailer") under a contract that offers the retailer a refund of a portion of the contract's sales price at the end of each year if the retailer has not met a minimum sales margin (i.e., a profit margin guarantee). The retailer takes title to the devices, and title remains with the retailer. The profit margin guarantee is agreed to at the inception of the contract and is a fixed amount.

This arrangement does not contain a guarantee within the scope of ASC 460. Therefore, the hardware manufacturer should account for the potential payment to the retailer as a form of variable consideration within the scope of ASC 606.

2.2.3 Barter Credit Transactions

In some industries, entities may enter into arrangements referred to as "barter credit transactions." Barter credit transactions may occur in many forms. In one common form, an entity provides goods or services and in return receives "credits" that can be used for a specific period to acquire products or services from either (1) a specific company that is a party to the exchange of products or services or (2) members of a "barter" exchange network. Barter exchange networks allow one member to exchange products or services of another member even if the member providing the products or services was not the counterparty to the original barter contribution. Barter credit transactions are structured in various ways and may differ significantly in terms of business motives or levels of risk.

Although barter credit transactions may create opportunities for barter participants, they pose various risks principally related to the measurement of the transaction, including:

- Failure to recognize impairment in value of products given up in a barter transaction.
- Difficulties in converting products or credits received in a barter transaction to cash when no market for the products or credits exists.
- Expiration of unused barter credits.
- Inadequate internal controls over barter credits.
- Inability to acquire products or services in return that are worth as much as the products or services contributed.
- Inability to reasonably determine the value of products or services received in return.

Since barter credit transactions are akin to nonmonetary exchanges, entities should consider whether particular barter credit transactions are subject to the scope exception for nonmonetary exchanges in ASC 606-10-15-2(e).

In accordance with ASC 606-10-15-2(e), nonmonetary exchanges between entities **in the same line of business** to facilitate sales to customers or potential customers are outside the scope of ASC 606 and may be subject to the guidance in ASC 845 on nonmonetary transactions. Typically, no revenue is recognized when the guidance in ASC 845 is applied to such nonmonetary exchanges outside the scope of ASC 606.

Accordingly, for an entity to determine whether a barter credit transaction should be accounted for under ASC 606 or under ASC 845, the entity should understand the substance and purpose of the barter credit transaction. If the entity determines that the barter credit transaction represents a contract with a customer that is within the scope of ASC 606, it should account for the barter credits received from the customer as noncash consideration.

Example 2-4

Entity S, a software company, enters into a one-year contract to sell a license to its software product to Entity T, an ad tech company, in exchange for $1 million in advertising credits to purchase advertising inventory from T. The software product is an output of S's ordinary activities. Entity S first considers whether the arrangement represents a nonmonetary exchange between entities in the same line of business to facilitate sales to customers or potential customers in accordance with ASC 606-10-15-2(e). Because S and T are not in the same line of business and the software product is an output of S's ordinary activities, S concludes that its arrangement with T is accounted for under ASC 606. Accordingly, S accounts for the advertising credits received from T as noncash consideration.

2.2.4 Determining Whether the Counterparty Is a Customer or Vendor in a Contract

As noted in the Background Information and Basis for Conclusions of ASU 2014-09, the FASB defined the term "customer" in the glossary of the revenue standard to help companies understand and establish which transactions are within the standard's scope. For the purposes of ASC 606, a customer is a "party that has contracted with an entity to obtain goods or services that are an output of the entity's ordinary activities in exchange for consideration." Despite some requests for further clarification, the Board purposefully did not define what constitutes "ordinary activities."

In certain arrangements, an entity may enter into one or more contracts with another entity that is both a customer and a vendor.[2] That is, the reporting entity may enter into one or more contracts with another entity to (1) sell goods or services that are an output of the reporting entity's ordinary activities in exchange for consideration from the other entity and (2) purchase goods or services from the other entity.

In these types of arrangements, the reporting entity will need to use judgment to determine whether the other entity is predominantly a customer or predominantly a vendor. It may not be possible to make this determination solely on the basis of the contractual terms. In such cases, the reporting entity will need to consider the facts and circumstances of the overall arrangement with the other entity. The reporting entity's conclusion that the other entity in the arrangement is predominantly a customer or predominantly a vendor may determine whether (1) the consideration received from the other entity should be accounted for under ASC 705-20 as consideration received from a vendor or (2) the consideration paid to the other entity should be accounted for under ASC 606 as consideration payable to a customer.

2.2.5 Contracts That Include Both Revenue and Nonrevenue Elements

When a contract includes multiple performance obligations, or deliverables, some of which are within the scope of other standards, any separation and initial measurement requirements of the other standards are applied first and the deliverables within the scope of the revenue model are ascribed any residual amount. For example, if a contract includes performance obligations subject to ASC 606 and a guarantee subject to ASC 460 (e.g., an indirect guarantee of the indebtedness of others), the guarantee would typically be recognized at its fair value, with the residual transaction price recognized under ASC 606.

If there are no separation or initial measurement requirements in those other standards, the requirements in ASC 606 are applied. That is, the guidance in ASC 606 is the default guidance to be used if there is no other relevant guidance. For example, consider an entity that enters into a single contract to lease hardware to a customer and provide cloud-based services associated with the hardware. Assume that the entity assesses the promises in the contract and determines that (1) the lease of the hardware is within the scope of the guidance on leases and (2) the cloud-based services are within the scope of ASC 606. Further, assume that the entity has adopted both ASC 606 and ASC 842 and that the entity has not elected to use the available practical expedient that would allow it to avoid separating lease and nonlease components. In accordance with ASC 606, the entity would first look to the other guidance (the leasing standard, in this situation) for guidance on how to allocate the consideration from the contract; if the other standard did not have allocation guidance, the entity would apply the allocation guidance in ASC 606. In this situation, the leasing standard says to apply the allocation guidance in ASC 606. Therefore, the entity would use the revenue standard's guidance to identify the performance obligations and allocate consideration between the revenue and nonrevenue (i.e., lease) components.

[2] The ASC master glossary defines a vendor as a "service provider or product seller, such as a manufacturer, distributor, or reseller."

2.3 Identify the Contract (Step 1)

For contracts within the scope of ASC 606, the first step of the revenue standard is to determine whether a contract exists, for accounting purposes, between an entity and its customer.

ASC 606-10

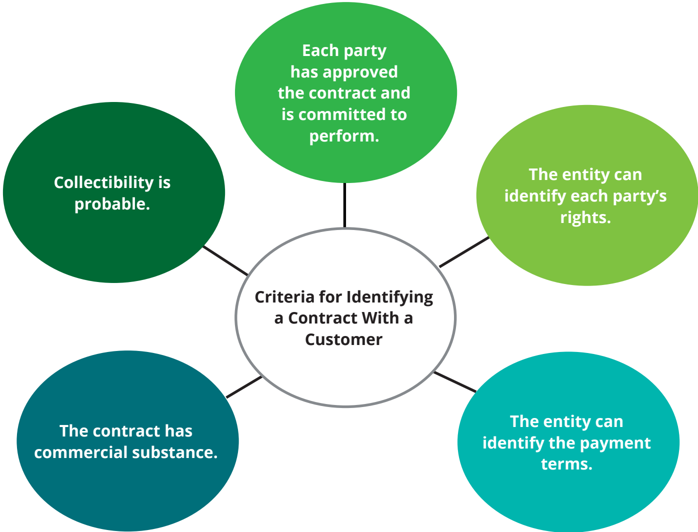
25-1 An entity shall account for a contract with a customer that is within the scope of this Topic only when all of the following criteria are met:

a. The parties to the contract have approved the contract (in writing, orally, or in accordance with other customary business practices) and are committed to perform their respective obligations.
b. The entity can identify each party's rights regarding the goods or services to be transferred.
c. The entity can identify the payment terms for the goods or services to be transferred.
d. The contract has commercial substance (that is, the risk, timing, or amount of the entity's future cash flows is expected to change as a result of the contract).
e. It is probable that the entity will collect substantially all of the consideration to which it will be entitled in exchange for the goods or services that will be transferred to the customer (see paragraphs 606-10-55-3A through 55-3C). In evaluating whether collectibility of an amount of consideration is probable, an entity shall consider only the customer's ability and intention to pay that amount of consideration when it is due. The amount of consideration to which the entity will be entitled may be less than the price stated in the contract if the consideration is variable because the entity may offer the customer a price concession (see paragraph 606-10-32-7).

Because the rest of the provisions of the standard rely on a careful analysis of the enforceable rights and obligations under the contract, if any of the five criteria required to establish a contract for accounting purposes are not met, the rest of the revenue recognition model cannot be applied. In these circumstances, any consideration received from the customer would be recognized as a liability, and revenue can only be recognized once (1) the contract existence criteria are met (under the assumption that the rest of the revenue recognition model supports the recognition of revenue) or (2) the consideration received is nonrefundable and one or more of the following have occurred:

- All of the performance obligations in the contract have been satisfied and substantially all of the promised consideration has been received.
- The contract has been terminated or canceled.
- The entity has transferred control of the goods or services to which the consideration received is related and has stopped transferring (and has no obligation to transfer) additional goods or services to the customer.

A contract does not have to be written to meet the criteria for revenue recognition; however, it does need to create enforceable rights and obligations. Because the rest of the revenue model cannot be applied until a valid contract is in place, it is important to determine when enforceable rights and obligations are created between two or more parties. Determining whether a contractual right or obligation is enforceable is a question of law, and the factors that determine enforceability may differ between jurisdictions.



2.3.1 Each Party Has Approved the Contract and Is Committed to Perform

For a contract to be accounted for under the revenue standard, the parties must approve the contract and be committed to perform their respective obligations.

A party may approve a contract in writing, orally, or through its customary business practices. If both parties to a contract do not approve the contract, it is unclear whether that contract creates enforceable rights and obligations that bind the parties to perform their respective obligations. Paragraph BC35 of ASU 2014-09 states, in part, that "the form of the contract does not, in and of itself, determine whether the parties have approved the contract." Entities will need to evaluate all relevant facts and circumstances, including their customary business practices, to determine whether both parties have approved the contract.

As noted above, each party must also be committed to perform under the contract. However, paragraph BC36 of ASU 2014-09 clarifies that each party will not always need to be committed to performing all of its obligations to meet this requirement. To illustrate, paragraph BC36 cites an example in which a customer is contractually required to make a minimum monthly purchase of goods provided by an entity. Despite the requirement, the customer does not always make the minimum monthly purchase and historically has not been forced by the entity to comply. In this example, the contractual requirement could still be met because the parties have demonstrated that they are "substantially committed to the contract."[3]

ASC 606 does not apply to a wholly unperformed contract when each party has the unilateral ability to terminate the contract without compensating the other party. Accordingly, entities will need to carefully consider termination clauses when evaluating whether each party is committed to the contract.

[3] Quoted from paragraph BC36 of ASU 2014-09.

Sometimes, after a contract between two parties expires and before they execute a new contract, both parties will continue to perform under the terms of the expired contract, thereby indicating that even in the absence of a formally executed contract, a contract may exist since both parties remain committed to perform. Entities should use caution in making this assessment and ensure that a careful evaluation of the specific facts and circumstances is performed to determine whether an enforceable contract exists.

Example 2-5

On May 1, 20X7, Entity A entered into a one-year contract with Customer B to provide SaaS in exchange for $100 per month. The contract did not include any automatic extension provisions and expired on April 30, 20X8. After the contract expired, the parties commenced negotiations for a new contract, under which A would provide the same SaaS to B. The price that A would charge B for the SaaS was the main point of negotiations between the parties. The two parties completed negotiations and executed a new, one-year contract on June 30, 20X8, that is retroactive to May 1, 20X8. The new contract requires B to pay $150 per month.

Entity A's customary business practice is to continue providing the SaaS to a customer while negotiations for a new contract occur after the expiration of an existing contract. Accordingly, during the interim period (i.e., May 1, 20X8, through June 30, 20X8) in which contract negotiations occurred, A continued to provide the SaaS and B continued to pay $100 per month. The $100 monthly fee paid by B during the interim period is nonrefundable.

Aside from the increased fee and extension of the contract, all other contract attributes are the same between the expired contract and the new contract, and no disputes occurred during the interim period.

To determine whether a contract existed during the interim period while a new contract was being negotiated, A should evaluate whether each party had enforceable rights and obligations during the interim period. ASC 606-10-25-2 states, in part, that "[e]nforceability of the rights and obligations in a contract is a matter of law." This assessment requires judgment, especially in the absence of automatic renewal provisions in the original contract. Accordingly, A should analyze the parties' rights and obligations to determine the legal enforceability of the contract in the relevant jurisdiction.

Entity A should also consider whether the negotiations and execution of the new contract are within the scope of the revenue standard's guidance on contract modifications. ASC 606-10-25-11 notes that a contract modification may exist when a change in the scope or price of the contract has not yet been resolved. When a change in scope has been approved by the parties, an entity is required under ASC 606-10-25-11 to "estimate the change to the transaction price arising from the modification in accordance with paragraphs 606-10-32-5 through 32-9 on estimating variable consideration and paragraphs 606-10-32-11 through 32-13 on constraining estimates of variable consideration."

In the situation described above, it appears that a contract existed during the interim period because A continued to provide the SaaS to B in a manner consistent with A's customary business practice. Further, in exchange for the SaaS and in accordance with the terms of the original contract, B continued to pay A $100 per month, which is nonrefundable. On the basis of these facts, it appears that both parties had enforceable rights and obligations during the interim period and that it would therefore be inappropriate to delay revenue recognition until the new agreement was signed on June 30, 20X8. Upon execution of the new agreement, A should analyze the revenue standard's guidance on contract modifications to determine the appropriate accounting.

A technology entity may provide a customer with free goods or services at the onset of the arrangement. In these circumstances, entities must carefully evaluate whether all of the criteria in ASC 606-10-25-1 are met. If the goods or services are provided as part of a "free trial period," each party may not have approved the contract or be committed to perform during that period.

An entity must evaluate whether a contract exists during a trial period and, if so, the appropriate timing of revenue recognition during the trial period. In these circumstances, entities must carefully evaluate whether all of the criteria in ASC 606-10-25-1 are met. Factors to consider include whether the trial period is risk-free, whether the customer has an obligation to make further purchases beyond the trial period, and whether the goods or services transferred during the trial period are, in fact, performance obligations. This determination may require an entity to use judgment on the basis of the specific facts and circumstances of the arrangement.

Two types of trial periods that an entity may participate in to solicit customers are (1) "risk-free" trials (i.e., the customer is not committed to a contract until after some of the goods or services are delivered) and (2) the delivery of "free" goods or services upon execution of a contract (i.e., a contract under the revenue standard exists when the free goods or services are delivered). As noted above, it is essential to evaluate whether a contract with a customer exists under the revenue standard to determine whether the goods or services provided during the trial period are performance obligations to which revenue should be allocated and recognized when control transfers. In addition, consideration should be given to whether the entity's performance obligation to transfer the goods or services during the trial period is satisfied at a point in time or over time (i.e., partly during the trial period and partly during the contractual period). Such factors are likely to affect the determination of whether and, if so, when revenue is recognized for the goods or services provided during the trial period.

Example 2-6

Entity A has a marketing program that offers a three-month "trial period" during which a customer can obtain free access to A's SaaS solution. If the customer does not cancel at the end of three months, it will be charged an annual subscription fee of $12 million, or $1 million per month (inclusive of the trial period).

Because the customer in the arrangement is not committed to perform, no contract exists during the free trial period unless and until the customer "accepts" the offer. Once the customer accepts the offer and has the intent and ability to pay $12 million for an annual subscription to the SaaS solution (i.e., collectibility is probable), a valid contract exists and the rest of the revenue recognition model can be applied.

2.3.2 The Entity Can Identify Each Party's Rights

An entity must be able to identify each party's rights related to the promised goods or services in the contract. Without knowing each party's rights, an entity would not be able to identify its performance obligations and determine when control of the goods and services are transferred to the customer (i.e., when to recognize revenue). Parties to the contract have valid rights and obligations when both (1) the entity has a right to receive consideration from the customer in exchange for the transfer of goods or services and (2) the customer has a right to require the entity to perform (i.e., transfer goods or services).

2.3.3 Identifying the Payment Terms

A contract must include payment terms for each of the promised goods and services in an arrangement for an entity to determine the transaction price. The payment terms do not need to be fixed, but the contract must contain enough information to allow an entity to reasonably estimate the consideration to which it will be entitled for transferring the goods and services to the customer.

2.3.4 The Contract Has Commercial Substance

For a contract to have commercial substance, the risk, timing, or amount of an entity's future cash flows must be expected to change as a result of the contract. That is, the transaction(s) between the parties should have economic consequences. Most business transactions will involve an entity's sale of goods or services in exchange for cash; therefore, an entity's future cash flows are expected to change as a result of the arrangement. Arrangements that include noncash consideration may require an entity to perform further analysis in evaluating whether the contract has commercial substance. The commercial substance requirement in the revenue standard is consistent with the principles of ASC 845 for evaluating whether a nonmonetary exchange has commercial substance; however, the criterion needs to be evaluated for all contracts (not just those with nonmonetary consideration).

2.3.5 Collectibility Is Probable

ASC 606-10-25-1(e) requires an entity to evaluate whether it is probable that substantially all of the consideration to which the entity will be entitled for goods or services transferred to the customer will be collected. This analysis is performed at contract inception and is not revisited unless there is a significant change in facts and circumstances. Such an evaluation should take into account only the customer's ability and intention to pay the consideration when it is due. All facts and circumstances should be considered in the evaluation of a customer's ability and intention to pay amounts due. Such facts and circumstances could include past experience with the customer, class of customer, and expectations about the customer's financial stability, as well as other factors.

2.3.5.1 Price Concessions

As part of determining whether a valid and genuine contract exists, an entity is required to evaluate whether it is probable that the entity will collect substantially all of the consideration to which it is entitled under the contract. However, the consideration to which an entity is ultimately entitled may be less than the price stated in the contract because the customer is offered a price concession. Price concessions are a form of variable consideration and need to be analyzed when the transaction price is being determined (as part of step 3 of the standard's revenue model). However, as part of step 1, an entity would evaluate whether it is probable that the entity will collect the consideration to which it will be entitled for providing goods or services to a customer after considering any price concessions. This evaluation requires aspects of step 3 to be performed in conjunction with step 1.

Differentiating between credit risk (i.e., the risk of collecting less consideration than the amount the entity legitimately expected to collect from the customer) and price concessions (i.e., entering into a contract with a customer with the expectation of accepting less than the contractual amount of consideration in exchange for goods or services) may be difficult. Entities will need to use significant judgment in determining whether they have provided an implicit price concession (variable consideration to be estimated in step 3) or have accepted a customer's credit risk (to be evaluated in step 1).

The following indicators may suggest that rather than accepting the customer's credit risk, the entity has offered a price concession (which would be evaluated as variable consideration):

- The entity has a customary business practice of providing discounts or accepting as payment less than the contractually stated price regardless of whether such a practice is explicitly stated at contract inception or specifically communicated or offered to the customer.
- The customer has a valid expectation that the entity will accept less than that contractually stated price. This could be due to customary business practices, published policies, or specific statements made by the entity.

- The entity transfers the goods or services to the customer, and continues to do so, even when historical experience indicates that it is not probable that the entity will collect the billed amount.
- Other facts and circumstances indicate that the customer intends to pay an amount that is less than the contractually stated price, and the entity nonetheless enters into a contract with the customer.
- The entity has a customary business practice of not performing a credit assessment before transferring goods or services to the customer.

2.3.5.2 Evaluating Credit Risk

The existence of the collectibility requirement does not eliminate credit risk in a contract with a customer. Not all differences between the contractually stated price and the amount ultimately collected by the entity will be due to explicit or implied concessions. Entities may (1) assume collection risk and (2) incur bad debt.

The following indicators may suggest that rather than granting a price concession, the entity has incurred a bad debt:

- The entity has the ability and intent to stop transferring goods or services to the customer and has no obligation to transfer additional goods or services in the event of nonpayment for goods or services already transferred to the customer (e.g., in the event of nonpayment by a SaaS customer, the SaaS provider ceases to provide further services to the customer).
- The entity believes that it will collect the consideration due and intends to enforce the contract price, but it knowingly accepts the risk of default by the customer. For example, the entity is able to conclude that the criterion in ASC 606-10-25-1(e) is met, but it is aware of the customer's increased risk of bankruptcy and chooses to provide the contractually agreed-upon goods or services to the customer despite this fact.
- The customer's financial condition has significantly deteriorated since contract inception.
- The entity has a pool of homogeneous customers that have similar credit profiles. Although it is expected that substantially all of the customers will be able to pay amounts when due, it is also expected that a small (not currently identifiable) number of customers may not be able to pay amounts when due.

The criterion in ASC 606-10-25-1(e) acts as a collectibility threshold and requires an entity to assess its customer's credit risk in determining whether a valid contract exists. The term "probable" is defined in the ASC 606 glossary as the "future event or events are likely to occur."

2.3.5.3 Collectibility Assessment — Other Considerations

Paragraph BC46 of ASU 2014-09 notes that the FASB and IASB intended the collectibility assessment to be made only for consideration to which an entity would be entitled in exchange for the goods or services that will be transferred to the customer. That is, if the customer fails to pay for goods or services transferred and the entity reacts by not transferring any additional goods or services to the customer, only the consideration associated with the goods or services already transferred to the customer should be assessed for collectibility.

The objective of the collectibility assessment is to determine whether there is a substantive transaction between the entity and the customer. There is deemed to be a substantive transaction between the two parties if it is probable that the entity will collect substantially all of the consideration attributed to goods or services that will be transferred to the customer. If the entity has an ability, and an established business practice, to mitigate collection risk by not transferring additional goods or services to a nonpaying customer, the entity would assess collectibility of only the consideration associated with the goods or services that will be transferred to the customer. Once the criteria in ASC 606-10-25-1 are met, the remainder of the guidance in ASC 606 should be applied to all of the promised goods or services in the contract. That is, an entity will assume that it will transfer all goods or services promised under the contract with its customer for purposes of identifying performance obligations, determining and allocating the transaction price, and recognizing revenue.

As noted in ASC 606-10-55-3B, the collectibility assessment is partly a forward-looking assessment that requires an entity to evaluate a customer's intention and ability to pay promised consideration when due. An entity may need to consider both the current and future financial condition of a customer when making this assessment. For example, in a situation involving a license of software for which consideration due is in the form of sales- and usage-based royalties, the entity may determine that the customer does not currently have the financial capacity to pay all of the expected sales- and usage-based royalties at contract inception; however, once the customer generates cash flows from the usage of the software, it is expected that the customer will have the financial capacity to make the required payments when due. When performing its analysis, the entity would need to consider the customer's other payment obligations in addition to the royalty payments. That is, the entity could not solely rely on the cash generated from the use of the software to conclude that it is probable that the customer will pay amounts when due. Rather, the entity would need to consider all relevant facts and circumstances when evaluating whether the customer has the intention and ability to pay amounts when due.

An entity may evaluate the collectibility criterion by analyzing its collection history with the same customer or similar types of customers (e.g., similar industry, size, geographic region). It should also consider any specifically identified events or circumstances related to the customer (e.g., the customer's significantly deteriorating financial position or a default on the customer's loan covenant).

2.3.5.4 Whether to Assess Collectibility at the Portfolio Level or the Individual Contract Level

Collectibility should be assessed at the individual contract level. For each individual contract, if it is considered probable that the entity will collect the consideration to which it will be entitled, the general requirements of ASC 606 should be applied. However, if an entity has a portfolio of contracts that are all similar, particularly in terms of collectibility, and historical evidence suggests that a proportion of the consideration due from contracts in the portfolio will not be collected, the entity may evaluate that portfolio to assess whether an individual contract is collectible.

For example, if the entity has a portfolio of 100 similar contracts and historical experience has indicated that the entity will only collect amounts due on 98 of those contracts, this does not suggest that there are two contracts that should not be accounted for under the general requirements of ASC 606. Rather, the entity should consider collectibility in the context of the individual contracts. If there is a 98 percent probability that amounts due under each contract will be collected, each contract will meet the criterion in ASC 606-10-25-1(e).

However, consideration should be given to any evidence that collection of amounts due under any specific contract is not probable. That is, an entity should not ignore information that suggests that there is a specific (i.e., identified) contract within a portfolio for which collectibility is not considered probable. If that is considered to be the case, the specific contract should be excluded from the portfolio and evaluated on an individual basis; if the contract does not meet the collectibility criterion, it should be accounted for in accordance with ASC 606-10-25-7.

When a contract meets the criteria in ASC 606-10-25-1, including collectibility, the entity should recognize revenue as it satisfies its performance obligations under the contract on the basis of the amount of consideration to which it expects to be entitled (rather than the amount that it expects to collect). Therefore, for example, if the entity expects to be entitled to consideration of $500 from each of its contracts, it should recognize that $500 as revenue notwithstanding its historical experience of a 2 percent level of default.

The entity should then evaluate any associated receivable or contract asset for impairment and present any difference between the measurement of the contract asset or receivable and the corresponding amount of revenue as an expense in accordance with ASC 310 (or ASC 326, once adopted[4]).

In the circumstances under consideration, this will result in recognized revenue of $50,000 ($500 × 100) and, under the assumption that the estimated 98 percent collection rate proves accurate, impairment (bad debts) of $1,000 ($50,000 × 2%).

2.3.6 Contract Term

Determining the term of the contract is an important step in the revenue recognition process since the contract term could affect the identification of promises under the contract, the transaction price, and disclosures. ASC 606 provides guidance on determining the contract duration, including the effect of termination clauses and contract renewals. The contract term is determined on the basis of the period over which the parties to the contract have present enforceable rights and obligations. The contract term would not include optional renewal periods or the delivery of optional goods or services. However, the existence of purchase options in a contract with a customer could give rise to a material right.

2.3.6.1 Termination Clauses and Penalties

When contracts have termination clauses and penalties, the duration of a contract is predicated on the contract's enforceable rights and obligations. Accordingly, regardless of whether one or both parties have the right to terminate the contract, an entity would need to evaluate the nature of the termination provisions, including whether any termination penalty is substantive. For example, an entity would assess factors such as (1) whether the terminating party is required to pay compensation, (2) the amount of such compensation, and (3) the reason for the compensation (i.e., whether the compensation is in addition to amounts due for goods and services already delivered). Substantive termination penalties suggest that the parties' rights and obligations extend for the duration of the contract term.

A contract's accounting term could be less than the contract's stated term if a termination penalty is not substantive. For example, a 12-month stated contract term could, in effect, be a month-to-month contract if the contract could be terminated each month and the termination penalty is not substantive. An entity will need to carefully consider the effect of nonsubstantive termination penalties on the timing and amount of revenue to be recognized.

[4] See ASC 326-10-65-1 through 65-5 for effective date and transition guidance related to ASC 326.

Because the assessment of termination clauses and penalties focuses on legally enforceable rights and obligations, certain economic factors such as economic compulsion should not be considered. Rather, the assessment depends on whether the terminating party is required to compensate the other party. For example, an entity may have a long-term agreement with a customer for a unique good or service that is critical to the customer's operations (e.g., a term-based license of software that is critical to the customer's manufacturing capabilities and cannot be easily obtained from another software vendor). If the agreement allows the customer to terminate it at any point and there are no contractual penalties if the customer does not purchase any goods or services, a contract for the purchase of additional goods or services does not exist even if it is highly likely that the customer will not terminate the agreement.

The economic considerations related to forgoing a discount on optional purchases would not be viewed as a substantive penalty suggesting that the parties' rights and obligations extend for a longer contract term. The discount on optional purchases should be assessed for the existence of a material right instead. Therefore, while an "economic" penalty may be incurred by a customer that elects not to purchase future but optional goods at a discount, that economic penalty would not rise to the level of a substantive penalty that lengthens the contract term.

The determination of whether a termination penalty is substantive requires judgment and would be evaluated both quantitatively and qualitatively. For example, data about the frequency of contract terminations may be useful in such a determination (i.e., a high frequency of payments made to terminate contracts may suggest that the termination provision is not substantive). Determining the enforceable term of a contract that includes termination provisions (e.g., cancellation fees) may be challenging, particularly when only the customer has a right to terminate the contract. When a customer has a right to terminate the contract without penalty, such termination provision is substantively the same as a renewal provision.

2.3.6.1.1 Termination Clauses That Include Refunds for Prepayments in Software Arrangements

In some software arrangements, a customer prepays for a term-based license and maintenance (i.e., postcontract customer support [PCS]). If a customer prepays but can terminate at any point and receive a pro rata refund for the portion of the term-based license and PCS that is unused, the arrangement would be accounted for as a daily contract. Undelivered performance obligations associated with such arrangements would generally be excluded from deferred revenue and instead be classified as some other liability account (e.g., "refund liability" or "customer arrangements with termination rights"). They would also generally be excluded from the requirement in ASC 606 to disclose "remaining performance obligations," although an entity would not necessarily be precluded from specifying amounts that are subject to termination in the notes to its financial statements if it properly describes these GAAP amounts.

The examples below illustrate how an entity might determine the contractual term in various software arrangements with termination clauses.

Example 2-7

Term-Based Software License With Pro Rata Refund Upon Termination

On March 1, 20X1, a vendor sells a one-year term-based license with PCS for $1,200. The vendor's customer has the right to terminate the arrangement at its convenience at the end of each month. If the customer terminates, it is entitled to a pro rata refund and loses the right to use the software. The vendor concludes that it has two distinct performance obligations: (1) the license and (2) the PCS. If there was no termination provision, the vendor would have allocated $800 to the license and $400 to the PCS (on the basis of their stand-alone selling prices). Further, it would have recognized the license fee ($800) up front and the PCS ratably over time ($33 per month).

In this circumstance, the vendor should account for the arrangement as 12 individual monthly contracts since the term is the lesser of the contractual period or the period in which the contract cannot be terminated without substantive penalty. Accordingly, the arrangement would continue to be accounted for ratably ($100 per month).[5]

Example 2-8

Term-Based Software License Sold to Reseller With Pro Rata Refund Upon Termination

Assume the same facts as in Example 2-7 above, except that the customer is a reseller that has a committed (noncancelable) contract with its end-user customer for the duration of the arrangement (one year).

Since the vendor is not a party to the reseller's end-user arrangement (i.e., the reseller, not the end user, is the vendor's customer), the end-user agreement is not relevant in the performance of step 1 under ASC 606 (i.e., identifying the contract with the customer). The vendor should therefore account for the arrangement in the same manner as it does for the arrangement discussed in Example 2-7.

Example 2-9

Perpetual Software License With Pro Rata Refund Upon Termination

A vendor sells a perpetual license with one year of PCS for $6,000. The vendor's customer has the right to terminate the arrangement at its convenience at the end of each month. The contractual prices of the license and the PCS are $5,000 and $1,000, respectively. Upon termination, the customer will be entitled to a pro rata refund for the PCS and a computed pro rata refund for the perpetual license, which has a three-year life. If the customer exercises its termination right, it loses the right to use the software. The vendor concludes that it has two distinct performance obligations: (1) the license and (2) the PCS. If there was no termination provision, the vendor would have allocated $5,000 to the license and $1,000 to the PCS on the basis of their stand-alone selling prices. Further, it would have recognized the license fee ($5,000) up front and the PCS ratably over time ($83 per month).

The vendor should account for the license as 36 individual monthly contracts and for the PCS as 12 individual monthly contracts. As a result, the license would be recognized over 36 months and the PCS would be recognized over 12 months, both ratably ($139 per month for 36 months[6] and $83 per month for 12 months).

[5] Revenue associated with the license would be recognized at the beginning of each month, which is similar to ratable recognition given the short term (i.e., monthly).

[6] See footnote 5.

Example 2-10

Perpetual Software License With Pro Rata Refund on PCS Only Upon Termination

A vendor sells a perpetual license with one year of PCS for $6,200. The vendor's customer has the right to terminate the PCS at its convenience at the end of each month. The contractual prices of the license and the PCS are $5,000 and $1,200, respectively. Upon termination, the customer will be entitled to a pro rata refund for the PCS and no refund for the license. Upon exercising the termination right, the customer retains the right to the perpetual license. The vendor concludes that it has two distinct performance obligations: (1) the license and (2) the PCS. If there was no termination provision, the vendor would have allocated $5,200 to the license and $1,000 to the PCS on the basis of their stand-alone selling prices. Further, it would have recognized the license fee ($5,200) up front and the PCS ratably over time ($83 per month).

The vendor should account for the PCS as 12 individual monthly contracts and for the license as part of the initial monthly contract. As a result, the license would be recognized upon delivery ($5,020) and the PCS would be recognized monthly ($80 in the first month and $100 per month thereafter).[7] The total revenue recognized in the first month would be limited to an amount less than what would have been recognized on the basis of relative stand-alone selling price if the contract were to be accounted for as a one-year contract. Note that there is no material right for "renewals" of PCS since the renewals are priced at $100, which is greater than the stand-alone selling price of $83.

Example 2-11

Perpetual Software License With a Negotiated Refund Upon Termination and Separate Stock-Keeping Units (SKUs)

A vendor sells a perpetual license with one year of PCS for $6,000. The vendor's customer has the right to terminate the arrangement at its convenience at the end of each month. The contractual prices of the license and the PCS (which have separate SKUs) are $5,000 and $1,000, respectively. The contract specifies that upon termination, the vendor and the customer will negotiate, in good faith, the amount of refund, if any, to which the customer would be entitled. The vendor concludes that it has two distinct performance obligations: (1) the license and (2) the PCS.

Generally, if the amount that would be refunded is not stated (i.e., unknown) because it is subject to negotiation and not legally enforceable, the arrangement would be accounted for as a one-year contract if a substantive termination penalty is legally enforceable.

Example 2-12

Term-Based Software License With an Uncertain Refund Upon Termination and a Combined SKU

A vendor sells a one-year term license with coterminous PCS for $6,000. The customer has the right to terminate at its convenience the PCS at the end of each month. The contractual prices of the license and PCS are not separately stated (i.e., the license and PCS do not have separate SKUs). Accordingly, the amount that would be refunded upon termination is not known. The vendor concludes that it has two distinct performance obligations: (1) the license and (2) the PCS.

Generally, if the amount that would be refunded is not stated (i.e., unknown) because it is subject to negotiation and not legally enforceable, the arrangement would be accounted for as a one-year contract if a substantive termination penalty is legally enforceable.

[7] Total noncancelable consideration of $5,100 for the initial month is allocated on a relative stand-alone selling-price basis — that is, approximately 98 percent to the license and 2 percent to one month of PCS.

2.3.6.1.2 License Keys and Termination Provisions

The example below illustrates how termination provisions in a software licensing contract requiring the delivery of a license key for the customer to use the software affect the contract term and the recognition of revenue.

Example 2-13

Company LEH enters into an arrangement to license its software (a right-to-use license for which revenue is recognized at a point in time) to Customer MJR for one year with coterminous PCS. The annual fee for the license and PCS is $5,000 (paid quarterly). Company LEH determines that the stand-alone selling price of the license is $4,000 and the stand-alone selling price of the PCS is $1,000. Company LEH delivers a license key to MJR at the beginning of each quarter; the license key is required for MJR to use the software. Company LEH determines that the license and PCS are distinct performance obligations.

Consider the following cases:

- *Case A: contract may be terminated at the end of each quarter during the one-year license term* — In Case A, MJR may choose not to make the next quarterly payment, thereby alleviating LEH's obligation to deliver the quarterly license key and provide further PCS. Customer MJR's election not to pay the quarterly fee is not deemed to be a breach of the contract, and LEH has no recourse against MJR if payment is not received (other than to discontinue providing the license and PCS). In effect, the contract is cancelable each quarter. Upon cancellation, MJR's rights to use the license and receive PCS for the remainder of the one-year license term are also revoked.
- *Case B: contract may not be terminated during the one-year license term* — In Case B, LEH is required to deliver or make available the license key to MJR at the beginning of each quarter (such obligation is not contingent on MJR's making quarterly payments). If LEH does not deliver or make available the license key at the beginning of each quarter, LEH will be in breach of its contractual obligations. Similarly, MJR will be in breach of its contractual obligations if it does not make the quarterly payments. Company LEH has agreed to deliver license keys on a quarterly basis as protection against a breach of contract by MJR. For example, if MJR fails to make payment on time at the start of the second quarter, LEH would still deliver the license key for that quarter. But if MJR has still not paid by the end of the second quarter and is therefore clearly in breach of its contractual commitments, LEH could consider whether to withhold the license key for the third quarter in response to MJR's breach of contract. The contract may not be terminated by either LEH or MJR during the one-year license term, and LEH has a history of enforcing the contract term.

In Case A, because the contract may be canceled at the end of each quarter, LEH does not have an unconditional obligation to deliver the license key to MJR after the first quarter, nor does MJR have the unconditional obligation to continue making quarterly payments to LEH. Because the contract is cancelable by MJR each quarter, the contract term is limited to one quarter unless MJR renews the contract (by making the quarterly payment). At contract inception (i.e., when the first license key is transferred to MJR), MJR obtains a right to use a license for only a term of one quarter. If MJR elects not to cancel the contract and LEH transfers an additional key to MJR, MJR obtains the rights to use and benefit from the software and receive PCS for an additional quarter.

In this case, LEH transfers control of a license for one quarter and is required to provide one quarter of PCS each time MJR elects not to terminate the contract. Therefore, LEH should recognize revenue of $1,000 allocated to the license at the beginning of each quarter and $250 allocated to PCS over the quarterly PCS period.

Example 2-13 (continued)

In Case B, LEH should account for the arrangement as a promise to transfer a one-year term license and one year of PCS. Although a new license key is required to be delivered or made available at the beginning of each quarter, LEH and MJR have entered into a noncancelable contract that gives MJR the right to use the software for one year. Control of a license can be transferred even if the product key is not transferred to the customer as long as the key is made available to the customer (and accessing the key is within the customer's control). In Case B, MJR has an enforceable right to demand the license key, and LEH is obligated to transfer or otherwise make available to MJR the key each quarter (regardless of whether MJR makes timely payments). Accordingly, once LEH initially transfers the license (and key) to MJR, MJR obtains control of the one-year term license. Because LEH does not have the ability to terminate the contract in the absence of a breach of contract by MJR or to prevent MJR from accessing the license key each quarter, LEH transfers all of the rights to use and benefit from the software for the entire one-year license term at contract inception. Similarly, MJR does not have the right to terminate the contract and cease making quarterly payments since the contract is noncancelable and LEH has a history of enforcing the contract term.

Accordingly, LEH should recognize revenue of $4,000 allocated to the license at contract inception (when the initial key is delivered) and $1,000 allocated to PCS over the PCS term (i.e., one year).

2.3.7 Reassessing the Criteria for Identifying a Contract

An entity is required to evaluate the criteria in ASC 606-10-25-1 at contract inception to determine whether a valid and genuine transaction exists for accounting purposes. Once an entity concludes that the criteria are met (i.e., that a valid contract exists), it is not required to reassess the criteria unless there has been a significant change in facts and circumstances (i.e., changes that might call into question the existence of a contract rather than minor changes that might reasonably be expected over the contract term, particularly for long-term contracts). A reassessment may be required, for example, if an entity determines that its remaining contractual rights and obligations are no longer enforceable or if other changes suggest that a valid and genuine transaction no longer exists.

If an entity is required to reassess its contract because of a significant change in facts and circumstances, the criteria in ASC 606-10-25-1 would only be evaluated in the context of the remaining goods or services that have yet to be provided. The reassessment would not affect any assets or revenue that has been recognized from satisfied performance obligations. However, assets would need to be evaluated for impairment under other applicable guidance, such as ASC 310 (or ASC 326, once adopted[8]).

There may be situations in which an entity concludes at contract inception that the criterion in ASC 606-10-25-1(e) is met but subsequent changes in circumstances lead the entity to question whether it will collect consideration from the customer. When concerns arise regarding the collectibility of consideration, an entity will need to use judgment to determine whether those concerns arise from a significant change in facts and circumstances in the context of ASC 606-10-25-5. That determination should be situation-specific (e.g., a significant change due to bankruptcy). If an entity concludes that a reassessment is required and determines that the collectibility criterion is not met, the contract would fail step 1. Accordingly, the entity is precluded from recognizing additional revenue under the contract until the criteria in ASC 606-10-25-7 are met or collectibility becomes probable. The entity also assesses any related contract assets or accounts receivable for impairment.

[8] See footnote 4.

2.3.8 Consideration Received When the Criteria for Identifying a Contract Are Not Met

If a contract does not meet the criteria in ASC 606-10-25-1 at contract inception, no revenue can be recognized until either the contract existence criteria are met or other conditions are satisfied. That is, any consideration received from a customer, including nonrefundable consideration, is precluded from being recognized as revenue until certain events have occurred. Those events are described in the following guidance in ASC 606-10-25-7:

ASC 606-10

25-7 When a contract with a customer does not meet the criteria in paragraph 606-10-25-1 and an entity receives consideration from the customer, the entity shall recognize the consideration received as revenue only when one or more of the following events have occurred:

a. The entity has no remaining obligations to transfer goods or services to the customer, and all, or substantially all, of the consideration promised by the customer has been received by the entity and is nonrefundable.
b. The contract has been terminated, and the consideration received from the customer is nonrefundable.
c. The entity has transferred control of the goods or services to which the consideration that has been received relates, the entity has stopped transferring goods or services to the customer (if applicable) and has no obligation under the contract to transfer additional goods or services, and the consideration received from the customer is nonrefundable.

2.3.9 Whether a Receivable Can Be Recorded When a Contract Fails Step 1 Because Collectibility Is Not Probable

If an entity decides to transfer its promised goods or services before collecting consideration from its customer and the collection of such consideration is not probable, a question arises about whether the entity can recognize a receivable for the amount of consideration to which it is legally entitled.

ASC 606-10-45-4 states, in part, the following (pending content effective later than the effective date of ASC 606 {in braces}):

> A receivable is an entity's right to consideration that is unconditional. A right to consideration is unconditional if only the passage of time is required before payment of that consideration is due. . . . An entity shall account for a receivable in accordance with Topic 310 {and Subtopic 326-20}.

In general, an entity cannot record a receivable if it transfers a good or service to its customer but the accounting contract fails step 1 because collectibility of the expected consideration is not probable. While an entity may have a legal contract, if it cannot conclude that a contract exists from an accounting perspective, it cannot recognize revenue and typically would not recognize a receivable.

When an entity has a right to recover products (e.g., hardware devices) from customers, it may be acceptable for the entity to record an asset (and corresponding adjustment to cost of sales) for its right to recover products from customers on settling the refund liability. For example, if the entity is unable to conclude that a contract has met all of the step 1 criteria because collectibility of the expected consideration is not probable, but the entity has already transferred inventory to the customer, the entity may record an asset for the right to the inventory if the legal contract stipulates that the entity has the right to take back the inventory in the event that the customer does not pay.

2.3.10 Combining Contracts

Generally, the revenue standard is applied at the individual contract level unless the portfolio approach has been elected. However, an entity's contracting practice could result in a single arrangement with a customer that is governed by multiple legal contracts. That is, the commercial substance of a single arrangement to provide goods or services to a customer could be addressed by multiple contracts with the same customer. The revenue standard requires multiple contracts with a customer to be combined and accounted for as a single contract when certain conditions are present.

ASC 606-10-25-9 requires contracts to be combined if they are entered into "at or near the same time with the same customer"[9] and at least one of the following criteria is met:

- "The contracts are negotiated as a package with a single commercial objective."
- "The amount of consideration to be paid in one contract depends on the price or performance of the other contract."
- "The goods or services promised in the contracts (or some goods or services promised in each of the contracts) are a single performance obligation."

The contract combination guidance should be assessed at contract inception. An entity will need to use judgment in determining whether multiple contracts are "entered into at or near the same time." As a general rule, the longer the period between entering contracts with the same customer, the more likely those contracts are not economically linked. However, a subsequent contract that is not combined with an initial contract could be a modification of the initial contract.

2.3.11 Contract Modifications

Contract modifications can frequently happen in the normal course of business. Any time an entity and its customer agree to change what the entity promises to deliver or the amount of consideration the customer will pay (i.e., creates or changes the enforceable rights or obligations in a preexisting contract), there is a contract modification.

The first step in the identification of a contract modification is to assess whether, for a contract accounted for under ASC 606, there has been a change in the contract's scope or price, or both. The second step is to determine whether the parties to the contract have agreed upon the change. As noted above, contract modifications must be agreed to by both parties (written, orally, or through customary business practices). That is, both parties must agree to change the enforceable rights and obligations of the contract.

At times, the determination of whether a new contract is a modification of an existing contract may be relatively simple. For example, an entity may be able to conclude relatively easily that a new contract does not modify an existing contract if the promised goods and services in the original contract are unrelated to and priced independently of those in the new contract (i.e., the additional goods or services are distinct and priced at their stand-alone selling prices).

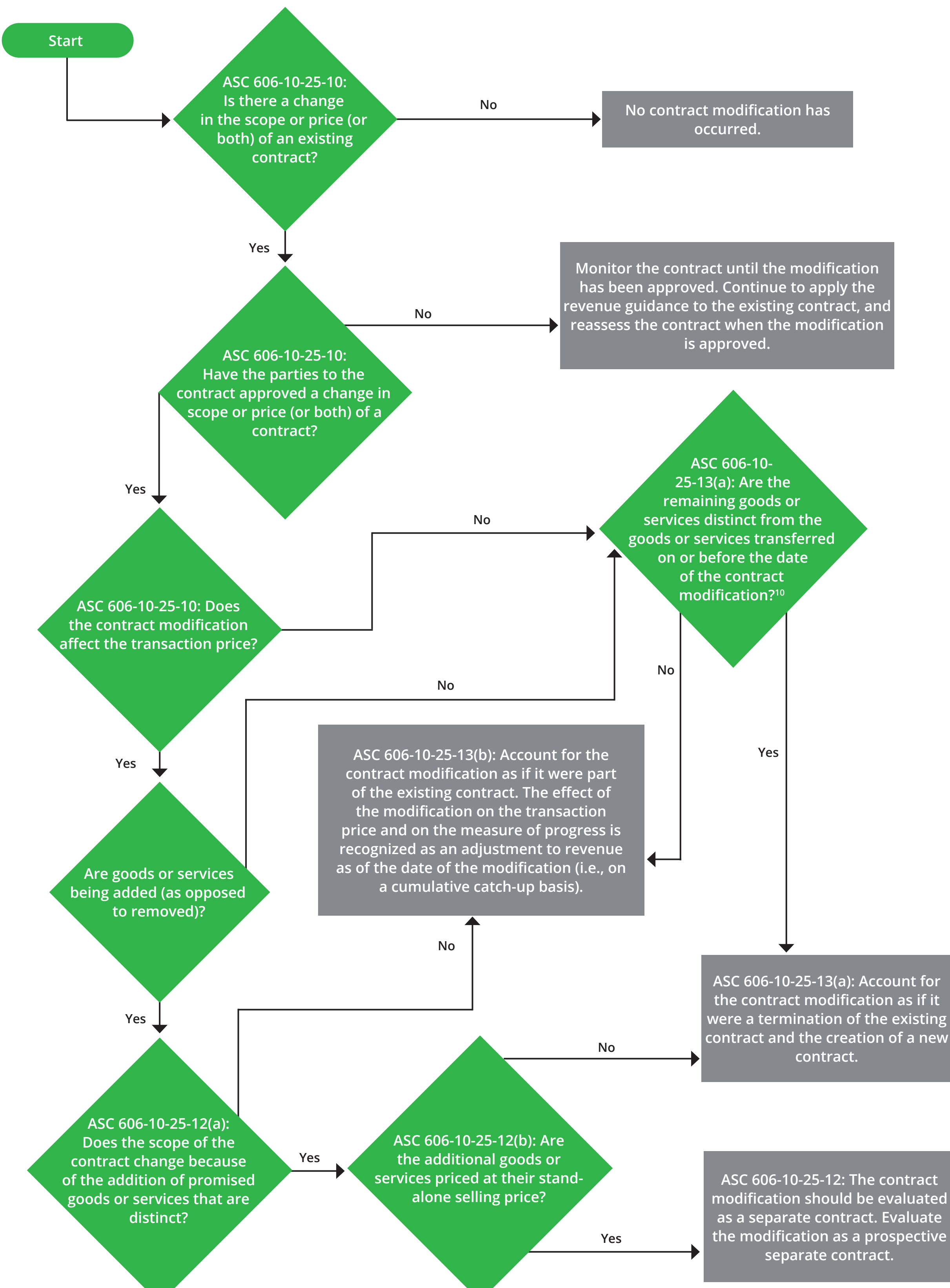
[9] A contract with a customer cannot be combined with a contract with a different party unless that party is considered a "related party" of the customer.

However, in other circumstances, even when the new agreement is not explicitly structured as a modification to the original contract, the entity may need to use judgment when making this determination. In addition to the considerations described in Section 2.3.10, the entity may need to assess whether and, if so, why any of the promised goods or services are priced at a discount in the newly negotiated contract (e.g., whether the favorable terms were offered solely because of the existing relationship). The entity may also need to understand the substance of the negotiations between the two parties when executing the new agreement to faithfully depict the recognition of revenue related to the goods or services promised to the customer. For example, the revenue recognition pattern of a combined, modified contract, whose combined transaction price would need to be allocated to the goods and services of the combined contract, may be different from that of a newly negotiated contract accounted for as a separate unrelated contract, whose independent transaction price would be allocated to fewer goods and services.

If a change in a contract qualifies as a contract modification under ASC 606-10-25-10 and 25-11, the entity must assess the goods and services and their selling prices. Depending on whether those goods and services are distinct or sold at their stand-alone selling prices, a modification can be accounted for as:

- A separate contract (see ASC 606-10-25-12).
- One of the following (if the modification is **not** accounted for as a separate contract):
  - A termination of the old contract and the creation of a new contract (see ASC 606-10-25-13(a)).
  - A cumulative catch-up adjustment to the original contract (see ASC 606-10-25-13(b)).
  - A combination of the items described in ASC 606-10-25-13(a) and (b), in a way that faithfully reflects the economics of the transaction (see ASC 606-10-25-13(c)).

The flowchart below explains the decisions needed to (1) identify modifications made to a contract and (2) determine how an entity should account for each type of contract modification.



[10] If the answer is "Yes" for some goods or services and "No" for others, it may be appropriate to apply both models to a single contract, in the manner described in ASC 606-10-25-13(c), on the basis of an assessment at the performance obligation level.

2.3.11.1 Contract Modification Accounted for as a Separate Contract

A contract modification is accounted for as a separate contract if (1) the modification adds *distinct* goods or services *and* (2) the price increases in such a way that the additional goods or services are priced at their *stand-alone selling prices*, taking into account any adjustments that are appropriate to reflect the circumstances of the contract (e.g., the stand-alone selling price may decrease because the entity does not incur selling-related costs it would normally incur if it were to sell those same goods or services to a new customer). The change in scope must be an increase rather than a decrease in the quantity of promised goods or services because by its very nature, a new contract that decreases the quantity of goods or services promised in the original contract is inherently modifying the original contract (i.e., the new contract is not separate). When an entity accounts for a contract modification as a separate contract in accordance with ASC 606-10-25-12, the entity's accounting for the original contract is not affected by the modification. Any revenue recognized through the date of the modification is not adjusted, and remaining performance obligations will continue to be accounted for under the original contract. The new contract is accounted for separately from the original contract and on a prospective basis.

There is no economic difference between (1) a modification of an existing contract with a customer that includes additional *distinct* goods or services at their *representative stand-alone selling prices* and (2) a completely new contract entered into by the two parties for goods or services at their representative stand-alone selling prices. Therefore, such a modification of an existing contract should be accounted for as a new contract that is separate and apart from the existing contract.

2.3.11.2 Contract Modification Not Accounted for as a Separate Contract

A contract modification that does not meet the requirements outlined in the previous section is not accounted for as a separate contract. Therefore, an entity would have to determine how to account for a blended contract that now includes one or both of the following:

- An original agreement plus or minus some other goods or services.
- A change in the amount of consideration due under the modified arrangement.

The determination of which model to use depends on whether the remaining goods or services (the originally promised items and the newly promised items) are *distinct* from the goods and services already provided under the contract. This further highlights the importance of appropriately identifying all distinct performance obligations in a contract, including an assessment of whether one or more performance obligations in a contract are required to be accounted for as a series in accordance with ASC 606-10-25-14(b). Contract modifications are evaluated at the performance obligation level unless the performance obligation is accounted for as a series, in which case contract modifications are evaluated at the level of the distinct goods or services that make up the series.

In accordance with ASC 606-10-25-13(a), if the remaining goods or services are distinct from the goods or services already provided under the original arrangement, the entity would in effect establish a "new" contract that includes only those remaining goods and services. In this situation, the entity would allocate to the remaining performance obligations (or distinct goods or services) in the contract (1) consideration from the original contract that has not yet been recognized as revenue and (2) any additional consideration from the modification. Such a situation would arise when there is a modification to a contract that contains (1) remaining distinct performance obligations (e.g., a distinct license and distinct PCS) or (2) a single performance obligation accounted for as a series of distinct goods or services under ASC 606-10-25-14(b) (e.g., SaaS that is a stand-ready obligation).

Example 2-14

Modification of a Performance Obligation Composed of a Series of Distinct Services

Company A has a contract with Customer B to provide SaaS over a one-year term for $1 million. The $1 million represents the stand-alone selling price of the SaaS. Company A concludes that the performance obligation to deliver SaaS over one year qualifies for revenue recognition over time and meets the definition of a series in ASC 606-10-25-14(b). Assume that the contract does not have a significant financing component.

After six months, revenue of $500,000 has been recognized, but B decides that it wants to extend the term of the SaaS for another year. Company A agrees to extend the SaaS for an incremental fee of $750,000. This price does not represent the stand-alone selling price of the SaaS, and it is adjusted by more than the normal expenses that A would incur to obtain a new customer.

If each day of SaaS were determined to be distinct, A would apply the guidance in ASC 606-10-25-13(a) to this fact pattern because the remaining days of SaaS are distinct services but are not sold at their stand-alone selling price. Therefore, A would reallocate the remaining consideration of both the original contract ($500,000) and the modification ($750,000) to the remaining SaaS and recognize $1.25 million over the remaining 18-month period.

In contrast, in accordance with ASC 606-10-25-13(b), if the contract modification results in remaining goods and services that are not distinct, the entity should account for the modification as though the additional goods and services were an addition to an incomplete performance obligation. This may be the case when a contract with a customer contains one performance obligation (e.g., customization of a software license for which revenue is recognized over time) and the parties modify the terms to change the scope of the services provided. In this instance, a measure of progress, such as costs incurred, would typically be used to recognize revenue over time. For example, suppose that just before the modification, the entity's performance was 30 percent complete. After the modification, the entity may determine that its performance is only 25 percent complete (or 35 percent complete because the scope of the single performance obligation decreased). As a result, an updated revenue figure is calculated on the basis of the revised percentage, and the entity would record a cumulative catch-up adjustment.

Example 2-15

Modification of an Accumulating Performance Obligation

Company A has a contract with Customer B that contains a single performance obligation that is a license to an extensive and highly customized software solution (B will take possession of the software) for $1 million. After six months, A and B decide to increase the scope of the contract to add functionality for an incremental fee of $500,000. Assume that (1) revenue is being recognized over time in accordance with ASC 606-10-25-27 and (2) as of the date of modification, but before the contract is actually modified, A has concluded that the contract is 40 percent complete. Company A has determined that the additional functionality is not distinct from the original software solution and that together, they still form a complete solution (i.e., a single project that represents a single performance obligation) that is being delivered to the customer.

Company A would combine the goods and services from the original contract and the modification to the contract. No allocation is necessary since there is only a single performance obligation. However, A would need to determine the extent to which it has completed its modified performance obligation.

Assume that A determines that the modified performance obligation is now 20 percent complete. Further assume that before the modification, A recorded $400,000 of revenue ($1 million × 40%). Upon modification, A would record a reduction in revenue of $100,000 ($1.5 million × 20%, or $300,000, less $400,000) to catch up on previously recognized revenue to represent A's performance to date on the basis of the modified contract terms and in accordance with ASC 606-10-25-13(b). Subsequently, A would recognize the remaining $1.2 million ($1.5 million − $300,000) as it satisfies the remaining performance obligation.

There may be contracts in which some performance obligations include remaining goods or services that are distinct from those already provided under the original arrangement, while other performance obligations include remaining goods and services that are not (i.e., a change in scope of a partially satisfied performance obligation). The FASB and IASB decided that in those circumstances, it may be appropriate for an entity to apply both models to a single contract, in the manner described in ASC 606-10-25-13(c), on the basis of an assessment at the performance obligation level. An entity would do so by considering whether, for the performance obligations that are not yet fully satisfied (including those that are partially satisfied), the remaining goods or services to be transferred in accordance with the promise are distinct from the goods or services previously transferred. No change would be made to revenue recognized for fully satisfied performance obligations.

2.3.11.3 Blend-and-Extend Modifications Related to a SaaS Arrangement

An entity that sells a SaaS solution may modify its arrangements before the end of the initial contract term by renewing the initial contract and revising the pricing on a "blended" basis for the remaining term, particularly if prices have decreased (i.e., a "blend-and-extend modification"). In such circumstances, the entity and its customer agree to extend the contract term and "blend" the remaining original, higher contract rate with the lower rate of the extension period for the remainder of the combined term. Consequently, when navigating the contract modification guidance, the entity may find it difficult to determine the appropriate accounting treatment. In a typical blend-and-extend modification in the SaaS industry, the entity would account for such a modification as either (1) a separate contract for the added services under ASC 606-10-25-12 or (2) a termination of the existing contract and the creation of a new contract under ASC 606-10-25-13(a).[11] The determination of which model to apply may be based on whether the additional services are priced at their stand-alone selling prices (i.e., whether the conditions in ASC 606-10-25-12 are met).

We believe there are three alternatives for an entity to consider in determining how to account for a blend-and-extend modification.

In accordance with ASC 606-10-25-12(b), to determine whether a modification results in a separate contract, an entity must assess whether the price of the contract increases by an amount that reflects the stand-alone selling prices of the additional promised goods or services. We believe that if a modification is not just an increase in a contract's scope (e.g., an extension of the SaaS arrangement) in exchange for an incremental fee because the pricing of the remaining goods or services in the original contract is also adjusted, it would be appropriate for the entity to account for the modification as a termination of an existing contract and the creation of a new contract. This is because the modification does not solely add goods or services for an incremental fee as described in ASC 606-10-25-12 (i.e., the modification also adjusts the pricing of the original goods or services). Under this view (hereafter referred to as "View A"), the entity does not need to perform an analysis of the stand-alone selling prices of the additional promised goods or services.

[11] Cumulative adjustments to revenue under ASC 606-10-25-13(b) are not common for these types of modifications of SaaS arrangements because the services provided after the modification are typically distinct from those transferred before the modification. Therefore, this discussion does not focus on modifications that would result in an adjustment to revenue.

However, an entity may also apply one of the two views below to blend-and-extend modifications. Under these views, an entity must carefully analyze whether the additional goods or services are actually priced at their stand-alone selling prices to determine whether they should be accounted for as a separate contract:

- *View B* — This view focuses on the net increase in the contract consideration (i.e., the total increase in consideration that the entity expects to be entitled to under the modified contract, including any changes to the prices of the remaining goods or services in the original contract), compared with the stand-alone selling prices of the additional promised goods or services. In determining how to account for the modification, the entity should compare the net increase in consideration with the stand-alone selling price of the services added during the extension period.
- *View C* — This view focuses on the revised blended prices of the contract compared with the stand-alone selling prices of the additional promised goods or services. Therefore, the analysis focuses solely on whether the stated blended price is consistent with the stand-alone selling price of the additional services during the extension period.

An entity should consistently apply its elected method to similar contracts.

Example 2-16

On January 1, 20X8, Company S enters into a noncancelable contract with Customer T for a two-year term to provide a SaaS solution for a variable fee of $50 per usage. The stand-alone selling price of the SaaS ranges from $45 to $55 per usage. There are no other performance obligations in the contract. Company S determines that (1) it is providing a series of distinct services and (2) it is appropriate to recognize revenue by using a time-based measure of progress (i.e., ratably). In considering how much revenue to recognize in a distinct time period, S concludes that the contract meets the variable consideration allocation exception guidance in ASC 606-10-32-40, and therefore it recognizes revenue as usage occurs. In 20X8, T incurs usage-based fees for 1,000 transactions.

By January 1, 20X9, the stand-alone selling price range of the SaaS has decreased to $30 to $40 per usage. During negotiations, T renews the contract for an additional year but requests a decrease in pricing. As a result of negotiations, S and T agree to apply a blended rate of $43 per usage for the remaining two years of the modified contract. Customer T is expected to incur usage-based fees for 1,000 transactions per year for the remaining years.

The following three views could be applied:

- *View A* — Company S accounts for the modification as a termination of the existing contract and the creation of a new contract. Therefore, it recognizes revenue at the blended transaction price of $43 per usage in both 20X9 and 20Y0.
- *View B* — Company S computes the total increase in the contract consideration, which is $36,000 or $36 per usage, as follows:

Additional consideration for 20Y0 ($43 per usage × 1,000 transactions)	$ 43,000
Less: Decrease in consideration for 20X9 [($50 per usage – $43 per usage) × 1,000 transactions]	7,000
Total increase in consideration	$36,000 or $36 per usage*

* ($36,000 ÷ 1,000 transactions)

Example 2-16 (continued)

Company S would then compare the increase in the transaction price to the stand-alone selling price range for the SaaS that will be provided during the extension period (i.e., 20Y0). Because $36 per usage is within the stand-alone selling price range of $30 to $40 per usage, S concludes that the extension period should be accounted for as a separate contract. Therefore, S will continue to recognize revenue in 20X9 at $50 per usage, but it will recognize revenue in 20Y0 at $36 per usage.

- *View C* — Company S compares the revised blended rate of $43 per usage to the stand-alone selling price range for the SaaS that will be provided during the extension period. Because $43 per usage is outside the stand-alone selling price range of $30 to $40 per usage, S concludes that the modification should be accounted for as a termination of the existing contract and the creation of a new contract. The accounting outcome would be similar to that in View A.

	Revenue Recognized		Revenue Recognized	Revenue Recognized	Total Revenue Recognized
	Jan. 1, 20X8–Dec. 31, 20X8		Jan. 1, 20X9–Dec. 31, 20X9	Jan. 1, 20Y0–Dec. 31, 20Y0	
View A	$ 50,000	Modification occurs	$ 43,000*	$ 43,000*	$ 136,000
View B	50,000	Modification occurs	50,000**	36,000***	136,000
View C	50,000	Modification occurs	43,000*	43,000*	136,000

* Under Views A and C, the modification is treated as a termination of the existing contract and the creation of a new contract. Company S uses a blended rate of $43 per usage, resulting in $43,000 ($43 per usage × 1,000 transactions) of revenue recognized in 20X9 and 20Y0.

** Under View B, because the extension period is treated as a separate contract, the initial contract is not affected. Company S recognizes revenue in the amount of $50,000 ($50 per usage × 1,000 transactions) in 20X9.

*** Under View B, the extension period (i.e., the separate contract) starts on January 1, 20Y0. Company S recognizes revenue in the amount of $36,000 ($36 per usage × 1,000 transactions) in 20Y0.

2.3.11.4 Differentiating Changes in the Transaction Price From Contract Modifications

While contract modifications often result in a change in the transaction price, not all changes in the transaction price are related to contract modifications. An entity should consider whether a change in the price is due to (1) the resolution of variability that existed at contract inception or (2) a change in the scope or price (or both) of the contract that changes the parties' rights and obligations after contract inception. An entity will need to use judgment to determine whether a change in price is the result of a change in the transaction price or a contract modification, especially when the entity provides the customer with a price concession. This distinction is important because the resolution of variability that existed at contract inception is accounted for in accordance with ASC 606-10-32-43 and 32-44, whereas ASC 606-10-32-45 states that changes in the transaction price that are related to a contract modification are accounted for in accordance with the contract modification guidance in ASC 606-10-25-10 through 25-13.

Stakeholders have raised questions about Example 5, Case B, in ASC 606. The example's facts describe a contract modification in which an entity gives a customer a discount because goods and services previously delivered to the customer were determined to be of lower quality than that to which the parties had agreed. The example is designed to illustrate how an entity would apply the guidance in ASC 606-10-25-13(a), which describes a modification that would terminate the original contract and create a new one. In the absence of this example, a literal interpretation of the guidance in ASC 606-10-25-13(a) would require all of the consideration, inclusive of the discount negotiated in the modification for the 60 flawed products already delivered, to be recognized only when the undelivered products are delivered to the customer in the future (i.e., the modification is solely accounted for prospectively). That is, the allocation of the remaining consideration of $7,500 (which is the sum of (1) the original 60 remaining products × $100 per product and (2) the additional 30 products × $50 per product) would result in the recognition of $83.33 for each of the remaining 90 products delivered. This is because as of the date of the modification, the 90 products (60 in the original contract and 30 in the modification) are distinct from the 60 products already delivered.

Specifically, stakeholders have questioned how to determine the appropriate accounting approach when a contract is modified and the selling price reflects both (1) compensation for poor-quality goods or services that have already been supplied to the customer and (2) a selling price for the additional goods or services that does not represent the stand-alone selling price as of the date of the contract modification. Generally, we believe that entities should carefully consider the facts and circumstances in a modification and appropriately consider whether there is a price concession or discount attributable to past performance that is similar to the price concession in Example 5, Case B, in ASC 606.

2.3.11.5 Accounting for Contract Assets as Part of a Contract Modification

The revenue standard provides an overall framework for modification accounting. For example, when a contract modification meets the conditions in ASC 606-10-25-13(a), the modification is accounted for prospectively as a termination of the existing contract and the creation of a new one. The revenue standard also requires entities to record contract assets in certain circumstances, such as when an entity has a contract with a customer for which revenue has been recognized (i.e., goods or services have been transferred to the customer), but customer payment is contingent on a future event, such as the satisfaction of additional performance obligations. These contract assets may still be recorded at the time of a contract modification.

Generally, existing contract assets should be carried forward to the new contract and realized as receivables are recognized (i.e., revenue is not reversed, leading to prospective accounting for the effects of the contract assets). This accounting treatment is generally appropriate for three reasons:

- It reflects the objective of ASC 606-10-25-13.
- ASC 606-10-25-13(a) "explicitly states that the starting point for the determination [of the allocation in a modification] is the transaction price in the original contract less what had already been recognized as revenue."[12]
- It is consistent with paragraph BC78 of ASU 2014-09, which notes that the intent of ASC 606-10-25-13(a) is to avoid adjusting revenue for performance obligations that have been satisfied (i.e., such modifications would be accounted for prospectively).

[12] Quoted from Implementation Q&A 81.

Example 2-17

Entity M enters into a contract with Customer R to sell a smart device (the product) and one year of a cloud-based service. The product and service are separate performance obligations. The one year of service is considered to be a series of distinct services that meet the criteria in ASC 606-10-25-14(b) to be accounted for as a single performance obligation satisfied over time. Entity M's performance obligation related to the product is satisfied at the point in time that the product is shipped to R, which occurs at the beginning of the first month.

The transaction price of the contract is $7,500, which is paid by R in 12 equal installments of $625 at the end of each month. Under these payment terms, the customer does not make an up-front payment when the product is shipped. The stand-alone selling price of the product is $2,700, and the stand-alone selling price of the services is $4,800 ($400 per month). Because the sum of the stand-alone selling prices equals the transaction price, the amount allocated to each performance obligation is the stand-alone selling price of that performance obligation. In addition, there are no explicit renewal provisions for the service.

At the end of six months, the contract is modified to include one additional year of service beyond the initial one-year service term. Customer R is current with all payments, and the modification does not affect the amounts due for the remaining six months of service under the initial one-year service term (i.e., R continues to pay $625 each month for the remaining six months of the initial one-year service term). The price for the additional one year of services is $100 per month, which does not represent the stand-alone selling price of the services. Because the remaining services to be provided are distinct from the product and services already delivered to R, the modification is accounted for prospectively under ASC 606-10-25-13(a).

The journal entries below illustrate how M should recognize revenue at contract inception and in the months leading up to the contract modification. For simplicity, the journal entries ignore any effect of a significant financing component.

At contract inception, to recognize revenue for the product shipped to R:

Contract asset	2,700	
Revenue		2,700

At the end of each of months 1 through 6, to recognize revenue for the monthly services:

Cash or accounts receivable	625	
Revenue		400
Contract asset		225

After six months, immediately before the modification, M has recognized revenue of $5,100 ($2,700 for the product and $2,400 for the services) and has a cumulative contract asset balance of $1,350.

Entity M would retain the original contract asset of $1,350 on the modification date. The remaining consideration to be allocated consists of two components:

- $2,400 for the transaction price not yet recognized as revenue under the initial contract ($625 per month × 6 months remaining, less $1,350 contract asset balance).
- $1,200 for the additional one year of services ($100 per month × 12 months).

The total transaction price for the modified contract of $3,600 ($2,400 + $1,200) is allocated to the remaining months of service under the modified contract term; as a result, M recognizes revenue of $200 per month for the remaining 18-month contract term. The contract asset that existed on the modification date will be reduced as amounts received or receivable exceed revenue recognized; once the contract asset is recovered, amounts received or receivable in excess of revenue recognized will be reflected as a contract liability. This is reflected in the journal entries below.

Example 2-17 (continued)

At the end of each of months 7 through 9:

Cash or accounts receivable	625	
Revenue		200
Contract asset		425

At the end of month 10:

Cash or accounts receivable	625	
Revenue		200
Contract asset		75
Contract liability		350

Before revenue is recognized at the end of month 10, the cumulative contract asset balance is only $75, or $1,350 – ($425 × 3). When a contract asset is fully recovered (i.e., is reduced to zero), consideration received in excess of revenue recognized is reflected as a contract liability. Consequently, a contract liability is recorded for the remaining amounts that are received or receivable in excess of revenue recognized.

For each of months 11 and 12, the contract liability will be recorded in the manner shown in the journal entry below.

At the end of each of months 11 and 12:

Cash or accounts receivable	625	
Revenue		200
Contract liability		425

As of the end of month 12, the cumulative contract liability balance is $1,200; and beginning with month 13, amounts due under the modified contract are reduced to $100 per month. Revenue recognized for each month of service continues to be $200. This is reflected in the journal entry below for each of months 13 through 24.

At the end of each of months 13 through 24:

Cash or accounts receivable	100	
Contract liability	100	
Revenue		200

Example 2-17 (continued)

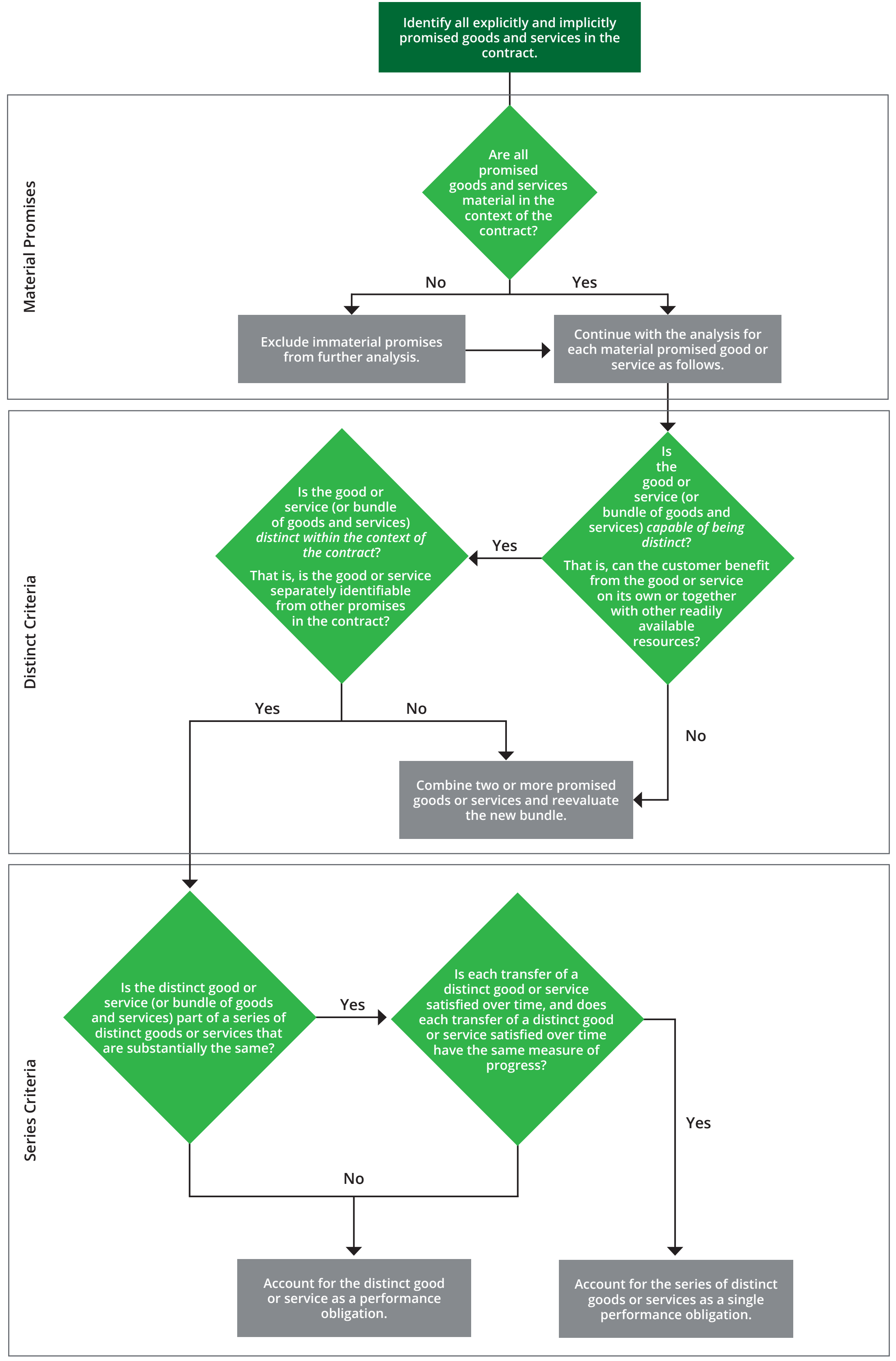
The results of this model are summarized in the table below.

Month	Cash Received or Received	Revenue Recognized	Cumulative Contract Asset Balance	Cumulative Contract Liability Balance
0	—	2,700	2,700	
1	625	400	2,475	
2	625	400	2,250	
3	625	400	2,025	
4	625	400	1,800	
5	625	400	1,575	
6	625	400	1,350	
7	625	200	925	
8	625	200	500	
9	625	200	75	
10	625	200		(350)
11	625	200		(775)
12	625	200		(1,200)
13	100	200		(1,100)
14	100	200		(1,000)
15	100	200		(900)
16	100	200		(800)
17	100	200		(700)
18	100	200		(600)
19	100	200		(500)
20	100	200		(400)
21	100	200		(300)
22	100	200		(200)
23	100	200		(100)
24	100	200	—	—

2.4 Identify the Performance Obligations (Step 2)

Step 2 is one of the most critical steps in the revenue framework since it establishes the unit of account for revenue recognition. This step requires an entity to identify what it has promised to the customer. The entity then determines whether a promise or multiple promises represent one or more performance obligations to the customer. To accomplish this, the entity should determine whether the promises in the contract are distinct.

The decision tree below illustrates the revenue standard's process for identifying performance obligations in a contract.



Identify all explicitly and implicitly promised goods and services in the contract.
Material Promises
Are all promised goods and services material in the context of the contract?
No
Yes
Exclude immaterial promises from further analysis.
Continue with the analysis for each material promised good or service as follows.
Distinct Criteria
Is the good or service (or bundle of goods and services) *capable of being distinct*?
That is, can the customer benefit from the good or service on its own or together with other readily available resources?
Yes
Is the good or service (or bundle of goods and services) *distinct within the context of the contract*?
That is, is the good or service separately identifiable from other promises in the contract?
Yes
No
No
Combine two or more promised goods or services and reevaluate the new bundle.
Series Criteria
Is the distinct good or service (or bundle of goods and services) part of a series of distinct goods or services that are substantially the same?
Yes
Is each transfer of a distinct good or service satisfied over time, and does each transfer of a distinct good or service satisfied over time have the same measure of progress?
Yes
No
Account for the distinct good or service as a performance obligation.
Account for the series of distinct goods or services as a single performance obligation.

2.4.1 Immaterial Promised Goods or Services

ASC 606-10-25-16A and 25-16B provide guidance on immaterial goods and services. We believe that the following considerations are relevant to the assessment of whether a good or service is immaterial in the context of the contract:

- An entity may conclude that a potential good or service is immaterial in the context of the contract if the estimated stand-alone selling price of the potential good or service is immaterial (quantitatively) compared with the total consideration in the contract (i.e., the amount that would be allocated to such good or service is immaterial in the context of the contract).
- An entity may conclude that a potential good or service is immaterial in the context of the contract if it determines that the customer does not consider the potential good or service material to the contract (i.e., the entity would evaluate qualitative factors, including the customer's perspective, in determining whether a potential good or service is immaterial in the context of the contract).

In addition, we think that when an entity performs an assessment to identify immaterial promised goods or services, it should also consider the guidance in ASC 606-10-25-16B on customer options (i.e., potential material rights) as well as the SEC staff's view of "material" as discussed in SAB Topic 1.M.

2.4.2 Shipping and Handling Activities

ASC 606 provides a practical expedient that permits an entity to account for shipping and handling activities that occur after the customer has obtained control of a good as fulfillment activities (i.e., an expense) rather than as a promised service (i.e., a revenue element). An entity may also elect to account for shipping and handling activities that occur after control of the good is transferred to the customer as a promised service. When the practical expedient is elected and revenue for the related good is recognized before the shipping and handling activities occur, the entity should accrue the costs of the shipping and handling activities at the time control of the related good is transferred to the customer (i.e., at the time of sale).

Shipping and handling activities performed before control of a product is transferred do not constitute a promised service to the customer in the contract (i.e., they represent fulfillment costs).

Connecting the Dots

The election to account for shipping and handling services as a promised service (a revenue element) or a fulfillment activity (a cost element) typically should not apply to entities whose principal service offering is shipping or transportation. Further, we believe that such election (1) should be applied consistently and (2) is available to entities that recognize revenue for the sale of goods either at a point in time or over time.

In a speech at the 2017 AICPA Conference on Current SEC and PCAOB Developments, Barry Kanczuker, associate chief accountant in the SEC's OCA, provided the following guidance on the classification of shipping and handling expenses:

> Given the noted absence of any guidance, I believe an entity will need to apply reasonable judgment in determining the appropriate classification of shipping and handling expenses for those shipping and handling activities that are accounted for as activities to fulfill the promise to transfer the good. Hence, the staff noted it would not object to the following approaches. First, the staff noted that it would not object to classification of these expenses within cost of sales. Second, given that there is no explicit guidance within Topic 606 related to

the classification of shipping and handling expenses, the staff noted that it also would not object to an entity continuing to apply its previous policy regarding classification of these expenses, which could potentially be outside of cost of sales. I believe that a registrant that classifies significant shipping and handling costs outside of cost of sales should consider whether it should disclose the amount of such costs and the line item or items on the income statement that include them, similar to the disclosures required under the previous guidance. [Footnotes omitted]

2.4.3 Criteria to Be Distinct

ASC 606-10-25-19 notes that a "good or service that is promised to a customer is distinct if both of the following criteria are met":

a. The customer can benefit from the good or service either on its own or together with other resources that are readily available to the customer (that is, the good or service is capable of being distinct).

b. The entity's promise to transfer the good or service to the customer is separately identifiable from other promises in the contract (that is, the promise to transfer the good or service is distinct within the context of the contract).

Further, ASC 606-10-25-22 states that "[i]f a promised good or service is not distinct, an entity shall combine that good or service with other promised goods or services until it identifies a bundle of goods or services that is distinct. In some cases, that would result in the entity accounting for all the goods or services promised in a contract as a single performance obligation."

Connecting the Dots

As a practical matter, it may not be necessary to apply the detailed guidance in ASC 606 on unbundling if the amounts recognized and disclosed in the financial statements will be the same irrespective of whether unbundling is performed. For example, when control of two or more goods or two or more services is transferred at exactly the same time (e.g., different software licenses delivered at the same time), or on the same basis over the same period (e.g., different SaaS solutions delivered ratably over the same contract term), and if those items do not need to be segregated for disclosure purposes, it will not be necessary to unbundle each of those concurrently delivered items because the amount and timing of revenue recognized and disclosed under the model would not differ if the items were unbundled. The boards acknowledged this in paragraph BC116 of ASU 2014-09 as follows:

> In their redeliberations, the Boards observed that paragraph 606-10-25-14(b) applies to goods or services that are delivered consecutively, rather than concurrently. The Boards noted that Topic 606 would not need to specify the accounting for concurrently delivered distinct goods or services that have the same pattern of transfer. This is because, in those cases, an entity is not precluded from accounting for the goods or services as if they were a single performance obligation, if the outcome is the same as accounting for the goods and services as individual performance obligations.

In addition, paragraph BC47 of ASU 2016-10 states:

> In many contracts, distinct sets of rights are coterminous. That is, the rights are transferred to the customer at the same point in time (in the case of licenses that provide a right to use intellectual property) or over the same period of time (in the case of licenses that provide a right to access intellectual property). Consistent with the discussion in paragraph BC116 of Update 2014-09, an entity would not be required to separately identify each set of distinct rights if those rights are transferred concurrently. For example, a licensor would not be precluded from accounting for the two sets of distinct rights in Example 61B as a single performance obligation if the facts of that example were modified such that the customer was able to begin to use and benefit from both sets of rights on January 1, 20X1 (rather than Class 1 on January 1, 20X1, and Class 2 on January 1, 20X2).

2.4.3.1 Capable of Being Distinct

The first criterion in ASC 606-10-25-19 that must be met for a promised good or service to be distinct (i.e., the good or service is capable of being distinct) is expanded in ASC 606-10-25-20.

ASC 606-10
25-20 A customer can benefit from a good or service in accordance with paragraph 606-10-25-19(a) if the good or service could be used, consumed, sold for an amount that is greater than scrap value, or otherwise held in a way that generates economic benefits. For some goods or services, a customer may be able to benefit from a good or service on its own. For other goods or services, a customer may be able to benefit from the good or service only in conjunction with other readily available resources. A readily available resource is a good or service that is sold separately (by the entity or another entity) or a resource that the customer has already obtained from the entity (including goods or services that the entity will have already transferred to the customer under the contract) or from other transactions or events. Various factors may provide evidence that the customer can benefit from a good or service either on its own or in conjunction with other readily available resources. For example, the fact that the entity regularly sells a good or service separately would indicate that a customer can benefit from the good or service on its own or with other readily available resources.

The first criterion for assessing whether goods or services in a contract are distinct would require an entity to assess whether a customer could economically benefit from the goods or services on their own or together with other readily available resources. "Readily available resources" could be those that have already been transferred to the customer as part of the current contract or prior contracts. For example, if a software entity sells a software license and PCS, the PCS is likely to be capable of being distinct because the customer can benefit from the PCS in conjunction with the software license (i.e., the readily available resource that is initially transferred to the customer). The fact that a good or service is regularly sold on its own is an indicator that the good or service meets the first criterion. For example, if a software entity regularly sells a SaaS solution on its own (e.g., without implementation services), the SaaS solution is likely to be capable of being distinct.

The assessment of whether the customer can economically benefit from the goods or services on its own should not be based on the customer's intended use of the goods or services. Paragraph BC100 of ASU 2014-09 notes that the assessment of whether the customer can benefit from the goods or services on its own "should be based on the characteristics of the promised goods or services themselves" and should exclude "contractual limitations that might preclude the customer from obtaining readily available resources from a source other than the entity."

2.4.3.2 Distinct Within the Context of the Contract

The second criterion in ASC 606-10-25-19 that must be met for a promised good or service to be distinct (i.e., the good or service is separately identifiable) is expanded in ASC 606-10-25-21.

ASC 606-10

25-21 In assessing whether an entity's promises to transfer goods or services to the customer are separately identifiable in accordance with paragraph 606-10-25-19(b), the objective is to determine whether the nature of the promise, within the context of the contract, is to transfer each of those goods or services individually or, instead, to transfer a combined item or items to which the promised goods or services are inputs. Factors that indicate that two or more promises to transfer goods or services to a customer are not separately identifiable include, but are not limited to, the following:

a. The entity provides a significant service of integrating goods or services with other goods or services promised in the contract into a bundle of goods or services that represent the combined output or outputs for which the customer has contracted. In other words, the entity is using the goods or services as inputs to produce or deliver the combined output or outputs specified by the customer. A combined output or outputs might include more than one phase, element, or unit.
b. One or more of the goods or services significantly modifies or customizes, or are significantly modified or customized by, one or more of the other goods or services promised in the contract.
c. The goods or services are highly interdependent or highly interrelated. In other words, each of the goods or services is significantly affected by one or more of the other goods or services in the contract. For example, in some cases, two or more goods or services are significantly affected by each other because the entity would not be able to fulfill its promise by transferring each of the goods or services independently.

The second criterion that the good or service is distinct within the context of the contract is included in the revenue standard because there could be situations in which the entity's contract with the customer requires the entity to provide additional goods and services and what the customer is actually acquiring is the combined goods and services (e.g., as in a license to highly customized software). Accordingly, the entity should combine the goods and services so that it can recognize revenue associated with the performance obligation in a way that truly depicts the transfer of control of the promised goods and services.

2.4.3.2.1 Providing a Service to Integrate a Good or Service With Other Goods or Services

As discussed in paragraph BC107 of ASU 2014-09, when an entity evaluates whether a contract with a customer provides for a significant service of integrating a good or service with other goods or services, the entity should consider whether the risk of transferring that good or service is inseparable from the risk of transferring the other goods or services because the promise in the contract is to ensure that the individual goods or services are incorporated into the combined output for which the customer has contracted. An example of the factor is a contract to build a highly customized cybersecurity monitoring system. The contract will require the entity to provide the hardware, software, and labor needed to build the system. However, identifying all items that are capable of being distinct may not represent the entity's true obligation because the customer is not purchasing those items individually. Rather, the customer contracted with the entity to purchase the entire customized cybersecurity system. Therefore, it would make more sense to identify the performance obligation as the entity's overall promise to build the cybersecurity monitoring system.

This concept is further discussed in paragraph BC29 of ASU 2016-10, which states that the entity should consider "whether the multiple promised goods or services in the contract are outputs or, instead, are inputs to a combined item (or items)." The paragraph goes on to explain that the combined item "is greater than (or substantively different from) the sum of those promised (component) goods and services." If multiple promised goods or services represent inputs rather than individual outputs, such goods or services would not be separately identifiable.

In a speech at the 2018 AICPA Conference on Current SEC and PCAOB Developments, OCA Professional Accounting Fellow Sheri York discussed her views on determining whether an entity provides a significant integration service that results in a combined performance obligation of equipment and services:

> In a recent consultation with OCA, a registrant provided its customer with a commercial security monitoring service by integrating a variety of cameras and sensors . . . with the registrant's technology platform. . . . The registrant believed it was providing a significant service of integrating the goods and services in the contract into a bundle that represented the combined output for which the customer had contracted. More specifically, the delivery of a "smart" security monitoring service would not be possible if the equipment were not integrated with the technology platform. . . . In this fact pattern, the entity demonstrated reasonable judgment that they were providing a significant integration service that transformed the equipment and services into a combined output that provided the customer with an overall service offering that was greater than the customer could receive from each individual part. [Footnotes omitted]

2.4.3.2.2 Significant Modification or Customization

In certain circumstances, an entity's contract with a customer may contain a promise to modify or customize another promised good or service in the contract such that the customer's expectation is the delivery of the modified or customized good or service. An example of the factor is a software contract in which the entity promises to customize software for the customer. In determining how many performance obligations exist, the entity would have to consider whether the customer could really benefit from the software without the customization.

2.4.3.2.3 Goods or Services Are Highly Interdependent or Interrelated

In certain cases, goods or services are so highly interdependent or interrelated that the utility of each individual good or service is significantly affected by other goods or services in the contract. Paragraphs BC32 and BC33 of ASU 2016-10 expand on the concept of whether goods or services are highly interdependent of interrelated. Paragraph BC32 of ASU 2016-10 states, in part:

> The separately identifiable principle is intended to consider the level of integration, interrelation, or interdependence among promises to transfer goods or services. That is, the separately identifiable principle is intended to evaluate when an entity's performance in transferring a bundle of goods or services in a contract is, in substance, fulfilling a single promise to a customer. Therefore, the entity should evaluate whether two or more promised goods or services (for example, a delivered item and an undelivered item) each significantly affect the other (and, therefore, are highly interdependent or highly interrelated) in the contract. The entity should not merely evaluate whether one item, by its nature, depends on the other (for example, an undelivered item that would never be obtained by a customer absent the presence of the delivered item in the contract or the customer having obtained that item in a different contract).

Paragraph BC33(b) of ASU 2016-10 discusses how the utility of a promised good or service may depend on the other promised goods or services in a contract and therefore each good or service may significantly affect the other. Paragraph BC33(b) of ASU 2016-10 states, in part:

> [T]he evaluation of whether two or more promises in a contract are separately identifiable also considers the utility of the promised goods or services (that is, the ability of each good or service to provide benefit or value). This is because an entity may be able to fulfill its promise to transfer each good or service in a contract independently of the other, but each good or service may significantly affect the other's utility to the customer. For example, in Example 10, Case C, or in Example 55, the entity's ability to transfer the initial license is not affected by its promise to transfer the updates or vice versa, but the provision (or not) of the updates will significantly affect the utility of the licensed intellectual property to the customer such that the license and the updates are not separately identifiable. They are, in effect, inputs to the combined solution for which the customer contracted. The "capable of being distinct" criterion also considers the utility of the promised good or service, but merely establishes the baseline level of economic substance a good or service must have to be "capable of being distinct." Therefore, utility also is relevant in evaluating whether two or more promises in a contract are separately identifiable because even if two or more goods or services are capable of being distinct because the customer can derive some economic benefit from each one, the customer's ability to derive its intended benefit from the contract may depend on the entity transferring each of those goods or services.

If the functionality of a promised good or service is significantly limited or diminished without the use of another promised good or service, and vice versa, that significantly limited or diminished functionality may indicate that the goods or services (1) are highly interdependent or highly interrelated (i.e., they significantly affect each other) and (2) function together as inputs to a combined output. This, in turn, may indicate that the promises are not distinct within the context of the contract since the customer cannot obtain the intended benefit of one good or service without the other. That is, while the customer may be able to obtain some functionality from a good or service on a stand-alone basis, it would not obtain the intended outputs from each good or service individually because each good or service is critical to the customer's intended use of the combined output. In this situation, the entity cannot fulfill its promise to the customer by transferring each good or service independently (i.e., the customer could not choose to purchase one good or service without significantly affecting the other good or service in the contract).

In addition, transformative functionality should be assessed separately from additive functionality. Transformative functionality comprises features that significantly affect the overall operation and interaction of the combined output. To be transformative, the inputs must significantly affect each other. That is, the promised goods or services are inputs to a combined output such that the combined output has greater value than, or is substantively different from, the sum of the inputs. By contrast, additive functionality comprises features that provide an added benefit to the customer without substantively altering (1) the manner in which the functionality is used and (2) the benefits derived from the functionality of a good or service on a stand-alone basis. Even if added functionality is significant, it may not be transformative. It is more likely that goods or services are highly interdependent or highly interrelated when the functionality of the combined output is transformative rather than additive.

In a speech at the 2017 AICPA Conference on Current SEC and PCAOB Developments, Joseph Epstein, professional accounting fellow in the OCA, provided the following guidance on the identification of performance obligations — specifically, whether an entity's promise to transfer a good or service to a customer is separately identifiable from other promises in the contract:

> I'd also like to take this opportunity to remind registrants that in evaluating whether two or more promised goods or services each significantly affect the other (and, therefore, are highly interdependent or highly interrelated), **registrants should not merely evaluate whether one item, by its nature, depends on the other. Rather, those goods or services should significantly affect each other.** [Emphasis added, footnote omitted]

Sarah Esquivel, associate chief accountant in the OCA, elaborated on this topic in a speech at the 2018 AICPA Conference on Current SEC and PCAOB Developments. In her speech, Ms. Esquivel described a fact pattern related to the identification of performance obligations in a contract for the sale of off-the-shelf patent application software. The software enabled the customer to prepare patent applications and also allowed the customer to print out the applications so that they could be submitted by mail. In addition, the contract included a free, one-time service of electronically submitting a patent application to the appropriate government agency. Ms. Esquivel made the following comments on whether the electronic submission service and the software were sufficiently interdependent or interrelated to constitute a single performance obligation:

> In this fact pattern, the service was a convenience to the customer, but it was not required . . . . In addition, the choice of whether or not to use the service did not significantly impact the utility of the software, and thus the identified promises did not significantly affect each other, and therefore were not highly interdependent or highly interrelated. As a result, OCA objected to the registrant's conclusion that the promises in the contract comprised a single performance obligation. [Footnote omitted]

This example emphasizes the view that entities should not merely evaluate whether one item depends on the other (one-way dependency); rather, they should evaluate whether the goods or services significantly affect **each other** (interdependency, or two-way dependency).

In a speech at the 2019 AICPA Conference on Current SEC and PCAOB Developments, OCA Professional Accounting Fellow Susan Mercier expanded on those views presented at the previous AICPA Conferences on determining whether an entity provides a combined performance obligation of software and updates. In addition, Ms. Mercier provided commentary of the use of the term "solution":

> While I understand that the term "solution" is commonly used nomenclature, I would observe that the staff is not persuaded that promises should be combined into a single performance obligation simply because a registrant labels those promises as a "solution" that the "customer wants." . . . I think that the notion of considering if the registrant's combined output is greater than or substantively different from the sum of the parts is helpful in many cases. . . .
>
> In [a recent] consultation, the registrant licenses software that allows its customers, application ("app") developers, to build and deploy, and therefore monetize, their own apps on various third-party platforms. The third-party platforms include phones as well as home entertainment systems, which, as you can imagine, are frequently undergoing their own updates. The registrant's software and updates ensure that the app built using the software is compatible with all platforms that it supports, both when the app is initially deployed on a platform and over time as that platform is updated. Therefore, the registrant partners with the third-party platforms to understand their timelines for internal updates so that the registrant can ensure compatibility by initiating corresponding updates to its software. Without these updates, the customer's ability to benefit from the software would be significantly limited over the contract term.
>
> Ultimately, the staff did not object to the registrant's conclusion that the software and updates represent a single performance obligation. In the staff's view, the registrant's promises to provide the software and the updates are, in effect, inputs that together fulfill a single promise to the customer — that is, to continually be able to deploy and monetize content using third-party platforms of the customer's choice in a rapidly changing environment — and that the updates are integral to maintaining the utility of the software. In other words, in this fact pattern, the staff thinks that the combined output (whether or not you label it a "solution") is greater than, or substantively different than, the individual promises (that is, the software and the updates). [Footnotes omitted]

Further, in a speech at the 2020 AICPA Conference on Current SEC and PCAOB Developments, OCA Professional Accounting Fellow Kevin Cherrstrom provided insights (similar to those provided by Ms. Mercier above) into an arrangement in which a software license and updates are highly interdependent or interrelated and there is significant two-way dependency between the software and the updates:

> First, I would like to discuss a fact pattern whereby a registrant concluded that its software license, along with updates to the software license, represent a single performance obligation. The assessment of whether a software license is distinct from related services can have a significant effect on the financial statements. Revenue from software and services that are one combined performance obligation would be recognized over time, while revenue from a software license that is distinct would be recognized when control of the software license transfers to the customer.
>
> The registrant developed a new data analytics software platform that it provides to its customers under a one-year license. The software's core functionality allows its customers to aggregate data from multiple sources and analyze that data on a real-time basis. To achieve that result, the software must be updated periodically in response to both a customer's internal changes, such as new data sources or hardware added to the customer's IT environment, and to external changes, such as updates to third-party software that impact the ability of the registrant's software to obtain real-time data from those third-party systems. As part of the registrant's promises to its customer, it monitors the software for required updates and provides updates to the licensed software as needed, on an on-going basis, throughout the contract term.
>
> The registrant performed a detailed assessment to determine the nature of each of its updates in order to identify those specific updates that are critical to maintaining the utility of the software. The frequency of the critical software updates varies depending on each customer's unique IT environment, ranging from critical updates provided on a daily basis for customers with more dynamic IT systems, to critical updates every few months for customers with static IT environments. Regardless of the frequency of each customer's critical updates, if they were not provided to the customer, the software would not be able to access and analyze the customer's data. The registrant concluded that the software license and updates are highly interdependent or interrelated, such that they significantly affect one another, and there is a significant two-way dependency between the software and the related updates.
>
> In this fact pattern, the staff did not object to the registrant's conclusion that the software license and related updates should be combined into a single performance obligation.

2.4.4 Scope of the Licensing Guidance

Although licenses to software or technology are examples of licenses of IP, the term "intellectual property" is not formally defined in U.S. GAAP. However, paragraph BC51 of ASU 2016-10 states that "intellectual property is inherently different from other goods or services because of its uniquely divisible nature," noting that "intellectual property can be licensed to multiple customers at the same time . . . and can continue to be used by the entity during the license period for its own benefit." Identification of IP will require judgment.

2.4.4.1 Software in a Hosting Arrangement

Software in a hosting arrangement is excluded from the scope of the licensing guidance in the revenue standard unless both of the following criteria in ASC 985-20-15-5 are met:

a. The customer has the contractual right to take possession of the software at any time during the hosting period without significant penalty.

b. It is feasible for the customer to either run the software on its own hardware or contract with another party unrelated to the vendor to host the software.

Connecting the Dots

Some may question whether "at any time" during the hosting period means *at every point in time* during the hosting period. We do not believe that to be the case. For example, an entity's arrangements may specify that the customer will automatically obtain the software at the end of the hosting period. We believe that as long as the customer can take possession of the software at that point without significant penalty and it is feasible for the customer to run the software (either on its own or with a third-party vendor), the software license is a separate promise in the hosting arrangement and would therefore meet the criteria in ASC 985-20-15-5(a) and (b).

Many software hosting arrangements include a "license" to software but allow the customer to use the software only in the entity's (rather than the customer's) hosted environment (because of contractual or practical limitations, or both). Although these arrangements may include a contractual license, since the customer is unable to take possession of the software subject to the license without significant penalty, the customer is required to make a separate buying decision before control of any software is truly transferred to the customer (the separate buying decision would be the customer's election to incur the penalty to take possession of the software). These transactions are accounted for as service transactions (rather than licensing transactions) since the entity is providing the functionality of the software through a hosting arrangement (service) rather than through an actual software license that is controlled by the customer.

Connecting the Dots

It is common for software to be hosted on the platform or infrastructure of a third party rather than that of the vendor or customer. In these circumstances, it is important to determine who has the contract with the third party (i.e., whether it is the vendor's or customer's cloud instance[13] of the third-party platform or infrastructure). If the software is hosted on the customer's cloud instance, the customer has possession of the software, and the arrangement would be subject to the licensing guidance in the revenue standard. By contrast, if the software is hosted on the vendor's cloud instance and the customer cannot otherwise obtain possession of the software without significant penalty, the software is provided in a hosting arrangement and is excluded from the licensing guidance in the revenue standard.

[13] When used in the context of cloud capacity, the term "cloud instance" refers to the cloud environment in which the software operates.

Example 2-18

Entity L, a software vendor, offers its office productivity package in an online format whereby a user accesses a Web site and stores files on a secure server. The applications will always be maintained at the most up-to-date version available, and customers have rights to online and telephone support. The customer will pay a fee of $200 for a one-year "right to use" license for software. Renewal fees are $200 for each subsequent year renewed. The customer does not have the ability to take possession of the software.

The license cannot be unbundled from the hosting service because the customer is not permitted to take possession and may only use the software together with L's hosting service. Therefore, the criteria in ASC 985-20-15-5 are not met, and the arrangement consequently does not contain a license as described in ASC 606-10-55-54. Entity L should recognize the $200 over the one-year term of the arrangement once the customer has access to the hosted software.

As noted above, to determine whether a right to use software in a hosted environment includes a license within the scope of the revenue standard's licensing guidance, entities need to consider whether the software license is within the scope of ASC 985-20. For the software subject to a hosting arrangement to be within the scope of ASC 985-20 (and, therefore, within the scope of the licensing guidance in the revenue standard), the criteria in ASC 985-20-15-5(a) and (b) must both be met.

ASC 985-20-15-6 states that the term "significant penalty" as used in ASC 985-20-15-5(a) contains the following two distinct concepts:

a. The ability to take delivery of the software without incurring significant cost
b. The ability to use the software separately without a significant diminution in utility or value.

The analysis for determining whether a significant penalty exists depends on the facts and circumstances of the arrangement and requires judgment. An entity may consider the following factors (not all-inclusive) in making this assessment:

- Contractual cancellation fees associated with the hosting arrangement.
- Other contractual penalties for taking possession of the software (e.g., the requirement that the customer continue to pay the hosting fees for the remainder of the hosting term even though hosting services are terminated).
- Costs of transitioning to (1) use of the software on the customer's own servers or (2) hosting of the software by the customer's third-party vendor.
- Whether the utility and value of the software can be maintained upon transition (e.g., whether (1) the customer will continue to receive updates, upgrades, and enhancements and (2) the software will be capable of providing the same functionality in another environment).
- Whether the software (1) has stand-alone functionality (on its own or with readily available resources) or (2) is significantly tied to other products or services that can be provided only by the entity and will no longer be provided if the customer takes possession of the software.

Significance can be evaluated both quantitatively and qualitatively. The accounting literature does not contain specific guidance on (1) which elements of the contract should be included in the measurement of the amount of the penalty or (2) the benchmark against which the entity should measure the amount of the penalty when determining whether the penalty is quantitatively significant. An entity may have an established policy for determining whether the penalty is significant. For example, in a manner consistent with other Codification subtopics, the entity may reasonably conclude that amounts above 10 percent of a given benchmark are significant. Establishing a method of determining both the elements of the contract to include in the measurement of the penalty and the benchmark against which to measure the penalty is an accounting policy decision that the entity should apply consistently.

Example 2-19

Company E is developing a customer relationship management (CRM) software solution to be marketed and sold to customers. The software will be provided to customers on a hosted basis (i.e., the software will be accessed by using an Internet connection) and will connect to E's proprietary data analytics platform, which has already been developed and is housed on E's own servers (i.e., it is a SaaS solution that is accessed only online). Company E's data analytics platform will be a significant part of the overall solution sold to its customers and will be significantly integrated with the CRM software solution being developed.

Company E plans to provide its customers with the contractual ability to take possession of the CRM software on an on-premise basis, when requested at any point during the hosting period, without paying E a penalty or cancellation fee. However, customers will not have the contractual ability to take possession of E's data analytics platform. In addition, cancellation of the hosting service for the CRM software will also result in the cancellation of the SaaS for E's data analytics platform, which cannot be easily replicated by the customer or third-party vendors. Further, customers would incur significant costs to integrate the CRM software with other third-party data analytics platforms.

While a customer will have "the contractual right to take possession of the software at any time during the hosting period" without paying E a penalty or cancellation fee, it cannot do so without incurring a significant penalty (i.e., significant diminution in utility or value of the CRM software without E's data analytics platform). Therefore, E concludes that arrangements with customers for the CRM software solution do not meet the criteria to be accounted for as licensing arrangements.

2.4.5 Identifying Performance Obligations in Licensing Arrangements

Licenses are often included with other goods or services in a contract. An entity will need to use judgment in determining whether a license (1) is distinct or (2) should be combined with other promised goods and services in the contract as a single performance obligation. An entity would apply the guidance in ASC 606-10-25-14 through 25-22 in identifying the performance obligations in the contract. The licensing implementation guidance is applicable to arrangements with customers that contain (1) a distinct license or (2) a license that is the predominant promised item in a performance obligation involving multiple goods or services.

ASC 606-10

55-55 In addition to a promise to grant a license (or licenses) to a customer, an entity may also promise to transfer other goods or services to the customer. Those promises may be explicitly stated in the contract or implied by an entity's customary business practices, published policies, or specific statements (see paragraph 606-10-25-16). As with other types of contracts, when a contract with a customer includes a promise to grant a license (or licenses) in addition to other promised goods or services, an entity applies paragraphs 606-10-25-14 through 25-22 to identify each of the performance obligations in the contract.

55-56 If the promise to grant a license is not distinct from other promised goods or services in the contract in accordance with paragraphs 606-10-25-18 through 25-22, an entity should account for the promise to grant a license and those other promised goods or services together as a single performance obligation. Examples of licenses that are not distinct from other goods or services promised in the contract include the following:

a. A license that forms a component of a tangible good and that is integral to the functionality of the good
b. A license that the customer can benefit from only in conjunction with a related service (such as an online service provided by the entity that enables, by granting a license, the customer to access content).

ASC 606-10 (continued)

55-57 When a single performance obligation includes a license (or licenses) of intellectual property and one or more other goods or services, the entity considers the nature of the combined good or service for which the customer has contracted (including whether the license that is part of the single performance obligation provides the customer with a right to use or a right to access intellectual property in accordance with paragraphs 606-10-55-59 through 55-60 and 606-10-55-62 through 55-64A) in determining whether that combined good or service is satisfied over time or at a point in time in accordance with paragraphs 606-10-25-23 through 25-30 and, if over time, in selecting an appropriate method for measuring progress in accordance with paragraphs 606-10-25-31 through 25-37.

When a license is included in an arrangement to provide additional goods or services, determining whether the license is distinct may require significant judgment. An entity would need to carefully evaluate whether the license is both capable of being distinct and distinct in the context of the contract. The Codification examples below illustrate how an entity would apply the guidance on determining whether multiple goods and services promised in the entity's contract, including a license, are distinct.

ASC 606-10

[Cases A and B omitted]

Example 10 — Goods and Services Are Not Distinct

Case C — Combined Item

55-140D An entity grants a customer a three-year term license to anti-virus software and promises to provide the customer with when-and-if available updates to that software during the license period. The entity frequently provides updates that are critical to the continued utility of the software. Without the updates, the customer's ability to benefit from the software would decline significantly during the three-year arrangement.

55-140E The entity concludes that the software and the updates are each promised goods or services in the contract and are each capable of being distinct in accordance with paragraph 606-10-25-19(a). The software and the updates are capable of being distinct because the customer can derive economic benefit from the software on its own throughout the license period (that is, without the updates the software would still provide its original functionality to the customer), while the customer can benefit from the updates together with the software license transferred at the outset of the contract.

55-140F The entity concludes that its promises to transfer the software license and to provide the updates, when-and-if available, are not separately identifiable (in accordance with paragraph 606-10-25-19(b)) because the license and the updates are, in effect, inputs to a combined item (anti-virus protection) in the contract. The updates significantly modify the functionality of the software (that is, they permit the software to protect the customer from a significant number of additional viruses that the software did not protect against previously) and are integral to maintaining the utility of the software license to the customer. Consequently, the license and updates fulfill a single promise to the customer in the contract (a promise to provide protection from computer viruses for three years). Therefore, in this Example, the entity accounts for the software license and the when-and-if available updates as a single performance obligation. In accordance with paragraph 606-10-25-33, the entity concludes that the nature of the combined good or service it promised to transfer to the customer in this Example is computer virus protection for three years. The entity considers the nature of the combined good or service (that is, to provide anti-virus protection for three years) in determining whether the performance obligation is satisfied over time or at a point in time in accordance with paragraphs 606-10-25-23 through 25-30 and in determining the appropriate method for measuring progress toward complete satisfaction of the performance obligation in accordance with paragraphs 606-10-25-31 through 25-37.

ASC 606-10 (continued)

Example 11 — Determining Whether Goods or Services Are Distinct

Case A — Distinct Goods or Services

55-141 An entity, a software developer, enters into a contract with a customer to transfer a software license, perform an installation service, and provide unspecified software updates and technical support (online and telephone) for a two-year period. The entity sells the license, installation service, and technical support separately. The installation service includes changing the web screen for each type of user (for example, marketing, inventory management, and information technology). The installation service is routinely performed by other entities and does not significantly modify the software. The software remains functional without the updates and the technical support.

55-142 The entity assesses the goods and services promised to the customer to determine which goods and services are distinct in accordance with paragraph 606-10-25-19. The entity observes that the software is delivered before the other goods and services and remains functional without the updates and the technical support. The customer can benefit from the updates together with the software license transferred at the outset of the contract. Thus, the entity concludes that the customer can benefit from each of the goods and services either on their own or together with the other goods and services that are readily available and the criterion in paragraph 606-10-25-19(a) is met.

55-143 The entity also considers the principle and the factors in paragraph 606-10-25-21 and determines that the promise to transfer each good and service to the customer is separately identifiable from each of the other promises (thus, the criterion in paragraph 606-10-25-19(b) is met). In reaching this determination the entity considers that although it integrates the software into the customer's system, the installation services do not significantly affect the customer's ability to use and benefit from the software license because the installation services are routine and can be obtained from alternate providers. The software updates do not significantly affect the customer's ability to use and benefit from the software license because, in contrast with Example 10 (Case C), the software updates in this contract are not necessary to ensure that the software maintains a high level of utility to the customer during the license period. The entity further observes that none of the promised goods or services significantly modify or customize one another and the entity is not providing a significant service of integrating the software and the services into a combined output. Lastly, the entity concludes that the software and the services do not significantly affect each other and, therefore, are not highly interdependent or highly interrelated because the entity would be able to fulfill its promise to transfer the initial software license independent from its promise to subsequently provide the installation service, software updates, or technical support.

55-144 On the basis of this assessment, the entity identifies four performance obligations in the contract for the following goods or services:

a. The software license
b. An installation service
c. Software updates
d. Technical support.

55-145 The entity applies paragraphs 606-10-25-23 through 25-30 to determine whether each of the performance obligations for the installation service, software updates, and technical support are satisfied at a point in time or over time. The entity also assesses the nature of the entity's promise to transfer the software license in accordance with paragraphs 606-10-55-59 through 55-60 and 606-10-55-62 through 55-64A (see Example 54 in paragraphs 606-10-55-362 through 55-363B).

Case B — Significant Customization

55-146 The promised goods and services are the same as in Case A, except that the contract specifies that, as part of the installation service, the software is to be substantially customized to add significant new functionality to enable the software to interface with other customized software applications used by the customer. The customized installation service can be provided by other entities.

ASC 606-10 (continued)

55-147 The entity assesses the goods and services promised to the customer to determine which goods and services are distinct in accordance with paragraph 606-10-25-19. The entity first assesses whether the criterion in paragraph 606-10-25-19(a) has been met. For the same reasons as in Case A, the entity determines that the software license, installation, software updates, and technical support each meet that criterion. The entity next assesses whether the criterion in paragraph 606-10-25-19(b) has been met by evaluating the principle and the factors in paragraph 606-10-25-21. The entity observes that the terms of the contract result in a promise to provide a significant service of integrating the licensed software into the existing software system by performing a customized installation service as specified in the contract. In other words, the entity is using the license and the customized installation service as inputs to produce the combined output (that is, a functional and integrated software system) specified in the contract (see paragraph 606-10-25-21(a)). The software is significantly modified and customized by the service (see paragraph 606-10-25-21(b)). Consequently, the entity determines that the promise to transfer the license is not separately identifiable from the customized installation service and, therefore, the criterion in paragraph 606-10-25-19(b) is not met. Thus, the software license and the customized installation service are not distinct.

55-148 On the basis of the same analysis as in Case A, the entity concludes that the software updates and technical support are distinct from the other promises in the contract.

55-149 On the basis of this assessment, the entity identifies three performance obligations in the contract for the following goods or services:

a. Software customization which is comprised of the license to the software and the customized installation service
b. Software updates
c. Technical support.

55-150 The entity applies paragraphs 606-10-25-23 through 25-30 to determine whether each performance obligation is satisfied at a point in time or over time and paragraphs 606-10-25-31 through 25-37 to measure progress toward complete satisfaction of those performance obligations determined to be satisfied over time. In applying those paragraphs to the software customization, the entity considers that the customized software to which the customer will have rights is functional intellectual property and that the functionality of that software will not change during the license period as a result of activities that do not transfer a good or service to the customer. Therefore, the entity is providing a right to use the customized software. Consequently, the software customization performance obligation is completely satisfied upon completion of the customized installation service. The entity considers the other specific facts and circumstances of the contract in the context of the guidance in paragraphs 606-10-25-23 through 25-30 in determining whether it should recognize revenue related to the single software customization performance obligation as it performs the customized installation service or at the point in time the customized software is transferred to the customer.

Example 54 — Right to Use Intellectual Property

55-362 Using the same facts as in Case A in Example 11 (see paragraphs 606-10-55-141 through 55-145), the entity identifies four performance obligations in a contract:

a. The software license
b. Installation services
c. Software updates
d. Technical support.

55-363 The entity assesses the nature of its promise to transfer the software license. The entity first concludes that the software to which the customer obtains rights as a result of the license is functional intellectual property. This is because the software has significant standalone functionality from which the customer can derive substantial benefit regardless of the entity's ongoing business activities.

ASC 606-10 (continued)

55-363A The entity further concludes that while the functionality of the underlying software is expected to change during the license period as a result of the entity's continued development efforts, the functionality of the software to which the customer has rights (that is, the customer's instance of the software) will change only as a result of the entity's promise to provide when-and-if available software updates. Because the entity's promise to provide software updates represents an additional promised service in the contract, the entity's activities to fulfill that promised service are not considered in evaluating the criteria in paragraph 606-10-55-62. The entity further notes that the customer has the right to install, or not install, software updates when they are provided such that the criterion in 606-10-55-62(b) would not be met even if the entity's activities to develop and provide software updates had met the criterion in paragraph 606-10-55-62(a).

55-363B Therefore, the entity concludes that it has provided the customer with a right to use its software as it exists at the point in time the license is granted and the entity accounts for the software license performance obligation as a performance obligation satisfied at a point in time. The entity recognizes revenue on the software license performance obligation in accordance with paragraphs 606-10-55-58B through 55-58C.

Example 55 — License of Intellectual Property

55-364 An entity enters into a contract with a customer to license (for a period of three years) intellectual property related to the design and production processes for a good. The contract also specifies that the customer will obtain any updates to that intellectual property for new designs or production processes that may be developed by the entity. The updates are integral to the customer's ability to derive benefit from the license during the license period because the intellectual property is used in an industry in which technologies change rapidly.

55-365 The entity assesses the goods and services promised to the customer to determine which goods and services are distinct in accordance with paragraph 606-10-25-19. The entity determines that the customer can benefit from (a) the license on its own without the updates and (b) the updates together with the initial license. Although the benefit the customer can derive from the license on its own (that is, without the updates) is limited because the updates are integral to the customer's ability to continue to use the intellectual property in an industry in which technologies change rapidly, the license can be used in a way that generates some economic benefits. Therefore, the criterion in paragraph 606-10-25-19(a) is met for the license and the updates.

55-365A The fact that the benefit the customer can derive from the license on its own (that is, without the updates) is limited (because the updates are integral to the customer's ability to continue to use the license in the rapidly changing technological environment) also is considered in assessing whether the criterion in paragraph 606-10-25-19(b) is met. Because the benefit that the customer could obtain from the license over the three-year term without the updates would be significantly limited, the entity's promises to grant the license and to provide the expected updates are, in effect, inputs that, together fulfill a single promise to deliver a combined item to the customer. That is, the nature of the entity's promise in the contract is to provide ongoing access to the entity's intellectual property related to the design and production processes for a good for the three-year term of the contract. The promises within that combined item (that is, to grant the license and to provide when-and-if available updates) are therefore not separately identifiable in accordance with the criterion in paragraph 606-10-25-19(b).

55-366 The nature of the combined good or service that the entity promised to transfer to the customer is ongoing access to the entity's intellectual property related to the design and production processes for a good for the three-year term of the contract. Based on this conclusion, the entity applies paragraphs 606-10-25-23 through 25-30 to determine whether the single performance obligation is satisfied at a point in time or over time and paragraphs 606-10-25-31 through 25-37 to determine the appropriate method for measuring progress toward complete satisfaction of the performance obligation. The entity concludes that because the customer simultaneously receives and consumes the benefits of the entity's performance as it occurs, the performance obligation is satisfied over time in accordance with paragraph 606-10-25-27(a) and that a time-based input measure of progress is appropriate because the entity expects, on the basis of its relevant history with similar contracts, to expend efforts to develop and transfer updates to the customer on a generally even basis throughout the three-year term.

ASU 2016-10's Background Information and Basis for Conclusions expands on the separately identifiable principle described in ASC 606-10-25-21 and the FASB's intent regarding application of that principle as follows:

- *Focusing on the principle; inputs to a combined output* — Paragraph BC29 notes that the separately identifiable principle requires an entity to consider "whether the multiple promised goods or services in the contract are outputs or, instead, are inputs to a combined item (or items)." The paragraph goes on to explain that the "combined item . . . is greater than (or substantively different from) the sum of those promised (component) goods and services." In addition, paragraph BC31 explains that the factors listed in ASC 606-10-25-21 are intended to support the principle and should not be viewed as criteria to be evaluated independently. If multiple promised goods or services represent inputs rather than individual outputs, such goods or services would not be separately identifiable.

- *Level of integration, interrelation, or interdependence* — Paragraph BC32 of ASU 2016-10 states, in part:

  > The separately identifiable principle is intended to consider the level of integration, interrelation, or interdependence among promises to transfer goods or services. That is, the separately identifiable principle is intended to evaluate when an entity's performance in transferring a bundle of goods or services in a contract is, in substance, fulfilling a single promise to a customer. Therefore, the entity should evaluate whether two or more promised goods or services (for example, a delivered item and an undelivered item) each significantly affect the other (and, therefore, are highly interdependent or highly interrelated) in the contract. The entity should not merely evaluate whether one item, by its nature, depends on the other (for example, an undelivered item that would never be obtained by a customer absent the presence of the delivered item in the contract or the customer having obtained that item in a different contract).

  The greater the level of integration, interrelation, or interdependence, the less likely it is that the promised goods or services are separately identifiable (i.e., the more likely it is that those goods or services should be combined into a single performance obligation). In a discussion not included in ASC 606 about how an entity should evaluate the level of integration, interrelation, or interdependence of multiple promised goods or services, paragraph BC116K of IFRS 15 states that "rather than considering whether one item, by its nature, depends on the other (ie whether two items have a functional relationship), an entity evaluates whether there is a transformative relationship between the two items in the process of fulfilling the contract."

- *Diminution of utility* — As indicated below, paragraph BC33(b) of ASU 2016-10 discusses how the utility of a license may depend on updates to the license and therefore should be considered in the evaluation of whether multiple promised goods or services are separately identifiable:

  > [I]n Example 10, Case C [ASC 606-10-55-140D through 55-140F], or in Example 55 [ASC 606-10-55-364 through 55-366], the entity's ability to transfer the initial license is not affected by its promise to transfer the updates or vice versa, but the provision (or not) of the updates will significantly affect the utility of the licensed intellectual property to the customer such that the license and the updates are not separately identifiable. **They are, in effect, inputs to the combined solution for which the customer contracted.** The "capable of being distinct" criterion also considers the utility of the promised good or service, but merely establishes the baseline level of economic substance a good or service must have to be "capable of being distinct." Therefore, utility also is relevant in evaluating whether two or more promises in a contract are separately identifiable because even if two or more goods or services are capable of being distinct because the customer can derive some economic benefit from each one, **the customer's ability to derive its intended benefit from the contract may depend on the entity transferring each of those goods or services**. [Emphasis added]

When the utility of one promised good or service significantly depends on another promised good or service, it is less likely that those goods or services are separately identifiable. Specifically, an entity should consider (1) how quickly the utility of the initial license diminishes and, therefore, (2) how quickly the customer needs to incorporate any updates or upgrades to the licensed IP to continue to benefit and derive utility from the originally licensed IP.

2.4.5.1 Identifying Performance Obligations in a Hybrid Software Arrangement

Software providers may offer hybrid solutions in which a customer may have the right to deploy the software (1) as either on-premise software or a cloud-based service (with the ability to switch from one to the other as needed) or (2) by using the on-premise software together with the cloud-based service. On-premise software is installed and runs on the customer's devices (e.g., computers and servers) or is hosted by a third party under a separate contract between the customer and that third party.[14] A cloud-based service involves software that is physically hosted on the software provider's systems (or hosted by the software provider's cloud-computing vendor) and accessed by the customer over the Internet. In arrangements involving these hybrid solutions, questions arise about how to identify the promises (and, therefore, the performance obligations) in the contract.

Example 2-20

An entity enters into a three-year contract with a customer to provide 1,000 licenses of Product X for a nonrefundable fee of $100,000. Under the terms of the contract, the customer has an option to deploy the 1,000 licenses as either on-premise software or a cloud-based service throughout the three-year license term. Assume that the on-premise software and the cloud-based service (1) each are fully functional on their own and (2) effectively provide the same functionality to the customer. At contract inception, the customer decides to use 600 licenses of Product X as on-premise software and 400 licenses of Product X as a cloud-based service. Six months later, the customer decides to use 500 licenses of Product X as on-premise software and 500 licenses of Product X as a cloud-based service.

We believe that it is reasonable to conclude that the entity has promised (1) to provide the right to use 1,000 software licenses of Product X and (2) to stand ready to provide a cloud-based service (i.e., to host the software licenses). If each of the promises is distinct, there are two performance obligations to which the nonrefundable $100,000 fee should be allocated on a relative stand-alone selling price basis. Consideration allocated to Product X (i.e., the on-premise software licenses) would be recognized once control of Product X is transferred to the customer. Since the performance obligation to provide the hosting service is satisfied over time, consideration allocated to this performance obligation should be recognized as revenue over the three-year contract term (i.e., the period over which the entity is required to stand ready to provide the hosting service).

The functionality of on-premise software and a cloud-based service in a hybrid cloud-based arrangement can vary between offerings to customers and between entities. When identifying performance obligations in a hybrid cloud-based arrangement, an entity should consider the guidance in ASC 606-10-25-19 through 25-21 to determine whether the on-premise software and the cloud-based service are distinct. While on-premise software and a cloud-based service are each often capable of being distinct, determining whether they are distinct within the context of the contract is much more challenging.

[14] In accordance with ASC 606-10-55-54 and ASC 985-20-15-5, software subject to a hosting arrangement is a license of IP (i.e., on-premise software) if (1) the "customer has the contractual right to take possession of the software at any time during the hosting period without significant penalty" and (2) "[i]t is feasible for the customer to either run the software on its own hardware or contract with another party unrelated to the vendor to host the software."

Example 9-2-3 of the AICPA Audit and Accounting Guide *Revenue Recognition* states, in part:

> Many hybrid offerings will enable customers to perform some functions with the on-premise software even when they are not connected to the hosting service. An entity may determine that the on-premise software meets the criteria of FASB ASC 985-20-15-5 and is capable of being distinct. However, even when the software license is within the scope of FASB ASC 606-10-55-54a and is capable of being distinct, it may not be distinct in the context of the contract because it is, for example, highly interdependent or interrelated with the hosting service. In making this determination, the entity may consider indicators such as the following:
>
> *a.* Hosted functionality is limited to capabilities that are widely available from other vendors. For example, the entity offers online file storage and sharing with minimal integration to the on-premise software workflow. In such cases, a customer could gain substantially all of the benefits included in the offering by utilizing alternative vendor services. This would indicate that the software license likely is both capable of being distinct from the hosted service and distinct within the context of the contract because the entity is not providing unique and additional value from the integration of the software and the file storage.
>
> *b.* A portion of the hosted functionality is available from other vendors, but the entity provides significant additional utility from the manner in which it integrates the software with its own hosted functionality. For example, the online storage and sharing is integrated with the on-premise software in such a manner that the customer gains significant capabilities or workflow efficiencies that would not be available when using another vendor's hosted services. In such circumstances, the on-premise software is capable of being distinct, but the customer obtains a significant functional benefit by purchasing the complete hybrid offering from the entity. This may indicate that the software license and hosting service are highly interrelated to each other and are not distinct within the context of the contract.
>
> *c.* Hosted functionality is limited to functions that the customer may also perform locally with the on-premise software. For example, the customer has the option to perform computationally intensive tasks on its own computer or upload them to the entity's servers as part of the hosting service. In such circumstances, the customer can obtain the intended benefit of the offering with only the on-premise software. This may indicate that the software is not highly dependent on or interrelated with the hosting service and is therefore distinct within the context of the contract.
>
> *d.* The hybrid offering workflow involves ongoing interactions between the on-premise software and hosted services. As a result, the utility of the offering would be significantly diminished if the customer is not connected to the hosting service. For example, the utility of the offering would be significantly diminished if the customer is unable to perform computationally intensive tasks when not connected to the hosting services. In such circumstances, the software and hosted services are highly interdependent or interrelated because (1) the customer gains significant functionality from the software and hosting services functioning together and (2) the entity fulfills its overall promise to the customer only by both transferring the on-premise license and providing the hosting services. This would indicate that the software is not distinct within the context of the contract.

In addition, in determining whether its on-premise software is distinct from its cloud-based service, an entity may consider the following indicators, which are not individually determinative or all-inclusive:

- *Whether the entity's on-premise software and cloud-based service are ever sold separately* — The entity's practice of selling the on-premise software or the cloud-based service separately typically indicates that there are two separate performance obligations (i.e., the promises should not be combined) since the customer may benefit from the on-premise software or the cloud-based service on its own. Separate sales also suggest that the on-premise software and the cloud-based service each have significant stand-alone functionality, which indicates that they are distinct within the context of the contract. For example, if the on-premise software separately provides substantially the same functionality as the cloud-based service, the two promises are likely to be distinct.
- *Whether the customer can benefit from each product or service (i.e., the on-premise software or the cloud-based service) either on its own or together with other resources that are readily available to the customer* — For example, suppose that the customer has the ability to (1) obtain the same or similar cloud-based service from a different vendor, (2) use the alternative vendor's cloud-based service with the entity's on-premise software, and (3) receive substantially the same

combined functionality as that of the entity's hybrid offering. That ability may indicate that the entity's on-premise software and cloud-based service each are capable of being distinct and are distinct within the context of the contract since (1) the entity is not providing a significant integration service for the on-premise software and the cloud-based service and (2) it is less likely that the on-premise software and the cloud-based service are highly interdependent or highly interrelated.

Alternatively, suppose that the functionality of the on-premise software is significantly integrated with (rather than just improved by) the cloud-based service in such a way that the entity's hybrid offering provides significant additional capabilities that cannot be obtained from an alternative vendor providing the cloud-based service. In that case, the presence of an alternative vendor providing a portion of the same utility with its cloud-based service could indicate that the promises are capable of being distinct, but the integrated nature of the promises could indicate that the promises are not distinct within the context of the contract.

- *Whether the cloud-based service significantly modifies the on-premise software* — The cloud-based service and the on-premise software may not be distinct within the context of the contract if rather than just enhancing the capabilities of the on-premise software, the cloud-based service modifies and significantly affects the functionality of the on-premise software. For example, suppose that the cloud-based service (1) employs AI or machine learning that teaches and significantly affects the functionality of the on-premise software and (2) cannot employ the AI or machine learning without using the functionality of the on-premise software. This situation could indicate that the cloud-based service and the on-premise software are not distinct within the context of the contract because rather than just enhancing the capabilities of the on-premise software, the cloud-based service modifies and significantly affects the functionality of the on-premise software.
- *Whether the absence of either the on-premise software or the cloud-based service significantly limits or diminishes the utility (i.e., the ability to provide benefit or value) of the other* — If the on-premise software's functionality is significantly limited or diminished without the use of the cloud-based service, and vice versa, that significantly limited or diminished functionality may indicate that the on-premise software and the cloud-based service (1) are highly interdependent or highly interrelated (i.e., they significantly affect each other) and (2) function together as inputs to a combined output. This, in turn, may indicate that the promises are not distinct within the context of the contract since the customer cannot obtain the intended benefit of the on-premise software or the cloud-based service without the other. That is, while the customer may be able to obtain some functionality from the on-premise software on a stand-alone basis, it would not obtain the intended outputs from the on-premise software if the on-premise software is not connected to the cloud-based service because the cloud-based service is critical to the customer's intended use of the hybrid solution. In this situation, the entity cannot fulfill its promise to the customer by transferring the on-premise software or the cloud-based service independently (i.e., the customer could not choose to purchase one good or service without significantly affecting the other good or service in the contract).
- *Whether the functionality of the combined on-premise software and cloud-based service is transformative rather than additive* — Transformative functionality should be assessed separately from additive functionality. Transformative functionality comprises features that significantly affect the overall operation and interaction of the on-premise software and the cloud-based service (e.g., collaboration, pushdown learning, customization). To be transformative, the on-premise software and the cloud-based service must significantly affect each other. That is, the on-premise software and the cloud-based service are inputs to a combined output such

that the combined output has greater value than, or is substantively different from, the sum of the inputs. By contrast, additive functionality comprises features that provide an added benefit to the customer without substantively altering (1) the manner in which the functionality is used and (2) the benefits derived from the functionality of the on-premise software or the cloud-based service on a stand-alone basis. Even if added functionality is significant, it may not be transformative. It is more likely that the on-premise software and the cloud-based service are highly interdependent or highly interrelated when the functionality of the combined on-premise software and cloud-based service is transformative rather than additive.

- *Whether the entity's marketing materials support a conclusion that the arrangement is for a combined solution rather than separate products or service offerings* — The entity's marketing materials may help clarify what the entity has promised to deliver to its customer and may provide evidence of the customer's intended use of the on-premise software and the cloud-based service. Circumstances in which an entity markets its product as a "solution" (i.e., the marketing materials discuss the functions, features, and benefits of the combined offering with little or no discussion of the on-premise software and the cloud-based service separately) may help support a conclusion that the entity's promise is a combined performance obligation. However, the entity should exercise caution when relying on its marketing materials since the manner in which the entity markets its hybrid offering would not, by itself, be sufficient to support a conclusion that the on-premise software and the cloud-based service represent a combined performance obligation.

Example 2-21

Entity A is a developer of modeling software that enables its customers to analyze, design, and render virtual prototypes to assess the real-world impact of products its customers are developing. Entity A enters into a three-year noncancelable contract with a customer to provide (1) an on-premise license to the software and (2) a cloud-based service, which is an online repository for in-process and final prototypes that can be accessed by the customer's employees from any device that also has the on-premise software. While the on-premise software and the cloud-based service are never sold separately and are marketed as an integrated offering, the on-premise software is fully functional without the cloud-based service and has significant utility on its own. The cloud-based service provides the added benefit of allowing the customer's employees to share and collaborate on projects but is similar to other cloud-based services provided by alternative vendors. Those other cloud-based services would require only minimal modifications to function with A's on-premise software.

We believe that it is reasonable to conclude that the on-premise software license and the cloud-based service are two separate performance obligations for the following reasons:

- While the on-premise software and the cloud-based service are not sold separately and are marketed as an integrated offering, there are other vendors that provide similar cloud-based services.
- The cloud-based service does not significantly modify the on-premise software but merely serves as a repository for sharing prototypes.
- The on-premise software is not significantly integrated with the cloud-based service since alternative cloud-based services would require only minimal modifications to function with the on-premise service.
- The absence of the cloud-based service does not significantly limit or diminish the utility of the on-premise software (the intended use of the on-premise software is to analyze, design, and render virtual prototypes).
- The functionality provided by the cloud-based service (added storage and collaboration functionality) is additive rather than transformative.

Example 2-22

Entity B is a developer of modeling software that enables its customers to analyze, design, and render virtual prototypes to assess the real-world impact of products its customers are developing. Entity B enters into a three-year noncancelable contract with a customer to provide (1) an on-premise license to the software and (2) a cloud-based service. The cloud-based service serves as an online repository for in-process and final prototypes that can be accessed by the customer's employees from any device that also has the on-premise software. In addition, the cloud-based service interacts with the on-premise software to provide continuous real-time data updates, data mining and analysis, predictive modeling, and machine-based learning (which are computationally intensive tasks that can be performed only through the cloud-based service) to enable the customer to enhance and improve its products. The nature of the customer's products makes their continual enhancement and improvement critical because without such continual enhancement and improvement, the products would quickly become obsolete. Similarly, functions performed by B's cloud-based service are critical because without those functions, the on-premise software would have little utility to the customer.

The on-premise software and the cloud-based service are never sold separately and are marketed as an integrated offering. There is significant integration of, and interaction between, the on-premise software and the cloud-based service such that together, they provide the functionality required by the customer. The cloud-based service is proprietary and can be used only with the on-premise software; no other competitors can provide (1) a similar service that can function with B's on-premise software or (2) a software product that can function with B's cloud-based service. Accordingly, B determines that there is a transformative relationship between the on-premise software and the cloud-based service such that they are inputs to a combined output. Further, because the on-premise software and the cloud-based service each have little or no utility without the other, they are highly interrelated and highly interdependent.

We believe that it is reasonable to conclude that there is one performance obligation (an integrated hybrid cloud-based offering) for the following reasons:

- Entity B's on-premise software and cloud-based service are never sold separately.
- The customer cannot benefit from the on-premise software or the cloud-based service either on its own or together with other resources that are readily available to the customer. There is no on-premise software or cloud-based service available from other vendors that can function with B's offering.
- The functionality of the on-premise software is significantly integrated with that of the cloud-based service in such a way that only together can the on-premise software and the cloud-based service provide the functionality (i.e., the intended benefit) required by the customer.
- The absence of either the on-premise software or the cloud-based service significantly limits or diminishes the utility (i.e., the ability to provide benefit or value) of the other. The on-premise software's functionality is significantly limited or diminished without the use of the cloud-based service, and vice versa. Therefore, the on-premise software and the cloud-based service (1) are highly interdependent and highly interrelated (i.e., they significantly affect each other) and (2) function together as inputs to a combined output. The customer cannot obtain the full intended benefit of the on-premise software or the cloud-based service on a stand-alone basis because each is critical to the customer's intended use of the hybrid solution. Therefore, B cannot fulfill its promise to the customer by transferring the on-premise software or the cloud-based service independently (i.e., the customer could not choose to purchase one good or service without significantly affecting the other good or service in the contract).
- The functionality of the combined on-premise software and cloud-based service is transformative rather than additive. That transformative functionality comprises features that significantly affect the overall operation and interaction of the on-premise software and the cloud-based service in such a way that the on-premise software and the cloud-based service significantly affect each other.
- Entity B's marketing materials support a conclusion that the arrangement is for a combined solution rather than separate product or service offerings.

2.4.6 Identifying Performance Obligations in a Cloud Computing Arrangement That Includes Implementation Services

Entities that sell a cloud-based or hosted software solution (e.g., in a SaaS arrangement)[15] often include implementation services. These services are performed either (1) at the outset of the customer arrangement or (2) during the SaaS term (in many cases because of added modules or features of the SaaS solution[16]). Depending on the facts and circumstances of the arrangement, an entity may need to use judgment to determine whether the implementation services represent (1) activities that do not transfer a good or service to the customer, (2) a promise that is not distinct from the SaaS, or (3) a distinct performance obligation.

2.4.6.1 Identifying Whether Implementation Services Are a Promised Good or Service

ASC 606-10-25-17 states the following regarding the identification of promised goods or services in an arrangement:

> Promised goods or services do not include activities that an entity must undertake to fulfill a contract unless those activities transfer a good or service to a customer. For example, a services provider may need to perform various administrative tasks to set up a contract. The performance of those tasks does not transfer a service to the customer as the tasks are performed. Therefore, those setup activities are not promised goods or services in the contract with the customer.

In addition, ASC 606-10-55-53 states:

> An entity may charge a nonrefundable fee in part as compensation for costs incurred in setting up a contract (or other administrative tasks as described in paragraph 606-10-25-17). If those setup activities do not satisfy a performance obligation, the entity should disregard those activities (and related costs) when measuring progress in accordance with paragraph 606-10-55-21. That is because the costs of setup activities do not depict the transfer of services to the customer. The entity should assess whether costs incurred in setting up a contract have resulted in an asset that should be recognized in accordance with paragraph 340-40-25-5.

Further, paragraph BC93 of ASU 2014-09 indicates that even if an activity is "required to successfully transfer the goods or services for which the customer has contracted," that activity may not "directly transfer goods or services to the customer."

Implementation Q&A 48 (compiled from previously issued TRG Agenda Papers 41 and 44) contains an example in which the FASB staff discusses up-front implementation services that are provided with a SaaS solution. In the example, (1) the hosting period begins when the implementation services are complete and the customer cannot access or use the service until that time, (2) the vendor's solution is proprietary and no other vendors can provide the implementation services, (3) the customer cannot derive any benefit from the implementation services or the SaaS until implementation is complete, and (4) the implementation services are not capable of being distinct from the hosting services. While the example is intended to illustrate considerations related to whether the implementation services were relevant to an entity's measurement of progress toward completion of a performance obligation, it also addresses whether such implementation services would represent a performance obligation at all. According to the FASB staff, "the nature of the entity's overall promise is the hosting service and the implementation service does not transfer a service to a customer"; thus, the services would be disregarded in a manner similar to the treatment of the set-up activities described in ASC 606-10-25-17. This view is analogous to that discussed in Example 53 in ASC 606-10-55-358 through 55-360, in which set-up activities related to transaction processing services "do not transfer a good or service to the customer and, therefore, do not give rise to a performance obligation."

[15] In this Guide, it is assumed that a SaaS arrangement is accounted for as a service contract because the customer does not have the ability to take possession of the underlying software license on an on-premise basis.

[16] If a customer purchases additional implementation services after the SaaS term has commenced, the entity would generally apply the modification guidance in ASC 606 and perform the same analysis as if it were analyzing implementation services purchased up front.

Since the nature and composition of implementation services can vary in practice, we do not believe that the example in Implementation Q&A 48 was intended to address all types of implementation services. Accordingly, an entity would have to carefully analyze the facts and circumstances of its SaaS arrangements and related implementation services to determine whether the activities a vendor performs for implementation services (1) transfer a good or service to the customer or (2) are akin to set-up activities. The entity's analysis would be based on whether the customer obtains control of the implementation services as they are performed. In the determination of whether the customer obtains such control, we believe that it may be helpful for the entity to consider the following:

- Whose assets are being enhanced, improved, or customized by those activities. If the implementation activities are performed on the entity's internal infrastructure and applications (i.e., "behind the firewall"), the activities most likely do not transfer a good or service to the customer and the entity therefore would not consider the services in identifying performance obligations. This would be the case even if the customer benefits from the implementation activities. Because the activities are performed on the entity's assets, the entity retains control of any benefits those activities confer. By contrast, if the implementation activities are performed on the customer's infrastructure and applications, the activities may represent the transfer of a promised good or service to the customer. Paragraph BC129 of ASU 2014-09 discusses "situations in which an entity's performance creates or enhances an asset that a customer clearly controls as the asset is created or enhanced." It states, in part:

  > In those cases, because the customer controls any work in process, the customer is obtaining the benefits of the goods or services that the entity is providing . . . . For example, in the case of a construction contract in which the entity is building on the customer's land, the customer generally controls any work in process arising from the entity's performance.

- Whether the services are provided directly to the customer (i.e., the services are simultaneously received and consumed by the customer; another entity would not need to substantially reperform the entity's performance to date). Paragraph BC125 of ASU 2014-09 states, in part:

  > In many typical "service" contracts, the entity's performance creates an asset only momentarily because that asset is simultaneously received and consumed by the customer. In those cases, the simultaneous receipt and consumption of the asset that has been created means that the customer obtains control of the entity's output as the entity performs . . . . For example, consider an entity that promises to process transactions on behalf of a customer. The customer simultaneously receives and consumes a benefit as each transaction is processed.

To the extent that the activities do not transfer a good or service to the customer, they should not be considered in the identification of performance obligations.

Example 2-23

Company S enters into a noncancelable SaaS arrangement with Customer T for a three-year term. As part of the arrangement, S has agreed to perform certain activities to add functionality to the SaaS before the commencement of the contract term (i.e., customization services) for an incremental fee. The added functionality is needed for the SaaS to work as intended by T. To perform the customization services, S must make modifications to its software applications that will be used to provide the SaaS. Customer T can only access the added functionality through the SaaS and has no other rights to the enhancements. That is, S continues to retain ownership of the improvements.

The customization services are not promised goods or services to the customer. Since the customization services will take place behind the firewall, the functionality is added only to S's assets, which S controls. The services will not enhance, improve, or customize a customer-controlled asset. Therefore, the arrangement does not result in a promise to transfer (i.e., does not transfer control of) services to the customer and would not be assessed as a promise under the contract. Rather, the customization services would be akin to set-up activities as described in ASC 606-10-25-17.

Example 2-24

Assume the same facts as in Example 2-23 above, except that Company S has also agreed to perform other implementation activities before the commencement of the contract term (i.e., implementation services) for an incremental fee. These activities, which are performed on Customer T's assets, include adapting and configuring T's infrastructure and T's in-place systems for communication with S's infrastructure. In addition, S will convert and migrate T's data in a format that is compatible with the SaaS platform and train T's employees in the SaaS's optimal use.

In this scenario, the additional implementation services are promised goods or services to the customer. Most of the activities enhance, improve, or customize T-controlled assets (i.e., T's infrastructure, in-place systems, and data). In addition, the training is provided directly to T's employees (as opposed to S's employees), which permits T to simultaneously receive and consume the benefit conferred by the training. Therefore, the implementation services represent promises to transfer services to the customer and should be assessed as such under the contract.

2.4.6.2 Identifying Whether Implementation Services Are a Distinct Performance Obligation

If an entity has determined that implementation services represent promised goods or services to the customer, it would next assess whether such services and the SaaS are (1) each a distinct performance obligation or (2) a combined performance obligation. Under ASC 606-10-25-19, for a promised good or service to be a separate performance obligation, the promise must be both (1) capable of being distinct (i.e., the customer can benefit from the good or service either on its own or together with other resources that are readily available to the customer) and (2) distinct within the context of the contract (i.e., the entity's promise to transfer the good or service to the customer is separately identifiable from other promises in the contract).

We believe that the following factors (not all-inclusive) may be helpful in an entity's determination of whether implementation services are a distinct performance obligation (the analysis may in some circumstances need to be performed separately for each promise because implementation services often consist of multiple activities that represent separate promises):

- *Whether the entity or other entities (e.g., consulting firms, SaaS competitors) provide the implementation services on a stand-alone basis* — We believe that this is a key consideration in the entity's assessment of whether the implementation services are distinct. For example, if the entity has a number of partnerships or alliances with other organizations that enable those other businesses to provide the implementation services to the entity's customers, the implementation services are likely to be distinct.
- *Whether the implementation services will provide an asset or incremental benefit to the customer without the SaaS arrangement (i.e., alternative use)* — An entity would evaluate whether the implementation services (1) are specific to the SaaS arrangement or (2) can be leveraged by the customer for use in other SaaS arrangements or circumstances. For example, an entity may provide professional services that enable the customer to use the SaaS to more efficiently analyze data. If those same professional services can be applied to other competitors' SaaS solutions, the services may be distinct.
- *Whether the customer must obtain the implementation services to use and benefit from the SaaS arrangement (i.e., whether the SaaS is functional without the implementation services)* — An entity would evaluate whether the customer can maintain a reasonable degree of utility of the SaaS without the implementation services. For example, a SaaS that has no utility or value without the entity's implementation services may be an indicator that the implementation services are not distinct.

- *Whether there are instances in which the SaaS was provided to customers without implementation services* — Customers' frequent purchasing of the entity's SaaS without purchasing its implementation service may be an indicator that the implementation services are distinct.
- *Whether the implementation services significantly alter any features or functionality of the SaaS* — For example, the implementation services may include significant customization of the customer's infrastructure and applications to enable the SaaS to process transactions it could not process otherwise. Such customization may be an indicator that the implementation services are not distinct; however, if the customization's benefits could be applied to another SaaS platform (i.e., another readily available resource), the implementation services may be distinct.
- *Whether the implementation services and the SaaS are so significantly integrated, interrelated, or interdependent that the entity could not fulfill its promises to transfer the implementation services and the SaaS independently* — For example, to enable the SaaS to perform unique functions that are critical to the customer's intended use of the SaaS, the implementation services may require significant customization of both the entity's and the customer's systems. In such cases, the implementation services may not be distinct because there is likely to be an interdependency between the implementation services and the SaaS (i.e., as a result of the services, there is an enhancement to the combined functionality of the SaaS and the customer's systems). In addition, as discussed in Section 2.4.6.1, the customization of the entity's systems is not likely to be a promised good or service in the arrangement.
- *Whether using the SaaS or providing implementation services requires a highly specialized or complex skill set that neither the customer nor third parties possess* — For example, an entity may provide to a governmental agency a highly customized and complex SaaS solution that requires the entity to employ scientists. If there is significant risk associated with the entity's ability to provide the implementation services and the level of effort and time needed to complete them is extensive, the implementation services may not be distinct. By contrast, if it is not difficult to configure or set up the customer's systems and interfaces, the implementation services may be distinct.
- *Whether the entity markets the implementation services and the SaaS as a combined solution* — While marketing the services and SaaS in such a manner is not a determinative factor, it may support a conclusion that the implementation services are not distinct.

2.4.7 Identifying Performance Obligations in Arrangements That Include Smart Devices, Updates, and Cloud-Based Services

Many technology entities offer solutions in which a customer purchases (1) a smart device with an embedded software component (e.g., firmware), (2) maintenance and support (i.e., PCS), and (3) a cloud-based service. In these offerings, the firmware allows the smart device to connect to the cloud-based application, which is physically hosted on the technology entity's systems (or hosted by the entity's cloud-computing vendor) and accessed by the customer over the Internet. For arrangements in which the software is always embedded in the smart device and the software is essential to the device's core functionality, an entity will typically conclude that the embedded software is not distinct from the smart device. This is because the software is a component of the tangible device and integral to the functionality of that device in accordance with ASC 606-10-55-56(a).

Because PCS and a cloud-based service typically are sold together, are coterminous, and have the same pattern of transfer (i.e., ratably over time as stand-ready obligations), they will be referred to collectively as "subscription services." In some cases, the smart device and both the PCS and the cloud-based service may constitute a combined performance obligation. However, there may be instances in which the smart device and either the PCS (without the cloud-based service) or the cloud-based service (without the PCS) constitute a combined performance obligation.

The functionality of smart devices and subscription services can vary between offerings to customers and between entities. When identifying performance obligations in these arrangements, an entity should consider the guidance in ASC 606-10-25-19 to determine whether the smart device and the subscription services are distinct (i.e., whether each promise is capable of being distinct and distinct within the context of the contract). While a smart device and related subscription services are each often capable of being distinct, determining whether they are distinct within the context of the contract is much more challenging.

In a speech at the 2018 AICPA Conference on Current SEC and PCAOB Developments, OCA Professional Accounting Fellow Sheri York discussed her views on determining whether an entity provides a significant integration service resulting in a combined performance obligation that comprises equipment and services:

> I would now like to discuss my views regarding the identification of performance obligations; specifically, whether or not a promise to transfer a good or service to the customer is distinct within the context of the contract. The objective of this assessment is to determine whether the nature of the promise, within the context of the contract, is to transfer each of the goods or services individually or, instead, to transfer a combined item for which the promised goods or services are inputs.
>
> In a recent consultation with OCA, a registrant provided its customer with a commercial security monitoring service by integrating a variety of cameras and sensors (which I will refer to as "equipment") with the registrant's technology platform. The equipment was integrated via a control panel that was installed at the customer's location and enabled communication between the equipment and the registrant's technology platform. The registrant's technology platform also incorporated an element of artificial intelligence that used data from the cameras and sensors to learn the patterns of the customer's behavior. It then used that information to create a "smart" security monitoring service. For example, motion detectors may identify an attempt to open a window while other sensors may simultaneously indicate, based on a lack of body temperature readings, that personnel are not currently located within the building. In this case, the control panel would route this information obtained from the equipment to the registrant's technology platform, which may alert the customer and/or the authorities about a potential issue.
>
> The registrant concluded that each piece of equipment (including the control panel), the installation, and the monitoring services were capable of being distinct, but believed that these promises comprised a single performance obligation as they were not distinct in the context of the contract. The registrant believed it was providing a significant service of integrating the goods and services in the contract into a bundle that represented the combined output for which the customer had contracted. More specifically, the delivery of a "smart" security monitoring service would not be possible if the equipment were not integrated with the technology platform.
>
> The staff did not object to the registrant's conclusion and considered it reasonable to conclude that the nature of the promise is to transfer a combined item — the commercial security solution — to which each piece of equipment (including the control panel), the technology platform, and installation are inputs. In this fact pattern, the entity demonstrated reasonable judgment that they were providing a significant integration service that transformed the equipment and services into a combined output that provided the customer with an overall service offering that was greater than the customer could receive from each individual part. [Footnotes omitted]

We believe that an entity may consider the following indicators, which are not individually determinative or all-inclusive, in determining whether its smart device is distinct from its subscription services:

- *Whether the entity's smart device and subscription services are ever sold separately* — The entity's practice of selling the smart device and the subscription services separately typically indicates that there are two separate performance obligations (i.e., the promises should not be combined) since the customer may benefit from the smart device or the subscription services offering on its own. In addition, separate sales also suggest that the smart device and the subscription services each have significant stand-alone functionality, which indicates that those items are distinct within the context of the contract.

- *Whether the customer can benefit from each product or service (i.e., the smart device or the subscription services) either on its own or together with other resources that are readily available to the customer* — For example, suppose that the customer has the ability to (1) obtain from a different vendor a smart device or subscription services offering that is the same as or similar to that sold by the entity, (2) use the alternative vendor's smart device with the entity's subscription services (or use the alternative vendor's subscription services with the entity's smart device), and (3) receive substantially the same functionality as that of the entity's combined offering. That ability may indicate that the entity's smart device and subscription services are each capable of being distinct and are distinct within the context of the contract since (1) the entity is not providing a significant integration service for the device and the subscription services and (2) it is less likely that the smart device and the subscription services are highly interdependent or highly interrelated.

  Alternatively, suppose that the functionality of the smart device is significantly integrated with (rather than just improved by) the subscription services in such a way that the entity's combined offering provides significant additional capabilities that cannot be obtained from an alternative vendor providing the subscription services. In that case, the presence of an alternative vendor providing a portion of the same utility with its subscription services could indicate that the promises are capable of being distinct, but the integrated nature of the promises could indicate that the promises are not distinct within the context of the contract.

- *Whether the subscription services significantly modify the smart device* — The subscription services and the smart device may not be distinct within the context of the contract if rather than just enhancing the capabilities of the smart device, the subscription services modify and significantly affect the functionality of the smart device. For example, suppose that the subscription services (1) employ AI or machine learning that teaches and significantly affects the functionality of the smart device and (2) cannot employ the AI or machine learning without using the functionality of the smart device. This situation could indicate that the subscription services and the smart device are not distinct within the context of the contract because rather than just enhancing the capabilities of the smart device, the subscription services modify and significantly affect the functionality of the smart device.

- *Whether the absence of either the smart device or the subscription services significantly limits or diminishes the utility (i.e., the ability to provide benefit or value) of the other* — If the smart device's functionality is significantly limited or diminished without the use of the subscription services, and vice versa, that significantly limited or diminished functionality may indicate that the smart device and the subscription services (1) are highly interdependent or highly interrelated (i.e., they significantly affect each other) and (2) function together as inputs to a combined output. This, in turn, may indicate that the promises are not distinct within the context of the contract since the customer cannot obtain the intended benefit of the smart device or the subscription services without the other. That is, while the customer may be able to obtain some functionality from the smart device on a stand-alone basis, it may not obtain the intended outputs from the smart device if the smart device is not updated by or connected to the subscription services because the subscription services are critical to the customer's intended use of the combined solution. In this situation, the entity may not be able to fulfill its promise to the customer by transferring the smart device or the subscription services independently (i.e., the customer may not be able to choose to purchase one good or service without significantly affecting the other good or service in the contract).

- *Whether the functionality of the combined smart device and subscription services is transformative rather than additive* — Transformative functionality should be assessed separately from added functionality. Transformative functionality comprises features that significantly affect the overall operation and interaction of the smart device and the subscription services (e.g., integrated data analytics, pushdown learning, customization). To be transformative, the smart device and the subscription services must significantly affect each other. That is, the smart device and the subscription services are inputs to a combined output such that the combined output has greater value than, or is substantively different from, the sum of the inputs. By contrast, added functionality comprises features that provide an added benefit to the customer without substantively altering (1) the manner in which the functionality is used and (2) the benefits derived from that functionality of the smart device or the subscription services on a stand-alone basis. Even if the added functionality is significant, it may not be transformative. It is more likely that the smart device and the subscription services are highly interdependent or highly interrelated when the functionality of the combined offering is transformative rather than additive.
- *Whether the entity's smart devices and subscription services are always sold on a one-to-one basis* — If the entity has a practice of selling smart devices without the subscription services, this may indicate that the customer can obtain its intended benefit from the smart devices separately. For example, if a customer purchases the entity's subscription services and 10 devices and has an option to subsequently purchase additional devices without additional subscription services, the entity is able to fulfill any promise to provide additional devices without any related subscription services. If the entity is able to fulfill its promise to provide a smart device independently from its promise to provide subscription services, the smart device and the subscription services may not be highly interdependent or highly interrelated. By contrast, if a customer is always required to purchase additional subscription services for each smart device purchased, this may indicate that the smart device and the subscription services are not distinct.
- *Whether the smart devices are sold on a stand-alone basis through a distribution channel or in an aftermarket* — If the entity's smart devices are sold on a stand-alone basis by other third parties and the entity will sell its subscription services separately to any customer that has purchased or obtained a smart device from a third party, the entity is able to fulfill its promise to provide subscription services independently from any promise to provide smart devices. This indicates that the smart device and the subscription services are not highly interdependent or highly interrelated. By contrast, if the entity will not sell its subscription services to a customer unless the customer has purchased a smart device directly from the entity, this may indicate that the smart device and the subscription services are not distinct.
- *Whether the entity's marketing materials support a conclusion that the arrangement is for a combined solution rather than separate products or service offerings* — The entity's marketing materials may help clarify what the entity has promised to deliver to its customer and may provide evidence of the customer's intended use of the smart device and the subscription services. Circumstances in which an entity markets its product as a "solution" (i.e., the materials discuss the functions, features, and benefits of the combined offering with little or no discussion of the smart device and the subscription services separately) may help support a conclusion that the entity's promise is a combined performance obligation. However, the entity should exercise caution when relying on its marketing materials since the manner in which the entity markets its combined offering would not, by itself, be sufficient to support a conclusion that the smart device and the subscription services represent a combined performance obligation.

Example 2-25

Entity X sells a bundled cybersecurity solution to protect against advanced cybersecurity threats to enterprise customers. In its standard revenue contracts, X promises to provide customers with a smart device (i.e., hardware with embedded software) and annual subscription services. The smart device has behavior and security analytics engines that use machine learning and AI to monitor and protect a customer's IT infrastructure (including e-mails, Internet applications, endpoints, and networks) on a real-time basis against cyberattacks. The subscription services include (1) a cloud-based service that pulls data on cyberattacks and other intelligence updates from various sources and (2) PCS that consists of support and critical software updates that enable the cloud-based service to stay compatible with the smart device. The cloud-based service is provided hourly in response to evolving cybersecurity threats, and software updates are provided on a daily or weekly basis. Entity X never sells the smart device without subscription services, but subscription services are sold separately on a renewal basis (approximately 95 percent of X's customers renew each year). Customers are required to purchase subscription services with each smart device purchased, and the smart device must be purchased from X directly (i.e., there are no distributors or resellers). Customers are also prohibited from reselling the smart device, and X will not sell subscription services to a customer that has not purchased the smart device directly from X (i.e., there is no aftermarket for the smart device).

The smart device on a stand-alone basis is functional and will monitor and prevent some level of cyberattacks. However, given the nature of the security updates and the cybersecurity environment for enterprise customers, the utility of the smart device diminishes significantly and quickly without the subscription services since the smart device would not be able to respond to evolving cybersecurity threats. The subscription services have no utility without the smart device, and there is significant integration of, and interaction between, the smart device and the subscription services such that together, they provide the functionality required by the customer. The smart device and the subscription services are proprietary and can only be used with each other; no similar third-party subscription services are compatible with X's smart device, and no similar third-party smart devices are compatible with X's subscription services. Entity X markets its smart device and subscription services as a single integrated offering; X does not describe the smart device or subscription services separately, and it refers only to the features, functionality, and benefits of the combined offering.

Entity X determines that there is a transformative relationship between the smart device and the subscription services such that they are inputs to a combined output. Further, because the smart device and the subscription services each have little or no utility without the other, they are highly interrelated and highly interdependent. Entity X therefore concludes that there is a single performance obligation in its contracts.[17]

We believe that it is reasonable to conclude that there is one performance obligation for the following reasons:

- Entity X's smart device is never sold separately.
- The customer cannot obtain the intended benefit from the smart device or the subscription services offering on its own. There are no smart devices or subscription services available from other vendors that can function with X's offering.
- The functionality of the smart device is significantly integrated with the subscription services in such a way that only together can they provide the functionality (i.e., the intended benefit) required by the customer.
- The absence of either the smart device or the subscription services significantly limits or diminishes the utility (i.e., the ability to provide benefit or value) of the other. The smart device's functionality is significantly limited or diminished without the use of the subscription services, and vice versa. Therefore, the smart device and the subscription services (1) are highly interdependent and interrelated (i.e., they significantly affect each other) and (2) function together as inputs to a combined output. The customer cannot obtain the full intended benefit of the smart device or the subscription services on a stand-alone basis because the smart device and the subscription services are each critical to the customer's intended use of the security solution.

[17] Often in these arrangements, a customer is required to pay an up-front fee for the smart device but is not required to pay that fee again upon renewal of the subscription services. In those circumstances, if the smart device is not distinct from the subscription services, an entity should consider whether a material right has been provided.

Example 2-25 (continued)

- The functionality of the combined smart device and subscription services is transformative rather than additive. That transformative functionality comprises features that significantly affect the overall operation and interaction of the smart device and the subscription services in such a way that the smart device and the subscription services significantly affect each other.
- Entity X always sells the smart device and the subscription services on a one-to-one basis. In addition, the smart device must be purchased from X directly (i.e., there are no distributors or resellers). Customers are also prohibited from reselling the smart device, and X will not sell subscription services to a customer that has not purchased the smart device directly from X (i.e., there is no aftermarket for the smart device). Therefore, X cannot fulfill its promise to the customer by transferring the smart device or the subscription services independently (i.e., the customer could not choose to purchase one good or service without significantly affecting the other good or service in the contract).
- Entity X's marketing materials support a conclusion that the arrangement is for a combined solution rather than separate product or service offerings.

Example 2-26

Entity Y sells GPS tracking devices (with embedded software) that enable its customers to monitor the location of its various products. In its standard revenue contracts, Y also sells a one-year cloud-based subscription service so that customers can monitor the devices online and perform data analytics. The devices have minimal functionality unless a customer has an active subscription service (i.e., the subscription service is required to enable a customer to monitor the devices). Likewise, if a customer has an active subscription service without an associated device, the subscription service will not monitor anything. The subscription service does not alter or modify the existing firmware on the device. In addition, Y is not providing a significant integration service that transforms the device and subscription service into a combined output.

Entity Y markets and sells the device and the subscription service as one bundled offering but does have stand-alone sales of the device and the subscription service. In addition to selling the device directly, Y sells the device to independent distributors. The device can also be resold in an aftermarket. If a customer purchases a device from a reseller or in an aftermarket, the customer will purchase the subscription service separately from Y. In addition, Y sells the subscription service separately on a renewal basis (approximately 95 percent of Y's customers renew each year).

Entity Y concludes that it has multiple performance obligations in its contracts with direct customers: (1) each device and (2) the subscription service.

We believe that it is reasonable to conclude that there are multiple performance obligations for the following reasons:

- While Y markets and sells the device and the subscription service as one bundled offering, it has stand-alone sales of the device and the subscription service. Entity Y sells the device separately to distributors and sells the subscription service separately to direct customers.
- Entity Y is not providing a significant integration service that transforms the device and the subscription service into a combined item.
- The device is not modified by the subscription service.
- The device and the subscription service are not highly interdependent or highly interrelated. Although the customer can only benefit from the functionality of the device with the subscription service (i.e., the device would have minimal functionality without the subscription service) and the device is required for the subscription service to function, the device and the subscription service do not significantly affect each other. This is because Y would be able to fulfill each of its promises in its contracts independently of the other, since (1) the device is sold separately through independent distributors and an aftermarket, and (2) Y will sell its subscription service separately to any customer that has purchased the device from a distributor or in the aftermarket. In addition, independent distributors and customers can obtain the benefits from the device separately by reselling it, and the buyer of the device can benefit from it by separately purchasing subscription services from Y.

2.4.8 Accounting for Virtual Goods

Many developers of online games allow customers to access and play the games for no charge. Rather than licensing the software to their customers, the developers generally host the software for their customers to access. Arrangements that allow customers of online game developers to access and play online games are accounted for as a service (hosted software as a service) rather than as the transfer of a software license because the customers typically cannot take possession of the software associated with the online games.

To enhance the gaming experience of customers who can access and play online games for no charge, online game developers may give them the option to purchase virtual goods or services (i.e., virtual items). These virtual items are generally classified as either (1) consumables (i.e., items that are consumed by a specific action and are no longer available to a customer once consumed, such as virtual groceries) or (2) durables (i.e., items that are accessible to a customer for use throughout the entire game, such as a virtual house). In addition, customers may have the ability to purchase virtual currency, which enables them to purchase other virtual items.

In effect, customers are enhancing their gaming experience through optional purchases. Some of these purchases are "consumed" by a player immediately or shortly after he or she gains access to them, and others are consumed by the player over time. Nevertheless, even when an item is consumed immediately, it may still have an ongoing effect on the player's gaming experience (e.g., if consumption of the item enables the player to reach another level that would otherwise have been inaccessible).

Generally, a developer is not contractually obligated to continue making an online game available to a customer. Further, a developer can terminate a customer's account at any time for no cause, regardless of whether the customer has purchased virtual items. Nevertheless, many developers have a customary business practice of notifying customers when they are planning to shut down an online game, although such notification is not contractually required.

Generally, an implied promise would exist since the developer has implicitly promised to provide hosting services after the customer purchases a virtual item. Without the hosting services, the customer would not be able to use and benefit from the enhanced gaming experience that it receives through the game as a result of purchasing the virtual item. Although the developer is not contractually obligated (i.e., it has not explicitly promised) to continue hosting the online game for the customer, it has established a customary business practice of (1) continuing to host the online game and (2) notifying customers when it is planning to shut down the game. The developer's customary business practice creates a reasonable expectation that the developer will continue to host the software so that the virtual item (or the enhanced gaming experience derived from the virtual item) will remain available to the customer.

A developer should carefully consider the nature of the implied promise to its customer in determining the appropriate recognition model. Customers often simultaneously receive and consume the benefits of the developer's performance of making the hosted software available to the customer. Consequently, the developer may determine that it should recognize revenue for its implied promise either at a point in time (e.g., upon consumption) or over time by using a method that faithfully depicts its performance in transferring control of the promised services (i.e., the benefits of the enhanced gaming experience related to the purchase of virtual items promised to the customer). Immediate recognition of revenue at the point in time when a customer purchases a virtual item may not be appropriate if the benefits of the enhanced gaming experience are provided over time. Rather, the entity may need to consider the period over which the customer benefits from the enhanced gaming experience that it receives by purchasing the virtual item when determining the appropriate period and pattern of revenue recognition.

We believe that the following may be relevant factors for an entity to consider in making this assessment:

- Whether the nature of the implied promise is to provide an enhanced gaming experience through the hosted service over time or to enable the player to consume virtual items.
- The period over which the enhanced gaming experience is provided if the benefits are consumed throughout the hosting period (e.g., user life, gaming life).
- The life span over which, or number of times, the virtual item may be accessed or used.
- Whether the virtual item must be used immediately or may be stored for later use.
- How and over what period the virtual item benefits the customer's gaming experience (e.g., a consumable such as a virtual meal that is used immediately vs. a durable that allows a player to "level up" within the game in such a way that the increased performance continues to enhance the gaming experience).
- Whether the benefit of purchasing the virtual item on the customer's gaming experience is temporary or permanent.

2.4.9 Series Guidance

ASC 606-10-25-14(b) explains that a performance obligation can be a series of goods or services; however, the performance obligation must meet certain requirements to qualify as a series. Specifically, the goods or services must be substantially the same and have the same pattern of transfer to the customer as though they were a single performance obligation. The guidance in ASC 606-10-25-15 clarifies the meaning of "the same pattern of transfer."

ASC 606-10

25-15 A series of distinct goods or services has the same pattern of transfer to the customer if both of the following criteria are met:

a. Each distinct good or service in the series that the entity promises to transfer to the customer would meet the criteria in paragraph 606-10-25-27 to be a performance obligation satisfied over time.
b. In accordance with paragraphs 606-10-25-31 through 25-32, the same method would be used to measure the entity's progress toward complete satisfaction of the performance obligation to transfer each distinct good or service in the series to the customer.

For distinct goods or services to be considered *substantially the same* to be accounted for as a series under ASC 606-10-25-14(b), it is not necessary for each increment of distinct goods or services to be identical. Instead, it is necessary to evaluate whether there is a series of distinct goods or services that are substantially the same. SaaS arrangements will typically meet this requirement because each day the SaaS is provided is likely to be substantially the same as another day the SaaS is provided. Some professional services will also meet this requirement, depending on the nature of the services.

A contract may require an entity to perform various activities as part of transferring services over the contract period. In these circumstances, an entity would need to determine whether the nature of the promise is to provide the customer with (1) multiple different services or (2) one integrated service (with different activities). In making this determination, an entity might first determine the nature of the services by evaluating the benefit provided to the customer. If the entity determines that the customer benefits from the integrated service over the contract term, it should then evaluate whether each time increment (e.g., hour, day, or week) is substantially the same. In these situations, each time increment of service may be substantially the same even if the underlying activities differ.

Example 2-27

IT Outsourcing Services

Company C provides IT outsourcing services to Customer X for a five-year period. The IT outsourcing services include providing X with server capacity, maintenance of the customer's software portfolio, and access to an IT help desk.

Company C considers the nature of the promise to X. Company C concludes that its promise to X is to provide continuous access to an integrated outsourced IT solution and not to provide a specified quantity of services (e.g., processing 100 transactions per day). The underlying activities in providing IT outsourcing services can vary significantly from day to day; however, the daily services are activities performed to fulfill C's integrated IT outsourcing service and are substantially the same. Company C concludes that for each period, (1) C is providing an integrated IT outsourcing service; (2) the customer is continuously receiving substantially the same benefit, which is distinct; and (3) each increment of time is substantially the same (i.e., each increment provides the same integrated IT outsourcing solution).

Company C concludes that each distinct increment of time meets the criteria for recognizing revenue over time and uses the same method for measuring progress. Therefore, C concludes that the IT outsourcing services satisfy the requirements of ASC 606-10-25-14(b) to be accounted for as a single performance obligation.

2.4.10 Stand-Ready Obligations

Contracts promise specific goods and services, but sometimes they also promise to deliver those goods and services over a specified period. ASC 606-10-25-18(e) describes a service of "standing ready" to provide goods or services ("stand-ready obligation"). The customer receives and consumes a benefit from a stand-ready obligation — namely, the assurance that a service (e.g., cybersecurity incident response services) is available to the customer when and if needed or called upon. When an entity enters into a contract with a customer and agrees to make itself available to provide goods and services to the customer over a specified period, such a promise is generally viewed as a stand-ready obligation. In this type of arrangement, (1) a customer may make requests of the entity to deliver some or all of the goods and services at some point during the period defined in the contract, or (2) the delivery of some or all of the goods and services on a when-and-if-available basis may be in the control of the entity.

Distinguishing a performance obligation to deliver goods or services from a stand-ready obligation to deliver goods or services may be complex and will require an entity to consider the arrangement's relevant facts and circumstances. However, an entity should begin by identifying the nature of the promise in the contract. For example, the determination of whether the promise is an obligation to provide one or more defined goods or services or is instead an obligation to provide an unknown type or quantity of goods or services **might** be a strong indicator of the nature of the entity's promise in the contract. While in **either** case the entity might be required to "stand ready" to deliver the good(s) or service(s) whenever called for by the customer or upon the occurrence of a contingent event (e.g., cybersecurity incident), the fact that the entity will not know when or how extensively the customer will receive the entity's good(s) or service(s) during the contract term may be a strong indicator that the entity is standing ready to perform.

Other examples of stand-ready performance obligations may include the following:

- *Software updates and upgrades* — An entity promises to make unspecified (i.e., when-and-if-available) software updates and upgrades available to a customer, and the entity has no discernible pattern of providing updates and upgrades. The nature of the entity's promise is fundamentally one of providing the customer with assurance that any updates or upgrades developed by the entity during the period will be made available because the entity stands ready to transfer updates or upgrades when and if they become available.

- *SaaS* — An entity promises to make its SaaS available to the customer, and the customer has unlimited usage of the SaaS over the contract term.
- *Extended warranty* — A customer purchases an extended product warranty for a good (e.g., hardware), and the entity promises to remediate **any** issues with the product when and if problems arise. That is, the entity is standing ready to make repairs when and if needed.

Connecting the Dots

If an entity has entered into contracts to provide professional services only on an as-needed basis (e.g., support services for a software license), it may be appropriate for the entity to account for its performance obligations under those contracts as stand-ready obligations by recording revenue as the stand-ready services are provided. However, the entity must evaluate its contracts that include professional services to determine the nature of its promises on the basis of the specific facts and circumstances of each contract. For example, if the entity has promised to provide an unknown type or quantity of professional services (as opposed to defined services), this may indicate that the services are a stand-ready obligation.

Assessing whether the promise in a professional services contract is a stand-ready obligation will require judgment. However, an entity may consider indicators supporting a conclusion that a stand-ready obligation does not exist. Such indicators include, but are not limited to, the following:

- The contract contains a promise to provide services that is specific about amounts and timing, as opposed to a promise to provide services as needed.
- The services vary in nature, frequency, or complexity each time they are performed.
- The goods or services are highly integrated or interrelated as a result of the complexity involved in providing them, making it difficult for another entity to take over the professional services.
- Modifications to the contract often include promises for specific additional services.

If an entity concludes that it does not have a stand-ready obligation, it would account for the professional services on the basis of the specific promises in the contract.

2.4.10.1 Determining Whether a Contract Includes a Stand-Ready Obligation or an Obligation to Provide a Defined Amount of Goods or Services

It will sometimes be necessary to determine whether the nature of an entity's promise under a contract is (1) to stand ready to provide goods or services or (2) to provide a defined amount of discrete goods or services. A promise to stand ready to provide goods or services is often satisfied over time as the customer benefits from being able to call upon a resource if and when needed throughout the stand-ready obligation period. However, an obligation to provide a defined amount of discrete goods or services is satisfied when or as those discrete goods or services are transferred to the customer.

An entity may be required to use judgment to distinguish between a stand-ready obligation and an obligation to provide a defined amount of goods or services. It will often be helpful for an entity to focus on the extent to which a customer's use of a resource affects the remaining resources to which the customer is entitled. A determination that the nature of the entity's obligation to the customer is to provide resources as and when required by the customer and that the customer's future entitlement is unaffected by the extent to which resources have already been provided is indicative of a stand-ready obligation. In contrast, a determination that the contract is to supply a specified number of units of the

resource and that the remaining entitlement diminishes as each unit is consumed is indicative of an obligation to provide a defined amount of goods or services.

Example 2-28

Company X enters into a software arrangement with Customer Y, who pays up-front nonrefundable consideration in exchange for a software license and a specified quantity of service credits. The credits can be redeemed for consulting services as and when needed by the customer over a three-year term.

Each credit is equivalent to a predetermined number of consulting hours. The agreement requires X to be available to provide consulting services in exchange for credits when requested by Y. The credits expire after the three-year term; however, customers generally use all of their credits.

As discussed above, for an entity to distinguish between a stand-ready obligation and an obligation to provide a defined amount of goods or services, it will often be helpful to focus on the extent to which the customer's use of a resource affects the remaining resources to which the customer is entitled.

In the circumstances described, Y pays in advance for a defined amount of consulting services to be provided by X when and if needed by Y. In contrast to the example in paragraph BC160 of ASU 2014-09, when Y redeems credits for consulting services, this does affect the amount of the remaining services to which it is entitled, indicating that X's promise is to deliver specified services rather than to stand ready.

In this example, assuming that X does not expect to be entitled to breakage, X should recognize revenue as the consulting services are provided to Y for redeemed credits or when the credits expire at the end of the three-year arrangement.

However, if X's obligation was to provide an unspecified amount of consulting services over time (e.g., an obligation to provide whatever level of consulting services was needed by Y), a different revenue recognition pattern would most likely result because X's promise would be to stand ready. In this scenario, Y's entitlement to future consulting services would not be affected by the extent to which Y had already received consulting services.

2.4.10.2 Determining Whether a SaaS Arrangement Represents a Stand-Ready Obligation or an Obligation to Provide a Specified Amount of Services

To determine the appropriate revenue recognition model to apply to its SaaS arrangements, an entity must first determine the nature of its promise to provide services. In some arrangements, the entity may price a SaaS arrangement on the basis of the expected volume of usage, but it may not always be clear whether the nature of the promise is (1) an obligation to provide a specified amount of services (e.g., a promise to process 5,000 transactions) or (2) a stand-ready obligation to provide services if and when the customer needs them (e.g., a promise to make the SaaS available throughout a specified term to process all transactions remitted during the period).

An entity will need to carefully consider the rights and obligations in the contract to identify the nature of the promise and to determine an appropriate measure of the progress toward complete satisfaction of the performance obligation.

The following factors may indicate that the nature of the entity's promise is an obligation to provide a specified amount of services:

- The customer has the right to "roll over" unused volume into a future period.
- The customer's right to use the SaaS terminates upon reaching the specified volume.
- Upon reaching the specified volume, the customer must make a separate purchasing decision with respect to additional services and the entity is not obligated to provide those services before the customer exercises its rights (e.g., the customer and entity need to enter into a contract modification to continue service).

The following factors may indicate that the nature of the entity's promise is to stand ready to provide the service:

- The contract does not include any specified volumes of usage (i.e., the customer has "unlimited access" to the SaaS).
- The specified volume is set as the maximum amount the customer can use, but it is not substantive (e.g., the limit is set as a protective measure and, in reality, is substantially higher than is actually expected to be used by the customer).
- The entity is required to stand ready to provide the service over the entire contractual period regardless of whether the customer exceeds the specified volume (i.e., the customer can continue use of the SaaS without requesting such ability from the entity, even if it has to pay an incremental fee for the excess).

If the nature of the entity's promise is to provide a specific amount of services, revenue is typically recognized when (or as) those services are provided. Breakage may be considered if a customer is not expected to use all the specified volume.

If the nature of the entity's promise is to stand ready to provide the SaaS, there are additional considerations related to applying the series guidance, determining an appropriate measure of progress, and determining how variable consideration is recognized.

2.4.10.2.1 Applying the Series Guidance to SaaS Arrangements That Are Stand-Ready Obligations

Under ASC 606-10-25-14(b), a performance obligation is considered a series of distinct goods or services if such goods or services "are substantially the same and . . . have the same pattern of transfer to the customer." To help entities make that determination, ASC 606-10-25-15 states:

> A series of distinct goods or services has the same pattern of transfer to the customer if both of the following criteria are met:
>
> a. Each distinct good or service in the series that the entity promises to transfer to the customer would meet the criteria in paragraph 606-10-25-27 to be a performance obligation satisfied over time.
>
> b. In accordance with paragraphs 606-10-25-31 through 25-32, the same method would be used to measure the entity's progress toward complete satisfaction of the performance obligation to transfer each distinct good or service in the series to the customer.

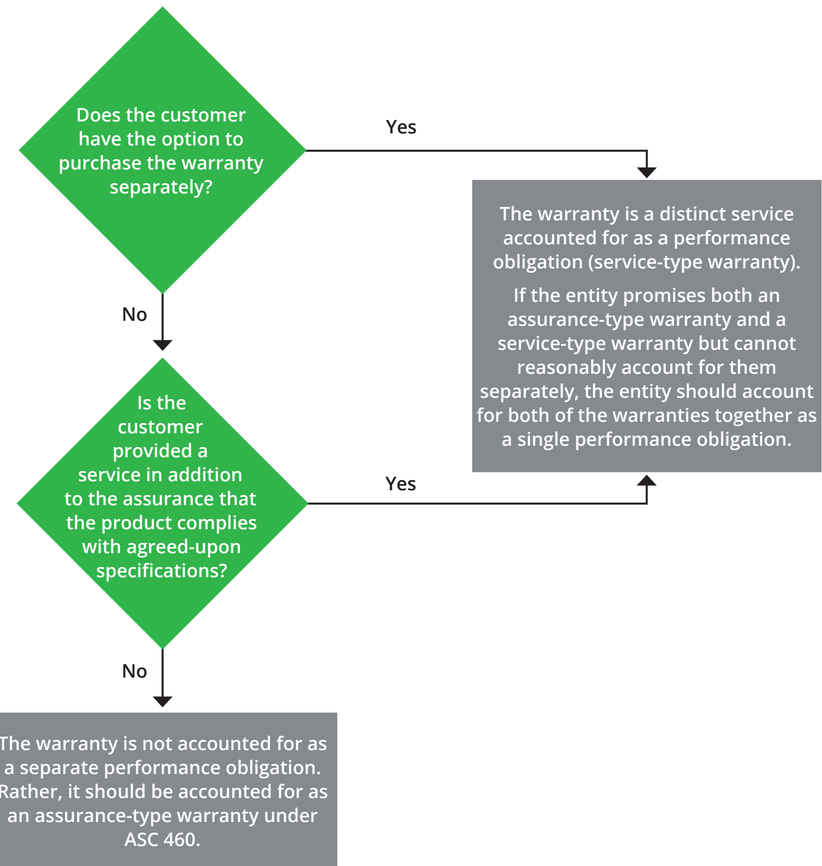
SaaS arrangements that represent stand-ready obligations typically meet the criteria to be considered a series since (1) each increment of service (e.g., each day of service) is distinct and would require recognition over time and (2) an entity would use the same method to measure its progress toward satisfaction of the obligation. Accordingly, the guidance on a series of distinct goods or services would typically apply.

2.4.11 Warranties

It is important to determine what type of warranty an entity offers to a customer because the way in which revenue is recognized will vary depending on that determination. An entity should determine whether it offers the customer an assurance-type warranty or a service-type warranty. An assurance-type warranty provides the customer with the peace of mind that the entity will fix or possibly replace a good or service if the original good or service was faulty. It is the type of warranty with which most customers are familiar. In contrast, a service-type warranty provides the customer with a service that is incremental to the assurance that the good or service will meet the expectations agreed to in the contract.

2.4.11.1 Determining Whether a Warranty Is a Performance Obligation (Service-Type Warranties)

The decision tree below illustrates the revenue standard's process for determining whether a warranty represents a separate performance obligation.



An entity may need to use judgment to determine whether a warranty is a service-type warranty (i.e., performance obligation). This is important because, depending on the outcome of the entity's assessment, consideration could be allocated to the performance obligation and consequently change the pattern of revenue recognition.

To assess the nature of a warranty, an entity should consider whether the warranty provides an additional service. An easy way to determine this is if a warranty is sold separately. As discussed in paragraph BC371 of ASU 2014-09, an entity could also separately negotiate a warranty with a customer and determine that a performance obligation exists.

However, a warranty does not necessarily have to be separately sold or separately negotiated to be considered a performance obligation. To determine whether a warranty is a performance obligation, an entity should consider various indicators in accordance with ASC 606-10-55-33.

A warranty that provides a service **in addition** to the entity's assurance that the goods or services transferred to a customer will function as intended or meet agreed-upon specifications would represent a separate performance obligation. Accordingly, the entity would need to allocate a portion of the transaction price to the separate service and recognize the related revenue when (or as) performance is completed even when this warranty is neither separately priced nor separately negotiated.

If the warranty merely provides what ASC 606-10-55-30 describes as "assurance that the related product will function as the parties intended because it complies with agreed-upon specifications," the assurance is not a service and therefore not a separate performance obligation. In this situation, the costs associated with providing the warranty would be accrued in accordance with ASC 460-10 (see ASC 606-10-55-32).

Assessing the substance of the promise in a warranty arrangement that is neither separately priced nor separately negotiated often will require judgment. To aid in such an assessment, ASC 606-10-55-33 lists three factors that an entity should consider in determining whether a warranty provides the customer with a service in addition to the entity's assurance that the good or service complies with agreed-upon specifications: (1) whether the warranty is required by law, (2) the length of the coverage period, and (3) the nature of the tasks that are promised.

In addition, while the duration of the warranty may be an indicator of whether a warranty is a separate performance obligation, it is not determinative.

Example 2-29

In accordance with customary business practices, a hardware manufacturer provides all customers with a one-year warranty that covers only manufacturing defects.

This warranty does not represent a separate performance obligation because it only provides assurance that the hardware will function as intended over a short (and customary) period. This is an "assurance-type" warranty, which should be accounted for under ASC 460. As a result, there is no revenue deferral for the warranty.

Example 2-30

A hardware manufacturer provides all customers with a three-year warranty that covers all defects and damages, including those arising from normal usage.

This warranty represents a separate performance obligation because the manufacturer has agreed to provide repairs for all damage (i.e., it has agreed to provide a service of repairing the hardware for all damage, which extends beyond rectifying manufacturing defects). The hardware manufacturer should (1) determine the stand-alone selling price of the repair service and allocate an appropriate portion of the transaction price to it and (2) recognize that portion as revenue over the period in which the service is delivered.

2.4.11.2 Warranties Within the Scope of Other Guidance (Assurance-Type Warranties)

Warranties could be within the scope of guidance outside the revenue standard under certain circumstances. For example, warranties that are determined to be separate performance obligations in accordance with the guidance in ASC 606-10-55-30 through 55-35 might appear to be insurance contracts. However, such warranties would only be considered insurance contracts within the scope of applicable guidance in ASC 944 if they are directly issued by a third-party insurance entity. Further, a warranty could be within the scope of the guidance on product warranties in ASC 460-10 if it only provides assurance that a product complies with agreed-upon specifications.

2.4.11.3 Implicit Warranty Beyond the Contractual Period

In addition to providing a warranty that guarantees that an entity's product or service complies with agreed-upon specifications for a specified period, entities in many industries may continue to provide warranty-type services (e.g., repairs) beyond the original specified period as part of their customary business practices. In accordance with ASC 606-10-55-34, if an entity's warranty, or part of its warranty, provides a customer with a service in addition to the assurance that the product complies with agreed-upon specifications, the promised service represents a performance obligation.

Regardless of whether the warranty services are explicitly promised in the contract for a specified period or are implied by customary business practices, the entity must assess whether the services to be provided represent an assurance-type warranty (which should be accounted for in accordance with ASC 460-10) or a promised service (in addition to the assurance that the product complies with agreed-upon specifications) in the contract. This assessment requires an analysis of the nature of (1) the products or services that are subject to the specific warranty and (2) any other products or services that are provided as part of the entity's customary business practice.

Example 2-31

Entity X sells smart devices to customers with a two-year contractual warranty period. Entity X also has a customary business practice of providing its customers with a replacement device free of charge if a defective device is returned within three years of the date of purchase.

In accordance with ASC 606-10-55-32 and ASC 606-10-55-34, the practice of replacement in the third year is not considered an additional service (i.e., it is not a separate performance obligation) and therefore should not be accounted for as a service-type warranty. Entity X concludes that the practice of replacement in the third year should be accounted for as an assurance-type warranty, and is not a separate performance obligation, because X is only guaranteeing that the device will function as intended. Therefore, X accounts for the warranty in accordance with ASC 460-10.

2.4.12 Customer Options for Additional Goods or Services

An entity's contract with a customer may give the customer a choice of whether to purchase additional goods or services; such a choice is typically referred to as an option for additional goods or services, which could include loyalty programs, discount vouchers, and renewal options. Entities are required to identify options for additional goods or services because in certain circumstances, such options can lead to performance obligations. As explained in paragraph BC386 of ASU 2014-09, the FASB and IASB realized that it could be difficult to differentiate between (1) an option for additional goods or services that was paid for by the customer and (2) a marketing or promotional offer for which the customer did not pay. The first type of option for additional goods or services would be identified as a performance obligation to which consideration must be allocated in accordance with step 4 of the revenue standard.

To help entities determine whether an option for additional goods or services is a performance obligation, the boards included the concept of a material right in the revenue standard. If an entity determines that an option for additional goods and services is a material right, the option should be considered a performance obligation. However, an entity will need to use judgment to determine whether a material right exists.

A material right in a contract is provided to a customer only if the customer would not have received it without entering into that contract. The guidance in the revenue standard describes an example of a material right as an option that provides the customer an incremental discount beyond the discounts that are typically given (considering the class of customer). When an option is identified as providing a customer with a material right, the option is identified as a performance obligation. A portion of the

transaction price is then allocated to the option and recognized when (or as) (1) the future goods or services related to the option are provided or (2) the option expires.

2.4.12.1 Likelihood That an Option for Additional Goods or Services Will Be Exercised

Some business models include arrangements under which a vendor will sell an up-front good or service and also provide the customer with an option to purchase other distinct goods or services in the future that are related to the up-front good or service (e.g., a specialized piece of hardware and an option to buy specialized parts that will be needed for its operation). Such arrangements may include features that result in a degree of economic compulsion such that there is a very high level of confidence that the customer will exercise its option.

In such circumstances, when it is highly probable, or even virtually certain, that the customer will exercise its option, the additional goods or services should not be treated as performance obligations under the contract. The treatment of customer options is explained in paragraph BC186 of ASU 2014-09, in which the FASB and IASB clarified that "the transaction price does not include estimates of consideration from the future exercise of options for additional goods or services," making no reference to the probability that those options will be exercised.

Accordingly, irrespective of how likely it is that a customer will choose to purchase additional goods or services, the entity should not treat those goods or services as performance obligations under the initial contract. Instead, the entity should evaluate the customer option (in accordance with ASC 606-10-55-41 through 55-45) to determine whether it gives rise to a material right.

2.4.12.2 Determining Whether an Option for Additional Goods or Services Represents a Material Right

In determining whether an option for future goods or services is a material right, an entity should (1) consider factors outside the current transaction (e.g., the current class of customer) and (2) assess both quantitative and qualitative factors. Further, an entity should also evaluate incentives and programs to understand whether they are customer options designed to influence customer behavior (i.e., an entity should consider incentives and programs from the customer's perspective) because this could be an indicator that an option is a material right.

When determining whether a contract option provides a material right, entities should consider not only the quantitative significance of the option (i.e., the quantitative value of the benefit) but also previous and future transactions with the customer as well as qualitative factors. Specifically, qualitative features such as whether the rights accumulate are likely to provide a qualitative benefit that may give rise to a material right. In accordance with ASC 606-10-25-16B, entities should not apply the guidance in ASC 606-10-25-16A on assessing whether promises for immaterial goods or services are performance obligations to the assessment of whether a contract option provides a material right (i.e., an optional good offered for free or at a discount may not be material for an individual contract but could be material in the aggregate and accounted for as a material right).

An entity should consider its customer's valid expectations when identifying promised goods or services. A customer's perspective on what constitutes a material right might consider qualitative factors (e.g., whether the right accumulates). Therefore, a numeric threshold alone might not determine whether a material right is provided by a customer option in a contract.

2.4.12.2.1 Renewal Options

Paragraph BC391 of ASU 2014-09 explains that contracts could describe renewal options as either (1) renewal options, which are basically extensions of the current contract, or (2) early cancellations, which are the option for a customer to end a long contract earlier than planned. A customer option to renew could be considered an option for additional goods or services, which then opens the door for the entity to consider whether the option is a material right (i.e., a performance obligation).

The FASB and IASB decided to provide a practical alternative for renewal options, as explained in paragraphs BC392 through BC395 of ASU 2014-09, that allows an entity to "include the optional goods or services that it expects to provide (and corresponding expected customer consideration) in the initial measurement of the transaction price." This practical alternative is included in ASC 606-10-55-45, which states:

> If a customer has a material right to acquire future goods or services and those goods or services are similar to the original goods or services in the contract and are provided in accordance with the terms of the original contract, then an entity may, as a practical alternative to estimating the standalone selling price of the option, allocate the transaction price to the optional goods or services by reference to the goods or services expected to be provided and the corresponding expected consideration. Typically, those types of options are for contract renewals.

To differentiate contract renewal options from other types of options for additional goods or services (the latter of which are not eligible for the practical alternative if the optional goods or services are not similar to the original goods or services in the contract), the boards developed two criteria that must be met for an entity to apply the practical alternative:

- The additional goods or services in the renewal options are similar to those provided in the initial contract.
- The renewal options' terms and conditions related to goods or services are the same as those of the original contract.

Example 2-32

ABC Company enters into 100 separate contracts with customers to provide a perpetual software license for $10,000 and one year of PCS for $1,000. The contracts include a customer option to renew PCS for an additional year for $500. ABC Company concluded that the renewal option represents a material right and the license and PCS are distinct performance obligations. ABC Company also determined that both the perpetual license and PCS were sold at stand-alone selling prices and estimated that the customer has a 75 percent probability of renewing at the end of year 1, 50 percent at the end of year 2, 25 percent at the end of year 3, and 0 percent at the end of year 4.

Stand-Alone Selling Price Approach

Year 1 renewal = $375, or ($1,000 − $500) × 75%

Year 2 renewal = $250, or ($1,000 − $500) × 50%

Year 3 renewal = $125, or ($1,000 − $500) × 25%

Example 2-32 (continued)

Performance Obligation	SSP	Relative Allocation	Allocation of Contract Consideration
Perpetual license	$ 10,000	85.1%	$ 9,362
PCS	1,000	8.5%	936
Renewal option — year 1	375	3.2%	351
Renewal option — year 2	250	2.1%	234
Renewal option — year 3	125	1.1%	117
Total	$ 11,750	100%	$ 11,000

As a result of applying the stand-alone selling price approach, ABC Company would allocate $702 ($351 + $234 + $117) to the material right. In addition, ABC Company would recognize $10,298 in year 1.

"Look Through" Approach

If ABC Company chose to apply the practical alternative or "look through" approach, the company would estimate a hypothetical transaction price in one of two ways. The first approach is to determine the best estimate of the number of years that a customer would renew. Assume in this case that the company's best estimate is that the customer will exercise the renewal option for two years.

Performance Obligation	SSP	Relative Allocation*	Allocation of Contract Consideration
Perpetual license	$ 10,000	76.9%	$ 9,231
PCS	1,000	7.7%	923
Renewal option — year 1	1,000	7.7%	923
Renewal option — year 2	1,000	7.7%	923
Total	$ 13,000	100%	$ 12,000**

* Rounded for presentation purposes.

** $10,000 + $1,000 + ($500 × 2).

This would result in recognition of $10,154 in revenue in year 1 ($9,231 + $923) and a deferral of $846 ($11,000 − $10,154) related to the material right.

Example 2-32 (continued)

However, an entity could also use a portfolio approach to estimate the hypothetical transaction price in the "look through" model. Under this approach, the entity would use the same probabilities applied in the stand-alone selling price model to determine the hypothetical transaction price. The following table illustrates this approach:

Performance Obligation	SSP	Relative Allocation*	Allocation of Contract Consideration
Perpetual license	$ 10,000	71.6%	$ 8,394*
PCS	1,000	7.1%	839
Renewal option — year 1	1,000	7.1%	839
Renewal option — year 2	1,000	7.1%	839
Renewal option — year 3	1,000	7.1%	839
Total	$ 14,000	100%	$ 11,750**

* Rounded for presentation purposes.

** $10,000 + $1,000 + ($500 × 75%) + ($500 × 50%) + ($500 × 25%).

This would result in recognition of $9,233 in revenue in year 1 ($8,394 + $839) and a deferral of $1,767 ($11,000 − $9,233) related to the material right.

Note, however, that when a portfolio approach is applied, individual cancellations would not necessarily result in an immediate adjustment. This is because the overall estimates would incorporate a level of cancellations each period. It is only when the cancellation pattern of the overall portfolio changes that an entity would assess a potential change in estimate.

2.4.12.2.2 Need for Assessing Whether a Material Right Exists When the Residual Approach Was Used to Establish the Stand-Alone Selling Price of the Additional Goods or Services

Determining the stand-alone selling price of goods or services offered to a customer under a contract option is a necessary step in the assessment of whether a material right exists. The ability to sell certain goods or services for a wide range of prices may make it difficult to establish the stand-alone selling price of goods or services offered to a customer under a contract option (e.g., a renewal option). This is especially true in the software industry, in which the incremental costs incurred to sell additional software licenses are often minimal and therefore allow software entities to sell their software at prices spanning a wide range of discounts or even premiums. Consequently, the FASB included the residual approach in ASC 606 as a "suitable" method for establishing the stand-alone selling price.

If an entity applied the residual approach to establish the stand-alone selling price of goods or services because the stand-alone selling price of those goods or services is highly variable or uncertain, the entity is required to assess whether an option (e.g., a renewal option) to acquire more of those goods or services conveys a material right to the customer. Under ASC 606-10-55-41 through 55-45, a customer option to purchase additional goods or services gives rise to a material right if the option provides the entity's customer with a discount that is incremental to the range of discounts typically given for those goods or services to that class of customer (e.g., a customer in a particular geographic area or market). It would not be appropriate for the entity to conclude that no material right was conveyed to the customer simply because the stand-alone selling price of the goods or services that are subject to the option is highly variable or uncertain and the residual approach was therefore applied.

When the residual approach is used to determine the stand-alone selling price of a good or service because pricing is highly variable or uncertain, assessing whether option pricing for that good or service provides a material right may require significant judgment because of the lack of a point estimate or sufficiently consistent range representing the stand-alone selling price. While we believe that entities are likely to identify fewer material rights in such cases, they are nonetheless required to base their determination of whether a material right was provided on all reasonably available information. Although the presence of highly variable or uncertain pricing complicates the identification of material rights, we believe that when doing so, an entity should consider (1) the definition of a material right[18] and (2) the allocation objective in ASC 606-10-32-28. In other words, an entity must determine whether the pricing of the optional good or service (1) indicates that preferential pricing would not have been received "but for" the initial contract or (2) reflects the amount to which the entity expects to be entitled in exchange for transferring that good or service to the customer. If the pricing does not meet the allocation objective (i.e., it is a discount that is incremental to what other similar customers would receive), a material right should be identified. We believe that an entity might find the following factors useful in determining whether a material right is present when the pricing of optional future purchases is highly variable or uncertain:

- *How the pricing of the optional future purchase aligns with current pricing policies and practices* — For example, if a good or service is not typically sold below a certain amount because it is a premium offering, an option to buy the good or service at an amount below that floor would be at odds with standard pricing practices and may therefore convey a material right to the customer.
- *How the pricing of the optional future purchase compares to historical amounts allocated to the good or service in similar situations* — Such a comparison is likely to require an entity to look to historical data and stand-alone selling prices that were derived by using the residual approach. Accordingly, while there will not be an established point estimate or narrow range of stand-alone selling prices against which to compare the pricing of the optional future purchase, ASC 606-10-32-34(c) indicates that the residual approach is a method of establishing a stand-alone selling price. Therefore, the amounts determined under that approach represent the stand-alone selling price for that good or service. Consequently, we believe that in assessing whether a customer has been given a material right, an entity may obtain useful information by comparing the pricing of an optional future purchase with historical stand-alone selling prices that were determined as a result of applying the residual approach. In addition, to determine which range of historical stand-alone selling prices to compare with the pricing of the optional future purchase, entities should consider only those transactions that are similar to the transaction in question. For example, an entity might disaggregate historical stand-alone selling price data by one or more of the following characteristics: class of customer, geography, distribution channel, or contract value.
- *How the pricing of the optional future purchase compares to historical contractually stated pricing (if any) of the good or service in similar situations* — While the contractually stated pricing may not necessarily represent the stand-alone selling price (see ASC 606-10-32-32), the historical price across a range of different contracts may nevertheless be relevant evidence of an entity's pricing practices and discounts it may offer on future purchases.
- *Whether the pricing of the optional future purchase is intended to incorporate a discount* — If the intent during negotiations was to give the customer a discount on future purchases, a material right may exist since the allocation objective is less likely to be met in such cases. For example, a

[18] A material right arises from pricing on an option to acquire additional goods or services in the future that would not have been received if the initial contract had not been entered into. In such cases, the customer with the option has essentially prepaid for the future purchase.

customer may only have agreed to enter into an initial contract if the vendor offered discounted pricing on future purchases.

- *Whether the pricing of the optional future purchase is discounted relative to (1) the price of similar goods or services sold under the initial contract or (2) the list price when compared with the discounted list prices of all goods or services (whether similar or not) sold under the initial contract* — We acknowledge that this factor conflicts with the FASB's reasons for departing from its definition of a significant incremental discount in legacy GAAP under ASC 985-605. In paragraph BC387 of ASU 2014-09, the Board indicates its rationale for defining "incremental" solely by reference to other comparable transactions:

  > [T]he Boards observed that even if the offered discount is not incremental to other discounts in the contract, it nonetheless could, in some cases, give rise to a material right to the customer. Consequently, the Boards decided not to carry forward that part of the previous revenue recognition guidance from U.S. GAAP into Topic 606.

  However, we believe that when evaluated in conjunction with all other available evidence, a comparison of the pricing of the optional future purchase with any discounts offered in the initial contract may provide insight into an entity's pricing practices and discounting intentions. If the optional future purchase is priced at an amount that is lower than the price under the original contract, this may indicate that a material right exists. Conversely, if the optional future purchase is priced at an amount that is lower than the list price but is nevertheless consistent with the discounted price charged under the original contract, this may be evidence to support a conclusion that the discounted price does nevertheless represent the stand-alone selling price.

- *How the pricing of the optional future purchase aligns with any intended future pricing for similar goods or services* — For example, an option to buy add-on software at a set price may not give the customer a material right if that price approximates the amount at which management intends to sell that software on a stand-alone basis in the near future.

- *The relative negotiating power of the entity and the customer* — In certain situations, customers may have a greater ability to demand discounted pricing on optional future purchases if the customers represent significantly larger, well-known brands that are dominant in their markets, are more mature, or are otherwise better positioned than the entity selling the goods or services.

The above factors are not intended to be all-inclusive or prescriptive, and each factor on its own may not be determinative. Entities may need to use significant judgment when determining whether a material right has been granted. Entities with highly variable or uncertain pricing should establish a policy for evaluating material rights and apply that policy consistently in similar situations.

The examples below demonstrate the application of some of the concepts described above.

Example 2-33

Entity J, an early-stage software developer, enters into an arrangement with Customer T, a large U.S.-based company, to license its software on a term basis and provide PCS for one year. The arrangement also includes hardware and professional services. The total transaction price is $2 million, and J has established that the license, PCS, hardware, and professional services each represent a distinct performance obligation.

Example 2-33 (continued)

Entity J has concluded that the pricing of software licenses is highly variable and uses the residual approach to determine the stand-alone selling price. The observable stand-alone selling prices of the other performance obligations are as follows:

- *PCS* — $200,000.
- *Professional services* — $500,000.
- *Hardware* — $300,000.

Under the residual approach, $1 million is allocated to the software license, which J determines is consistent with the allocation objective. The contract also indicates that the customer may renew the software license for $250,000 per additional year and that the pricing for other products and services will be at their stand-alone selling prices.

Entity J reviews historical transaction data for sales of software licenses to large customers in the United States to determine the amounts that have been allocated to the software license under the residual approach. Over the past year, a range of $500,000 to $3 million has been allocated to the software license, which is consistent with J's pricing policies. While J did not initially intend to give T a discount, it was willing to negotiate on renewal pricing because it wanted to secure the large contract and is able to enhance the marketability of its products by obtaining T as a customer (T is a well-known brand and dominant in its market). Therefore, J concludes that the pricing of the optional future purchase has given T a material right.

We believe that the following factors indicate that T has received a material right:

- A comparison of (1) the price T must pay if it exercises its option to renew the license in the future ($250,000) and (2) the range of stand-alone selling prices determined under the residual approach in similar historical transactions ($500,000 to $3 million) indicates that the pricing offered to T does not meet the allocation objective because T is receiving a significant discount that is incremental to the range of discounts offered to other similar customers.
- Although J did not initially intend to give T a discount on future purchases, other facts and circumstances indicate that J nonetheless offered T preferential pricing.

Example 2-34

Entity A enters into an arrangement with Customer C, a midsized company based in Europe, to license its software on a term basis and provide PCS for one year. The arrangement also includes hardware and professional services. The total transaction price is $20,000, and A has established that the license, PCS, hardware, and professional services each represent a distinct performance obligation.

Entity A has concluded that the pricing of software licenses is highly variable and uses the residual approach to determine the stand-alone selling price. It has observable stand-alone selling prices for its other products and services. The list price, contractually stated price, discount from list price, and stand-alone selling price of each performance obligation are as follows:

Performance Obligation	List Price	Contractually Stated Price	Discount From List Price	SSP
License	$ 7,500	$ 4,500	40%	$ 5,000*
PCS	3,500	3,500	0%	3,000
Professional services	8,000	5,000	38%	6,000
Hardware	10,000	7,000	30%	6,000
Total	$ 29,000	$ 20,000	31%	$ 20,000

* Determined under the residual approach on the basis of a total transaction price of $20,000 minus the sum of the observable stand-alone selling prices of the other performance obligations ($3,000 + $6,000 + $6,000 = $15,000).

Example 2-34 (continued)

The contract also indicates that the customer may renew the software license for $3,000 per additional year, which represents a 60 percent discount from the list price, and that the pricing for other products and services remains at the same contractually stated prices.

Entity A reviews historical transaction data for sales of software licenses to midsized customers in Europe to determine the contractually stated prices and related discounts from list price for the software license. Over the past year, the software license has been priced between $1,000 to $20,000, thus ranging from a discount of 87 percent to a premium of 167 percent relative to the list price. Entity A's internal pricing policies require that discounts of over 50 percent must undergo an extensive approval process. Further, A intended to give C a discount on renewals of the software license because A is in a highly competitive market in which customer retention is difficult. In addition, C indicated that it would purchase large additional amounts of hardware. Therefore, A concludes that the pricing of the optional future purchase(s) gives C a material right.

We believe that the following factors indicate that C has received a material right:

- It is not especially meaningful to compare (1) the discount to the list price C receives if it exercises its option to renew the license in the future (60 percent) with (2) the range of discounts and premiums in similar historical transactions (87 percent discount to 167 percent premium) given the significant pricing variation observed in the data. However, A's internal pricing policies require any discounts of over 50 percent to undergo an extensive approval process.
- On the basis of a comparison of (1) the discount from list price for the renewal pricing (60 percent) with (2) the other discounts offered in the same contract (0 percent to 38 percent for other goods and services and 40 percent for the same software license), A determines that the optional future purchase pricing conveys an incremental discount to C that it did not receive under the initial contract.
- Entity A's intention to give C a discount to secure its future business in a competitive market supports a conclusion that "but for the initial contract," C would not have received favorable pricing on future software license renewals.
- Customer C's indication that it would make many additional purchases of hardware supports A's decision to provide preferential pricing.

2.4.12.3 Customer's Exercise of a Material Right

When a contract with a customer includes a material right in the form of an option to acquire additional goods or services, an entity may account for the customer's subsequent exercise of the material right either as if it were a separate contract ("Alternative A," which we generally believe is preferable) or as if it were the modification of an existing contract ("Alternative B," which we believe is acceptable). Those alternatives may be summarized as follows:

- *Alternative A (preferred)* — At the time a customer exercises a material right, an entity treats the exercise as a continuation of the original contract such that the additional consideration is allocated only to the additional performance obligation underlying the material right. In effect, therefore, the entity is treating the exercise as if it were a separate contract altogether. Under this alternative, an entity should determine the transaction price of the "new" contract and include any additional consideration to which the entity expects to be entitled as a result of the exercise. This additional consideration, along with the consideration from the original contract that was allocated to the material right, should be allocated to the performance obligation underlying the material right and recognized as revenue when or as this performance obligation is satisfied. That is, the amount allocated to the material right as part of the original contract is added to any additional amounts due (under the "new" contract) as a consequence of the customer's exercise of the material right, and that total is allocated to the additional goods or services under the "new" contract. The amounts previously allocated to the other goods and services in the original contract are not revised.

- *Alternative B (acceptable)* — It is also acceptable to account for the exercise of a material right as a contract modification since it results in a change in the scope and the price of the original contract. An entity should apply the modification guidance in ASC 606-10-25-10 through 25-13.

  Since we believe that the application of Alternative B may be complex, we recommend that entities consider consulting with their accounting advisers before electing to use this method.

The method used should be applied consistently by an entity to similar types of material rights and under similar facts and circumstances.

Connecting the Dots

A customer's exercise of an option to purchase additional goods or services that was accounted for as a "marketing offer" is different from a customer's exercise of a material right contained within the original contract. We generally would not consider it appropriate for an entity to analogize to the alternatives outlined above on the basis of the TRG discussion when accounting for a marketing offer. Example 50 in ASC 606 illustrates a contract with an option for additional services that is akin to a marketing offer rather than a material right because the prices of the additional services under the option represent the stand-alone selling prices of those services. Because a marketing offer in an original contract is not accounted for as a material right and therefore is not treated as part of the original contract, the exercise of the marketing offer at a subsequent date should be accounted for as a new contract (i.e., the exercise of the marketing offer is a separate contract because the additional goods or services are distinct and priced at their stand-alone selling prices).

2.4.12.4 Distinguishing an Option to Acquire Additional Rights From Provisions Giving Rise to Variable Consideration in the Form of a Sales- or Usage-Based Royalty

As discussed in ASC 606-10-55-64, contractual provisions in a licensing transaction may allow an entity's customer to obtain additional benefits or rights after the initial transfer of the license. An entity may need to use significant judgment to differentiate between contractual terms that allow a customer to obtain additional rights that the customer does not already control (thereby creating additional performance obligations) and contractual terms that allow for additional usage of IP already controlled by the customer (which would not create additional performance obligations but may entitle the entity to additional variable consideration in the form of a sales- or usage-based royalty). The entity will need to evaluate any option to acquire additional rights to use or access the IP to determine whether the option gives rise to a material right.

Paragraph BC46 of ASU 2016-10 states, in part, that "judgment often is required in distinguishing a single promised license with multiple attributes from a license that contains multiple promises to the customer in the contract." The determination of whether contractual provisions that allow the customer to obtain additional benefits or rights constitute optional purchases or variable consideration related to rights already controlled by the customer could affect the timing of revenue recognition if the optional additional rights give rise to a material right.

When options to acquire additional rights not already controlled by the customer are priced at their stand-alone selling prices, the timing and amount of revenue recognized will most likely be the same as if the contractual rights gave rise to variable consideration in the form of a sales- or usage-based royalty. However, the differentiation may still be important since consideration in the form of a sales- or usage-based royalty is a form of variable consideration to which the disclosure requirements in ASC 606-10-50-15 might apply.

An entity will need to use judgment on the basis of the specific facts and circumstances of the arrangement to determine whether (1) the contract includes an option to acquire additional rights to use or access IP or (2) the contractual provisions give rise to variable consideration in the form of a sales- or usage-based royalty.

The following factors may indicate that the contractual provisions (1) give the customer an option to acquire additional rights to use or access IP or (2) represent an obligation to transfer additional rights to the customer that constitutes a separate performance obligation:

- The customer's right to use or access the initial IP changes when the additional rights are obtained (e.g., the customer can embed the IP within a new or different product or can use the IP in a different geographic area).
- The customer obtains new or expanded functionality as a result of the additional rights obtained.
- The additional rights obtained for a fee continue for the duration of the license agreement rather than expiring upon usage, and the additional usage during that period does not result in additional fees. That is, the additional rights are acquired for an additional initial fee, but the additional rights are not wholly consumed once the rights are acquired (e.g., the customer expands the use of functional IP from 100 users to 200 users for the duration of the license term) and no ongoing usage fee is payable.
- The license is transferred to a reseller (requiring the reseller to pay a fee per copy, license, or end user upon making a purchase or sale), and the reseller is not using the functionality provided by the license itself but is transferring the rights to use the IP to end users. Because the reseller is simply purchasing and reselling the software product, the software product is more akin to any other tangible product that is purchased for resale. In these situations, the transaction between the vendor and the reseller is one in which the vendor is selling and the reseller is purchasing incremental software rights that the reseller does not already control each time the reseller pays a fee to transfer the vendor's software to an end user.

The following factors may indicate that the contractual provisions give the customer a right to additional usage of a single license, which would give rise to variable consideration:

- The customer controls the rights to use or access the IP but is required to pay additional consideration based on how often the IP is used (e.g., consideration is payable each time the IP performs a task, or each time the IP is integrated into a device and contributes to the device's functionality).
- The additional usage of the IP does not provide sustained additional benefits without additional fees. For example, a customer may have to pay a fee each time it uses software to perform a task rather than a fixed fee that allows the customer to continually use the software to perform tasks.

Sometimes, specific performance by the licensor will be required before additional rights are granted or additional usage of a single license is allowed. For example, a software licensor may need to provide the licensee with a software key each time software is embedded in a device. The fact that the licensor is required to provide a software key for each license does not necessarily mean that a new right is transferred to the licensee with each key (i.e., specific actions required by the licensor are not in and of themselves determinative of whether additional rights have been transferred to the licensee). Rather, an entity should evaluate all facts and circumstances when determining whether contractual provisions (1) give a customer the right to acquire additional rights to use or access IP that it does not already control in exchange for additional consideration or (2) give rise to variable consideration in the form of a sales- or usage-based royalty.

2.4.12.4.1 Accounting for a Customer's Option to Purchase or Use Additional Copies of Software

A software license arrangement accounted for as a right-to-use license (i.e., a license for which revenue is recognized at a point in time) may (1) transfer a license and require the customer to make a fixed payment at inception and (2) include an option for the customer to obtain additional rights that allow the software to be used by additional users for incremental fees per user.[19] Alternatively (or in addition), a right-to-use license arrangement may provide for "additional usage" of a single license in exchange for incremental fees per use.

An entity in a right-to-use license arrangement will need to use judgment to determine whether the nature of the arrangement is to provide the customer with an option to obtain additional rights (e.g., for additional users) or to require payment of incremental fees for additional usage of rights already controlled by the customer.

An arrangement in which an entity provides an option to the customer to obtain rights for additional users typically represents promises to provide additional licenses (i.e., additional performance obligations) for an incremental fee. Those optional additional purchases (i.e., options that would require an entity to transfer additional rights to the customer) would not initially be included in the contract; however, they should be evaluated for favorable terms that may give rise to a material right.

In some cases, additional copies of a software license could represent additional usage of a single license as opposed to additional users. For example, the ability to use additional copies of a license for an incremental fee in certain reseller arrangements could represent additional usage as opposed to optional purchases of additional rights (see Example 2-36).

An arrangement in which an entity provides additional usage of a single license (i.e., usage of rights already controlled by the customer) could include additional consideration as part of the transaction price for a single license. Because the additional potential consideration is based on usage of a single license, it would be subject to the sales- or usage-based royalty exception (under the assumption that the license is predominant if there are multiple promises) and be recognized no earlier than when the subsequent usage occurs.

Example 2-35

Licensor sells Customer Y 1,000 licenses of Product A for $50,000. Each license allows Y one seat to use Product A for the duration of the contract term. Customer Y can purchase additional licenses of Product A for $30 per license that will allow Y to use Product A in an additional seat (i.e., add users). Licensor provides separate activation keys for each license. Customer Y can use additional licenses purchased for the remaining contract term.

The option to acquire additional licenses would be viewed as an option that gives the customer additional rights (and, therefore, as an additional performance obligation if the option gives rise to a material right). This is because if Y exercises the option to acquire additional licenses to Product A, Licensor would be required to transfer additional rights for additional users that Y does not already control. Therefore, Licensor should evaluate the option to determine whether it gives rise to a material right.

[19] While this section addresses additional rights associated with users, additional rights could also include other incremental licenses, such as the right to use the software at additional locations or for different business segments.

Example 2-36

Licensor provides OEM, an original equipment manufacturer, with a master copy of software that OEM can use to reproduce copies of the license for integration only into Product A, which contributes to Product A's functionality. OEM pays Licensor a fee of $50 for each use (i.e., integration into Product A) up to 1,000 uses and $30 for each use above 1,000 licenses.

The customer controls the rights provided by the software license and has committed to pay a fee that varies depending on the use of the license (rather than on the basis of additional rights acquired, which would be a separate performance obligation). The rights provided by the software give rise to variable consideration to which the sales- or usage-based royalty exception in ASC 606-10-55-65 through 55-65B applies.

Example 2-37

Assume the same facts as in Example 2-36 above, except that the contract gives OEM the option to obtain the right to integrate the software into Product B (and contribute to Product B's functionality) for an additional $10,000. If the right is exercised, OEM will also pay a fee of $40 for each use of the software in Product B (the price of the software included in Product A remains unchanged). OEM will use the same master copy to replicate the software as that provided in Example 2-36, which requires no action by Licensor.

The option to acquire the rights to include the software in Product B allows OEM to acquire additional rights to use the IP (and is therefore an additional performance obligation if the option gives rise to a material right). That is, OEM does not have the right to integrate the software into Product B unless it exercises the option, at which point Licensor will transfer additional rights to OEM that OEM does not already control. Therefore, Licensor should evaluate the option to determine whether it gives rise to a material right. The additional consideration that is paid to Licensor for each use of the software in Product B is variable consideration to which the sales- or usage-based royalty exception in ASC 606-10-55-65 through 55-65B applies.

Example 2-38

Licensor enters into a five-year contract to sell an unknown quantity of software licenses to Reseller. Each license gives Reseller the right to resell the individual software licenses to end users. Reseller does not have any other rights related to the software. Reseller pays $50,000 for the first 2,500 software licenses that can be downloaded on demand. Further, Reseller pays $15 for each additional software license sold above the initial 2,500 licenses during the five-year contract term.

In this example, Reseller obtains the right to resell Licensor's software but does not obtain end-user rights associated with the software. Any additional consideration above the initial $50,000 payment is in exchange for Licensor's granting additional software licenses that Reseller will resell to end users. That is, Licensor transfers additional rights to Reseller with each additional license.

In addition, because the price per license sold after the initial 2,500 licenses ($15 per license) is less than the price per license for the first 2,500 licenses ($20 per license), Licensor should consider whether there is a material right related to the right to purchase additional software licenses.

2.4.12.4.2 Material Right Assessment

If an entity in a right-to-use license arrangement determines that the arrangement provides for an option to purchase additional rights such as users (i.e., an option to acquire additional licenses, which would constitute additional performance obligations), the entity should perform an evaluation in accordance with ASC 606-10-55-42 to determine whether the customer's option to add licenses at a later date on the basis of a per-license fee represents a material right. If the option represents a material right, the entity should allocate a portion of the transaction price for the initial license rights to the material right.

If the option does not represent a material right, the entity would not account for the additional license rights until the subsequent purchases for additional licenses occur. This accounting outcome (i.e., no identification of a material right) results in a recognition pattern similar to that of an arrangement that is determined to allow for additional usage. When the arrangement is determined to provide for additional usage, consideration for that incremental usage is deemed to be variable consideration for the license already transferred. Therefore, since the arrangement includes a license of IP, the sales- or usage-based royalty guidance in ASC 606-10-55-65 would apply (under the assumption that the license is predominant if there are multiple promises). As a result, for a right-to-use license, revenue would be recognized no earlier than when the subsequent usage occurs.

2.4.12.4.3 Customer's Ability to Access or Download Additional Copies of Software

Whether an entity (i.e., a software vendor) is involved in reproducing software copies does not in itself determine whether an arrangement includes rights to additional users or usage of software. The example below illustrates how an entity (the vendor) in a software arrangement with a customer should account for the customer's ability to access or download additional copies of software when adding users may or may not require additional direct involvement by the vendor.

Example 2-39

A customer in a software arrangement pays a fixed fee of $300,000 for up to 500 copies of the software. Each copy can only have a single user. The customer pays an additional $400 per copy for copies in excess of the initial 500. The number of copies is measured, and the customer pays for any additional users each quarter.

Consider the following scenarios:

- *Scenario A* — The customer has been given a master copy of the software and has the technical capability and legal right to create an unlimited number of copies without any further assistance from the vendor.
- *Scenario B* — The customer has been given access to download copies of the software and has the technical capability and legal right to download an unlimited number of copies without any further direct involvement by the vendor.
- *Scenario C* — The customer must request, and the vendor must provide, access codes for any additional downloads.

The vendor must use judgment to determine whether the additional copies in a particular fact pattern should be regarded as additional usage (one license) or additional users (multiple licenses). However, this judgment is not solely affected by whether adding users requires additional direct involvement by the vendor.

In Scenario C, the fact that the customer cannot obtain additional copies of the software without the vendor's direct involvement does not in itself prevent the nature of the arrangement from being additional usage (one license). Control of software may be determined to have passed to a customer before the software is downloaded if the seller has nevertheless made the software available.

In Scenarios A and B, if the nature of the arrangement is determined to be additional users (multiple licenses), the fact that the customer can obtain additional copies of the software without the vendor's direct involvement does not in itself mean that the customer controls the additional licenses and that the vendor has satisfied its performance obligation. The vendor's performance obligation includes not only making the IP available to the customer but also the act of granting those rights.

Accordingly, the outcome of the accounting analysis does not depend on whether adding copies of a license requires additional direct involvement by the vendor. In all three scenarios above, the vendor should evaluate the arrangement to determine whether the contract provides for **additional users** (i.e., separate performance obligations that should be evaluated in accordance with the guidance in ASC 606-10-55-42 on options to acquire additional goods or services) or **additional usage** of a single license that was already delivered. The accounting for the initial 500 copies (i.e., the committed volume by the customer) is not the subject of this example. Rather, this example addresses only the additional copies in excess of the initial 500 copies to be delivered to the customer.

2.4.12.4.4 Recognition of Revenue From Software Arrangements When Additional Amounts Due Are Identified Through a Customer Audit

In certain software licensing arrangements, a customer may have the option to purchase additional licenses without direct involvement from the software vendor. For example, a customer may have the ability to use additional licenses without first issuing a purchase order but instead is required to self-report (and subsequently pay for) any additional licenses used. In other software licensing arrangements, a customer may not have the ability to use additional licenses without entering into another contract with the software vendor for additional licenses.

It is common for a software vendor to have the right to audit the number of licenses used by its customers. Such a license audit could result in (1) the identification of additional licenses beyond what the customer self-reported or is entitled to use and, therefore, (2) additional license fees. The examples below illustrate the accounting for software arrangements when a license audit results in the identification of additional licenses used by the customer.

Example 2-40

Entity S, a software vendor, enters into a three-year term-based license agreement with Customer C on January 1, 20X1. Under the terms of the agreement, C has the right to 100 licensed users of the software at a price of $10 per user per year. The agreement includes an option to purchase the right to additional licensed users each year (determined to be optional purchases rather than variable consideration), also for $10 per user per year. Customer C is not required to first issue a purchase order to S to acquire and use additional user licenses on its own, but it must provide a report to S on the number of licenses used each year. Entity S has the right to audit how many licenses to the software C has used. The option to purchase additional licenses does not represent a material right because the price per additional user per year is the stand-alone selling price.

On March 1, 20X1, C uses 10 additional software licenses (for a total of 110 licensed users) but does not report the increase to S. On February 15, 20X2, S performs an audit of C's users and identifies the 10 additional software licenses. Entity S intends to enforce its right to collect the additional fee of $10 per licensed user per year and invoices C $100 (10 additional licensed users per year × $10 per additional licensed user × 1 year) on March 1, 20X2.

Entity S prepares financial statements for the year ended December 31, 20X1, that are issued on February 28, 20X2. The information identified in the audit is a recognized subsequent event because C exercised its contractual option to acquire rights to additional licensed users and such rights were transferred to C on March 1, 20X1. Accordingly, even though S was not aware of the additional licenses being transferred, the information obtained as a result of the audit confirmed that S had an enforceable right to additional consideration for promised goods or services (i.e., licenses) transferred to C on March 1, 20X1, as a result of the optional purchases made by C during the year ended December 31, 20X1.

Example 2-41

Assume the same facts as in the example above, except that Customer C is not contractually authorized to use additional licenses without entering into a separate contract with Entity S. On February 15, 20X2, as a result of the audit, S and C negotiate and execute a separate contract for additional licenses. Because C anticipates that it will need only five additional licenses for the remainder of the term, S agrees to only charge C for those additional licenses for an additional license fee of $150 (5 additional licenses per year × $10 per additional license × 3 years), which is invoiced at the time the separate contract is executed.

Because C did not have a contractual right to the additional users throughout 20X1, S (1) did not transfer rights to additional users in 20X1 and (2) does not have a contractual right to additional consideration for the additional users as of December 31, 20X1 (since the additional users were not covered by a legally enforceable contract as of December 31, 20X1). Accordingly, S concludes that (1) a legally enforceable contract for the additional licenses does not exist as of December 31, 20X1, and (2) the additional rights in the separate contract are not transferred to C until February 15, 20X2. Consequently, S should not record revenue for the additional users in the year ended December 31, 20X1.

2.4.12.5 Nonrefundable Up-Front Fees

Nonrefundable up-front fees are payments made by customers at the start of a contract for various reasons. The revenue standard cites set-up fees as an example of nonrefundable up-front fees. Entities need to assess nonrefundable up-front fees to determine whether the fees (1) are for goods or services provided at contract inception or (2) provide the customer with an option for additional goods or services that gives rise to a material right (a performance obligation).

Example 53 in ASC 606 illustrates the application of the revenue guidance on nonrefundable up-front fees.

ASC 606-10

Example 53 — Nonrefundable Upfront Fees

55-358 An entity enters into a contract with a customer for one year of transaction processing services. The entity's contracts have standard terms that are the same for all customers. The contract requires the customer to pay an upfront fee to set up the customer on the entity's systems and processes. The fee is a nominal amount and is nonrefundable. The customer can renew the contract each year without paying an additional fee.

55-359 The entity's setup activities do not transfer a good or service to the customer and, therefore, do not give rise to a performance obligation.

55-360 The entity concludes that the renewal option does not provide a material right to the customer that it would not receive without entering into that contract (see paragraph 606-10-55-42). The upfront fee is, in effect, an advance payment for the future transaction processing services. Consequently, the entity determines the transaction price, which includes the nonrefundable upfront fee, and recognizes revenue for the transaction processing services as those services are provided in accordance with paragraph 606-10-55-51.

The example below illustrates how an entity would determine the period over which to recognize a nonrefundable up-front fee.

Example 2-42

Entity X agrees to provide a customer with SaaS on a monthly basis at a price of $100,000 per month, payable at the start of each month. At the outset, X also charges the customer a one-time, nonrefundable up-front fee of $50,000, for which no separate goods or services are transferred. The customer can cancel the contract at any time without penalty, but it will not be entitled to any refund of amounts already paid. Entity X's average customer life is two years.

The period over which the up-front fee should be recognized depends on whether the up-front fee provides the customer with a material right with respect to renewing X's services. In determining whether the up-front fee provides the customer with such a material right, X should consider both quantitative and qualitative factors (e.g., the renewal price compared with the price a new customer would pay or the price paid for services already transferred, inclusive of the nonrefundable up-front fee).

If X concludes that the up-front fee does provide a material right, that fee should be recognized over the service period during which the customer is expected to benefit from not having to pay a further up-front fee upon renewal of service.

2.4.12.5.1 Termination Clauses and Nonrefundable Up-Front Fees in Software Arrangements

Under some software arrangements, the customer must pay a nonrefundable up-front fee. ASC 606 requires entities to consider whether the fee is (1) associated with the transfer of promised goods or services or (2) an advance payment for future goods or services.[20] In addition, some software arrangements give the customer the right to terminate the contract at the customer's convenience. For example, an arrangement for a one-year term license and PCS may contain a provision that allows the customer to terminate the contract after a 30-day notice period. If the customer can terminate a contract without having to pay a substantive penalty, generally only the noncancelable portion of the contract (e.g., the initial 30 days) is accounted for under ASC 606, even if the customer is unlikely to exercise its termination right.

Questions have arisen in practice regarding how to account for nonrefundable up-front fees associated with a software arrangement that contains a termination provision. The examples below illustrate this scenario and discuss the accounting considerations.

Example 2-43

All Fees Are Nonrefundable

A vendor sells a one-year term-based license with PCS for an up-front nonrefundable fee of $1.25 million. The stand-alone selling prices of the license and PCS are $1 million and $250,000, respectively. The vendor's customer has the right to terminate the arrangement at its convenience at the end of each month without paying any penalty. If the customer terminates, it loses the right to use the software and receive support. The customer also has the right to renew the contract annually for the same fee.

Under the assumption that the license is distinct from the PCS, the vendor has two performance obligations: (1) a one-year term license and (2) one year of PCS. While the customer has the right to terminate the contract at the end of each month without paying the vendor a penalty, the customer has, in substance, paid up front for all the goods and services in the contract — the one-year term license and one year of PCS. That is, while a termination provision is treated similarly to a renewal option, there is no incremental fee to "renew" (i.e., not terminate) the contract each month, nor is there a refundable payment for termination. Therefore, the nonrefundable up-front fee is payment for the term license and PCS for the full year. In addition, the contract does not give the customer a material right since the annual renewal provision is priced at the stand-alone selling prices of the term license and PCS.

Revenue Recognized Each Quarter	Q1	Q2	Q3	Q4
License	$ 1,000,000			
PCS	62,500	$ 62,500	$ 62,500	$ 62,500
Total	$ 1,062,500	$ 62,500	$ 62,500	$ 62,500

[20] See ASC 606-10-55-50 and 55-51.

Example 2-44

Nonrefundable License Fees and Pro Rata Refund for PCS

A vendor sells a one-year term-based license with PCS for an up-front fee of $1.25 million. The stand-alone selling prices of the license and PCS are $1 million and $250,000, respectively. The vendor's customer has the right to terminate the arrangement at its convenience at the end of each month without paying any penalty. If the customer terminates, it loses the right to receive support and $1 million of the up-front fee. However, the customer receives a pro rata refund for the PCS ($250,000) and retains the software license for the remainder of the year. The customer also has the right to renew the contract annually for the same fee.

Under the assumption that the license is distinct from the PCS, the vendor has two performance obligations: (1) a one-year term license and (2) one month of PCS. The contract terms are one year for the license and one month for the PCS. While the customer has the right to terminate the contract at the end of each month without paying the vendor a penalty, the customer has, in substance, paid up front for the one-year term license since the fee for the license is nonrefundable and the customer retains the right to use the license for the entire year, even if the contract is terminated. However, the termination provision is treated similarly to a renewal option for PCS since there is a pro rata refund for PCS. Therefore, the incremental fee to renew the contract each month is for optional renewals of PCS only. In addition, the contract does not give the customer a material right since (1) the annual renewal provision is priced at the stand-alone selling prices of the term license and PCS and (2) the monthly renewal of PCS is priced at the stand-alone selling price of PCS.

Revenue Recognized Each Quarter	Q1	Q2	Q3	Q4
License	$ 1,000,000			
PCS	62,500	$ 62,500	$ 62,500	$ 62,500
Total	$ 1,062,500	$ 62,500	$ 62,500	$ 62,500

Example 2-45

Nonrefundable License Fees and Pro Rata Refund for Mandatory PCS

A vendor sells a one-year term-based license with PCS for an up-front fee of $1.25 million. The stand-alone selling prices of the license and PCS are $1 million and $250,000, respectively. The vendor's customer has the right to terminate the arrangement at its convenience at the end of each month without paying any penalty. If the customer terminates, it loses the right to use the software and receive support, but it receives a pro rata refund that is based on the PCS fee stated in the contract. The vendor intends to enforce compliance with the requirement to relinquish the use of the term license if PCS is not renewed. The stated fee for PCS ($250,000) is refundable, and the remainder of the up-front payment for the license ($1 million) is nonrefundable. The customer also has the right to renew the contract annually for the same fee.

Example 2-45 (continued)

Under the assumption that the license is distinct from the PCS, we believe that it may be reasonable to conclude that the vendor has three performance obligations: (1) a one-month term license, (2) one month of PCS, and (3) a material right. If the termination provision is substantive, the contract term is likely to be one month (i.e., the enforceable rights and obligations are likely to be limited to one month). The customer has the right to terminate the contract at the end of each month without paying the vendor a penalty. While the customer does not receive a refund of the up-front payment of $1 million and also loses the right to use the software license in the event of a termination, neither loss is considered a substantive termination penalty. ASC 606 specifies that a termination penalty compensates the other party. We do not believe that the relinquishment of the software would be considered a termination penalty because the customer is not compensating the vendor for terminating the contract. Because software licenses are typically sold on a nonexclusive basis and can be replicated an unlimited number of times at minimal or no cost, no substantive asset is returned to the vendor (i.e., the vendor does not receive a returned product that it can resell or otherwise obtain economic value from). Such licenses can be contrasted with exclusive licenses to IP, which may have value if returned to a vendor. In addition, we do not believe that the loss of the up-front, nonrefundable payment is compensation to the vendor because the initial contract already gave the vendor the right to that payment (i.e., the vendor retains the payment irrespective of whether the customer cancels or renews the contract). Rather, the up-front nonrefundable fee should be assessed under ASC 606-10-55-50 and 55-51.

The termination provision is treated similarly to a renewal option since there is a pro rata refund for PCS if the contract is terminated (which can also be viewed as an incremental fee to renew). In deciding not to terminate the contract (i.e., by renewing the contract), the customer renews both the term license and PCS, because if PCS is not renewed, the customer loses the right to the license. Therefore, because of the termination provision, the vendor might conclude that present enforceable rights and obligations only exist for a term license and PCS for one month.

In evaluating whether the up-front, nonrefundable fee is either (1) a payment for the transfer of promised goods or services in the initial contract or (2) an advance payment for future goods or services, the vendor should determine whether a material right has been provided for the monthly renewals.[21] If the contract is renewed, the incremental fee (i.e., the refundable portion) is only associated with the stated PCS fee. In effect, the customer obtains control of both a term license and PCS by only paying the fee for PCS. Since the monthly renewal is priced at a significant and incremental discount to the price that would be charged to similarly situated customers (i.e., the term license and PCS are not renewed at their stand-alone selling prices), the customer receives a material right. That material right would be accounted for as a performance obligation that is recognized with the renewals of the term license and PCS. If the practical alternative in ASC 606-10-55-45 is elected, the transaction price would be allocated to the renewals of the term license and PCS by reference to the renewals expected to be provided and the corresponding expected consideration. If renewals are expected over the entire stated term (i.e., one year), the entire contractually stated fee (i.e., $1.25 million) would be allocated evenly to each monthly term license and PCS. The amount associated with each month (approximately $104,000) would then be allocated to the one-month term license and PCS and recognized when the customer obtains control of the term license (at a point in time at the beginning of each month) and as PCS is provided (ratably over the month) on the basis of their relative stand-alone selling prices.

For a vendor to conclude that a termination provision affects the contract term, the provision must be substantive (i.e., the customer is making a purchasing decision to renew or terminate the contract). In determining whether the termination/renewal provision is substantive, the vendor should consider quantitative and qualitative factors. For example, the amount subject to refund must be substantive relative to the total contract fee. Further, there should be a business purpose for the provision, and the vendor must intend to enforce the requirement to relinquish the use of the term license if PCS is not renewed. The factors to consider and the relevance of those factors will depend on the specific facts and circumstances of each arrangement, and the use of significant judgment may be required. Companies are therefore encouraged to consult with their accounting advisers and auditors.

[21] The contract does not give the customer a material right on an annual basis since the annual renewal provision is priced at the stand-alone selling prices of the term license and PCS.

Example 2-45 (continued)

Revenue Recognized Each Quarter	Q1	Q2	Q3	Q4
License	$ 250,000	$ 250,000	$ 250,000	$ 250,000
PCS	62,500	62,500	62,500	62,500
Total	$ 312,500	$ 312,500	$ 312,500	$ 312,500

Example 2-46

Nonrefundable License Fees and Nonsubstantive Pro Rata Refund for Mandatory PCS

A vendor sells a one-year term-based license with PCS for an up-front fee of $1.25 million. The stand-alone selling prices of the license and PCS are $1 million and $250,000, respectively. The vendor's customer has the right to terminate the arrangement at its convenience at the end of each month without paying any penalty. If the customer terminates, it loses the right to use the software and receive support, but it receives a pro rata refund for PCS. The vendor intends to enforce compliance with the requirement to relinquish the use of the term license if PCS is not renewed. The stated fee for PCS is $50,000, and the remainder of the up-front payment ($1.2 million) is nonrefundable. The customer also has the right to renew the contract annually for the same fee.

Under the assumption that the license is distinct from the PCS, we believe that it is reasonable to conclude that the vendor has two performance obligations: (1) a one-year license and (2) one year of PCS. The contract term is likely to be one year (i.e., the enforceable rights and obligations are likely to be for the full stated term). The customer has the right to terminate the contract at the end of each month without paying the vendor a penalty. While the customer does not receive a refund related to the up-front payment of $1.2 million and also loses the right to use the software license in the event of a termination, neither loss is a substantive termination penalty. However, unlike the termination provision in Example 2-45, the provision in this scenario is not likely to be considered substantive since the amount subject to refund is only $50,000.

In evaluating whether the up-front nonrefundable fee is either (1) a payment for the transfer of promised goods or services in the initial contract or (2) an advance payment for future goods or services, the vendor would consider that substantially all of the total contract fee is the up-front nonrefundable fee. The customer has the right to terminate the contract at the end of each month without paying the vendor a penalty; however, the customer has, in substance, substantially paid up front for all the stated goods and services in the contract — the one-year term license and one year of PCS. That is, while a termination provision is treated similarly to a renewal option, there is no substantive incremental fee to "renew" the contract (i.e., there is no substantive refundable payment for terminating the contract). Therefore, as in Example 2-43, the nonrefundable up-front fee (in addition to the nonsubstantive refundable payment) is considered an up-front payment for the term license and PCS for the full year. In addition, the contract does not give the customer a material right since the annual renewal provision is priced at the stand-alone selling prices of the term license and PCS.

Revenue Recognized Each Quarter	Q1	Q2	Q3	Q4
License	$ 1,000,000			
PCS	62,500	$ 62,500	$ 62,500	$ 62,500
Total	$ 1,062,500	$ 62,500	$ 62,500	$ 62,500

2.4.12.6 Accounting for Cloud Conversion or Switching Rights

Some entities in the software industry enter into contracts that include (or are subsequently modified to include) an option that allows the customer to convert from an on-premise license arrangement to a cloud-based arrangement under which the software is hosted (e.g., SaaS). This issue has become more prevalent because customers of software entities frequently migrate from on-premise software solutions to cloud-based platforms. Often, when a customer converts from an on-premise software arrangement to a SaaS arrangement, the customer will lose or forfeit its rights to the on-premise version of the software. Views differ on how to account for the revocation of the initial licensing rights and the conversion to a hosted solution.

From inception or after modification, a software arrangement may include a feature that allows a customer to convert a nonexclusive on-premise term-based software license to a cloud-based or hosted software solution (e.g., a SaaS arrangement)[22] for the same software (i.e., software with the same functionality and features). An entity may also modify a nonexclusive on-premise term-based software arrangement to immediately convert it to a SaaS arrangement. Further, an entity's software arrangement may allow a customer to (1) deploy a certain number of licenses to software (e.g., 1,000 seats) and (2) use discretion to determine how many licenses to deploy on an on-premise basis or as SaaS at any point in time or at discrete points in time during the arrangement term. Cloud conversion or switching rights vary widely in practice, and the determination of the appropriate accounting for an arrangement that provides for such rights will depend on the particular complexities involved.

In accordance with the guidance in ASC 606, revenue from on-premise software licenses is typically recognized at the point in time when both (1) the entity provides (or otherwise makes available) a copy of the software to the customer and (2) the period in which the customer is able to use and benefit from the license has begun. Revenue from a SaaS arrangement is typically recognized over time because the performance obligation is likely to meet the conditions for such recognition, particularly if the SaaS is a stand-ready obligation. While ASC 606 includes guidance on contract modifications,[23] material rights,[24] and sales with a right of return,[25] it does not directly address transactions in which a nonexclusive software license is revoked or converted to a SaaS arrangement. As a result, there are diverse views on the accounting for such arrangements, particularly those in which a nonexclusive on-premise software license for which revenue is recognized at a point in time is converted to a SaaS arrangement for the same underlying software product for which revenue is recognized over time.

We believe that there could be more than one acceptable accounting model for certain types of cloud conversion or switching arrangements. The next sections provide illustrative examples of such arrangements and discuss views on how entities may account for them. However, the examples are not all-inclusive, and entities should carefully consider their specific facts and circumstances in determining the appropriate accounting model. In addition, the accounting views discussed for each example may not necessarily be the only methods that are acceptable.

2.4.12.6.1 Initial Contract Includes a Cloud Conversion Right

The example below illustrates an initial nonexclusive on-premise term-based software license contract that includes the right to convert the on-premise software license to a SaaS arrangement.

[22] In this Guide, it is assumed that the SaaS arrangement is accounted for as a service contract because the customer does not have the ability to take possession of the underlying software on an on-premise basis in accordance with the requirements of ASC 985-20-15-5.
[23] See ASC 606-10-25-10 through 25-13.
[24] See ASC 606-10-55-41 through 55-45.
[25] See ASC 606-10-55-22 through 55-29.

Example 2-47

On January 1, 20X0, Entity A enters into a noncancelable two-year contract with a customer for an up-front fee of $1 million to provide a nonexclusive on-premise software license with maintenance or PCS for 100 seats and a right to convert any of the on-premise license seats to a SaaS arrangement at the beginning of the second year (i.e., January 1, 20X1). The SaaS has the same functionality and features as the on-premise software but would be hosted by A instead of being provided on an on-premise basis. Upon exercise of the conversion right, the customer would be required to forfeit the on-premise software license seats and related PCS, and the conversion is irrevocable (i.e., the customer cannot convert back to an on-premise software license). Upon conversion, the customer would be required to pay an incremental fee of $500 per seat and would receive a credit for a pro rata portion of the "unused" on-premise software license and related PCS to apply to the price the customer would pay for the SaaS.

Entity A has similar arrangements with other customers and expects the customer to convert 50 seats at the beginning of the second year. The stand-alone selling prices are as follows:

Performance Obligation	SSP
On-premise software license	$ 4,000 per seat per year
PCS	$ 1,000 per seat per year
SaaS	$ 5,500 per seat per year

2.4.12.6.1.1 Alternative 1A — Material Right Model (Preferred View)

Under this alternative, an entity should determine whether the conversion right represents a material right. ASC 606-10-55-42 through 55-44 state the following:

ASC 606-10

55-42 If, in a contract, an entity grants a customer the option to acquire additional goods or services, that option gives rise to a performance obligation in the contract only if the option provides a material right to the customer that it would not receive without entering into that contract (for example, a discount that is incremental to the range of discounts typically given for those goods or services to that class of customer in that geographical area or market). If the option provides a material right to the customer, the customer in effect pays the entity in advance for future goods or services, and the entity recognizes revenue when those future goods or services are transferred or when the option expires.

55-43 If a customer has the option to acquire an additional good or service at a price that would reflect the standalone selling price for that good or service, that option does not provide the customer with a material right even if the option can be exercised only by entering into a previous contract. In those cases, the entity has made a marketing offer that it should account for in accordance with the guidance in this Topic only when the customer exercises the option to purchase the additional goods or services.

55-44 Paragraph 606-10-32-29 requires an entity to allocate the transaction price to performance obligations on a relative standalone selling price basis. If the standalone selling price for a customer's option to acquire additional goods or services is not directly observable, an entity should estimate it. That estimate should reflect the discount that the customer would obtain when exercising the option, adjusted for both of the following:

a. Any discount that the customer could receive without exercising the option
b. The likelihood that the option will be exercised.

Under the material right guidance, an entity provides a material right if the customer has the option to purchase the SaaS at a discount that is incremental to the range of discounts typically provided for the SaaS to that class of customer in similar circumstances. Any incremental fee the customer is required to pay to exercise the conversion right is compared with the stand-alone selling price of the SaaS. While the customer may receive a credit for the "unused" portion of the on-premise term-based software license and related PCS, only the incremental fee to exercise the right is considered. This is because under Alternative 1A, a nonexclusive on-premise term-based software license is not subject to the right of return guidance since the entity does not receive an asset back when the right is exercised (i.e., there is no return of an asset).[26] That is, the entity is not compensated with an asset of any value as a result of the conversion since it can replicate a nonexclusive software license for sale to any of its customers for a nominal cost. If the incremental fee that the customer is required to pay to convert to the SaaS reflects the stand-alone selling price of the SaaS, no material right exists under ASC 606-10-55-43. Instead, the conversion right is accounted for only if and when it is exercised. On the other hand, if the conversion right represents a material right because the incremental fee is less than the stand-alone selling price of the SaaS, that material right would be accounted for as a separate performance obligation. In accordance with ASC 606-10-55-44, the entity would estimate the stand-alone selling price of the material right as the discount the customer would obtain when exercising the material right, adjusted for any discount the customer could receive without exercising the option and the likelihood that the option will be exercised. If the conversion option is exercised, the amount allocated to the material right plus any incremental fee paid would generally be recognized over the remaining term of the SaaS (and the PCS if not all licenses are converted).

In Example 2-47, A would need to assess whether the option to receive the SaaS at a discount represents a material right. Because the incremental fee to be paid by the customer of $500 per seat per year is significantly less than the stand-alone selling price for the SaaS of $5,500 per seat per year, A would conclude that a material right exists at contract inception. Entity A could estimate the material right's stand-alone selling price as the $5,000 per seat per year discount ($5,500 SaaS stand-alone selling price − $500 incremental fee to be paid), adjusted for the likelihood that the option will be exercised.[27] We believe that it would also be acceptable for A to estimate the stand-alone selling prices of the on-premise software license and the PCS by applying a similar adjustment for the likelihood that the option will be exercised (which could truncate the term of the on-premise software license and the PCS). For example, A might estimate the stand-alone selling prices of the on-premise software license and the PCS under the assumption that 50 seats of the license and related PCS will have only a one-year term if customers are expected to convert half the seats of the license to SaaS after one year.

Assume that A determines that the relative stand-alone selling price allocation of the transaction price results in allocations to the on-premise software license, PCS for 20X0, PCS for 20X1, and the material right of $600,000, $100,000, $50,000, and $250,000, respectively.[28] Entity A will recognize $600,000 of revenue on January 1, 20X0, for the on-premise software license and $100,000 for PCS ratably over 20X0. Revenue is deferred for the $50,000 allocated to PCS for 20X1 and the $250,000 allocated to the

[26] This alternative view is consistent with the accounting for on-premise term-based software licenses that enable the customer to terminate the license agreement without penalty. For example, if a customer paid for a one-year on-premise term-based software license but had the ability to cancel the arrangement for a pro rata refund with 30 days' notice, the term of the initial arrangement would be 30 days, with optional renewals thereafter. In those circumstances, the right of return guidance would not be applied.

[27] While the material right's stand-alone selling price could be adjusted for any discount the customer could receive without exercising the option, this example assumes that the customer could not receive a discount without exercising the option.

[28] The allocation of the transaction price based on relative stand-alone selling price is included for illustrative purposes only and uses simplistic assumptions; judgment will be required to determine stand-alone selling prices in this and similar fact patterns.

material right, and those amounts are recognized as contract liabilities. If the customer elects to exercise the conversion right on 100 seats on January 1, 20X1, A would assess its policy for accounting for the exercise of an option that includes a material right and apply either of the following:

- *Separate contract model* — The remaining unrecognized revenue of $50,000 related to PCS is recognized immediately since PCS for all 100 seats is forfeited and therefore will not be provided in 20X1. Revenue of $300,000, which is calculated by adding the material right allocation of $250,000 and the incremental fee of $50,000 ($500 incremental fee × 100 seats), is recognized over the remaining one-year SaaS term.
- *Contract modification model* — Revenue of $350,000, which is calculated by adding the remaining unrecognized revenue of $50,000 related to PCS, the material right allocation of $250,000, and the incremental fee of $50,000, is recognized over the remaining one-year SaaS term.

Alternative 1A may be less costly to implement than Alternative 1B below because the stand-alone selling price of the material right is estimated only at contract inception and is not subsequently revised. In addition, because the right of return model is not applied, the variable consideration constraint would likewise not be applicable. Therefore, revenue recognition could potentially be less volatile under the material right model than under the right of return model discussed below.

2.4.12.6.1.2 Alternative 1B — Right of Return Model (Acceptable View)

Under this alternative, an entity applies the right of return guidance when accounting for the potential that a nonexclusive on-premise term-based software license will be converted to a SaaS arrangement. ASC 606-10-55-22 through 55-26 state the following:

ASC 606-10

55-2 In some contracts, an entity transfers control of a product to a customer and also grants the customer the right to return the product for various reasons (such as dissatisfaction with the product) and receive any combination of the following:

a. A full or partial refund of any consideration paid
b. A credit that can be applied against amounts owed, or that will be owed, to the entity
c. Another product in exchange.

55-23 To account for the transfer of products with a right of return (and for some services that are provided subject to a refund), an entity should recognize all of the following:

a. Revenue for the transferred products in the amount of consideration to which the entity expects to be entitled (therefore, revenue would not be recognized for the products expected to be returned)
b. A refund liability
c. An asset (and corresponding adjustment to cost of sales) for its right to recover products from customers on settling the refund liability.

55-24 An entity's promise to stand ready to accept a returned product during the return period should not be accounted for as a performance obligation in addition to the obligation to provide a refund.

ASC 606-10 (continued)

55-25 An entity should apply the guidance in paragraphs 606-10-32-2 through 32-27 (including the guidance on constraining estimates of variable consideration in paragraphs 606-10-32-11 through 32-13) to determine the amount of consideration to which the entity expects to be entitled (that is, excluding the products expected to be returned). For any amounts received (or receivable) for which an entity does not expect to be entitled, the entity should not recognize revenue when it transfers products to customers but should recognize those amounts received (or receivable) as a refund liability. Subsequently, at the end of each reporting period, the entity should update its assessment of amounts for which it expects to be entitled in exchange for the transferred products and make a corresponding change to the transaction price and, therefore, in the amount of revenue recognized.

55-26 An entity should update the measurement of the refund liability at the end of each reporting period for changes in expectations about the amount of refunds. An entity should recognize corresponding adjustments as revenue (or reductions of revenue).

Under Alternative 1B, an on-premise software license is generally treated like a tangible product, and the right of return guidance applies to the exchange of a product for another product in accordance with ASC 606-10-55-22(c). However, while an entity would generally record an asset for its right to recover a tangible product, an entity would not record an asset for its right to recover a nonexclusive software license in accordance with ASC 606-10-55-23(c) since the returned license has no value to the entity. Therefore, in applying the right of return guidance, the entity would estimate and recognize an adjustment to the transaction price (and reduce revenue) at contract inception to account for the potential conversion.[29] The right of return would be accounted for as variable consideration, subject to the constraint in ASC 606-10-32-11 and 32-12.[30] The estimate of the variable consideration associated with the right of return would be reassessed at the end of each reporting period in accordance with ASC 606-10-55-25 and 55-26, with changes in the estimate recognized as an adjustment to revenue. If the conversion right is exercised, the amount previously deferred as a liability[31] plus the incremental fee paid would generally be recognized as revenue over the remaining term of the SaaS (and the PCS for any licenses that are not converted).

In Example 2-47, A would need to determine its estimate of variable consideration and how much of that consideration, if any, should be constrained. Assume that A determines that $500,000 of the $1 million transaction price is variable consideration, which is calculated as ($4,000 on-premise software license stand-alone selling price + $1,000 PCS stand-alone selling price) × 100 seats × 1 year. In addition, assume that A estimates variable consideration of $250,000 — calculated as ($4,000 on-premise software license stand-alone selling price + $1,000 PCS stand-alone selling price) × 50 seats × 1 year — and concludes that none of the estimated variable consideration should be constrained.[32] Therefore, A will recognize revenue of $600,000, or ($4,000 on-premise software license stand-alone selling price × 100 seats × 1 year) + ($4,000 on-premise software license stand-alone selling price × 50 seats × 1 year), on January 1, 20X0, for the on-premise software license and $100,000, or $1,000 PCS stand-alone selling price × 100 seats × 1 year, for PCS ratably over 20X0. In addition, A will recognize a liability of $250,000,

[29] The variable consideration resulting from the right of return would generally be estimated on the basis of the transaction price allocated to the on-premise software and related PCS and the amount of that allocated transaction price that is expected to be refunded as a credit to the SaaS arrangement (i.e., the pro rata portion of the on-premise software and related PCS that is "unused"). If the credit plus any incremental fee required to convert to the SaaS arrangement is less than the stand-alone selling price of the SaaS, the entity may need to consider whether a material right has also been granted.

[30] Under ASC 606-10-32-11, an entity includes variable consideration in the transaction price "only to the extent that it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is subsequently resolved."

[31] A liability for a return right is typically recognized as a refund liability in accordance with ASC 606-10-55-23(b). However, we believe that if an entity's contract with a customer is noncancelable and consideration therefore would not be refunded to the customer, it would be acceptable to recognize the liability as a contract liability (e.g., deferred revenue) for the entity's expected performance associated with a SaaS arrangement.

[32] The amount of variable consideration to include in the transaction price is provided for illustrative purposes only and uses simplistic assumptions; judgment will be required to estimate variable consideration and the related constraint in this and similar fact patterns.

or $1 million − $500,000 fixed consideration − $250,000 variable consideration, for the credit that the customer is expected to receive for the on-premise software license and PCS that are expected to be forfeited. Entity A will reassess its estimate of variable consideration at the end of each reporting period.

Assume that on December 31, 20X0, A revises its estimate of the liability associated with the right of return to $500,000 because it now expects that the customer will convert all 100 seats to a SaaS arrangement. Entity A will reverse $200,000 of revenue for the incremental 50 seats of on-premise software expected to be forfeited ($4,000 on-premise software license stand-alone selling price × 50 seats × 1 year) and reclassify the $50,000 PCS contract liability for the incremental PCS expected to be forfeited ($1,000 PCS stand-alone selling price × 50 seats × 1 year) for a total increase in liability of $250,000 related to the credit expected to be granted to the customer. If the customer elects to exercise the conversion right on 100 seats on January 1, 20X1, revenue of $550,000, which is calculated by adding the liability of $500,000 and the incremental fee of $50,000 ($500 incremental fee × 100 seats × 1 year), is recognized over the remaining one-year SaaS term.

Because A's initial estimate of the liability for the credit expected to be granted to the customer was not sufficient, a significant amount of revenue ultimately had to be reversed in a subsequent reporting period. This example highlights the importance of critically evaluating how much revenue should be constrained to ensure that it is probable that a significant reversal in cumulative revenue recognized will not occur. Given the risk of overestimating the amount of variable consideration to which an entity can expect to be entitled for the on-premise software license and PCS, we believe that many software entities, particularly those that do not have sufficient historical data on conversion rates, may find it challenging to determine an appropriate estimate of variable consideration and constraint as required under Alternative 1B.

2.4.12.6.1.3 Tabular Summary of Alternatives 1A and 1B

The following table summarizes the timing of revenue recognition under Alternatives 1A and 1B:

	Alternative 1A (Material Right Model)		Alternative 1B (Right of Return Model)
	Separate Contract	Contract Modification	
Revenue recognized on January 1, 20X0	$ 600,000	$ 600,000	$ 600,000
Revenue recognized (reversed) from January 1 through December 31, 20X0	100,000	100,000	(100,000)*
Revenue recognized on January 1, 20X1	50,000	—	—
Revenue recognized from January 1 through December 31, 20X1	300,000	350,000	550,000
Total revenue recognized	$ 1,050,000	$ 1,050,000	$ 1,050,000

* This amount represents the $100,000 of revenue recognized for PCS less the $200,000 reversal of revenue for the change in the estimate of variable consideration.

2.4.12.6.2 Initial Contract Is Modified to Convert a Term-Based License to SaaS

The example below illustrates a situation in which a nonexclusive on-premise term-based software license contract (1) initially *does not* include the right to convert the on-premise software license to a SaaS arrangement but (2) is subsequently modified to immediately convert the on-premise software license to a SaaS arrangement.

Example 2-48

On January 1, 20X0, Entity B enters into a noncancelable two-year contract with a customer for an up-front fee of $1 million to provide a nonexclusive on-premise software license with PCS for 100 seats. At contract inception, there is no explicit or implied right to convert any of the on-premise license seats to a SaaS arrangement.[33]

On January 1, 20X1, B and the customer modify the contract to convert 50 seats of the on-premise software license to a SaaS arrangement for the remaining term. The SaaS has the same functionality and features as the licensed software but would be hosted by B instead of being provided on an on-premise basis. The customer is required to forfeit the 50 on-premise software license seats and related PCS (but will retain the other 50 seats on an on-premise basis with the related PCS for the remaining term), and the conversion is irrevocable (i.e., the customer cannot convert back to an on-premise software license). Upon contract modification and conversion, the customer is required to pay an incremental fee of $500 per seat and receives a credit for the pro rata portion of the "unused" term-based license and related PCS to apply to the price the customer will pay for the SaaS.

The stand-alone selling prices are as follows:

Performance Obligation	SSP
On-premise software license	$ 4,000 per seat per year
PCS	$ 1,000 per seat per year
SaaS	$ 5,500 per seat per year

2.4.12.6.2.1 Alternative 2A — Prospective Model (Preferred View)

Under this alternative, an entity should evaluate the contract modification guidance since the contract has been modified (i.e., there is a change in the scope and price). ASC 606-10-25-12 and 25-13 state the following:

ASC 606-10

25-12 An entity shall account for a contract modification as a separate contract if both of the following conditions are present:

a. The scope of the contract increases because of the addition of promised goods or services that are distinct (in accordance with paragraphs 606-10-25-18 through 25-22).
b. The price of the contract increases by an amount of consideration that reflects the entity's standalone selling prices of the additional promised goods or services and any appropriate adjustments to that price to reflect the circumstances of the particular contract. For example, an entity may adjust the standalone selling price of an additional good or service for a discount that the customer receives, because it is not necessary for the entity to incur the selling-related costs that it would incur when selling a similar good or service to a new customer.

[33] Note that if an entity's contract does not contain a cloud conversion right at contract inception, a practice of allowing customers to convert their on-premise software license to a SaaS arrangement may create an implied right that is similar to the explicit right provided to the customer in Example 2-47. Significant judgment will be required to determine when an implied right is created in these circumstances.

ASC 606-10 (continued)

25-13 If a contract modification is not accounted for as a separate contract in accordance with paragraph 606-10-25-12, an entity shall account for the promised goods or services not yet transferred at the date of the contract modification (that is, the remaining promised goods or services) in whichever of the following ways is applicable:

a. An entity shall account for the contract modification as if it were a termination of the existing contract, and the creation of a new contract, if the remaining goods or services are distinct from the goods or services transferred on or before the date of the contract modification. The amount of consideration to be allocated to the remaining performance obligations (or to the remaining distinct goods or services in a single performance obligation identified in accordance with paragraph 606-10-25-14(b)) is the sum of:

1. The consideration promised by the customer (including amounts already received from the customer) that was included in the estimate of the transaction price and that had not been recognized as revenue and
2. The consideration promised as part of the contract modification.

b. An entity shall account for the contract modification as if it were a part of the existing contract if the remaining goods or services are not distinct and, therefore, form part of a single performance obligation that is partially satisfied at the date of the contract modification. The effect that the contract modification has on the transaction price, and on the entity's measure of progress toward complete satisfaction of the performance obligation, is recognized as an adjustment to revenue (either as an increase in or a reduction of revenue) at the date of the contract modification (that is, the adjustment to revenue is made on a cumulative catch-up basis).

c. If the remaining goods or services are a combination of items (a) and (b), then the entity shall account for the effects of the modification on the unsatisfied (including partially unsatisfied) performance obligations in the modified contract in a manner that is consistent with the objectives of this paragraph.

The contract modification is accounted for as a termination of the existing contract and the creation of a new contract in accordance with ASC 606-10-25-13(a) because the modification does not solely add goods or services at their stand-alone selling prices (i.e., goods and services are also forfeited, and any incremental fee paid for the SaaS is not at its stand-alone selling price) and the remaining SaaS (and PCS for any licenses that are not converted) is distinct. The contract modification is accounted for prospectively, and any unrecognized revenue that was included in the transaction price from the original contract plus any additional consideration paid as part of the contract modification is recognized over the remaining term of the SaaS (and the PCS for any licenses that are not converted). There is no adjustment to or reversal of revenue for the "unused" portion of the on-premise software license since the modification is accounted for prospectively (i.e., revenue is not "recycled"). Further, the entity does not receive a "returned" asset since, as similarly noted in the discussion of Alternative 1A, the entity does not receive an asset of any value back. Therefore, none of the pro rata credit provided for the "unused" portion of the on-premise software license that has been forfeited would be included as part of the consideration allocated to the SaaS (and PCS for any licenses that are not converted).

In Example 2-48, B will recognize revenue of $800,000 ($4,000 on-premise software license stand-alone selling price × 100 seats × 2 years) on January 1, 20X0, for the on-premise software license and $100,000 ($1,000 PCS stand-alone selling price × 100 seats × 1 year) for PCS ratably over 20X0. When the contract is modified on January 1, 20X1, B has a contract liability related to PCS of $100,000 and receives incremental consideration of $25,000 ($500 incremental fee × 50 seats). Entity B will therefore recognize $125,000 ($100,000 + $25,000) for both PCS and the SaaS over the remaining one-year term.[34]

[34] Entity B would generally allocate the $125,000 between PCS and the SaaS on the basis of their relative stand-alone selling prices if required to do so for presentation or disclosure purposes. However, because both PCS and the SaaS are stand-ready obligations that are recognized ratably over the same period, the $125,000 was not allocated between the two services for purposes of this illustration.

2.4.12.6.2.2 Alternative 2B — Return Model (Acceptable View)

Under this alternative, in a manner similar to that in Alternative 2A, the contract modification is accounted for as a termination of the existing contract and the creation of a new contract because the modification does not solely add goods or services at their stand-alone selling prices (i.e., goods and services are also forfeited, and any incremental fee paid for the SaaS is not at its stand-alone selling price) and the remaining SaaS (and PCS if not all licenses are converted) is distinct. However, unlike Alternative 2A, Alternative 2B treats the "unused" portion of the on-premise software license as being effectively returned for a credit that can be applied toward the purchase of the SaaS. Therefore, revenue associated with the unused portion of the returned on-premise software license is reversed. The amount of revenue reversed (i.e., the credit associated with the unused portion of the returned on-premise software license), together with any unrecognized revenue that was included in the transaction price from the original contract and any additional consideration paid as part of the contract modification, is recognized over the remaining term of the SaaS (and the PCS for any licenses that are not converted).

In Example 2-48, B will recognize revenue of $800,000 ($4,000 on-premise software license stand-alone selling price × 100 seats × 2 years) on January 1, 20X0, for the on-premise software license and $100,000 ($1,000 PCS stand-alone selling price × 100 seats × 1 year) for PCS ratably over 20X0. When the contract is modified on January 1, 20X1, B will reverse revenue of $200,000 ($4,000 on-premise software license stand-alone selling price × 50 seats × 1 year) for the returned portion of the on-premise software license. Entity B also has a contract liability related to PCS of $100,000 and receives incremental consideration of $25,000 ($500 incremental fee × 50 seats). Entity B will therefore recognize revenue of $325,000 ($200,000 + $100,000 + $25,000) for both PCS and the SaaS over the remaining one-year term.[35]

2.4.12.6.2.3 Tabular Summary of Alternatives 2A and 2B

The following table summarizes the timing of revenue recognition under Alternatives 2A and 2B:

	Alternative 2A (Prospective Model)	Alternative 2B (Return Model)
Revenue recognized on January 1, 20X0	$ 800,000	$ 800,000
Revenue recognized from January 1 through December 31, 20X0	100,000	100,000
Revenue reversed on January 1, 20X1	—	(200,000)
Revenue recognized from January 1 through December 31, 20X1	125,000	325,000
Total revenue recognized	$ 1,025,000	$ 1,025,000

2.4.12.6.3 Initial Contract Is Modified to Add a Cloud Conversion Right

The example below illustrates a situation in which a nonexclusive on-premise term-based software license contract (1) initially *does not* include the right to convert the on-premise software license to a SaaS arrangement but (2) is subsequently modified to add a right to convert the on-premise software license to a SaaS arrangement.

[35] Entity B would generally allocate the $325,000 between PCS and the SaaS on the basis of their relative stand-alone selling prices if required to do so for presentation or disclosure purposes. However, because both PCS and the SaaS are stand-ready obligations that are recognized ratably over the same period, the $325,000 was not allocated between the two services for purposes of this illustration.

Example 2-49

On January 1, 20X0, Entity C enters into a noncancelable three-year contract with a customer for an up-front fee of $3 million to provide a nonexclusive on-premise software license with PCS for 100 seats. At contract inception, there is no explicit or implied right to convert any of the on-premise license seats to a SaaS arrangement.[36]

On January 1, 20X1, C and the customer modify the contract to add a right to convert any of the on-premise license seats to a SaaS arrangement at the beginning of the third year (i.e., January 1, 20X2). The SaaS has the same functionality and features as the on-premise software but would be hosted by C instead of being provided on an on-premise basis. As in Example 2-47, the customer would be required to forfeit the on-premise software license seats and related PCS upon exercise of the conversion right, and the conversion is irrevocable (i.e., the customer cannot convert back to an on-premise software license). Upon conversion, the customer would be required to pay an incremental fee of $1,000 per seat and would receive a credit for a pro rata portion of the "unused" on-premise software license and related PCS to apply to the price the customer would pay for the SaaS.

The stand-alone selling prices are as follows:

Performance Obligation	SSP
On-premise software license	$ 8,000 per seat per year
PCS	$ 2,000 per seat per year
SaaS	$ 11,000 per seat per year

2.4.12.6.3.1 *Alternative 3A — Prospective Material Right Model (Preferred View)*

Under this alternative, in a manner similar to that under Alternative 2A, the contract modification is accounted for as a termination of the existing contract and the creation of a new contract because the modification does not solely add goods or services at their stand-alone selling prices (i.e., a conversion right is added for no additional consideration, and any incremental fee to be paid for the SaaS is not at its stand-alone selling price) and the remaining performance obligations (PCS and a material right) are distinct. The contract modification is accounted for prospectively, and any unrecognized revenue that was included in the transaction price from the original contract is allocated to the remaining performance obligations (PCS and a material right). If the conversion option is exercised, the amount allocated to the material right plus any incremental fee paid would generally be recognized over the remaining term of the SaaS (and the PCS for any licenses that are not converted).

In Example 2-49 above, C will recognize revenue of $2.4 million ($8,000 on-premise software license stand-alone selling price × 100 seats × 3 years) on January 1, 20X0, for the software license and $200,000 ($2,000 PCS stand-alone selling price × 100 seats × 1 year) for PCS ratably over 20X0. When the contract is modified on January 1, 20X1, C has a contract liability related to PCS of $400,000. Entity C will allocate that amount to the remaining PCS and the material right on the basis of their relative stand-alone selling prices. The material right's stand-alone selling price would be estimated as the $10,000 per seat per year discount ($11,000 SaaS stand-alone selling price − $1,000 incremental fee to be paid), adjusted for the likelihood that the option will be exercised. We believe that it would also be acceptable for C to estimate the stand-alone selling price of the PCS by applying a similar adjustment for the likelihood that the option will be exercised (which could truncate the term of the PCS).

[36] See footnote 33.

Assume that C determines that the relative stand-alone selling price allocation of the transaction price results in allocations to the PCS for 20X1, the PCS for 20X2, and the material right of $100,000, $50,000, and $250,000, respectively.[37] Entity C will recognize $100,000 for PCS ratably over 20X1. If the customer elects to exercise the conversion right on 100 seats on January 1, 20X2, C would assess its policy for accounting for the exercise of an option that includes a material right and apply either of the following:

- *Separate contract model* — The remaining unrecognized revenue of $50,000 related to PCS is recognized immediately since PCS for all 100 seats is forfeited and therefore will not be provided in 20X2. Revenue of $350,000, which is calculated by adding the material right allocation of $250,000 and the incremental fee of $100,000 ($1,000 incremental fee × 100 seats), is recognized over the remaining one-year SaaS term.
- *Contract modification model* — Revenue of $400,000, which is calculated by adding the remaining unrecognized revenue of $50,000 related to PCS, the material right allocation of $250,000, and the incremental fee of $100,000, is recognized over the remaining one-year SaaS term.

Alternative 3A may be less costly to implement than Alternative 3B below because the stand-alone selling price of the material right is estimated only upon contract modification and is not subsequently revised. In addition, because the right of return model is not applied, the variable consideration constraint would likewise not be applicable. Therefore, revenue recognition could potentially be less volatile under the prospective material right model than under the right of return model discussed below.

2.4.12.6.3.2 Alternative 3B — Right of Return Model (Acceptable View)

Under this alternative, in a manner similar to that under Alternative 3A, the contract modification is accounted for as a termination of the existing contract and the creation of a new contract because the modification does not solely add goods or services at their stand-alone selling prices (i.e., a conversion right is added for no additional consideration, which could result in the forfeiture of goods and services, and any incremental fee to be paid for the SaaS is not at its stand-alone selling price) and the remaining PCS is distinct. However, unlike Alternative 3A, Alternative 3B treats any "unused" portion of the on-premise software license as being effectively returned for a credit that can be applied toward the purchase of the SaaS. Therefore, revenue associated with the expected unused portion of the returned on-premise software license is reversed. The amount of revenue reversed (i.e., the credit associated with the potential unused portion of the returned on-premise software license), together with any unrecognized revenue that was included in the transaction price from the original contract, is accounted for prospectively over the remaining two-year term. In applying the right of return guidance, the entity would estimate and recognize an adjustment to the transaction price (and reduce revenue) upon contract modification to account for the potential conversion.[38] The right of return would be accounted for as variable consideration, subject to the constraint in ASC 606-10-32-11 and 32-12.[39] The estimate of variable consideration associated with the right of return would be reassessed at the end of each reporting period in accordance with ASC 606-10-55-25 and 55-26, with changes in the estimate recognized as an adjustment to revenue. If the conversion right is exercised, the amount previously deferred as a liability[40] plus the incremental fee paid would generally be recognized as revenue over the remaining term of the SaaS (and the PCS for any licenses that are not converted).

[37] See footnote 28.
[38] See footnote 29.
[39] See footnote 30.
[40] See footnote 31.

In Example 2-49, C will recognize revenue of $2.4 million ($8,000 on-premise software license stand-alone selling price × 100 seats × 3 years) on January 1, 20X0, for the software license and $200,000 ($2,000 PCS stand-alone selling price × 100 seats × 1 year) for PCS ratably over 20X0. When the contract is modified on January 1, 20X1, C would need to determine its estimate of variable consideration and how much of that consideration, if any, should be constrained. Assume that C determines that $1 million of the original transaction price of $3 million is variable consideration, which is calculated as ($8,000 on-premise software license stand-alone selling price + $2,000 PCS stand-alone selling price) × 100 seats × 1 year. In addition, assume that C estimates variable consideration of $500,000 — calculated as ($8,000 on-premise software license stand-alone selling price + $2,000 PCS stand-alone selling price) × 50 seats × 1 year — and concludes that none of the estimated variable consideration should be constrained.[41] Therefore, C will reverse revenue of $400,000 ($8,000 on-premise software license × 50 seats × 1 year) and reclassify $100,000 of the PCS contract liability for the PCS expected to be forfeited ($2,000 PCS stand-alone selling price × 50 seats × 1 year) for a total liability of $500,000 for the credit the customer is expected to receive. Entity C also has a remaining contract liability related to PCS of $300,000 and recognizes $200,000 ($2,000 PCS stand-alone selling price × 100 seats × 1 year) for PCS ratably over 20X1.

Assume that on December 31, 20X1, C revises its estimate of the liability associated with the right of return to $1 million because it now expects that the customer will convert all 100 seats to a SaaS arrangement. Entity C will reverse an additional $400,000 of revenue for the incremental 50 seats of on-premise software expected to be forfeited ($8,000 software license stand-alone selling price × 50 seats × 1 year) and reclassify $100,000 of the remaining PCS contract liability for the incremental PCS expected to be forfeited ($2,000 PCS stand-alone selling price × 50 seats × 1 year) for a total increase in liability of $500,000 related to the credit expected to be granted to the customer. If the customer elects to exercise the conversion right on 100 seats on January 1, 20X2, revenue of $1.1 million, which is calculated by adding the liability of $1 million and the incremental fee of $100,000 ($1,000 incremental fee × 100 seats × 1 year), is recognized over the remaining one-year SaaS term.

Because C's initial estimate of the liability for the credit expected to be granted to the customer was not sufficient, a significant amount of revenue ultimately had to be reversed in a subsequent reporting period. This example highlights the importance of critically evaluating how much revenue should be constrained to ensure that it is probable that a significant reversal in cumulative revenue recognized will not occur. Given the risk of overestimating the amount of variable consideration to which an entity can expect to be entitled for the on-premise software license and PCS, we believe that many software entities, particularly those that do not have sufficient historical data on conversion rates, may find it challenging to determine an appropriate estimate of variable consideration and constraint as required under Alternative 3B.

[41] See footnote 32.

2.4.12.6.3.3 Tabular Summary of Alternatives 3A and 3B

The following table summarizes the timing of revenue recognition under Alternatives 3A and 3B:

	Alternative 3A (Prospective Material Right Model)		Alternative 3B (Right of Return Model)
	Separate Contract	Contract Modification	
Revenue recognized on January 1, 20X0	$ 2,400,000	$ 2,400,000	$ 2,400,000
Revenue recognized from January 1 through December 31, 20X0	200,000	200,000	200,000
Revenue reversed on January 1, 20X1	—	—	(400,000)
Revenue recognized (reversed) from January 1 through December 31, 20X1	100,000	100,000	(200,000)*
Revenue recognized on January 1, 20X2	50,000	—	—
Revenue recognized from January 1 through December 31, 20X2	350,000	400,000	1,100,000
Total revenue recognized	$ 3,100,000	$ 3,100,000	$ 3,100,000

* This amount represents the $200,000 of revenue recognized for PCS less the $400,000 reversal of revenue for the change in the estimate of variable consideration.

2.4.12.6.4 Initial Contract Includes Cloud Mixing Rights With a Cap

The example below illustrates an initial contract that gives the customer the right to use nonexclusive licensed software on both an on-premise basis and a cloud basis, subject to a cap on the total number of seats.

Example 2-50

On January 1, 20X0, Entity D enters into a noncancelable two-year contract with a customer for an up-front fee of $1 million to provide 1,000 nonexclusive software licenses. Under the terms of the contract, the customer has an option to deploy each of the 1,000 licenses as either on-premise software or SaaS throughout the two-year license term. That is, the customer can use any mix of on-premise software and SaaS at any point during the license term as long as the number of licenses used does not exceed 1,000 seats. The on-premise software license and the SaaS (1) are each fully functional on their own and (2) provide the same functionality and features (other than D's hosting of the SaaS). At contract inception, the customer decides to use 600 licenses as on-premise software and 400 licenses as SaaS. Six months later, the customer decides to use 500 licenses as on-premise software and 500 licenses as SaaS.

We believe that D may reasonably conclude that it has promised to (1) provide the right to use on-premise software and (2) stand ready to provide SaaS (i.e., to host the software license). Since each of the promises is likely to be distinct, there are two performance obligations to which the $1 million fee should be allocated on a relative stand-alone selling price basis. We believe that it would be acceptable for D to estimate the stand-alone selling price of each performance obligation by considering the expected mix of on-premise software and SaaS. The stand-alone selling prices are determined at contract inception and should not be subsequently revised regardless of whether the mix of on-premise software and SaaS changes after the initial estimate. Consideration allocated to the on-premise software would be recognized once control of the license is transferred to the customer. In addition, since the performance obligation to provide SaaS is satisfied over time, consideration allocated to this performance obligation would be recognized as revenue over the two-year contract term (i.e., the period over which D is required to stand ready to provide SaaS).

2.5 Determine the Transaction Price (Step 3)

In step 3 of the revenue standard, an entity determines the "transaction price," which, as stated in ASC 606-10-32-2, represents "the amount of consideration to which an entity expects to be entitled in exchange for transferring promised goods or services to a customer, excluding amounts collected on behalf of third parties (for example, some sales taxes). The consideration promised in a contract with a customer may include fixed amounts, variable amounts, or both." Because the transaction price is an expected amount, estimates are inherently required. When determining the transaction price, an entity is required under ASC 606-10-32-3 to "consider the effects of all of the following":

- "Variable consideration."
- "Constraining estimates of variable consideration."
- "The existence of a significant financing component in the contract."
- "Noncash consideration."
- "Consideration payable to a customer."

2.5.1 Effect of a Customer's Credit Risk on the Determination of the Transaction Price

When measuring the transaction price, an entity should take a customer's credit risk into account only to determine (1) the discount rate used to adjust the promised consideration for a significant financing component, if any, and (2) potential price concessions.

ASC 606-10-32-2 specifies that the transaction price is the amount to which an entity expects to be entitled rather than the amount it expects to collect. The determination of the amount to which an entity expects to be entitled is not affected by the risk of whether it expects the customer to default (i.e., the customer's credit risk) unless a price concession is expected.

However, when the timing of payments due under the contract provides the customer with a significant benefit of financing, the transaction price is adjusted to reflect the time value of money. Paragraph BC239 of ASU 2014-09 indicates that in such circumstances, an entity will take a customer's credit risk into account in determining the appropriate discount rate to apply. This rate will affect the amount of revenue recognized for the transfer of goods or services under the contract.

Further, a customer's credit risk is also a factor in the determination of whether a contract exists, because one of the criteria for identification of a contract in ASC 606-10-25-1 is that collection of substantially all of the consideration to which the entity is entitled is probable (specifically, ASC 606-10-25-1(e)).

2.5.2 Variable Consideration

ASC 606-10-32-6 explains that variable consideration may arise "because of discounts, rebates, refunds, credits, price concessions, incentives, performance bonuses, penalties, or other similar items" and that the promised consideration can vary "if an entity's entitlement to the consideration is contingent on the occurrence or nonoccurrence of a future event" (e.g., when "a product [is] sold with a right of return or a fixed amount is promised as a performance bonus on achievement of a specified milestone"). In the technology industry, common forms of variable consideration include volume-based discounts or tiered pricing, promotions, concessions, royalties, and usage-based fees.

The determination of the transaction price should include consideration that is implicitly variable in the arrangement. The consideration to which an entity is ultimately entitled may be less than the price stated in the contract because the customer may be offered, or expects, a price concession. This creates variability in the amount to which an entity expects to be entitled and is thus a form of variable consideration even though there is no explicitly stated price concession in the contractual terms. Accordingly, an entity should consider all facts and circumstances in a contract with a customer to determine whether it would accept an amount that is lower than the consideration stated in the contract. If so, the total transaction price is variable because it is contingent on the occurrence or nonoccurrence of an event (i.e., the entity's grant of an implicit price concession to the customer).

Entities will need to use significant judgment in determining whether they have provided an implicit price concession (i.e., whether they have the expectation of accepting less than the contractual amount of consideration in exchange for goods or services) or have accepted a customer's credit risk (i.e., whether they have accepted the risk of collecting less consideration than what they legitimately expected to collect from the customer). Credit risk is generally not measured as part of the transaction price (except in the determination of the discount rate an entity should use when adjusting the transaction price for a significant financing component or in the determination of potential concessions associated with credit risk) but is addressed in step 1 of the revenue model as part of the gating analysis of whether revenue from a contract with a customer should be recognized in accordance with ASC 606. Further, Section 2.3.5.1 discusses indicators of when the variability between the contractually stated price and the amount the entity expects to collect is due to a price concession.

2.5.2.1 Distinguishing Between Optional Purchases and Variable Consideration

Under the revenue standard, an entity must determine its contractual rights and obligations, including whether options for future goods or services give rise to performance obligations under a current contract with a customer . In considering how to apply the guidance on optional purchases for which an entity does not identify a material right, stakeholders have questioned whether and, if so, when customer options to acquire additional goods or services would be considered (1) a separate contract that arises when the option is exercised or (2) variable consideration for which an entity would be required to estimate the amount of consideration to include in the original contract's transaction price (subject to the standard's constraint on variable consideration). That is, stakeholders have raised questions about when an entity, as part of determining its transaction price, should estimate customers' future purchases that may be made under options for additional goods or services.

The revenue standard does not require or allow an entity to estimate the transaction price of future contracts into which it will enter with a customer. This assertion is supported by the FASB and IASB in paragraph BC186 of ASU 2014-09, which states that "the transaction price should include only amounts (including variable amounts) to which the entity has rights under the **present** contract" (emphasis added).

Further, an entity should perform an evaluation of the nature of its promises in a contract with a customer, including a careful evaluation of the enforceable rights and obligations in the present contract (not future contracts). That is, there is a distinction between (1) customer options and (2) uncertainty that is accounted for as variable consideration.

Customer options are predicated on a separate customer action (namely, the customer's decision to exercise the option), which would not be embodied in the present contract; unless an option is a material right, such options would not factor into the accounting for the present contract. If an option to acquire additional goods or services represents a material right, part of the transaction price is allocated to that material right, and recognition of a portion of revenue is deferred (see ASC 606-10-55-41 through 55-45). The additional goods or services are not themselves performance obligations under the contract; instead, the option to acquire them is treated as a performance obligation if it represents a material right.

Enforceable rights and obligations in a contract are only those for which the entity has legal rights and obligations under the contract and would not take economic or other penalties into account (e.g., (1) economic compulsion or (2) exclusivity because the entity is the sole provider of the goods or services, which may make the future deliverables highly probable of occurring).

In contrast, uncertainty is accounted for as variable consideration when the entity has enforceable rights and obligations under a present contract to provide goods or services without an additional customer decision. ASC 606 deals separately with the appropriate accounting for "variable consideration" when the consideration promised in a contract includes a variable amount (see ASC 606-10-32-5 through 32-14). For example, there may be uncertainty in a long-term contract that includes variability because of other factors (e.g., variable quantities that affect the consideration due under the contract). Entities should consider the need to take variability of this nature into account in determining the transaction price.

An entity will need to evaluate the nature of its promises under a contract and use judgment to determine whether the contract includes (1) an option to purchase additional goods or services (which the entity would need to evaluate for a material right) or (2) a single performance obligation for which the quantity of goods or services to be transferred is not fixed at the outset (which would give rise to variable consideration).

In exercising such judgment, an entity may find the following indicators helpful:

- A determination that an entity's customer can make a separate purchasing decision with respect to additional distinct goods or services and that the entity is not obliged to provide those goods or services before the customer exercises its rights would be indicative of an option for additional goods or services. For example, suppose that an entity enters into a five-year exclusive master supply agreement with a customer related to components that the customer uses in its products. The customer may purchase components at any time during the term of the agreement, but it is not obliged to purchase any components. Each time the customer elects to purchase a component from the entity represents a separate performance obligation of the entity.
- Conversely, if future events (which may include a customer's own actions) will not oblige an entity to provide a customer with additional *distinct* goods or services, any additional consideration triggered by those events would be accounted for as variable consideration. For example, suppose that an entity agrees to process all transactions for a customer in exchange for fees that are based on the volume of transactions processed, but the volume of transactions is not known at the outset and is outside the control of both the entity and the customer. The performance obligation is to provide the customer with continuous access to transaction processing for the contract period. The additional transactions processed are not distinct services; rather, they are part of the satisfaction of the single performance obligation to process transactions, and the variability in transactions processed results in variable consideration.

2.5.2.2 Methods of Estimating Variable Consideration

Regardless of the form of variability or its complexity, once variable consideration is identified, an entity is generally required under ASC 606-10-32-8 to estimate the amount of variable consideration to determine the transaction price in a contract with a customer by using either the "expected value" method or the "most likely amount" method, "depending on which method the entity expects to better predict the amount of consideration to which it will be entitled." As ASC 606-10-32-8 explains, the expected value is "the sum of probability-weighted amounts in a range of possible consideration amounts. An expected value may be an appropriate estimate of the amount of variable consideration if an entity has a large number of contracts with similar characteristics." ASC 606-10-32-8 further states that the most likely amount is "the single most likely amount in a range of possible consideration amounts (that is, the single most likely outcome of the contract)."

2.5.2.3 Constraining Estimates of Variable Consideration

Since revenue is one of the most important metrics to users of financial statements, the FASB and IASB and their constituents agreed that estimates of variable consideration are useful only to the extent that an entity is confident that the revenue recognized as a result of those estimates will not be subsequently reversed. Accordingly, as noted in paragraph BC203 of ASU 2014-09, the boards acknowledged that some estimates of variable consideration should not be included in the transaction price if the inherent uncertainty could prevent a faithful depiction of the consideration to which the entity expects to be entitled in exchange for delivering goods or services. Thus, the focus of the boards' deliberations on a mechanism to improve the usefulness of estimates in revenue as a predictor of future performance was to limit subsequent downward adjustments in revenue (i.e., reversals of revenue recognized). The result of those deliberations is what is commonly referred to as the "constraint."

ASC 606-10-32-11 and 32-12 describe the constraint and provide guidance on how it should be applied.

ASC 606-10

32-11 An entity shall include in the transaction price some or all of an amount of variable consideration estimated in accordance with paragraph 606-10-32-8 only to the extent that it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is subsequently resolved.

32-12 In assessing whether it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur once the uncertainty related to the variable consideration is subsequently resolved, an entity shall consider both the likelihood and the magnitude of the revenue reversal. Factors that could increase the likelihood or the magnitude of a revenue reversal include, but are not limited to, any of the following:

a. The amount of consideration is highly susceptible to factors outside the entity's influence. Those factors may include volatility in a market, the judgment or actions of third parties, weather conditions, and a high risk of obsolescence of the promised good or service.
b. The uncertainty about the amount of consideration is not expected to be resolved for a long period of time.
c. The entity's experience (or other evidence) with similar types of contracts is limited, or that experience (or other evidence) has limited predictive value.
d. The entity has a practice of either offering a broad range of price concessions or changing the payment terms and conditions of similar contracts in similar circumstances.
e. The contract has a large number and broad range of possible consideration amounts.

Importantly, the constraint does not apply to sales- or usage-based royalties derived from the licensing of IP; rather, consideration from such royalties is only recognized as revenue at the later of when the performance obligation is satisfied or when the uncertainty is resolved (e.g., when subsequent sales or usage occurs).

Inherent in ASC 606-10-32-12 are three key aspects of the assessment necessary for an entity to determine whether an estimate of variable consideration in a contract with a customer should be constrained in an entity's transaction price:

- The likelihood of a reversal in the cumulative amount of revenue recognized (i.e., a qualitative aspect).
- The magnitude (or significance) of the potential reversal in the cumulative amount of revenue recognized (i.e., a quantitative aspect).
- The threshold that triggers a constrained estimate (i.e., the use of "probable").

Although the guidance on constraining estimates of variable consideration is intended to avoid significant downward adjustments in revenue after it has been recognized, we generally do not think that it would be appropriate to constrain 100 percent of an estimate of variable consideration. That is, we do not think that the factors in ASC 606-10-32-12 could be so significant that an estimate of variable consideration should be entirely constrained from the transaction price. This concept is different from a $0 *estimate* of variable consideration. A 100 percent constraint on an estimate of variable consideration that is not $0, however, would generally go against the measurement principle of ASC 606, which is to include in the transaction price the amount to which an entity expects to be entitled for its performance so that the entity can provide financial statement users a better prediction of future revenues.

While the above is a general interpretation, there are exceptions in the revenue standard that may allow for a 100 percent constraint on an estimate of variable consideration. Example 25 in ASC 606-10-55 discusses an exception in which market-based factors are a significant driver of variability in the transaction price. Also, in paragraph BC415 of ASU 2014-09, the boards discuss their rationale for providing an exception for sales- or usage-based royalties in a license of IP.

2.5.2.4 Volume-Based Rebates

An entity may offer its customers rebates or discounts on the pricing of products or services once specific volume thresholds have been met. That is, an entity may either retrospectively or prospectively adjust the price of its goods or services once a certain volume threshold has been met.

A volume rebate or discount that is **retrospectively** applied should be accounted for under ASC 606 as variable consideration (rather than as a customer option to be evaluated as a potential material right). In accordance with ASC 606-10-32-6, which specifically includes discounts and rebates as a form of variable consideration, the "promised consideration also can vary if an entity's entitlement to the consideration is **contingent on the occurrence or nonoccurrence of a future event**" (emphasis added).

However, an offer to prospectively lower the price per unit (once certain volume thresholds are met) should not be accounted for as variable consideration. Rather, when a volume rebate or discount is applied prospectively, an entity will need to evaluate the facts and circumstances of each contract to determine whether the rebate or discount represents a material right and therefore should be accounted for as a performance obligation. As part of this evaluation, the entity would consider whether the offer to the customer is at a price that would reflect the stand-alone selling price for that good or service, in accordance with ASC 606-10-55-43.

Example 2-51

Rebate Applied Retrospectively

Entity X enters into a contract with a customer to license software. Under the terms of the contract, each license is sold for $10, but if the customer purchases more than 100 licenses in a calendar year, the price will be reduced retrospectively to $8 per license. The contract does not include any minimum purchase commitments.

In this example, the volume rebate of $2 is applied retrospectively. It should be accounted for as variable consideration under ASC 606-10-32-5 through 32-14 because X's entitlement to consideration for each license sold is contingent on the occurrence of a future event (i.e., the customer's buying more than 100 licenses).

Accordingly, X is required to estimate the amount of consideration to which it will be entitled for each license by using either the expected value method or the most likely amount (whichever is considered to better predict the amount of consideration to which X will be entitled). The $2 variable consideration should only be included in the transaction price if it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur (i.e., it is likely that the customer will not purchase more than 100 licenses).

Example 2-52

Rebate Applied Prospectively

Entity Y enters into a contract with a customer to license software. Under the terms of the contract, each license is sold for $10, but if the customer purchases more than 100 licenses in a calendar year, the price will be reduced prospectively to $8 per license (i.e., the $8 price applies only for subsequent purchases). The contract does not include any minimum purchase commitments.

In this example, the customer has an option to purchase additional licenses at a reduced price of $8 per unit, which should be accounted for in accordance with ASC 606-10-55-41 through 55-45. Entity Y will need to evaluate the facts and circumstances to determine whether the option gives rise to a performance obligation. The option would give rise to a performance obligation if it provides a material right to the customer that the customer would not receive without purchasing the first 100 licenses. As part of this evaluation, Y should consider whether the reduced price offered to the customer ($8 per license) reflects the stand-alone selling price for the licenses, in accordance with ASC 606-10-55-43.

Example 2-53

Reassessment of Volume Discounts Applied Retrospectively

Assume the same facts as those in Example 2-51, as well as the following additional information:

- Entity X initially estimated total sales of 90 licenses. The $2 variable consideration was included in the transaction price because X believed that it was probable that a significant reversal in the amount of cumulative revenue recognized would not occur (i.e., it was likely that the customer would not purchase more than 100 licenses).
- Entity X sells 10 licenses during the first quarter, sells 20 licenses during the second quarter, and sells 60 licenses during the third quarter.
- In light of recent sales activity, X increases its estimate of total sales volume for the year to 120 licenses.

Example 2-53 (continued)

In this example, X will be required to effectively reduce the price per license to $8. Accordingly, X should update its calculation of the transaction price to reflect the change in estimate. The updated transaction price is $8 per license, which is based on the recent increase in sales activity and updated sales volume. Therefore, X should recognize revenue of $420 for the third quarter, which is calculated as follows:

$8 per license × 60 licenses sold during third quarter	$ 480
Less: $2 per license ($10 – $8) × 30 licenses previously sold	(60)*
Total revenue recognized in third quarter	$ 420

* The cumulative catch-up adjustment reflects the revenue that X would have recognized if the sales volume information that is now available had been available to X at contract inception.

2.5.2.5 Sales- or Usage-Based Royalty Exception

An entity may license its IP to a customer and in exchange receive consideration that may include fixed and variable amounts. Certain licensing arrangements require the customer to pay the entity a variable amount based on the underlying sales or usage of the IP (a "sales- or usage-based royalty"). Although the revenue standard requires an entity to estimate and constrain variable consideration in a contract with a customer, the FASB and IASB decided to create an exception to the general model for consideration in the form of a sales- or usage-based royalty related to licenses of IP.

Under the sales- or usage-based royalty exception to the revenue standard's general rule requiring an entity to include variable consideration in the transaction price, if an entity is entitled to consideration in the form of a sales- or usage-based royalty, revenue is not recognized until (1) the underlying sales or usage has occurred and (2) the related performance obligation has been satisfied (or partially satisfied). That is, an entity is generally not required to estimate the amount of a sales- or usage-based royalty at contract inception; rather, revenue would be recognized as the subsequent sales or usage occurs (under the assumption that the associated performance obligation has been satisfied or partially satisfied).

The sales- or usage-based royalty exception only applies if the royalty is associated with a license of IP that is the predominant item. For example, if the royalty is associated with a software license, PCS, and other services provided to a customer, the exception would apply if the customer can reasonably expect the software license (and any related updates to the license) to have significantly more value than the services.

2.5.2.5.1 Application of the Sales- or Usage-Based Royalty Exception to Guaranteed Minimum Royalties Related to Functional IP

Sometimes, the sales- or usage-based royalty may be subject to a minimum guarantee, which establishes a floor for the amount of consideration to be paid to the entity. The sales- or usage-based royalty exception applies only when the consideration due under the licensing agreement is variable and the variability is directly related to sales or usage of the underlying IP. That is, the exception does not apply to any fixed consideration in a licensing arrangement.

If there are no other performance obligations, a minimum guarantee related to functional IP (i.e., a right-to-use license) should be recognized as revenue at the point in time that the entity transfers control of the license to the customer. Any royalties that exceed the minimum guarantee should be recognized as the subsequent sales or usage related to the IP occurs, in accordance with ASC 606-10-55-65.

Example 2-54

Entity LH enters into a five-year software license agreement with Customer MC under which MC can embed the software in MC's hardware product in exchange for royalties from MC's sales and usage of the IP. In addition, the contract contains a minimum guarantee of $1 million per year.

Ignoring potential effects of financing, LH should recognize the total minimum guarantee of $5 million for the contract when control of the software license is transferred to the customer and the license period begins. This is because (1) the $5 million is fixed as a result of the minimum guarantee and (2) the underlying IP (i.e., the software) is functional (revenue is recognized at a point in time). Additional royalties that exceed the $1 million minimum guarantee in any year should be recognized as the subsequent sales and usage occur.

2.5.2.5.2 Application of the Sales- or Usage-Based Royalty Exception to a Refundable Up-Front Payment

There are certain situations in which (1) an up-front payment is made for the sale of a license and (2) the up-front payment is refundable depending on actual sales or usage of the license. In these cases, we believe that the sales- or usage-based royalty exception would apply.

Example 2-55

Entity S licenses its software (i.e., functional IP) to an OEM, which then integrates S's software with its own software for inclusion in hardware devices (e.g., computers, tablets, and smart devices) to be sold to end users. Entity S sells 5,000 licenses to the OEM for $10 per license (i.e., $50,000 in total consideration) that is paid at contract inception. In addition, S provides the OEM with 5,000 activation keys, each of which allows the OEM to download S's software for integration with the OEM's software to be included in one hardware device. The license agreement allows the OEM to acquire additional software licenses for $10 per license by requesting additional activation keys, which S readily provides to the OEM. Entity S has concluded that providing additional license keys to the OEM does not transfer any additional rights not already controlled by the OEM.

The OEM can return any activation keys that are paid for but not used to download and integrate the software for inclusion in the OEM's devices. The OEM will receive a refund of $10 per license for any activation keys returned.

Because S's consideration for the transfer of the licensed software (i.e., functional IP) is contingent on the OEM's subsequent usage, S must apply the sales- or usage-based royalty exception described in ASC 606-10-55-65. It would not be appropriate for S to recognize revenue from the sale of the license with the right of return before the OEM's subsequent usage.

Although the OEM has paid for the activation keys at contract inception, because the amounts are refundable to the extent that the OEM does not use the IP by integrating it with the OEM's software to be included in hardware devices, the consideration is in the form of a sales- or usage-based royalty. Entity S would therefore be prohibited from recognizing revenue until the subsequent sale or usage of the IP occurs (in accordance with 606-10-55-65(a)). That is, it would not be appropriate for S to estimate and constrain the amount of consideration to which it expects to be entitled and recognize such at the time the initial 5,000 licenses are transferred to the OEM.

2.5.2.5.3 Recognition of Sales-Based Royalties When Information Is Received From the Licensee After the End of the Reporting Period

In certain licensing arrangements for which the consideration received from the customer is based on the subsequent sales of IP, information associated with those subsequent sales may not be available before the end of the reporting period. Provided that the related performance obligation has been satisfied or partially satisfied, ASC 606-10-55-65 requires that sales-based royalties received for a license of IP be recognized when the subsequent sale or usage by the licensee occurs. It would not be appropriate to delay recognition until the sales information is received.

Example 2-56

Entity LN enters into a software license with Entity B that allows inclusion of the software in computers that B sells to third parties. Under the terms of the license, LN receives royalties on the basis of the number of computers sold that include the licensed software. Upon delivery of the software to B, LN satisfies the performance obligation to which the sales-based royalty was allocated. Thereafter, LN receives quarterly sales data in arrears, which allow it to calculate the royalty payments due under the license.

Entity LN should recognize revenue (royalty payments) for computer sales made by B up to the end of its reporting period even though sales data had not been received at the end of that reporting period.

In this scenario, royalties should be recognized for sales made by B up to the end of LN's reporting period on the basis of sales data received before LN's financial statements are issued or available to be issued. If necessary, LN should estimate sales made in any period not covered by such data. It would not be appropriate for entities to omit sales-based royalties from financial statements merely because the associated sales data were received after the end of the reporting period or were not received when the financial statements were issued or available to be issued.

This conclusion is consistent with the following view expressed in a speech delivered on June 9, 2016, by then OCA Deputy Chief Accountant Wesley Bricker at the 35th Annual SEC and Financial Reporting Institute Conference:

> The standard setters did not provide a lagged reporting exception with the new standard. Accordingly, I believe companies should apply the sales- and usage-based royalty guidance as specified in the new standard. The reporting, which may require estimation of royalty usage, should be supported by appropriate internal accounting controls.

2.5.3 Significant Financing Components

In certain contracts with customers, one party may provide a service of financing (either explicitly or implicitly) to the other. Such contracts effectively contain two transactions: one for the delivery of the good or service and another for the benefit of financing (i.e., what is in substance a loan payable or loan receivable). An entity should account for both transactions included in a contract with a customer when the benefit of the financing provided is significant.

In determining the transaction price, an entity adjusts the promised amount of consideration to determine the cash selling price of the good or service to be delivered and reflect the time value of money if the contract has a significant financing component. The direction of the financing component (i.e., whether financing is provided to the entity through an advance payment or to the customer through payments in arrears) is irrelevant to the assessment, and as a result of the adjustment to the transaction price, the entity could recognize interest expense or interest income.

However, ASC 606-10-32-18 provides a practical expedient under which an entity does not need to adjust the promised amount of consideration for the effects of a significant financing component "if the entity expects, at contract inception, that the period between when the entity transfers a promised good or service to a customer and when the customer pays for that good or service will be one year or less."

Entities must use judgment in determining whether a significant financing component exists. However, ASC 606-10-32-17 notes that a contract with a customer would not have a significant financing component if certain factors exist.

ASC 606-10

32-17 Notwithstanding the assessment in paragraph 606-10-32-16, a contract with a customer would not have a significant financing component if any of the following factors exist:

a. The customer paid for the goods or services in advance, and the timing of the transfer of those goods or services is at the discretion of the customer.
b. A substantial amount of the consideration promised by the customer is variable, and the amount or timing of that consideration varies on the basis of the occurrence or nonoccurrence of a future event that is not substantially within the control of the customer or the entity (for example, if the consideration is a sales-based royalty).
c. The difference between the promised consideration and the cash selling price of the good or service (as described in paragraph 606-10-32-16) arises for reasons other than the provision of finance to either the customer or the entity, and the difference between those amounts is proportional to the reason for the difference. For example, the payment terms might provide the entity or the customer with protection from the other party failing to adequately complete some or all of its obligations under the contract.

The following are examples of arrangements in which a significant financing component would not exist:

- Prepayment of minimum usage commitments in SaaS arrangements.
- Customer loyalty programs.
- Sales-based royalties.
- Prepayments to secure supply of goods.

The following example in ASC 606 illustrates a situation in which a significant financing component does not exist:

ASC 606-10

Example 30 — Advance Payment

55-244 An entity, a technology product manufacturer, enters into a contract with a customer to provide global telephone technology support and repair coverage for three years along with its technology product. The customer purchases this support service at the time of buying the product. Consideration for the service is an additional $300. Customers electing to buy this service must pay for it upfront (that is, a monthly payment option is not available).

55-245 To determine whether there is a significant financing component in the contract, the entity considers the nature of the service being offered and the purpose of the payment terms. The entity charges a single upfront amount, not with the primary purpose of obtaining financing from the customer but, instead, to maximize profitability, taking into consideration the risks associated with providing the service. Specifically, if customers could pay monthly, they would be less likely to renew, and the population of customers that continue to use the support service in the later years may become smaller and less diverse over time (that is, customers that choose to renew historically are those that make greater use of the service, thereby increasing the entity's costs). In addition, customers tend to use services more if they pay monthly rather than making an upfront payment. Finally, the entity would incur higher administration costs such as the costs related to administering renewals and collection of monthly payments.

ASC 606-10 (continued)

55-246 In assessing the guidance in paragraph 606-10-32-17(c), the entity determines that the payment terms were structured primarily for reasons other than the provision of finance to the entity. The entity charges a single upfront amount for the services because other payment terms (such as a monthly payment plan) would affect the nature of the risks assumed by the entity to provide the service and may make it uneconomical to provide the service. As a result of its analysis, the entity concludes that there is not a significant financing component.

2.5.4 Noncash Consideration

When providing goods or services, an entity may receive noncash consideration from its customers (e.g., goods, services, shares of stock). It is not uncommon for companies in the technology industry to enter into revenue transactions with customers that involve receiving equity or other noncash consideration from the customer. Step 3 requires entities to include the fair value of the noncash consideration in the transaction price. Further, changes in the fair value of noncash consideration for reasons other than its form would be subject to the variable consideration constraint in ASC 606-10-32-11 through 32-13.

The measurement date for noncash consideration is the "contract inception" date, which is the date on which the criteria in step 1 are met (i.e., the criteria in ASC 606-10-25-1). In addition, the transaction price does not include any changes in the fair value of the noncash consideration after the contract inception date that are due to its form. Further, if changes in noncash consideration are due both to its form and to reasons other than its form, only variability resulting from changes in fair value that are due to reasons other than the consideration's form is included in the transaction price as variable consideration (and thus also subject to the variable consideration constraint).

Some stakeholders asked the FASB to clarify how the fair value of noncash consideration should be measured on the contract inception date. As noted in paragraph BC39 of ASU 2016-12, the FASB elected not to clarify the measurement process because it believes that "the concept of fair value exists in other parts of [ASC] 606," and an entity will need to use judgment in determining fair value. In addition, ASC 606-10-32-21 and 32-22 require an entity to first look to measure the estimated fair value of the noncash consideration and then consider the stand-alone selling price of the goods or services promised to the customer only when the entity is unable to reasonably estimate the fair value of the noncash consideration.

2.5.4.1 Noncash Consideration in the Form of Internet Advertisement Space in the Advertisement Technology Industry

Noncash consideration may sometimes be used in the advertisement technology industry — specifically, an entity may be paid in the form of Internet advertising space (commonly referred to as "impressions"). In addition, the total number of impressions received by the entity may vary depending on the number of impressions generated by the customer. In such situations, the noncash consideration would also represent a form of variable consideration.

Unlike some other forms of noncash consideration, impressions generated in the advertisement technology industry do not represent assets that are transferred to the entity at contract inception. Rather, the impressions will be generated in the future and therefore will become assets of the entity when the impressions are generated and control of the impressions is transferred to the entity. Consequently, the entity does not have control of the impressions at contract inception.

The entity should not recognize the fair value of the impressions promised by the customer until control of the impressions is transferred to the entity. This determination is consistent with the guidance in ASC 606-10-32-24, which requires an entity to account for contributed goods or services as noncash consideration if the entity obtains control of those contributed goods or services. Although ASC 606-10-32-24 focuses on the evaluation of whether an entity should account for goods or services contributed by a customer as noncash consideration received from the customer, it also helps an entity understand when noncash consideration should be recognized. That is, the guidance in ASC 606-10-32-24 indicates that noncash consideration should be recognized only when control of the consideration is transferred to the entity.

Example 2-57

Company A enters into an arrangement with Company B in which A will provide a service to B ratably over a four-month period in exchange for cash of $1 million (payable in equal increments of $250,000 at the beginning of each month) and Internet advertising space (i.e., "impressions") on B's Web platform. In the arrangement, B does not promise a specified number or amount of impressions but promises a specified percentage of impressions generated on B's Web platform; therefore, the number of users who will view A's advertisement on B's Web platform is unknown.

Company A should treat the impressions as variable consideration and estimate the fair value of the impressions expected to be generated and transferred by B at contract inception. In this case, A estimates that it will receive 20 million impressions at a fair value of $10 cost per mille (CPM) — that is, $10 cost per 1,000 impressions — for a total fair value of $200,000. However, because control of the impressions has not been transferred to A at contract inception, A would not record an asset for the estimated fair value of the impressions to be received.

At the end of the first month of the service contract, B has generated 8 million impressions and transferred them to A. On the basis of the fair value of $10 CPM estimated at contract inception, A has received from B noncash consideration totaling $80,000, or 8 million impressions × ($10 ÷ 1,000 impressions). However, since A has performed only 25 percent of its promised service to B (one month's service to date under the four-month service contract), only $300,000 of revenue has been earned ($1.2 million × 25%). Therefore, A should record revenue of $300,000 and a contract liability of $30,000 for the impressions received that have not yet been earned, which is calculated as $330,000 consideration received ($250,000 cash and $80,000 noncash) less $300,000 recognized as revenue. If, instead, A received 3 million impressions for noncash consideration of $30,000, or 3 million impressions × ($10 ÷ 1,000 impressions), A should record a contract asset of $20,000, or $280,000 consideration received ($250,000 cash and $30,000 noncash) compared with $300,000 recognized as revenue.

Note that this example represents a simple fact pattern and does not contemplate changes or updates to the number of impressions that A would be granted under the arrangement.

2.5.5 Consideration Payable to a Customer

If an entity makes (or promises to make) a cash payment to a customer in (or related to) a contract with that customer to subsequently receive the return of that cash through purchases of its goods or services by the customer, the economics of the transaction do not justify the entity's recognition of revenue without consideration of the amounts it paid to the customer. As a result, ASC 606 generally precludes the "grossing up" of revenue for the amounts paid to the customer. This ensures that payments made to a customer are appropriately reflected as a reduction of revenue such that revenue is presented on a "net basis" to more appropriately reflect the economics of the arrangements.

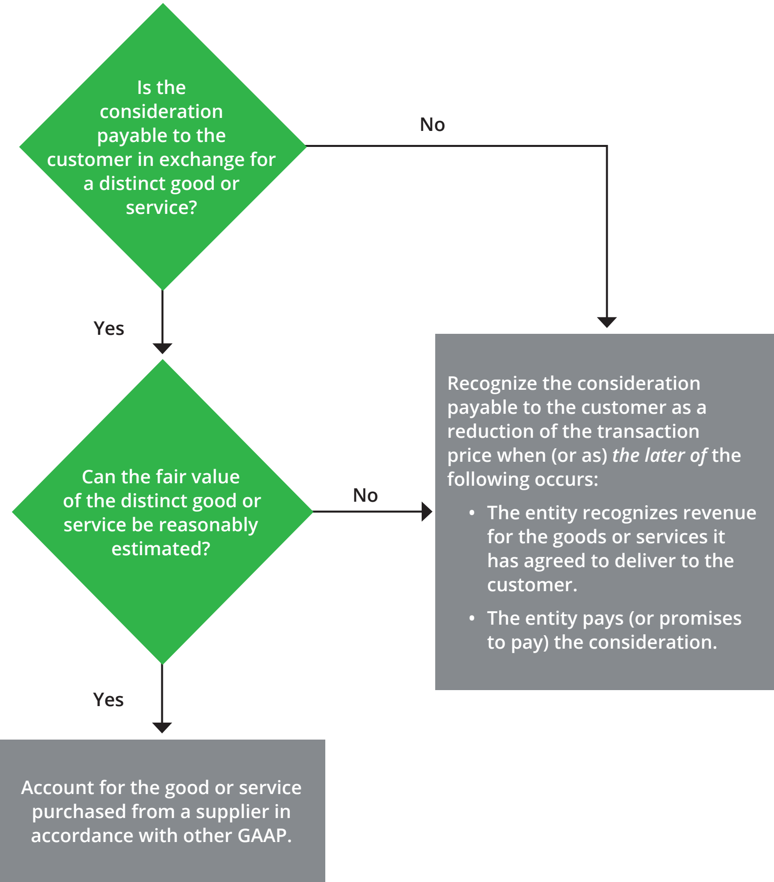
Connecting the Dots

In June 2018, the FASB issued ASU 2018-07 to improve the accounting for nonemployee share-based payments. The ASU amends ASC 606-10-32-25 by expanding the scope of the guidance in that paragraph on consideration payable to a customer to include equity instruments granted in

conjunction with the sale of goods or services. In addition, if share-based payments are granted to a customer as payment for a distinct good or service from the customer, an entity should apply the guidance in ASC 718.

In November 2019, the FASB issued ASU 2019-08 on share-based consideration payable to a customer, which clarifies the accounting for share-based payments issued as consideration payable to a customer in accordance with ASC 606 (i.e., share-based consideration payable to a customer that is not in exchange for distinct goods or services). ASU 2019-08 requires that entities measure and classify share-based sales incentives by applying the guidance in ASC 718. Accordingly, under the ASU, entities should measure share-based sales incentives by using a fair-value-based measure on the grant date, which would be the date on which the grantor (the entity) and the grantee (the customer) reach a mutual understanding of the key terms and conditions of the share-based sales incentive. The resulting measurement of the share-based sales incentive should be reflected as a reduction of revenue in accordance with the guidance in ASC 606 on consideration payable to a customer. After initial recognition, the measurement and classification of the share-based sales incentive continues to be subject to ASC 718 unless (1) the award is subsequently modified when vested and (2) the grantee is no longer a customer. The amendments in the ASU apply to share-based sales incentives issued to customers under ASC 606 that are not in exchange for distinct goods or services.

Consideration in a contract with a customer may be payable by an entity to its customer in various forms (e.g., a cash discount, or a payment in exchange for good or services). Accordingly, an entity should consider the following thought process in determining how to account for consideration payable to its customer:



2.5.5.1 Scope of the Guidance on Consideration Payable to a Customer

2.5.5.1.1 Identifying Customers Within the Scope of the Requirements Related to Consideration Payable to a Customer

ASC 606-10-32-25 through 32-27 establish requirements related to consideration payable to a customer. ASC 606-10-32-25 states that those requirements apply to (1) an entity's customer (defined in the ASC 606 glossary as a "party that has contracted with an entity to obtain goods or services that are an output of the entity's ordinary activities in exchange for consideration") and (2) other parties that purchase the entity's goods or services from the customer (commonly referred to as other parties "in the distribution chain," such as a reseller).

The requirements should be applied more broadly to include parties outside the distribution chain depending on the facts and circumstances. ASC 606-10-32-25 is clear that the requirements of ASC 606-10-32-25 through 32-27 apply to parties in the distribution chain. In addition, depending on the circumstances, an entity might identify a customer beyond the distribution chain. In some instances, an agent that arranges for a supplier (the principal) to supply goods to a third party (the end customer) might regard both the principal and the end customer as its customers. In this circumstance, any incentive payment to the end customer should be treated as consideration payable to a customer.

In addition, regardless of whether the end customer is the agent's customer, if the agent has an agreement with the principal to provide consideration to the end customer (e.g., to incentivize the end customer to purchase the principal's goods or services), the entity acting as an agent should treat the consideration payable to the end customer as consideration payable to a customer (i.e., a reduction of revenue rather than an amount recognized as an expense) in accordance with ASC 606-10-32-25 through 32-27.

An agent's agreement with the principal to provide consideration to the end customer may not have to be explicit. That is, contractual linkage is not necessarily required for the incentive payment to be treated as consideration payable to a customer. Depending on the facts and circumstances, an incentive payment could be implicitly agreed to (i.e., the principal may have a reasonable expectation that the incentive payment will be provided to its customers) and could represent consideration payable to a customer. Significant judgment may be required to determine whether an implicit agreement to provide an incentive to the principal's customer results in consideration payable to a customer, and any information that is reasonably available to the principal's customer should be considered.

Example 2-58

Entity AR is a platform company that provides a marketplace for merchants to sell certain used products to consumers. Entity AR derives revenue from the merchants' use of the platform by collecting a fee (fixed percentage) for each transaction a merchant has with a consumer. Entity AR concludes that the merchants are its customers but consumers are not its customers. Entity AR's sole performance obligation is to provide a platform to connect merchants with consumers. That is, AR considers itself to be acting as an agent when the merchants sell products directly to consumers.

Entity AR regularly offers credits (i.e., discounts) on all products purchased by consumers through the platform to encourage consumer use of the platform and to attract new consumers. However, AR is not obligated to provide discounts under its agreements with the merchants, and the discounts do not affect the consideration the merchants receive from sales of their products. Nevertheless, the merchants are aware of the details of AR's offerings because AR routinely mentions the incentives in advertising campaigns and on its own Web site.

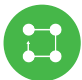
Although AR is not contractually required to provide credits to consumers, the merchants (i.e., AR's customers) are aware of the offerings and have a reasonable expectation of benefiting from them. Further, although AR also benefits from the offerings through increased use of the platform, that benefit is not a good or service that is distinct from the platform services provided to the merchants that benefit from the offerings through increased sales on the platform. Entity AR therefore concludes that the credits should be accounted for as consideration payable to a customer and records such amounts as a reduction of revenue.

Example 2-59

Assume the same facts as in the example above, except for the following:

- Entity AR does not regularly offer credits to consumers. Rather, AR occasionally offers ad hoc credits as a short-term marketing strategy to penetrate certain markets via e-mail campaigns.
- The details of the offerings are not available to the merchants even after they are provided to consumers.

Because the merchants are unaware of the ad hoc credits, new or existing merchants do not have a reasonable expectation of benefiting from the credits provided to consumers. Therefore, AR may conclude that the credits are not paid on behalf of its customers. That is, AR may conclude that the credits are not consideration payable to a customer and instead can be separately accounted for as sales and marketing expenses when incurred. However, before making this determination, AR should carefully consider any information about the offerings that is reasonably available to the merchants. If information about the offerings is reasonably available to the merchants, the credits may need to be accounted for as consideration payable to a customer.



Connecting the Dots

At the 2021 AICPA & CIMA Conference on Current SEC and PCAOB Developments, OCA Senior Associate Chief Accountant Jonathan Wiggins discussed a scenario in which an entity that operates a marketplace platform and is acting as an agent must determine which party or parties are the entity's customers. This assessment is particularly important when the entity offers incentives to one or more parties involved in the arrangement. Mr. Wiggins referred to isolated fact patterns in which platform entities have concluded that they are seller agents and were able to support the presentation of certain incentives paid to the end user as a marketing expense rather than as a reduction of revenue. He cautioned that an entity's specific facts and circumstances may not support this accounting and financial reporting conclusion and that the SEC staff has objected to recognizing incentives as a marketing expense in certain circumstances. In addition, he advised that an entity acting as a seller agent should consider whether it has multiple customers, including whether it receives consideration from both the seller and the end user. Mr. Wiggins noted that even if the entity concludes that it has only one customer (i.e., the seller), the entity should consider whether it has made an implicit or explicit

promise to provide incentives to the end user on the seller's behalf. Further, the entity should consider whether incentives are an in-substance price concession because the seller has a valid expectation that the entity will provide the incentives to the end user buying the good or service.

In considering the SEC staff's views, we believe that determining whether there is an implicit promise to provide incentives to the end users on the seller's behalf and whether the seller has a valid expectation that the entity (i.e., the entity acting as a seller agent) will provide incentives to the end users requires an understanding of the entity's facts and circumstances. The entity should analyze all communications with the seller and the type of information that the seller might have about the entity's incentive program. If information about the incentives is reasonably available to the seller, those incentives may be deemed to be consideration payable to a customer (i.e., incentives paid on the seller's behalf).

2.5.5.1.2 Identifying Payments Within the Scope of the Requirements Related to Consideration Payable to a Customer

In accordance with ASC 606-10-32-25, consideration payable to a customer includes the following:

a. Cash amounts that an entity pays, or expects to pay, to the customer (or to other parties that purchase the entity's goods or services from the customer)

b. Credit or other items (for example, a coupon or voucher) that can be applied against amounts owed to the entity (or to other parties that purchase the entity's goods or services from the customer)

c. Equity instruments (liability or equity classified) granted in conjunction with selling goods or services (for example, shares, share options, or other equity instruments).

An entity should account for consideration payable to a customer as a reduction of the transaction price and, therefore, of revenue unless the payment to the customer is in exchange for a distinct good or service (typically resulting in the recognition of an asset or expense).

An entity should assess the following payments to customers under ASC 606-10-32-25 to determine whether they are in exchange for a distinct good or service:

- Payments to customers that result from a contractual obligation (either implicitly or explicitly).
- Payments made on behalf of customers that are considered in-substance price concessions because the customer has a reasonable expectation of such payments (either implicitly or explicitly).
- Purchases made on behalf of customers in lieu of making cash payments to those customers.
- Payments to customers that can be economically linked to revenue contracts with those customers.

While an entity is not required to separately assess and document each payment made to a customer, an entity should not disregard payments that extend beyond the context of a specific revenue contract with a customer. Rather, an entity should use reasonable judgment when determining how broadly to apply the guidance on consideration payable to a customer to determine whether the consideration provided to the customer is in exchange for a distinct good or service (and is therefore an asset or expense) or is not in exchange for a distinct good or service (and is therefore a reduction of revenue).

Payments made to third parties on behalf of customers can come in many forms and may not necessarily be incentives paid to a customer's customer to be deemed consideration payable to a customer. For example, an entity might pay a fee to a financing company that enables the entity's customer to obtain a favorable borrowing rate for a loan the customer uses to pay for the entity's product. In this example, the payment to the financing company would be linked to the revenue contract with that customer and is being made on behalf of (and for the benefit of) that customer. Therefore, the fee paid would be deemed consideration payable to a customer and should be recorded as a reduction of revenue.

In determining whether a payment made to a third party is on behalf of a customer, the entity making the payment should consider whether it receives a distinct good or service from the third party. In the above example, the entity does not receive a distinct good or service because (1) the customer is the party that obtains the favorable financing from the third party (i.e., the entity is not the party that receives a good or service from the third party for making the payment) and (2) the benefit the entity receives from making the payment is not distinct from the product sold in its revenue contract with the customer.

Further, in determining whether a payment made to a third party is on behalf of a customer, the entity making the payment might consider whether it is acting as a principal or as an agent when the customer receives the good or service provided by the third party. For example, if an entity (1) sells a service to a customer, (2) pays a third party for a distinct good that is provided to the customer for free, and (3) is the principal in providing that good to the customer because it obtains control over that good before the good is transferred to the customer, the entity may determine that the payment made to the third party should be reflected as cost of sales. In this circumstance, the good provided to the customer may be considered a separate performance obligation in the entity's revenue contract with the customer. By contrast, if the entity is an agent in facilitating the provision of the good to the customer, the payment made to the third party could be deemed consideration payable to a customer because the payment is being made on behalf of the customer.

Example 2-60

Entity G sells SaaS offerings to its customers. To increase its sales, G offers its customers a discount on a one-year subscription to a third-party cybersecurity solution as an incentive for the customers to commit to a three-year SaaS contract with G. To offer the incentive to its customers, the Company partners with Entity H, an unrelated third-party provider of a cloud-based cybersecurity solution.

Entity G's incentive program for its customers is structured as follows:

- The customer enters into a one-year agreement for the cybersecurity solution with H. The terms of the agreement stipulate that the customer is to make payments to H that are significantly less than the normal selling price for the cybersecurity solution. At the direction of the customer, G makes cash payments directly to H to cover the difference between the normal selling price and the discounted fee for the cybersecurity solution.
- The customer executes a separate SaaS contract with G in exchange for G's cash payments to H that commits the customer to a three-year contract with G. Entity G's incremental cash payments to H are required on the basis of G's contract with the customer. Entity G's customer billings for the SaaS offering have sufficient margins to cover G's incremental cash payments to H.
- Entity G does not control the cybersecurity solution provided to the customer at any time. In the event that the customer defaults under its agreement with H, G is not obligated to make payments for the cybersecurity solution.

Example 2-60 (continued)

Entity G's cash payments to H should be accounted for as consideration payable to a customer in accordance with ASC 606-10-32-25 through 32-27 even though H is not G's customer, the customer's customer, or another party in the distribution channel for G's SaaS offering.

The requirements related to consideration payable to a customer should be applied more broadly to include parties outside the distribution chain depending on the facts and circumstances. While G's cash payments are not to its customer's customer, the cash payments to H are required on the basis of G's contract with the customer. Accordingly, G should account for the cash payments to H as consideration payable to a customer. Since G could have made the cash payments directly to the customer, which then could have paid H for the payments related to the cybersecurity solution in their entirety, we believe that there is no difference in the substance of the arrangement.

Further, G does not receive a distinct good or service in exchange for the cash payments to H. Therefore, in accordance with ASC 606-10-32-25 through 32-27, the consideration payable to the customer should be recognized as a reduction of the transaction price when or as the SaaS is transferred to the customer.

2.5.5.1.3 Accounting for an Entity's Participation in Its Customer's Third-Party Financing

In certain revenue transactions, an entity may participate in a customer's third-party financing by (1) providing financial guarantees or indemnifications to the financing party or (2) buying down interest rate points payable to the financing party to give the customer a sales incentive. These types of arrangements may be structured in any of various forms, such as one in which the customer obtains third-party financing to do either of the following:

- Pay for a product up front when the product is delivered.
- Make payments to the entity over time rather than pay any up-front consideration to the entity.

Depending on the facts and circumstances of the particular arrangement, an entity's participation in its customer's third-party financing may (1) affect the entity's assessment that collectibility of substantially all of the consideration to which the entity will be entitled for goods or services transferred to the customer is probable, (2) affect the entity's determination of the transaction price of the entity's contract with the customer, or (3) result in a guarantee within the scope of ASC 460.

When an entity's customer has obtained third-party financing and the entity participates in the financing, the entity should first evaluate whether its participation in the financing results in a guarantee within the scope of ASC 460.

If the entity's participation in the financing is not a guarantee within the scope of ASC 460, the entity should still consider whether the nature of the arrangement may affect the assessment of collectibility or increase the probability that the entity will offer a price concession to the customer. That is, through the entity's participation in the third-party financing, the entity may inherently be more likely to accept an amount that is less than what it is entitled to under the contract. Specifically, the entity will need to evaluate whether (1) its participation in the financing affects its assessment that collectibility of substantially all of the consideration to which the entity will be entitled for goods or services transferred to the customer is probable (step 1) or (2) any potential price concessions represent variable consideration that should be included in the determination of the transaction price (step 3).

In addition, the entity should consider whether the nature of the arrangement includes consideration payable to a customer that would be accounted for as a reduction in the transaction price. If the

payments the entity made to the financing party are contractually or economically linked to the entity's revenue contract with the customer, the entity should account for those payments as consideration payable to a customer.

2.5.5.2 Applying the Guidance on Consideration Payable to a Customer

In many circumstances, application of the guidance on consideration payable to a customer is straightforward because an entity pays a customer a fixed cash amount at the inception of a new contract without receiving any goods or services in return. In these situations, it is clear that the requirements of ASC 606-10-32-25 through 32-27 related to consideration payable to a customer need to be applied. However, application of this guidance can prove to be challenging in other scenarios, such as those in which (1) other third parties are involved or (2) purchases or payments are made on a customer's behalf rather than directly to the customer. An entity may have to make critical judgments in applying the guidance, including those related to (1) determining whether a "distinct" good or service is received from a customer in exchange for a payment, (2) applying the guidance on variable consideration, (3) determining the transaction price when a customer supplies goods or services to the entity, and (4) presentation matters when amounts paid (or payable) to a customer could exceed the consideration to which the entity expects to be entitled from the customer.

When applying the guidance on consideration payable to a customer, an entity may also have to use judgment to identify the *related* revenue so that it can appropriately determine what revenue (or portion of revenue) needs to be reduced. That is, judgment may be required in the determination of whether consideration payable to a customer is related to one or more of the following types of revenue:

- Revenue previously recognized.
- Revenue associated with performance obligations in a current or new contract.
- Revenue from a potential future contract.

The following example in ASC 606 illustrates how an entity would account for consideration payable to a customer:

ASC 606-10

Example 32 — Consideration Payable to a Customer

55-252 An entity that manufactures consumer goods enters into a one-year contract to sell goods to a customer that is a large global chain of retail stores. The customer commits to buy at least $15 million of products during the year. The contract also requires the entity to make a nonrefundable payment of $1.5 million to the customer at the inception of the contract. The $1.5 million payment will compensate the customer for the changes it needs to make to its shelving to accommodate the entity's products.

55-253 The entity considers the guidance in paragraphs 606-10-32-25 through 32-27 and concludes that the payment to the customer is not in exchange for a distinct good or service that transfers to the entity. This is because the entity does not obtain control of any rights to the customer's shelves. Consequently, the entity determines that, in accordance with paragraph 606-10-32-25, the $1.5 million payment is a reduction of the transaction price.

55-254 The entity applies the guidance in paragraph 606-10-32-27 and concludes that the consideration payable is accounted for as a reduction in the transaction price when the entity recognizes revenue for the transfer of the goods. Consequently, as the entity transfers goods to the customer, the entity reduces the transaction price for each good by 10 percent ($1.5 million ÷ $15 million). Therefore, in the first month in which the entity transfers goods to the customer, the entity recognizes revenue of $1.8 million ($2.0 million invoiced amount – $0.2 million of consideration payable to the customer).

2.5.5.2.1 Meaning of "Distinct" Goods or Services

In accordance with ASC 606-10-32-25, consideration payable to a customer should generally be accounted for as a reduction of the transaction price (and, therefore, of revenue). However, ASC 606-10-32-26 provides that if the payment to the customer is in exchange for a distinct good or service that the customer transfers to the entity, the entity should "account for the purchase of the good or service in the same way that it accounts for other purchases from suppliers."

ASC 606-10-32-25 refers to ASC 606-10-25-18 through 25-22 for guidance on the identification of distinct goods or services. Specifically, in the context of consideration payable to a customer, application of ASC 606-10-25-19 would lead to a determination that goods or services are distinct if both of the following criteria are met:

- The entity can benefit from the good or service supplied by the customer (either on its own or together with other resources that are readily available to the entity).
- The customer's promise to transfer the good or service to the entity is separately identifiable from other promises in the entity's revenue contract with the customer (i.e., the customer's promise to transfer the good or service to the entity is distinct within the context of the contract, and the benefit to be received by the entity is separable from the sale of goods or services by the entity to the customer).

Paragraph BC256 of ASU 2014-09 explains that the principle for assessing whether a good or service is distinct is similar to the concept of an "identifiable benefit" previously applied under U.S. GAAP. As stated in paragraph BC256, an identifiable benefit "was described as a good or service that is 'sufficiently separable from the [customer's] purchase of the vendor's products such that the vendor could have entered into an exchange transaction with a party other than a purchaser of its products or services in order to receive that benefit.' "

Note that when an entity concludes that the consideration payable to a customer is for distinct goods or services that the entity receives, the entity is also required to assess whether it can reasonably estimate the fair value of those distinct goods or services.

The examples below discuss common transactions in the technology industry and illustrate how an entity should determine whether the goods or services supplied by a customer are distinct.

Example 2-61

Slotting Fees

Entity X contracts to sell gaming devices and related games to Entity Y, a retailer. As part of the contract, Y promises to display the products in a prime location within its store to encourage sales of those products to the end customer (payments for such services are commonly referred to as "slotting fees").

To determine the appropriate accounting, X considers whether the services provided by Y are "distinct." Entity X concludes that its only substantive benefit from those services will be through additional sales in Y's store and that it would not enter into an exchange transaction with a party other than a purchaser of its products to receive that benefit (i.e., it would not pay for the services if Y were not also purchasing products from X). Consequently, although X believes that it receives benefit from the services provided by Y, it concludes that the benefit received and its own sales of goods to Y are highly interrelated. Therefore, it concludes that the services provided by Y are not sufficiently separable from Y's purchases of X's products to be regarded as distinct.

Accordingly, any payments made, or discounts provided, to Y in exchange for such slotting services should be accounted for as a reduction of the transaction price recognized by X in accordance with ASC 606-10-32-25 and ASC 606-10-32-27.

Example 2-62

Consideration Payable to a Customer in Exchange for Online Advertising

Entity F contracts to sell smart devices to Entity G, an online retailer. As part of the contract, G agrees to advertise F's products prominently on G's online platform in exchange for a fee. If a user clicks the advertisement, it will be directed to purchase F's products on G's online platform.

To determine the appropriate accounting, F considers whether the online advertising services provided by G are "distinct." Entity F concludes that its only substantive benefit from those services will be through additional sales on G's online platform and that it would not pay for the services if G were not also purchasing goods from F. Consequently, although F believes that it receives benefit from the services supplied by G (thus meeting the criterion in ASC 606-10-25-19(a)), it concludes that the benefit received and its own sales of goods to G are highly interrelated; the service received is not distinct in the context of the contract (thus failing the criterion in ASC 606-10-25-19(b)).

Accordingly, any payments made to G in exchange for the advertisement of F's products on G's online platform would be considered a reduction of the transaction price recognized by F in accordance with ASC 606-10-32-25 and ASC 606-10-32-27.

Example 2-63

Consideration Payable to a Customer in Exchange for Broadly Distributed Advertising

Entity J contracts to sell smart devices to Entity K, an online retailer, and also sells those products through other online retailers and directly to the public via its Web site. As part of the contract, K agrees to advertise the sale of J's products on third-party platforms (e.g., third-party search engines, social media, publishers) in exchange for cash consideration.

To determine the appropriate accounting, J considers whether the advertising services provided by K are "distinct." Entity J concludes that (1) it will benefit from the advertising undertaken by K through increased sales in all online stores that sell J's products (not just in K's online store) and via its Web site and (2) it would enter into an exchange transaction with a party other than a purchaser of its product to receive that benefit (e.g., it could purchase advertising services directly from the various third-party advertisers). Entity J concludes that the services provided by K are sufficiently separable from K's purchase of J's product and are therefore distinct.

Accordingly, J should assess whether it can reasonably estimate the fair value of the advertising services that it will receive (which may not correspond to any amount specified in the contract for those services). If that fair value can be reasonably estimated, J should record the lesser of the fair value of those services or the consideration paid to the customer as an expense when the advertising services are received.

If the fair value cannot be reasonably estimated, any consideration payable by J to K with respect to services should be accounted for as a reduction in the transaction price for the sale of goods to K. In addition, if the fair value can be reasonably estimated, any amount of consideration paid to K that exceeds the fair value of the advertising services received should be accounted for as a reduction of the transaction price for the sale of goods to K.

Connecting the Dots

The advent of the Internet and the subsequent rise of online shopping have irrevocably changed the landscape of consumer spending. Further, as a result of e-commerce platforms, loyalty programs, changes to online cookie policies, and the evolution of the privacy landscape, the value of the wealth of information at retailers' disposal has increased since retailers are uniquely positioned to easily capture their key consumer data and analyze consumer purchasing habits for various demographics. While consumers are increasingly digitizing their lives, many still value the in-store experience. Accordingly, the advertising industry continues to evolve to meet the needs of advertisers by connecting them with data that provide insight into on-line and off-line consumer behaviors.

To reach the right consumers and optimize sales, vendors are increasingly using retail media networks (RMNs), which allow retailers and product suppliers to use consumer data to create targeted, more effective advertising programs and platforms. This advertising can be more traditional (e.g., in-store product placement) or more modern (e.g., digital ad space).

RMNs can be used to provide advertising in a physical or digital format and can be established completely in-house by the retailer or in partnership with a third-party advertising company. RMN-enabled campaigns can be executed via "off-site" external platforms (i.e., through third-party social media, search engines, etc.), "on-site" internal digital or physical properties (i.e., through the retailer's own stores, Web sites, and applications, etc.), or both.

RMNs bring retailers, product suppliers, and consumers together through a form of cooperative advertising. For example, consider a situation in which a consumer is shopping online at his or her favorite online clothing retailer and receives a targeted advertisement for a clothing item sold by the same online clothing retailer (i.e., on-site advertising). The consumer places the clothing item in his or her online shopping cart but exits the clothing retailer's Web site before buying the item. Later, while browsing social media, the consumer sees a targeted advertisement for the product in the online shopping cart and, after clicking the link, is directed back to the online clothing retailer to finish making the purchase (i.e., off-site advertising).

Arrangements related to RMN advertising can be highly complex and involve multiple parties. Therefore, it is critical for the retailer and the product supplier to carefully analyze the promised goods or services in arrangements to determine the appropriate accounting treatment. In their most basic form, RMN advertising contracts involve a retailer that provides targeted advertising services to a product supplier in exchange for consideration. However, because the retailer and product supplier often have preexisting, established vendor-customer relationships through various other contractual agreements, the economics of each underlying contract between the retailer and the product supplier can be commingled, making it difficult to isolate the economics of each element of an individual contract.

While such arrangements are often referred to as RMNs, similar arrangements may also exist in the technology industry, in which there is a lot of customer data.

For a discussion of the accounting considerations related to RMNs, see Deloitte's October 2022 *Retail & Distribution Spotlight*.

2.5.5.2.2 Consideration Payable to a Customer and Variable Consideration

The revenue standard requires an entity to recognize consideration payable to a customer as a reduction of revenue at the later of when the entity (1) recognizes revenue for the transfer of the related goods or services or (2) pays or promises to pay such consideration.[42] However, an entity also has to take into account variable consideration when determining the transaction price.

For example, if an entity anticipates that it may provide a credit to the customer when entering into the contract, or if, given the facts and circumstances, an entity can conclude that the customer has a valid expectation that it will receive a price concession in the form of a credit, the credit represents variable consideration that the entity should estimate at contract inception.[43] The entity's anticipation or the customer's expectation of a price concession does not need to be explicit and instead may be

[42] An entity's promise to pay, or payment of, consideration to a customer may be dependent on a future event, implied by the entity's customary business practices, or both. This concept is discussed in the "later of" guidance in ASC 606-10-32-27 on consideration payable to a customer.

[43] While this section discusses credits, price concessions that an entity intends to provide may be in other forms, such as cash payments and rebates. These would also be regarded as forms of variable consideration.

determined on the basis of the entity's history of granting price reductions through credits (i.e., on the basis of the entity's customary business practices even though the credit is not explicitly stated in the contract). Accordingly, the entity should apply the guidance on estimating variable consideration in ASC 606-10-32-5 and should reduce the transaction price before the payment is communicated to the customer (i.e., at contract inception, when the transaction price is estimated).

Because an entity needs to take into account the variable consideration guidance in determining when to recognize price concessions such as credits provided to a customer, it is expected that the "later of" guidance in ASC 606-10-32-27 on consideration payable to a customer under the revenue standard will be applied in limited circumstances.

2.5.5.2.3 Determining the Transaction Price — Consideration of Goods or Services Supplied to the Entity by the Customer

When an entity enters into an agreement to sell products to a customer, the transaction with the customer may also involve the customer's supplying goods or services to the entity. For example, an entity may sell software licenses to a customer and concurrently purchase hardware equipment from the customer. The contract may be structured in such a way that the consideration payable by the entity to the customer for those goods or services is separately identified. Alternatively, the contract may be structured in such a way that it includes a single amount payable by the customer to the entity that reflects the net of the value of the goods or services provided by the entity to the customer and by the customer to the entity. When the fair value of the goods or services can be reasonably estimated, the accounting outcome should be the same in either circumstance.

The goods or services supplied by the customer should be accounted for separately if both of the following conditions are met:

- Those goods or services are "distinct."
- The entity can reasonably estimate the fair value of the goods or services that it will receive (which may not correspond to any amount specified in the contract for those goods or services).

If both of these conditions are met, the fair value of the goods or services received from the customer should be accounted for in the same way the entity accounts for other purchases from suppliers (e.g., as an expense or asset). If any consideration payable to the customer with respect to those goods or services exceeds their fair value, the excess should be accounted for as a reduction of the transaction price.

If either or both of these conditions are not met, any consideration payable to the customer with respect to those goods or services should be accounted for as a reduction of the transaction price.

The examples below illustrate the application of this guidance.

Example 2-64

An entity sells servers to a customer for $100,000 and, as part of the same arrangement, pays that customer $10,000 in exchange for SaaS. If the SaaS is determined to be distinct and its fair value can be reasonably estimated (as being, for example, $6,000), a portion of the contractually stated amount will be recognized as a reduction of the transaction price for the sale of servers to $96,000 ($100,000 minus the $4,000 payment made to the customer in excess of the fair value of the SaaS received).

Example 2-65

An entity sells servers to a customer for $100,000 and, as part of the same arrangement, pays that customer $10,000 in exchange for specialized parts. If the specialized parts are not determined to be distinct or their fair value cannot be reasonably estimated, the transaction price for the sale of servers will be reduced to $90,000 ($100,000 minus the full amount payable to the customer).

The requirements above apply irrespective of whether the consideration related to the goods or services supplied by the customer is separately identified in the contract. If the contract is net settled (i.e., the customer is required to pay cash and provide distinct goods or services as payment for the goods or services provided by the entity to the customer, and the entity does not make a cash payment to the customer for the distinct goods or services provided by the customer), the noncash consideration guidance would apply.

2.5.5.2.4 Impact of Negative Revenue on Presentation of Consideration Payable to a Customer

In certain arrangements, amounts paid (or payable) to a customer could exceed the consideration to which the entity expects to be entitled from the customer. In these situations, recognition of payments to the customer as a reduction of revenue could result in "negative revenue." Legacy revenue guidance in ASC 605-50 included explicit guidance on how to account for payments to customers that result in negative revenue. In these cases, ASC 605-50-45-9 required an entity to reclassify the cumulative shortfall (i.e., the amount of the payment to a customer in excess of the entity's cumulative revenue from the customer) from a reduction of revenue to an expense unless certain conditions exist.

ASC 606 does not specifically address situations in which the entity could potentially recognize negative revenue if it accounts for consideration payable to a customer as a reduction of revenue.

In the absence of explicit guidance in ASC 606, we believe it would be acceptable for entities to consider the legacy guidance in ASC 605-50 by analogy and reclassify negative revenue as an expense if certain conditions are met. Specifically, the legacy guidance in ASC 605-50-45-9 stated:

> A vendor may remit or be obligated to remit cash consideration at the inception of the overall relationship with a customer before the customer orders, commits to order, or purchases any vendor products or services. Under the guidance in the preceding two paragraphs, any resulting negative revenue may be recharacterized as an expense if, at the time the consideration is recognized in the income statement, it exceeds cumulative revenue from the customer. However, recharacterization as an expense would not be appropriate if a supply arrangement exists and either of the following circumstances also exists:
>
> a. The arrangement provides the vendor with the right to be the provider of a certain type or class of products or services for a specified period of time and it is probable that the customer will order the vendor's products or services.
>
> b. The arrangement requires the customer to order a minimum amount of vendor products or services in the future, except to the extent that the consideration given exceeds probable future revenue from the customer under the arrangement.

Example 2-66

On January 1, 20X1, Company A enters into a master sales agreement with Customer X, a large and well-known technology entity, to sell X an undefined quantity of software licenses over a three-year period. A sale of licenses is initiated each time X issues a purchase order to A, at which point A is legally obligated to supply X with the quantity of licenses specified in the purchase order.

Company A expects that it is probable that X will purchase a total of 200 licenses per year (i.e., 600 licenses over the term of the master sales agreement). The price of each license is $500.

As an incentive for X to enter into the master sales agreement and because having X as a customer will enhance A's ability to sell licenses to other customers, A agrees to pay X $400,000 upon receipt of the first purchase order. On January 15, 20X1, X issues its first purchase order to A for 200 licenses. Customer X pays A $100,000 for the 200 licenses and receives the $400,000 payment from A. Company A determines that at least some of the $400,000 payment meets the definition of an asset. In addition, A determines that the $400,000 is not in exchange for a distinct good or service.

To determine the amount of negative revenue, A compares the $400,000 payment to X with the total purchases that A believes it is probable that X will make over the term of the master sales agreement (i.e., $300,000 for 600 licenses). Because the consideration payable to X ($400,000) exceeds the total expected purchases from X ($300,000), it would be acceptable for A to reclassify the cumulative shortfall ($100,000) as an expense.

2.5.5.3 Accounting for Up-Front Payments to Customers

In developing the revenue standard, the FASB and IASB did not broadly reconsider the accounting for up-front payments made to customers. While the revenue standard provides explicit guidance on accounting for payments made to customers, such guidance does not distinguish the accounting for payments made to customers at the inception of the contract (i.e., up-front payments) from the accounting for payments made to customers during the contract period.

The revenue standard specifies that if consideration paid to a customer is not in exchange for a distinct good or service, the consideration paid should be reflected as a reduction of the transaction price that is allocated to the performance obligations in the contract. If an up-front payment is made as part of an enforceable contract with a customer (i.e., a contract that meets all of the criteria in ASC 606-10-25-1), treating that payment as a reduction of the transaction price could result in the recording of an asset for the up-front payment made, which would then be recognized as a reduction of revenue as the promised goods or services are transferred to the customer. The recording of an asset and subsequent amortization is predicated on the fact that the asset represents an advance of funds to the customer, which the entity recovers as goods or services are transferred to the customer.

However, the revenue standard is less clear on the accounting for up-front payments when either (1) a revenue contract does not yet exist (i.e., an entity makes a payment to incentivize the customer to enter into a revenue contract with the entity) or (2) an up-front payment is related to goods or services to be transferred under a current contract and anticipated future contracts.

Implementation Q&A 43 (compiled from previously issued TRG Agenda Papers 59 and 60) discusses how an entity should account for an up-front payment made to a customer when (1) a revenue contract does not yet exist (i.e., an entity makes a payment to incentivize a customer to enter into a revenue contract with the entity) or (2) the up-front payment is related to goods or services to be transferred under a current contract and anticipated future contracts. That Q&A presents the following two views on when an up-front payment to a customer should be recognized as a reduction of revenue:

- *View A* — A payment to a customer should be recognized as an asset and amortized as a reduction of revenue as the entity provides the customer with the related goods or services (i.e., the expected total purchases resulting from the up-front payment). Under this approach, the up-front payment may be recognized as a reduction of revenue over a period that is longer than the currently enforceable contract term.
- *View B* — Payments to customers should be recognized as a reduction of revenue only over the current contract term. If a contract does not yet exist, the up-front payment should be recognized as a reduction of revenue immediately.

Implementation Q&A 43 indicates that View A would often be appropriate and that if an asset is recorded, it should be an asset as defined in FASB Concepts Statement 6.[44] In addition, View B would sometimes be appropriate.

However, as also stated in Implementation Q&A 43, the selection of either view is not an accounting policy election but should be made after entities "understand the reasons for the payment, the rights and obligations resulting from the payment (if any), the nature of the promise(s) in the contract (if any), and other relevant facts and circumstances for each arrangement when determining the appropriate accounting." Further, while acknowledging that some diversity in practice may continue under the revenue standard, the FASB staff emphasized that the standard's requirement to provide increased disclosure about judgments made in the determination of the transaction price should help financial statement users understand an entity's accounting for up-front payments to customers.

When determining how to account for an up-front payment to a customer that is not in exchange for a distinct good or service, an entity should first consider whether the up-front payment meets the definition of an asset.

Connecting the Dots

In December 2021, the FASB issued FASB Concepts Statement 8, Chapter 4, whose guidance supersedes that in FASB Concepts Statement 6, including guidance on the definition of an asset. Under the legacy guidance of FASB Concepts Statement 6, assets are defined as "probable future economic benefits obtained or controlled by a particular entity as a result of past transactions or events." FASB Concepts Statement 8, Chapter 4, updates this definition by providing that "[a]n asset is a present right of an entity to an economic benefit," further noting that "[a]n asset has the following two essential characteristics:

a. It is a present right.

b. The right is to an economic benefit."

[44] Since the issuance of the Implementation Q&As, FASB Concepts Statement 6 has been superseded by FASB Concepts Statement 8, Chapter 4, which updates the definition of an asset. However, as discussed below, we do not believe that the definition of an asset as updated would result in a change in practice.

Paragraph BC4.9 of FASB Concepts Statement 8, Chapter 4, states:

> When applied as intended, the definitions of assets and liabilities in Concepts Statement 6 were not fundamentally problematic. However, those definitions were often misunderstood. As a result, the Board concluded that improving the definitions in Concepts Statement 6 by making them clearer and more precise would enhance consistent application of the definitions in developing standards.

While the Board made clarifications to the definition of an asset, we do not believe that the definition of an asset as updated in FASB Concepts Statement 8, Chapter 4, would result in a change in practice when entities determine whether up-front payments to customers should be recognized as assets.

In a speech at the 2016 AICPA Conference on Current SEC and PCAOB Developments, Ruth Uejio, then professional accounting fellow in the OCA, provided the following guidance on determining whether an up-front payment constitutes an asset:

> From my perspective, a company must first determine what the payment was made for. The following are some of the questions that OCA staff may focus on to understand the nature and substance of the payment:
>
> 1. What are the underlying economic reasons for the transaction? Why is the payment being made?
> 2. How did the company communicate and describe the nature of the payment to its investors?
> 3. What do the relevant contracts governing the payment stipulate? Does the payment secure an exclusive relationship between the parties? Does the payment result in the customer committing to make a minimum level of purchases from the vendor?
> 4. What is the accounting basis for recognizing an asset, or recognizing an upfront payment immediately through earnings?
>
> Once a company has determined the substance of the payment, I believe a company should account for the payment using an accounting model that is consistent with the identified substance of the payment and relevant accounting literature. Additionally, companies should establish accounting policies that are consistently applied. I'd highlight that there should be a neutral starting point in the accounting evaluation for these types of arrangements. I believe that registrants must carefully evaluate all of the facts and circumstances in arriving at sound judgments, and should perform the analysis impartially. Additionally, in my view "matching" is not a determinative factor to support asset recognition.

To recognize an up-front payment to a customer as an asset, an entity needs to be assured that it has obtained a present right to an economic benefit in exchange for providing the customer with the up-front payment. In evaluating whether an up-front payment to a customer meets the definition of an asset, an entity should consider the following:

- Whether the up-front payment is expected to be recovered through the customer's purchases under the initial contract or an anticipated contract.
- The entity's history of renewals with that specific customer or similar classes of customers.
- The negotiation process for the up-front payment and how the payment is characterized in the contract with the customer.

If the entity determines that the payment meets the definition of an asset, the payment should be recognized as an asset and subsequently "amortized" as a reduction of revenue as the related goods or services are provided to the customer over a period that may continue beyond the current contract term. If, on the other hand, the payment does not meet the definition of an asset, it may be more appropriate to recognize the payment as a reduction of revenue immediately. For example, we believe that for an asset to be recognized, the payment must be recoverable. In our view, it would be reasonable for an entity to assess recoverability by performing the same analysis it uses to evaluate the costs of obtaining or fulfilling a contract under ASC 340-40.

Connecting the Dots

The SEC observer at the November 2016 TRG meeting noted that an entity will need to use judgment in assessing up-front payments to customers and emphasized that the entity must appropriately disclose its conclusions related to the up-front payments in both its financial statements and MD&A. In addition, the SEC observer noted that the SEC staff intends to form its views on the topic by analyzing the guidance in the revenue standard independently of its past decisions that were based on the legacy guidance in ASC 605.

2.5.5.4 Warranty Payments Versus Variable Consideration

2.5.5.4.1 Accounting for Liquidating Damage Obligations as Warranties or Variable Consideration

Some contracts (e.g., service level agreements) provide for liquidating damages or similar features that specify damages in the event that the vendor fails to deliver future goods or services or the vendor's performance fails to achieve certain specifications.

In general, cash refunds, liquidating damages, fines, penalties, or other similar features should be evaluated as variable consideration. However, an entity must consider the specific facts and circumstances in reaching this conclusion.

In limited situations, consideration paid to a customer that is required under a warranty or similar claim may be accounted for in a manner consistent with the warranty guidance in ASC 606-10-55-30 through 55-35. Under ASC 606-10-32-25 through 32-27, consideration paid to a customer is a reduction of the transaction price unless the payment is in exchange for a distinct good or service. There may be limited situations in which the consideration paid to a customer is intended to reimburse the cost of warranty services that the customer has incurred directly and that the vendor would have otherwise been obligated to provide to the customer. In these limited instances, it would be appropriate to account for the reimbursement amount paid to the customer as an in-substance assurance- or service-type warranty.

Example 2-67

An entity sells a smart device to its customer. Shortly after the purchase (within the warranty period), the device does not perform as intended because of a malfunctioning part. The customer pays a third-party contractor $100 to fix the malfunctioning part. In accordance with the warranty terms of the contract, the entity reimburses the customer for the cost of the third-party repairs ($100).

The cash reimbursement amount paid to the customer is based on the cost of repairing the product and is in accordance with the standard warranty terms of the device. The vendor should account for the repair cost as an assurance-type warranty cost in accordance with ASC 606-10-55-32. As a result, the $100 is presented as an expense rather than a reduction of revenue.

2.5.5.4.2 Accounting for a Refund of the Purchase Price Following the Customer's Return of a Defective Item

ASC 606-10-55-30 through 55-35 provide guidance on the accounting for warranties under which an entity promises to repair or replace defective items, requiring that the warranty obligation be accounted for either as a separate performance obligation (for "service-type" warranties) or in accordance with the guidance on product warranties in ASC 460-10 on guarantees (for "assurance-type" warranties).

Entities will sometimes provide a customer with a full or partial refund with respect to a defective item. This might be the only option offered to the customer (i.e., the entity does not offer to repair or replace defective items); alternatively, the customer may be entitled to choose between receiving a refund and having the defective item repaired or replaced. A right to receive such a refund might sometimes be described as a "warranty."

The guidance on accounting for warranties in ASC 606-10-55-30 through 55-35 should not be applied to an obligation to provide a full or partial refund of consideration received for defective products. When amounts are expected to be refunded to a customer for a defective product, a refund liability should be recognized in accordance with ASC 606-10-32-10. The amount expected to be refunded is consideration payable to a customer and therefore reduces revenue in accordance with ASC 606-10-32-25 through 32-27. Because the consideration payable to the customer includes a variable amount, the entity would also need to estimate the transaction price in accordance with ASC 606-10-32-5 through 32-13.

This accounting appropriately reflects that when a full or partial refund is offered, the product delivered to the customer and the consideration payable for that product are both different from what was originally agreed. If no refund is due (i.e., there is no warranty claim), the entity receives full payment for a product that meets agreed-upon specifications, whereas in the case of a full refund, the entity has not delivered a functioning product and has received no payment. A partial refund reflects that the entity has accepted a lower price for an imperfect product.

In contrast, in the case of an assurance-type warranty, neither what is delivered to the customer (a product meeting agreed-upon specifications) nor the price eventually paid by the customer varies. Instead, the cost to the entity of delivery varies, and this variability is appropriately reflected in the warranty costs recognized in accordance with ASC 460-10 (or in the costs of fulfilling the performance obligation in a service-type warranty).

When an entity offers customers a choice between receiving a refund and accepting repair or replacement of defective items, it will be necessary to estimate the extent to which customers will choose each option and then account for each obligation accordingly.

An entity will be required to use judgment to determine the appropriate treatment of any additional amount paid to a customer over and above the amount originally paid by the customer for the product.

2.5.5.5 Applying the Guidance on Consideration Received From a Vendor

ASU 2014-09 added ASC 705-20 to provide specific guidance on consideration received from a vendor.

ASC 705-20

25-1 Consideration from a vendor includes cash amounts that an entity receives or expects to receive from a vendor (or from other parties that sell the goods or services to the vendor). Consideration from a vendor also includes credit or other items (for example, a coupon or voucher) that the entity can apply against amounts owed to the vendor (or to other parties that sell the goods or services to the vendor). The entity shall account for consideration from a vendor as a reduction of the purchase price of the goods or services acquired from the vendor unless the consideration from the vendor is one of the following:

a. In exchange for a distinct good or service (as described in paragraphs 606-10-25-19 through 25-22) that the entity transfers to the vendor
b. A reimbursement of costs incurred by the entity to sell the vendor's products
c. Consideration for sales incentives offered to customers by manufacturers.

25-2 If the consideration from a vendor is in exchange for a distinct good or service (see paragraphs 606-10-25-19 through 25-22) that an entity transfers to the vendor, then the entity shall account for the sale of the good or service in the same way that it accounts for other sales to customers in accordance with Topic 606 on revenue from contracts with customers. If the amount of consideration from the vendor exceeds the standalone selling price of the distinct good or service that the entity transfers to the vendor, then the entity shall account for such excess as a reduction of the purchase price of any goods or services acquired from the vendor. If the standalone selling price is not directly observable, the entity shall estimate it in accordance with paragraphs 606-10-32-33 through 32-35.

25-3 Cash consideration represents a reimbursement of costs incurred by the entity to sell the vendor's products and shall be characterized as a reduction of that cost when recognized in the entity's income statement if the cash consideration represents a reimbursement of a specific, incremental, identifiable cost incurred by the entity in selling the vendor's products or services. If the amount of cash consideration paid by the vendor exceeds the cost being reimbursed, that excess amount shall be characterized in the entity's income statement as a reduction of cost of sales when recognized in the entity's income statement.

25-4 Manufacturers often sell their products to resellers who then sell those products to consumers or other end users. In some cases, manufacturers will offer sales discounts and incentives directly to consumers — for example, rebates or coupons — in order to stimulate consumer demand for their products. Because the reseller has direct contact with the consumer, the reseller may agree to accept, at the point of sale to the consumer, the manufacturer's incentives that are tendered by the consumer (for example, honoring manufacturer's coupons as a reduction to the price paid by consumers and then seeking reimbursement from the manufacturer). In other instances, the consumer purchases the product from the reseller but deals directly with the manufacturer related to the manufacturer's incentive or discount (for example, a mail-in rebate).

The recognition guidance in ASC 705-20-25 on consideration received from a vendor has certain conceptual similarities to the measurement guidance in ASC 606-10-32 on consideration payable to a customer.

ASC 606-10-32-25 states, in part, that an "entity shall account for consideration payable to a customer as a **reduction** of the **transaction price** and, therefore, of revenue unless the payment to the customer is **in exchange for a distinct good or service** (as described in paragraphs 606-10-25-18 through 25-22) that the customer transfers to the entity" (emphasis added). Under ASC 606-10-32-26, "[i]f consideration payable to a customer is a payment for a distinct good or service from the customer, then an entity shall account for the purchase of the good or service **in the same way that it accounts for other purchases** from suppliers. If the amount of consideration payable to the customer exceeds the fair value of the distinct good or service that the entity receives from the customer, then the entity shall account for such an excess as a reduction of the transaction price" (emphasis added).

Similarly, under ASC 705-20-25-1 and 25-2, an entity will need to determine whether consideration from a vendor is **in exchange for a distinct good or service** (as described in ASC 606-10-25-19 through 25-22) that the entity transfers to the vendor. If an entity concludes that consideration received from a vendor is related to distinct goods or services provided to the vendor, the entity should account for the consideration received from the vendor **in the same way that it accounts for other sales** (e.g., in accordance with ASC 606 if distinct goods or services are sold to a customer). If the consideration is not in exchange for a distinct good or service and is also unrelated to the items described in ASC 705-20-25-1(b) and (c), the entity should account for consideration received from a vendor as a **reduction of the purchase price** of the goods or services acquired from the vendor. Also similar to the guidance in ASC 606-10-32-25 and 32-26 is the requirement in ASC 705-20-25-2 that any excess of the consideration received from the vendor over the stand-alone selling price of the good or service provided to the vendor should be accounted for as a reduction of the purchase price of any goods or services purchased from the vendor.[45]

Connecting the Dots

Under legacy U.S. GAAP (specifically, ASC 605-50), consideration received from a vendor could be accounted for as revenue (or other income, as appropriate) only if a separate benefit was provided to the vendor. For that condition to be met, the identified benefit provided would need to (1) be sufficiently separable from the customer's purchase of the vendor's products and (2) have a readily determinable fair value.

ASC 705-20 retains the "separate identified benefit" concept, although it provides, in a manner consistent with the ASC 606 framework, that for a customer to account for consideration received from a vendor as revenue, the consideration received must be in exchange for the transfer of a distinct good or service. However, ASC 705-20 does not require the distinct good or service to have a readily determinable fair value. Rather, ASC 705-20-25-2 states, in part, that "[i]f the standalone selling price is not directly observable, the entity shall estimate it in accordance with paragraphs 606-10-32-33 through 32-35." This provision differs from the guidance in ASC 606 that allows an entity to separately account for a distinct good or service obtained from a customer only if the entity can reasonably estimate the fair value of the good or service. Specifically, ASC 606-10-32-26 states, in part, that "[i]f the entity cannot reasonably estimate the fair value of the good or service received from the customer, it shall account for all of the consideration payable to the customer as a reduction of the transaction price." Under ASC 705-20, an entity may separately account for a good or service provided to a vendor regardless of whether the entity can reasonably estimate the fair value of the good or service.

The concepts in ASC 606 that address how to evaluate whether consideration payable to a customer is in exchange for distinct goods or services purchased from a customer are also applicable to the determination of whether consideration received from a vendor is in exchange for distinct goods or services delivered to a vendor.

Notwithstanding the similarities between ASC 705-20 and ASC 606, determining whether an entity is a customer or a vendor in certain arrangements may be challenging. There are certain arrangements in which an entity may enter into one or more contracts with another entity that is both a customer and a vendor. That is, the reporting entity may enter into one or more contracts with another entity to (1) sell goods or services that are an output of the reporting entity's ordinary activities in exchange for consideration from the other entity and (2) purchase goods or services from the other entity. In

[45] If an entity concludes that the consideration received from a vendor was not in exchange for a distinct good or service that the entity transferred to the vendor, the entity will be required under ASC 705-20-25-1 to (1) determine whether the consideration received was either a reimbursement of costs incurred by the entity to sell the vendor's products or consideration for sales incentives offered to customers by manufacturers and (2) account for the consideration received accordingly.

these types of arrangements, the reporting entity will need to use judgment to determine whether the other entity is predominantly a customer or predominantly a vendor. This determination might not be able to be made solely on the basis of the contractual terms. In such cases, the reporting entity will need to consider the facts and circumstances of the overall arrangement with the other entity. The example below illustrates an arrangement in which this issue may arise and discusses how the reporting entity may determine whether the other entity in the arrangement is predominantly a customer or predominantly a vendor. This distinction may be important to determining whether the reporting entity should apply the guidance on consideration payable to a customer in ASC 606 or the guidance on consideration received from a vendor in ASC 705-20.

Example 2-68

Entity B offers digital media analytics products and services that report on digital activity to identify trends and provide insights to customers. Entity B purchases data from third-party operators, which it analyzes, measures, and combines with a wide variety of other data obtained from various sources for use in the products and services that it sells to its customers.

Entity B has entered into an agreement with Operator C, a telecommunications company, to purchase C's data. Operator C's data will be combined with data provided from other sources, analyzed, and used as an input for delivering data subscription services to B's customers. Before negotiating the agreement to purchase C's data, B entered into an agreement to provide data subscription services and several other services to C. Consequently, B has contracts with C to (1) purchase data from C in exchange for cash consideration and (2) sell various services to C in exchange for cash consideration.

Since C could be viewed as both a customer and a vendor of B, B evaluates whether C is predominantly a customer or predominantly a vendor in their arrangement. Entity B's conclusion may determine whether (1) the consideration paid to C for C's data should be analyzed under ASC 606 (i.e., potentially as a reduction of the transaction price for the data subscription services provided to C) or (2) the consideration received from C for the data subscription services should be analyzed under ASC 705-20 (i.e., potentially as a reduction of the purchase price of the data provided to B).

To determine whether C is predominantly a customer or predominantly a vendor in the arrangement, B considers qualitative and quantitative factors, including the following:

- The extent to which the data purchased from C are important to B's ability to successfully sell its products and services to customers (e.g., whether C's data represent a significant portion of all of the data analyzed and included in B's products and services), or the extent to which the services purchased from B are important to C (e.g., whether C attributes significant value to the insights obtained from the data services provided by B).
- The quantitative significance of B's past, current, and expected future (1) purchases of data from C and (2) sales of data subscription services to C.
- The extent to which B (1) sells other products and services to C and (2) purchases other products and services from C.
- The historical relationship between B and C, as applicable.
- The pricing of B's products and services sold to C as compared with the pricing of products and services that B sells to other customers of similar size and nature.
- The pricing of C's data purchased by B as compared with the pricing of similar data that B purchases from other vendors.
- The substance of the contract negotiation process or contractual terms between B and C, which may indicate that (1) B is the customer and C is the vendor or (2) C is the customer and B is the vendor.
- The payment terms and cash flows between B and C.
- The significance of other parties involved in the arrangement.

Example 2-68 (continued)

Regardless of whether B concludes that C is predominantly a customer or predominantly a vendor in the arrangement, B must evaluate whether its purchase of C's data is distinct from the services sold to C in accordance with ASC 705-20 or ASC 606.

In addition, if the consideration paid to C is accounted for under ASC 606 and B has concluded that the consideration payable to C is a payment for a distinct good or service, B should account for the purchase of the data in the same way that it accounts for other purchases from suppliers. However, B must evaluate whether the consideration paid to C for the data represents the fair value of the data received. If the amount of consideration payable to C exceeds the fair value of the data that B receives from C, B should account for such an excess as a reduction of the transaction price. If B cannot reasonably estimate the fair value of the data received from C, it should account for all of the consideration payable to C as a reduction of the transaction price.

If the consideration received from C is instead accounted for under ASC 705-20 and B has concluded that the consideration from C is in exchange for a distinct good or service, B should account for the sale of the service in the same way that it accounts for other sales to customers in accordance with ASC 606. However, B must evaluate whether the services sold to C were sold at the stand-alone selling price. If the amount of consideration received from C exceeds the stand-alone selling price of the services that B transfers to C, B should account for the excess as a reduction of the purchase price of the data acquired from C.

2.5.5.6 Sales Taxes and Similar Taxes Collected From Customers

The revenue standard's guidance on assessing whether an entity is a principal or an agent in a transaction may be relevant to the assessment of whether sales taxes should be presented on a gross or net basis within revenue. However, the analysis could be challenging in the evaluation of sales taxes and similar taxes in each tax jurisdiction (which would include all taxation levels in both domestic and foreign governmental jurisdictions), especially for entities that operate in a significant number of jurisdictions.

The revenue standard includes a practical expedient (codified in ASC 606-10-32-2A) that permits entities to exclude from the transaction price all sales taxes that are assessed by a governmental authority and that are "imposed on and concurrent with a specific revenue-producing transaction and collected by the entity from a customer (for example, sales, use, value added, and some excise taxes)." However, such an accounting policy election does not apply to taxes assessed on "an entity's total gross receipts or imposed during the inventory procurement process." An entity that elects to exclude sales taxes is required to provide the accounting policy disclosures in ASC 235-10-50-1 through 50-6.

An entity that does not elect to present all sales taxes on a net basis would be required to determine, for every tax jurisdiction, whether it is a principal or an agent in the sales tax transaction and would present sales taxes on a gross basis if it is a principal in the jurisdiction and on a net basis if it is an agent. Making this determination requires an understanding of which entity (the customer or the vendor) has incurred the tax obligation (i.e., identification of the party on which the taxes are assessed). In some jurisdictions, it may be clear that the taxes are assessed on the customer. Therefore, the vendor might be acting as an agent and collecting and remitting taxes on behalf of the customer or the government. The vendor might have the obligation to remit taxes (i.e., have a sales tax liability for amounts collected, or for amounts whose collection was required); however, a remittance obligation by itself does not mean that the vendor is primarily responsible for the taxes. By contrast, in other jurisdictions, sales taxes (or similar taxes) may be assessed on and payable by the vendor regardless of whether the taxes are included in the amounts collected from customers. In these instances, the vendor may be the entity that legally incurred the taxes and is obligated to pay the government (i.e., the vendor may be primarily responsible for paying the taxes). Therefore, the vendor would be the principal in the tax transaction and would present the taxes on a gross basis as revenue.

2.6 Allocate the Transaction Price to the Performance Obligations (Step 4)

In step 4 of the revenue standard, an entity allocates the transaction price to each of the identified performance obligations. For a contract containing more than one performance obligation, the allocation is generally performed on the basis of the relative stand-alone selling price of each distinct good or service. ASC 606-10-32-32 through 32-35 provide guidance on how an entity may determine the stand-alone selling price of a promised good or service, including a preference for the use of observable prices from actual stand-alone sales. This guidance also includes an overarching requirement that if the stand-alone selling price is not directly observable, the estimation technique must maximize the use of observable inputs. Further, in the absence of stand-alone sales, a contractually stated price or a list price for a distinct good or service may be (but should not be presumed to be) indicative of the stand-alone selling price.

There are exceptions that allow an entity to allocate a disproportionate amount of the transaction price to a specific performance obligation. For example, an entity may allocate a discount to a single performance obligation rather than proportionately to all performance obligations if certain factors indicate that the discount is related to a specific performance obligation.

In addition, in arrangements that include a license of IP (e.g., license of software) along with ongoing services (e.g., PCS) that represent distinct performance obligations, an entity is required to allocate the total transaction price between the license and the services. If a history of selling the services or license of IP separately does not exist, the entity will need to estimate the stand-alone selling price of each performance obligation by using one of the following methods:

- *Adjusted market assessment approach* — Under this method, an entity considers the market in which the good or service is sold and estimates the price that a customer in that market would be willing to pay. In addition, the entity considers a competitor's pricing for similar goods or services as adjusted for specific factors such as position in the market, expected profit margin, and customer-specific or geography-specific conditions. For example, a software entity may be able to use a market-based approach to estimate stand-alone selling price for a software license, PCS, hosting, or professional services if the entity's products and services are similar to solutions offered by its peers and the market data are reliable.
- *Expected cost plus a margin* — Under this method, an entity estimates the stand-alone selling price by considering the costs incurred to produce the product or service plus an adjustment for the expected margin on the sale. This method may be appropriate for an entity to use when it determines the stand-alone selling price of professional services by considering the level of effort necessary to perform the services.
- *Residual approach* — This approach may only be used if the entity sells the same good or service to different customers for a broad range of amounts, making the consideration highly variable, or the entity has not yet established a price for that good or service and the good or service has not previously been sold. Under this method, the entity deducts the observable stand-alone selling prices of other goods and services in the contract from the total transaction price to determine the stand-alone selling price of the remaining goods and services.

2.6.1 Stand-Alone Selling Price of PCS Based on a Stated Renewal Percentage

It is common for software contracts to include both a software license and PCS for a defined term. After the initial PCS term, such contracts will often allow for renewal of PCS at a stated percentage of the contractual license fee (e.g., 20 percent of the initial contractual license fee). Contractual license fees will often vary between customers; consequently, the renewal price for the related PCS also often varies between customers.

ASC 606-10-32-32 states that the "best evidence of a standalone selling price is the observable price of a good or service when the entity sells that good or service separately in similar circumstances and to similar customers" and that the "contractually stated price or a list price for a good or service may be (but shall not be presumed to be) the standalone selling price of that good or service." Further, ASC 606-10-32-33 requires entities to estimate the stand-alone selling price when that price is not observable.

Because the actual amount paid for the PCS in the software arrangements described above varies between contracts, it may not represent the "observable price" for the PCS when an entity sells the PCS separately "in similar circumstances and to similar customers." Since the prices vary by individual contract, the contractually stated renewal rate may not necessarily represent the stand-alone selling price for the PCS, especially when PCS is renewed for a broad range of amounts.

If an entity determines that it does not have observable pricing of PCS based on consistent renewal of PCS priced at consistent dollar amounts, it may be appropriate for the entity to consider PCS renewals stated as a constant percentage of the license fee to determine an observable stand-alone selling price for PCS. This approach may be appropriate when the entity routinely prices PCS as a consistent percentage of the license fee, the entity has consistent pricing practices, and the resulting stand-alone selling price results in an allocation that is consistent with the overall allocation objective.

However, when an entity determines that an observable stand-alone selling price for the PCS does not exist, the entity may need to estimate the stand-alone selling price of the PCS in accordance with ASC 606-10-32-33 through 32-35 by considering all of the information that is reasonably available to the entity, such as the actual amounts charged for renewals, the anticipated cost of providing the PCS, internal pricing guidelines, and third-party prices for similar PCS (if relevant). While the range of amounts charged for actual renewals on the basis of the stated rates may be broad (whether priced as a fixed dollar amount or as a percentage of the license fee), a concentration of those amounts around a particular price may help support a stand-alone selling price.

2.6.2 Residual Approach to Estimating Stand-Alone Selling Prices

In the software industry, certain goods or services can be sold for a wide range of prices. This is especially true when the incremental costs incurred to sell additional software licenses are often minimal, thus allowing entities to sell their software at a wide range of discount prices or even premiums. Various factors may make it challenging for an entity to determine the stand-alone selling prices of goods and services promised in a contract with a customer. Such factors may include, but are not limited to, (1) highly variable or uncertain pricing, (2) lack of stand-alone sales for one or more goods or services, and (3) pricing interdependencies such that the selling price of one good or service is used to determine the selling price of another good or service in the same contract.

2.6.2.1 Appropriateness of Using the Residual Approach

ASC 606-10-32-34(c) indicates that the residual approach may be used only if the selling price of a good or service (or bundle of goods or services) meets either of the following conditions:

- The selling price is **highly variable**. This is the case when an "entity sells the same good or service to different customers (at or near the same time) for a broad range of amounts" so that a single-point estimate of the stand-alone selling price or even a sufficiently narrow range of values representing the stand-alone selling price is "not discernible from past transactions or other observable evidence." For example, the selling price of a software product may be highly variable if an entity has historically sold the software product for prices between $1,000 and $20,000 and there is no discernible concentration around a single price, range of prices, or other metric.
- The selling price is **uncertain**. This is the case when an "entity has not yet established a price for [a] good or service, and the good or service has not previously been sold on a standalone basis."

In determining whether one of the above conditions is met, an entity should disaggregate (i.e., stratify) its selling prices into different populations to the extent that pricing practices differ for each population. In doing so, the entity should take into account market conditions, entity-specific factors, and information about the customer or class of customer (e.g., by product, by geography, by customer size, by distribution channel, or by contract value). However, the entity should also consider whether there are enough data points for it to determine a meaningful stand-alone selling price relative to its pricing practices.

In addition to assessing whether one of the two pricing conditions above has been met, an entity must determine whether the resulting amount allocated to a performance obligation under the residual approach satisfies the allocation objective in ASC 606-10-32-28 (i.e., an allocation that depicts the amount of consideration to which an entity expects to be entitled in exchange for a good or service). If the application of the residual approach to a particular contract results in either a stand-alone selling price that is not within a range of reasonable stand-alone selling prices or an outcome that is not aligned with the entity's observable evidence, use of the residual approach would not be appropriate even if one of the conditions in ASC 606-10-32-34(c) is met. An entity should use all available information to determine whether the stand-alone selling price is reasonable, which may include an assessment of market conditions adjusted for entity-specific factors. When such an analysis results in a highly variable or broad range and the residual approach is used to estimate the stand-alone selling price, this observable information should still be used to support the reasonableness of the resulting residual amount. In addition, the resulting stand-alone selling price must be substantive and consistent with the entity's normal pricing practices. Further, as paragraph BC273 of ASU 2014-09 states, "if the residual approach in paragraph 606-10-32-34(c) results in no, or very little, consideration being allocated to a good or service or a bundle of goods or services, the entity should consider whether that estimate is appropriate in those circumstances."

The residual approach is applied by subtracting observable stand-alone selling prices from the total transaction price and allocating the remainder (i.e., the residual) to the performance obligation or obligations for which pricing is highly variable or uncertain. Accordingly, for an entity to apply the residual approach to a contract containing performance obligations whose pricing is highly variable or uncertain, that contract must include at least one performance obligation for which the stand-alone selling price is observable. If a contract contains multiple performance obligations with pricing that is highly variable or uncertain, a combination of approaches (including the residual approach) may be necessary as described in ASC 606-10-32-35.

ASC 606 requires entities to maximize the use of observable data in determining a stand-alone selling price. The observable data available for a good or service may change over time. In addition, an entity's pricing practices may change as a result of market or entity-specific factors. Therefore, the appropriateness of the residual approach for a particular good or service may also change from one period to another. For example, an entity may implement pricing policies that cause the price of a good or service that was previously highly variable to become consistent enough for a stand-alone selling price to be estimated (either as a point estimate or a range).

Entities that use the residual approach to determine a stand-alone selling price should continually assess whether its use remains appropriate. In making this determination, entities should monitor and consider entity-specific and market conditions. A change from the residual approach to another method for determining a stand-alone selling price should be accounted for prospectively, and corresponding changes may need to be made to disclosures about the determination of the stand-alone selling price and allocation of the transaction price (e.g., ASC 606-10-50-17).

The examples below illustrate the application of the concepts described above.

Example 2-69

Entity S licenses its software to customers for terms ranging from one to five years. Along with its software licenses, S frequently sells other services such as PCS, professional services, or training, and it has observable stand-alone selling prices for such services. Taking into account market conditions, entity-specific factors, and information about customers or classes of customers, S stratifies its historical software sales data. It analyzes the pricing of stand-alone license transactions as well as the pricing of the software when sold with other goods or services and determines the following:

- Fifteen percent of software transactions are priced between $150 and $1,200.
- Thirty-five percent of software transactions are priced between $1,201 and $1,800 (plus or minus 20 percent concentration around a midpoint).
- Thirty percent of software transactions are priced between $1,801 and $2,700 (plus or minus 20 percent concentration around a midpoint).
- Twenty percent of software transactions are priced above $2,700.

There are no discernible concentrations within the above ranges.

On the basis of an analysis of the available observable data, including appropriate stratification of that data, S may conclude that it sells software licenses for a broad range of amounts and that therefore there is no discernible stand-alone selling price. Accordingly, the selling price of software licenses is highly variable. In addition, there are observable stand-alone selling prices for the other services in S's contracts. If the resulting allocation under the residual approach meets the objective in ASC 606-10-32-28, the use of that method is acceptable.

Example 2-70

Assume the same facts as Example 2-69 above except that in this case, the software vendor, Entity K, determines the following:

- Fifteen percent of software transactions are priced between $150 and $1,200.
- Sixty-five percent of software transactions are priced between $1,201 and $1,800 (plus or minus 20 percent concentration around a midpoint).
- Fifteen percent of software transactions are priced between $1,801 and $2,700 (plus or minus 20 percent concentration around a midpoint).
- Five percent of software transactions are priced above $2,700.

Entity K determines that enough data points exist for it to conclude that there is a sufficient concentration of selling prices between $1,201 and $1,800.

While K sells software licenses for a broad range of amounts, there is a discernible range of stand-alone selling prices given the sufficient concentration of selling prices between $1,201 and $1,800. Accordingly, K may conclude that the selling price of its software license is not highly variable or uncertain.

Example 2-71

Entity B licenses its software to customers for terms ranging from one to five years. Along with its software licenses, B frequently sells other services such as PCS, professional services, or training, and it has observable stand-alone selling prices for such services. Taking into account market conditions, entity-specific factors, and information about the customer or class of customer, B stratifies its historical software sales data and analyzes the pricing of stand-alone license transactions as well as the pricing of the software when sold with other goods or services. Entity B determines that the vast majority of its software transactions are priced between $500 and $2,400 and that there are no discernible concentrations within that range. Further, the selling-price range is consistent with B's normal pricing policies and practices.

Entity B concludes that it is appropriate to use the residual approach to estimate the stand-alone selling price of its software license in contracts that contain other services. In a few of its contracts, application of the residual approach results in the allocation of between $0 and $50 to the software license performance obligation.

Entity B concludes that it should not use the residual approach to determine the stand-alone selling price of the software license for those contracts for which the residual approach results in the allocation of between $0 and $50 to the software license performance obligation.

Even though the selling price for the software license is highly variable, the allocation objective in ASC 606-10-32-28 is not met. This is because the amount allocated to the software license in a given transaction ($0 to $50) does not faithfully depict "the amount of consideration to which the entity expects to be entitled in exchange for transferring the promised goods or services to the customer."

Since B typically prices its software between $500 and $2,400 and has no substantive history of selling software licenses for a price below $50 (i.e., such pricing is not indicative of its normal pricing policies and practices), those amounts do not represent substantive pricing. Accordingly, B must use another method or methods to determine the stand-alone selling price of its software license performance obligations.[46] This conclusion is consistent with that in Case C in Example 34 in ASC 606-10-55-269. By contrast, if B's application of the residual approach resulted in the allocation of between $500 and $2,400 to software license performance obligations, use of the residual may be reasonable since these amounts appear to be within B's normal pricing policies and practices.

[46] One method may be to use the range of observable pricing in other transactions for which the stand-alone selling prices were determined to be reasonable and in line with B's normal pricing policies and practices.

2.6.2.2 Allocating the Transaction Price When a Value Relationship Exists

ASC 606 does not provide guidance on estimating the stand-alone selling price of a good or service when the price of that good or service is dependent on the price of another good or service in the same contract. Entities in the software industry often sell PCS to customers in conjunction with a software license. Sometimes, PCS is priced as a percentage of the contractually stated selling price of the associated software license (e.g., 20 percent of the net license fee), including upon renewal. In these circumstances, if an entity does not have observable pricing of PCS based on renewals of PCS priced at consistent dollar amounts, it may be appropriate for the entity to consider PCS renewals stated as a consistent percentage of the license fee to determine the observable stand-alone selling price for PCS. That is, even if an entity's license pricing is highly variable and the dollar pricing of PCS in stand-alone sales (i.e., renewals) is therefore also highly variable, the observable stand-alone selling price of PCS may still be established if PCS renewals are priced at a consistent percentage of the license fee, the entity has consistent pricing practices, and the stand-alone selling price results in an allocation that is consistent with the overall allocation objective.

Although the revenue standard includes the residual approach as a suitable method for estimating the stand-alone selling price of a good or service in a contract, use of the residual approach is intended to be limited to situations in which the selling price of the good or service is highly variable or uncertain. Before applying the residual approach, an entity should consider whether (1) it has an observable stand-alone selling price for the good or service or (2) it can estimate the stand-alone selling price by using another method (e.g., adjusted market assessment or expected cost plus a margin approach). When the entity cannot determine the stand-alone selling price of the good or service by using another estimation method (e.g., because the stand-alone selling prices of the license and PCS, respectively, are highly variable), it may be appropriate to apply the residual approach. In some instances, a combination of approaches may be needed to determine stand-alone selling prices and the resulting transaction price allocation. On the basis of available data and established internal pricing strategies and practices related to licenses and PCS, an entity may determine that it has established a "value relationship" between the license and the PCS. If this value relationship is sufficiently consistent, the entity may use it to estimate the stand-alone selling prices of the license and PCS, respectively. For example, if the PCS is consistently priced and renewed at 20 percent of the net license fee, the entity may conclude that it is appropriate to consistently allocate 83 percent of the transaction price to the license (1 ÷ 1.2) and 17 percent to the PCS (0.2 ÷ 1.2).

In addition, if a license is not sold separately because it is always bundled with PCS, the entity might analyze its historical pricing for that bundle and conclude that such pricing is highly variable. If the bundle also includes another good or service (e.g., professional services) for which there is an observable stand-alone selling price, a residual approach may be appropriate for determining the combined stand-alone selling price for the license and PCS bundle if the resulting estimated stand-alone selling price is reasonable.

The example below illustrates these concepts.

Example 2-72

Entity X is a software vendor that licenses its software products to customers. The entity has determined that its licenses are functional IP in accordance with ASC 606-10-55-59.

Entity X enters into a contract with a customer to provide a perpetual software license bundled with one year of PCS and professional services in return for $100,000. While PCS and professional services are sold on a stand-alone basis, the license is never sold separately (i.e., it is always sold with PCS). Entity X concludes that the license, PCS, and professional services represent distinct performance obligations.

Example 2-72 (continued)

The contractually stated selling prices are as follows:

- License — $70,000.
- PCS — $14,000 (20 percent of $70,000).
- Professional services — $16,000.

After analyzing sales of the bundled license and PCS (the "bundle"), X concludes that the pricing for the bundle is highly variable and that a residual approach is appropriate in accordance with ASC 606-10-32-34(c).

Entity X has an observable stand-alone selling price for professional services of $25,000. In addition, the PCS is consistently priced (and may be renewed) at 20 percent of the net license fee stated in the contract (for simplicity, a range is not used). Entity X determines that it has observable data indicating that there is a value relationship between the perpetual license and the PCS since the PCS is consistently priced at 20 percent of the contractually stated selling price of the license, including on a stand-alone basis upon renewal. Consequently, X concludes that the stand-alone selling price of the PCS is equal to 20 percent of the selling price of the license.

We believe that the two alternatives described below ("Alternative A" and "Alternative B") are acceptable methods for allocating the transaction price to the performance obligations. To determine which alternative is more appropriate, an entity should consider the facts and circumstances of the arrangement. For example, we believe that when an entity has no (or insufficient) observable data available to determine the stand-alone selling price for the PCS, it generally would not be appropriate to use Alternative B.

Alternative A

Since the pricing of the bundle that comprises the license and the PCS is highly variable and there is an observable stand-alone selling price for the professional services, X may apply the residual approach to determine the stand-alone selling price of the bundle (step 1). If the resulting amount allocated to the bundle is reasonable and consistent with the allocation objective, X may then use the value relationship to determine how much of the transaction price that remains after allocation to the professional services should be allocated between the license and the PCS (step 2).

Step 1

Under step 1, X would determine the residual transaction price to be allocated to the bundle as follows:

Total transaction price	$ 100,000
Less: observable SSP (professional services)	25,000
Residual transaction price	$ 75,000

Step 2

Next, under step 2, X would allocate the residual transaction price to the license and PCS as follows:

Residual transaction price	$ 75,000	
PCS value relationship (% of license)	20%	
PCS value relationship (% of bundle)	17%	(0.2 ÷ 1.2)
Transaction price allocated to PCS	12,750	($75,000 × 17%)
Transaction price allocated to license	$ 62,250	($75,000 × 83%)

Example 2-72 (continued)

The table below summarizes the allocation of the total transaction price to the performance obligations.

Performance Obligation	Contract Price	SSP	SSP Method(s)	Relative SSP (%)*	Allocated Amount**	% of License SSP
Professional services	$ 16,000	$ 25,000	Observable SSP	25%	$ 25,000	
PCS	14,000	12,750	Residual and value relationship	13%	12,750	20%
License	70,000	62,250	Residual and value relationship	62%	62,250	
	$ 100,000	$ 100,000		100%	$ 100,000	

* To calculate the relative stand-alone selling price percentage, X would divide the stand-alone selling price of each performance obligation by the sum of all of the performance obligations' respective stand-alone selling prices.

** To calculate the amount allocated to each performance obligation, X would multiply the relative stand-alone selling price percentage for the performance obligation by the total transaction (contract) price.

Alternative B

Given that the pricing of the bundle comprising the license and the PCS is highly variable, X may determine that the pricing of the license is also highly variable since it has observable data indicating that there is a consistent value relationship between the license and the PCS. In addition, X may determine that it has an observable stand-alone selling price for the PCS since PCS is consistently priced at 20 percent of the contractually stated selling price of the license. Since X has observable stand-alone selling prices for the PCS and professional services, respectively, it may apply the residual approach to determine the stand-alone selling price of the license if the resulting amount allocated to the license is reasonable and consistent with the allocation objective.

Entity X would allocate the transaction price as follows:

Total transaction price	$ 100,000	
PCS value relationship (% of license)	20%	
Observable SSP (professional services)	$ 25,000	
Observable SSP (PCS)	14,000	($70,000 × 20%)
Residual transaction price (license)	$ 61,000	($100,000 – $25,000 – $14,000)

Example 2-72 (continued)

The table below summarizes the allocation of the total transaction price to the performance obligations.

Performance Obligation	Contract Price	SSP	SSP Method(s)	Relative SSP (%)*	Allocated Amount**	% of License SSP
Professional services	$ 16,000	$ 25,000	Observable SSP	25%	$ 25,000	
PCS	14,000	14,000	Observable SSP via value relationship	14%	14,000	23%
License	70,000	61,000	Residual	61%	61,000	
	$ 100,000	$ 100,000		100%	$ 100,000	

* To calculate the relative stand-alone selling price percentage, X would divide the stand-alone selling price of each performance obligation by the sum of all of the performance obligations' respective stand-alone selling prices.

** To calculate the amount allocated to each performance obligation, X would multiply the relative stand-alone selling price percentage for the performance obligation by the total transaction (contract) price.

In selecting an appropriate alternative to determine the stand-alone selling price in accordance with ASC 606-10-32-33, an entity should consider "all information (including market conditions, entity-specific factors, and information about the customer or class of customer) that is reasonably available to the entity" and should "maximize the use of observable inputs." Further, any allocation achieved through the use of the residual method should be (1) assessed for reasonableness and (2) consistent with the allocation objective in ASC 606-10-32-28.

2.6.2.3 Material Right

Under ASC 606-10-55-41 through 55-45, a customer option to purchase additional goods or services gives rise to a material right if the option gives the entity's customer a discount that is incremental to the range of discounts typically given for those goods or services to that class of customer (e.g., a customer in a particular geographic area or market). It would not be appropriate for the entity to conclude that no material right was conveyed to the customer simply because the selling prices of the goods or services that are subject to the option are highly variable or uncertain and the residual approach was therefore applied.

2.6.3 Using a Range When Estimating a Stand-Alone Selling Price

Throughout ASC 606, the FASB uses the term "standalone selling price," which is defined in ASC 606-10-20 and the ASC master glossary as the "price at which an entity would sell a promised good or service separately to a customer." In the Codification's definition, the FASB refers to the term in the singular rather than the plural. In ASC 606, this word choice is further emphasized in illustrative examples in which the stand-alone selling price is always expressed as a single-point observation or estimate of value (e.g., in Example 33 of ASC 606-10-55, the directly observable stand-alone selling price of Product A is $50, and the estimated stand-alone selling price of Product B under an adjusted market approach is $25).

As a result, some have questioned whether the singular form of the defined term and the illustrations in the examples would preclude an entity from using anything other than a single-point observation or estimate as the stand-alone selling price (i.e., whether the guidance in ASC 606 precludes an entity from using a range of observations or estimates to establish a stand-alone selling price).

We believe that the stand-alone selling price for a performance obligation does not need to be a single amount. That is, the stand-alone selling price can be a range of amounts if the range is sufficiently narrow and concentrated, and the allocation of the transaction price that results from the identified stand-alone selling price is consistent with the general allocation objective in ASC 606-10-32-28 (i.e., "to allocate the transaction price to each performance obligation (or distinct good or service) in an amount that depicts the amount of consideration to which the entity expects to be entitled in exchange for transferring the promised goods or services to the customer").

2.6.3.1 Determining the Appropriate Range

When a range is used to estimate the stand-alone selling price, questions have arisen about how to determine whether the range is truly indicative of the stand-alone selling price.

Some entities in the software industry have developed a practice of estimating the stand-alone selling price as a range by demonstrating that a certain number of observable transactions are sufficiently clustered around a midpoint. For example, on the basis of an analysis of historical data (i.e., observable pricing), an entity may use a bell-shaped curve approach and determine that 75 percent of the sales of a particular good are priced within 15 percent of $5 (the midpoint) in either direction. Therefore, the stand-alone selling price range is $4.25 to $5.75. Both the distribution (i.e., width) of the range and the percentage of transactions clustered around the midpoint within that distribution (i.e., concentration) are important factors to consider in the determination of whether a range is truly indicative of the stand-alone selling price for a particular good or service.[47]

Some entities may instead establish the stand-alone selling price by using historical data on discounts off the list price. For example, if an entity consistently priced a particular good or service at 40 percent off the list price, the entity may establish the midpoint stand-alone selling price as 60 percent of the list price (100 percent less the 40 percent discount), provided that a sufficient number of transactions were discounted within a reasonable range of that midpoint. In such a case, a reasonable range might be 51 percent to 69 percent of the list price (calculated as 15 percent below and 15 percent above the midpoint of 60 percent of the list price). Alternatively, a reasonable range might be a discount of 34 percent to 46 percent off the list price (calculated as 15 percent below and 15 percent above the midpoint of 40 percent off the list price). Entities should consider whether the use of historical discounting data is sufficient and appropriate for establishing the stand-alone selling price.

ASC 606 does not prescribe or preclude any method for estimating the stand-alone selling price (exclusive of conditions that must be met for an entity to use the residual method). Likewise, ASC 606 does not establish any bright lines regarding which values or ranges are indicative of the stand-alone selling price, including the width and concentration of a given range. Instead, ASC 606 states that the stand-alone selling price of each distinct good or service should be a value "that depicts the amount of consideration to which the entity expects to be entitled in exchange for transferring the promised goods or services."

Since the stand-alone selling price determined by using a range must meet the allocation objective in ASC 606-10-32-28, we believe that a particular range may not be appropriate if the concentration is too low, the width is too great, or both. For example, a stand-alone selling price range in which 60 percent of transactions fall within plus or minus 40 percent of a midpoint would most likely be too wide to meet the allocation objective. Likewise, a stand-alone selling price range in which 10 percent of transactions fall within plus or minus 15 percent of a midpoint would most likely not be sufficiently concentrated to meet the allocation objective. Entities must balance the narrowness of distribution with the adequacy of

[47] Some entities may instead apply a method similar to a bell-shaped curve approach to determine a single-point estimate of the stand-alone selling price of a performance obligation (e.g., by using the midpoint within the distribution as the stand-alone selling price). This section addresses only circumstances in which the stand-alone selling price is determined as a range.

the concentration. That is, for an entity to establish the stand-alone selling price by using a range, both the concentration of transactions around the midpoint and the width thereof must be reasonable. For example, we believe that if an entity has maximized the use of observable inputs and has considered all reasonably available information, the entity would most likely meet the allocation objective in ASC 606-10-32-28 when using a stand-alone selling price range that (1) encompasses the majority of the relevant transactions (i.e., greater than 50 percent) and (2) has a width extending no greater than 20 percent from the midpoint in either direction.

We also believe that if there are not enough transactions within a reasonably narrow range, further disaggregation of the data (e.g., by contract value and geography in addition to product type) may be appropriate for determining reasonable stand-alone selling price ranges.[48]

If the resulting range does not meet the allocation objective after an entity has disaggregated the population of transactions, maximized the use of observable inputs, and considered all reasonably available information, the entity may need to apply other methods to establish the stand-alone selling price.

2.6.3.2 Allocation Considerations When the Stand-Alone Selling Price Is Established as a Range

An entity that establishes the stand-alone selling price as a range for a particular good or service will need to implement and consistently apply a policy related to when a contractually stated price does not represent the stand-alone selling price for any performance obligation (e.g., the contractually stated price is not within the established stand-alone selling price range) and reallocation is required. If a contractually stated price falls within the established stand-alone selling price range, it is considered "at stand-alone selling price," and reallocation is therefore unnecessary unless required by other performance obligations in the contract (i.e., because the contractually stated price of another performance obligation is not at its stand-alone selling price). By contrast, if a contractually stated price is outside the stand-alone selling price range, reallocation is required. Accordingly, an entity will need to make a policy election regarding the point in the range that it will use for allocating the transaction price to each performance obligation on the basis of the stand-alone selling price. The following points are possible alternatives (not all-inclusive):

- The midpoint in the range.
- The outer point in the range, which would be:
  - The high point in the range when the contractually stated price is greater than the high point in the range.
  - The low point in the range when the contractually stated price is less than the low point in the range.
- The low point in the range.
- The high point in the range.

Once an entity elects a policy, the entity must ensure that the policy is consistently applied and that the resulting allocation meets the allocation objective in ASC 606-10-32-28.

[48] The level of disaggregation may depend, in part, on an entity's pricing policies and practices.

2.6.4 Methods for Establishing the Stand-Alone Selling Price for Term Licenses and PCS

Questions have arisen regarding the determination of stand-alone selling prices when observable pricing from stand-alone sales (typically the most persuasive data point) does not exist for one or more performance obligations. In addition, contractually stated or list prices to be used as data points may not exist for one or more performance obligations. These circumstances frequently exist when term licenses are sold with PCS. Regardless of whether any of these circumstances apply, entities will generally have to estimate the stand-alone selling price of each performance obligation. We believe that in many such cases, there may be *reasonably available* observable data from which to determine the stand-alone selling prices.

Example 2-73

Market-Based Approach — Value Relationship

Entity A has developed a software solution similar to solutions offered by its peers. Although A's solution has certain proprietary features that other competitors do not offer, A determines that the products are very comparable. Entity A licenses its software on a term basis. Each license includes coterminous PCS (i.e., PCS that begins and ends at the same time as the license term). Entity A has concluded that the license and PCS each constitute a distinct performance obligation.

Entity A always sells the license with the PCS. Given the coterminous nature of the PCS, there are no stand-alone renewals of PCS or stand-alone sales of term licenses. Entity A prices the license and PCS as a bundle and does not have any entity-specific information related to pricing for the term license and PCS separately. Consequently, there are no contractually stated or list prices for each performance obligation.

Entity A obtains data related to its competitors' historical and current pricing of similar licenses and PCS. The data indicate that while pricing is variable, a value relationship exists between the pricing of licenses and the pricing of PCS. Specifically, on average, the data indicate that PCS for software products similar to those offered by A is consistently priced at 22–28 percent of the net license price.

Example 2-73 (continued)

We believe that A may use a market-based approach to estimate the stand-alone selling prices if the data represent reliable pricing information and the products are sufficiently similar. ASC 606-10-32-33 includes market conditions as information that could be used to estimate the stand-alone selling price of a promised good or service. In addition, paragraphs 9.4.31 and 9.4.34 of the AICPA Audit and Accounting Guide *Revenue Recognition* (the "AICPA Guide") state the following, in part, regarding the estimation of the stand-alone selling price:

> **9.4.31** An entity's estimate of the stand-alone selling price will require judgment and the consideration of a number of different factors. . . . A vendor may consider the following information when estimating the stand-alone selling price of the distinct goods or services included in a contract:
>
> *a.* Historical selling prices for any stand-alone sales of the good or service (for example, stand-alone maintenance renewals), even if limited stand-alone sales exist. An entity will have to consider its facts and circumstances to determine how relevant historical pricing is to the determination of current stand-alone selling price. For example, if an entity recently changed its pricing strategy, historical pricing data is likely less relevant for the current determination of stand-alone selling price.
>
> *b.* Historical selling prices for non-stand-alone sales/bundled sales.
>
> *c.* **Competitor pricing for a similar product, especially in a competitive market or in situations in which the entities directly compete for customers.**
>
> *d.* Vendor's pricing for similar products, adjusting for differences in functionality and features.
>
> *e.* Industry pricing practices for similar products.
>
> *f.* Profit and pricing objectives of the entity, including pricing practices used to price bundled products.
>
> *g.* Effect of proposed transaction on pricing and the class of the customer (for example, the size of the deal, the characteristics of the targeted customer, the geography of the customer, or the attractiveness of the market in which the customer resides).
>
> *h.* Published price lists.
>
> *i.* The costs incurred to manufacture or provide the good or service, plus a reasonable profit margin.
>
> *j.* Valuation techniques; for example, the value of intellectual property could be estimated based on what a reasonable royalty rate would be for the use of intellectual property.
>
> **9.4.34** Depending on the inherent uniqueness of a license to proprietary software and the related vendor maintenance, **third-party or industry pricing may or may not be useful for determining stand-alone selling price of distinct goods or services included in these arrangements.** When evaluating whether third-party or industry pricing is a relevant and reliable basis for establishing the stand-alone selling price, **the data points should be based on information of comparable items sold on a stand-alone basis to similar types of customers. Products or services are generally similar if they are largely interchangeable and can be used in similar situations by similar customers.** For these reasons, third-party or industry pricing for software licenses may not be a relevant data point. However, **third-party or industry pricing may be a relevant data point for estimating stand-alone selling price for maintenance, hosting, or professional services if other vendors sell similar services on a stand-alone basis and their pricing is known by the vendor.** For example, third-party pricing may be a relevant data point if other vendors provide implementation services or host the vendor's software products. [Emphasis added]

In accordance with the guidance above, if A's software solution is similar to solutions offered by its peers and the market data are reliable, A may use a market-based approach to estimate the stand-alone selling prices by using the pricing data related to its peers. Under such an approach, A may conclude that the stand-alone selling price of the PCS is 25 percent of the net selling price of the license (i.e., the midpoint of the stand-alone selling price range that A determined through its analysis of available observable market data), which may also be expressed as 20 percent of the bundle price (0.25 ÷ 1.25). Consequently, A may also conclude that the stand-alone selling price of the license is equal to 80 percent of the bundle price.

Example 2-74

Entity-Specific Approach — Value Relationship

Entity B licenses its proprietary software on a term basis for five years. There are no other similar products[49] on the market, and because any incremental direct costs involved in the production and distribution of copies of B's software product are minimal, B does not use cost as a basis for establishing pricing. Customers are required to purchase one year of PCS in conjunction with any license purchase. Consequently, licenses are never sold on a stand-alone basis. On the basis of B's historical experience, PCS is consistently priced at approximately 20 percent of the contractually stated net license fee for both the initial purchase and any subsequent renewals. Therefore, observable stand-alone sales of PCS exist upon renewal. Further, B has concluded that the license and PCS each constitute a distinct performance obligation.

It may be reasonable for B to use the approach described below to estimate the stand-alone selling prices.

Since there are no similar software products on the market, B does not use a market-based approach to estimate the stand-alone selling price of the license. In addition, because the incremental direct costs involved in the production and distribution of copies of B's software product are minimal and such costs are not used as a basis for establishing pricing, B does not use a cost-based approach to estimate the stand-alone selling price of the license. However, B determines that observable data and pricing practices demonstrate the existence of a value relationship between the license and the PCS (PCS is consistently priced at 20 percent of the net license fee).

Paragraphs 9.4.34 and 9.4.44 of the AICPA Guide state the following, in part, regarding the concept of a value relationship:

> **9.4.34** [O]ver time, the software industry has developed a common practice of pricing maintenance services as a percentage of the license fee for related software products, indicating there may be a consistent value relationship between those two items. . . .
>
> **9.4.44** [The] lack of history of selling goods or services on a stand-alone basis combined with minimal direct costs and a lack of third-party or industry-comparable pricing may result in some software vendors focusing on entity-specific and market factors when estimating stand-alone selling price of both the license or the maintenance such as internal pricing strategies and practices. That is, based on its established pricing practices, an entity may conclude that it has established a value relationship between a software product and the maintenance that is helpful in determining stand-alone selling price.

In a manner consistent with the guidance above, B determines that the value relationship between the term license and the PCS for establishing their respective stand-alone selling prices in a given contract is a ratio of 83 percent (1 ÷ 1.2) to 17 percent (0.2 ÷ 1.2). Therefore, if the transaction price for a contract is $120, B would allocate $100 to the license and $20 to the PCS.[50]

Example 2-75

Entity-Specific Approach — Observable Data From Perpetual Licenses

Entity C has developed a unique proprietary software solution. The entity licenses this software on a perpetual basis and has determined that the economic useful life of the software is five years. All customers are required to purchase at least one year of PCS when they purchase a license. Consequently, licenses are never sold on a stand-alone basis. On the basis of C's historical experience, PCS is consistently priced at approximately 20 percent of the contractually stated net license fee for both the initial purchase and any subsequent stand-alone renewals. In addition, C has determined from historical experience that customers typically purchase a total of five years of PCS over the life of a perpetual license.

[49] Even when similar products do exist, reliable pricing information may not be available for determining stand-alone selling prices under a market-based approach.

[50] If B had determined that pricing for its software product is highly variable under ASC 606-10-32-34(c)(1) and that an observable stand-alone selling price exists for PCS, it would have been reasonable for B to conclude that a residual approach is appropriate. This approach may yield an answer similar to the one resulting from the value relationship approach described above.

Example 2-75 (continued)

Like Entity B in Example 2-74 above, C does not use a market- or cost-based approach to estimate the stand-alone selling price of a license. Therefore, C estimates the stand-alone selling prices of a perpetual license and PCS, respectively, by using the value relationship observed between the license and PCS (i.e., 83%/17%).

Entity C charges an up-front fee of $100 for a perpetual license and prices PCS at 20 percent of the license fee both initially and upon renewal. The resulting value relationship between a perpetual license and PCS, which varies depending on the total years of PCS purchased, is shown in the table below.

Perpetual License Price*	Price of Initial Year of PCS	Years of PCS Renewed	Price of PCS Renewals	Total Cumulative PCS Price	Total Cumulative Transaction Price	Value Relationship**
$ 100	$ 20	0	$ 0	$ 20	$ 120	83%/17%
$ 100	$ 0	1	$ 20	$ 40	$ 140	71%/29%
$ 100	$ 0	2	$ 20	$ 60	$ 160	62%/38%
$ 100	$ 0	3	$ 20	$ 80	$ 180	56%/44%
$ 100	$ 0	4	$ 20	$ 100	$ 200	50%/50%

* This price is paid up front and only once.

** The value relationship is the ratio of (1) the license price divided by the total cumulative transaction price to (2) the total cumulative PCS price divided by the total cumulative transaction price.

Entity C also licenses the same software product discussed above on a term basis for five years. Each sale of a term license is bundled with coterminous PCS (i.e., PCS that begins and ends at the same time as the license term). Entity C has concluded that the term license and PCS each constitute a distinct performance obligation. The term license is always sold with PCS, and given the coterminous nature of the PCS, there are no stand-alone renewals of PCS on term licenses. That is, stand-alone sales of PCS and term licenses do not occur. Entity C prices term licenses and PCS as a bundle; consequently, contractually stated prices for a term license and PCS individually are unavailable. However, C determines that its internal pricing process for a term license (1) is similar to that for a perpetual license and (2) takes into consideration the length of a term license relative to renewals of PCS on a perpetual license.

It may be reasonable for C to use the approach described below to estimate the stand-alone selling prices.

Entity C considers the observable entity-specific information related to its perpetual licenses to estimate the stand-alone selling price of a five-year term license and that of the associated PCS.

Paragraph 9.4.32 of the AICPA Guide states the following:

> The quantity and type of reasonably available data points used in determining stand-alone selling price will not only vary among software vendors but may differ for products or services offered by the same vendor. Furthermore, with respect to software licenses, **reasonably available data points may vary for the same software product that has differing attributes/licensing rights (that is, perpetual versus term license, exclusive versus nonexclusive). For example, a vendor may have stand-alone observable sales of the maintenance services in its perpetual software license (that is, maintenance renewals). These observable sales may be a useful data point for similar maintenance services bundled with other types of software licenses (for example, term licenses)**. [Emphasis added]

In a manner consistent with the guidance above, an entity may consider observable data related to the value relationship between a perpetual license and the associated PCS to be a relevant and useful data point in determining the stand-alone selling prices of term licenses for the same software and the associated PCS, especially when other observable data are limited or nonexistent. While the entity should not presume such data to be determinative when estimating the stand-alone selling prices, we acknowledge that in certain cases in which the observable inputs for the determination of stand-alone selling prices for term licenses and PCS are limited to data on the same licenses and PCS sold on a perpetual basis, such data may represent the best available information for making the determination.

Example 2-75 (continued)

Legacy guidance in AICPA Technical Practice Aid (TPA) Section 5100.68, "Revenue Recognition: Fair Value of PCS in Perpetual and Multi-Year Time-Based Licenses and Software Revenue Recognition," indicates that the value of PCS for a term license is different from that of PCS for the same license sold on a perpetual basis because upgrades and enhancements associated with the latter are retained indefinitely. AICPA TPA 5100.68 states, in part:

> **PCS services for a perpetual license and PCS services for a multi-year time-based license are two different elements.** Though the same unspecified product upgrades or enhancements may be provided under each PCS arrangement, **the time period during which the software vendor's customer has the right to use such upgrades or enhancements differs based on the terms of the underlying licenses**. Because PCS services are bundled for the entire term of the multi-year time-based license, those PCS services are not sold separately. [Emphasis added]

While this guidance has been superseded by ASC 606, we believe that the concept that differences in value may exist between PCS for a term license and PCS for a perpetual license remains valid. However, we also note that AICPA TPA 5100.68 goes on to state the following:

> **[I]n the rare situations in which both of the following circumstances exist, the PCS renewal terms in a perpetual license provide [vendor-specific objective evidence] of the fair value of the PCS services element included (bundled) in the multi-year time-based software arrangement:** (1) **the term of the multi-year time-based software arrangement is substantially the same as the estimated economic life of the software product** and related enhancements that occur during that term; and (2) **the fees charged for the perpetual (including fees from the assumed renewal of PCS for the estimated economic life of the software) and multi-year time-based licenses are substantially the same.** [Emphasis added]

Similarly, pricing data from transactions involving a perpetual license may, in certain situations, be relevant to the determination of the stand-alone selling prices for a term license and associated PCS. This concept is similar to that of the above-referenced guidance in paragraph 9.4.32 of the AICPA Guide, but determining the stand-alone selling price for a term license under ASC 606 on the basis of pricing for a perpetual license is more flexible than under legacy U.S. GAAP. Nonetheless, pricing data for the perpetual license should not be considered in isolation from the facts and circumstances associated with the term license. Paragraph 9.4.51 of the AICPA Guide states the following:

> As discussed in paragraph 9.4.44, a software vendor may have established a value relationship between the perpetual software license and the maintenance services for that license that influences the vendor's determination of stand-alone selling price for each of those items. **Given that the underlying products (software license) and services (technical support and unspecified upgrades and enhancements) are similar for both a perpetual and a term license arrangement, FinREC believes that the renewal pricing for the maintenance associated with one type of license (for example, a percentage of the license fee for a perpetual license) would be a good starting point for establishing stand-alone selling price for the maintenance associated with the license without renewal pricing. Entities would have to determine whether the stand-alone selling price of the maintenance for one type of license would be different from the other type of license. Management would need to carefully analyze its particular facts and circumstances and the related market dynamics, but should consider any stand-alone renewal transaction data, adjusting as necessary for the type of license, in formulating its stand-alone selling price.** For example, some vendors may determine that the renewal rates would not differ based on market dynamics. Conversely, other vendors may determine that the ability to use the updates provided in maintenance associated with perpetual or longer-term licenses might cause that maintenance to have higher pricing. [Emphasis added]

Example 2-75 (continued)

In a manner consistent with the guidance above and C's internal pricing process, C determines that the value relationship observed between sales of perpetual licenses and the associated PCS is the best available observable information for estimating the stand-alone selling price of the term license and that of the associated PCS. Therefore, after considering all of the facts and circumstances, C estimates the stand-alone selling prices of the term license and PCS, respectively, by using the value relationship observed in the sale of a perpetual license with five total years of PCS, or 50%/50%.

We believe that this example may be expanded to include various scenarios in which the economic useful life of the perpetual license is not equivalent to the term of the term license. In such cases, various factors could be considered, including, but not limited to, the following:

- The *expected term* (i.e., the stated duration of the term license and PCS *as well as* subsequent renewals of both) of the term license as compared with the economic useful life of the perpetual license.
- The initial term of the term license as compared with the economic useful life of the perpetual license.
- Renewals of the term license and associated PCS as compared with renewals of PCS for the perpetual license.
- The internal pricing process and practices (e.g., if the internal pricing process and practices for the term license are consistent with those for the perpetual license inclusive of PCS renewals, the value relationship table for the perpetual license may be more relevant).
- The pace of technological advancement that could affect whether the customer is more likely to renew the term license (rather than upgrade to a new version or buy a license to a different software product).

Example 2-76

High Renewal Rates and Expected Term

Assume the same facts as in Example 2-75 above, except that Entity C sells (1) a term license with an initial two-year term, (2) coterminous PCS, and (3) annual renewals of both the term license and PCS on a bundled basis. On the basis of historical experience, 95 percent of C's customers are expected to renew the license and PCS on an annual basis for at least three additional years.

It may be reasonable for C to use the approach described below to estimate the stand-alone selling prices of the two-year term license and PCS.

In a manner similar to that discussed in Example 2-75, C determines that the value relationship observed between sales of perpetual licenses and the associated PCS is the best available observable information for estimating the stand-alone selling price of the term license and that of the associated PCS. Entity C considers that the expected term of the term license and PCS (i.e., the term that is inclusive of anticipated renewals) is *greater* than the initial two-year term and approximates the economic useful life of the perpetual license. That is, C concludes that a two-year term license with coterminous PCS and annual renewals is not substantially different from a five-year term license with coterminous PCS since the term license and PCS are renewed annually 95 percent of the time for an additional three years. Therefore, after considering all facts and circumstances, C estimates the stand-alone selling prices of the term license and PCS, respectively, by using the value relationship observed in the sale of a perpetual license with five total years of PCS, or 50%/50%.

In addition to the facts outlined above, assume the following:

- The transaction price for the initial two-year term license with coterminous PCS is $100 and is paid up front.
- The transaction price for the three annual renewals of the coterminous term license and PCS is $50 per year.

Example 2-76 (continued)

The license revenue will be recognized up front ($50 in year 1 and $25 at the start of years 3, 4, and 5 as renewals occur) when the customer obtains the right to use and benefit from the software in accordance with ASC 606-10-55-58C. PCS revenue will be recognized over time ($50 over the first two-year period for the initial two-year PCS and then $25 over each subsequent one-year period as renewals occur), typically on a straight-line (i.e., ratable) basis because of the stand-ready nature of most PCS offerings.

The table below summarizes the allocation of the transaction price and associated revenue recognition.

	Year 1	Year 2	Year 3	Year 4	Year 5	Total (Years 1–5)
Consideration	$100	—	$50	$50	$50	$250
License revenue	$50	—	$25	$25	$25	$125
PCS revenue	$25	$25	$25	$25	$25	$125
Total revenue (license and PCS)	$75	$25	$50	$50	$50	$250

Example 2-77

Low Renewal Rates and Expected Term

Assume the same facts as in Example 2-75, except that Entity C sells (1) a term license with an initial one-year term, (2) coterminous PCS, and (3) annual renewals of both the term license and PCS on a bundled basis. On the basis of historical experience, only 10 percent of C's customers are expected to renew the license and PCS for one additional year. Entity C believes that it (1) would not price its one-year term license and PCS differently from its perpetual license with one year of PCS and (2) does not have any other observable information that would indicate that the pricing of its one-year term license and PCS would be different from the pricing of its perpetual license with one year of PCS.

It may be reasonable for C to use the approach described below to estimate the stand-alone selling prices.

In a manner similar to that discussed in Example 2-75, C determines that the value relationship observed between sales of perpetual licenses and the associated PCS is the best available observable information for estimating the stand-alone selling price of the term license and that of the associated PCS. However, C considers that the expected term of the term license and PCS (i.e., the term that is inclusive of anticipated renewals) is substantially different from the economic useful life of the perpetual license because the term license and associated PCS are infrequently renewed beyond the initial term. In addition, the initial term of the term license is only one year. However, C does not believe that it would price the two types of licenses and PCS differently. Therefore, after considering all of the facts and circumstances, C estimates the stand-alone selling prices of the term license and PCS, respectively, by using the value relationship observed in the sale of a perpetual license with one year of PCS, or approximately 83%/17%. Since C does not have any other observable information that conflicts with the 83%/17% split, and management asserts that it would not price term licenses differently, the only — and, therefore, best — observable information is the value relationship observed in sales of perpetual licenses with one year of PCS.

Example 2-78

Moderate Renewal Rates and Expected Term

Assume the same facts as in Example 2-75, except that Entity C sells (1) a term license with an initial two-year term, (2) coterminous PCS, and (3) annual renewals of both the term license and PCS on a bundled basis. On the basis of historical experience, 70 percent of C's customers are expected to renew the license and PCS on an annual basis. While there is no consistent pattern of renewals, most customers that renew do so for one or two years. In addition, C has an internal pricing policy that indicates that renewals of the term license should be targeted at approximately 67 percent (per additional year) of the original annualized transaction price, while renewals of PCS should be targeted at approximately 33 percent (per additional year) of the original annualized transaction price.

It may be reasonable for C to use the approach described below to estimate the stand-alone selling prices.

Entity C determines that its internal pricing policy and the value relationship observed between sales of perpetual licenses and the associated PCS constitute the best available information for estimating the stand-alone selling price of the term license and that of the associated PCS. The entity considers that the expected term of the term license and PCS (i.e., the term that is inclusive of anticipated renewals) is most likely greater than the initial two-year term given the renewal rate of 70 percent but is most likely shorter than the economic useful life of a perpetual license. Consequently, by using the observable data related to the value relationship between a perpetual license and various durations of PCS, C determines that a value relationship between the term license and the PCS should be between 71%/29% (perpetual license with two years of PCS) and 50%/50% (perpetual license with five years of PCS). Entity C also considers its internal pricing policy and notes that the policy indicates a value relationship closer to 67%/33%. Accordingly, after considering all of the facts and circumstances, C estimates the stand-alone selling prices of the term license and PCS, respectively, by using the value relationship observed in the sale of a perpetual license with three years of PCS, or approximately 62%/38%.

2.6.5 Allocating Variable Consideration in Cloud-Based or Hosted Software Arrangements

Entities that sell cloud-based or hosted software solutions (e.g., SaaS arrangements)[51] often require the customer to pay them a variable amount, usually based on the underlying usage of the SaaS technology. ASC 606 generally requires entities to estimate variable consideration subject to a constraint,[52] but it also provides a practical expedient and a variable consideration allocation exception. In addition, while ASC 606 includes an exception to the general model for variable consideration in the form of a sales- or usage-based royalty related to licenses of IP,[53] SaaS arrangements often do not qualify for the exception because a license is typically not transferred to the customer in such cases (i.e., the contracts are often hosting arrangements that do not meet the criteria in ASC 985-20-15-5 to be considered a license and are therefore accounted for as a service).

The next sections provide interpretive guidance intended to help entities address certain challenges associated with applying the revenue model in ASC 606 to SaaS arrangements that include variable consideration. All of the examples assume that (1) SaaS is the only promise in the contract and (2) the SaaS performance obligation meets the requirements to be recognized over time because the customer "simultaneously receives and consumes the benefits provided by the entity's performance as the entity performs," in accordance with ASC 606-10-25-27(a).

[51] In this section, it is assumed that a SaaS arrangement is accounted for as a service contract because the customer does not have the ability to take possession of the underlying software license on an on-premise basis.

[52] In accordance with ASC 606-10-32-11, variable consideration can only be included in the transaction price "to the extent that it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is subsequently resolved."

[53] When a sales- or usage-based royalty is related only to a license of IP or a license of IP that is the predominant item in an arrangement, the royalty is recognized at the later of the date on which (1) the subsequent sale or usage occurs or (2) the performance obligation associated with the royalty is satisfied (or partially satisfied).

2.6.5.1 Applying the "Invoice Practical Expedient" to Stand-Ready SaaS Arrangements With Usage-Based Variable Consideration

ASC 606-10-55-18 provides the following practical expedient, which can be applied to performance obligations that are satisfied over time:

> As a practical expedient, if an entity has a right to consideration from a customer in an amount that corresponds directly with the value to the customer of the entity's performance completed to date (for example, a service contract in which an entity bills a fixed amount for each hour of service provided), the entity may recognize revenue in the amount to which the entity has a right to invoice.

Commonly referred to as the "invoice practical expedient," this option allows an entity to recognize revenue in the amount of consideration to which the entity has the right to invoice if such amount corresponds directly to the value transferred to the customer. That is, the invoice practical expedient cannot be applied in all circumstances because the amount that an entity has the right to invoice does not always correspond to the value of the entity's performance to date. Therefore, an entity should demonstrate its ability to apply the invoice practical expedient to performance obligations satisfied over time. In addition, because the use of the invoice practical expedient must faithfully depict the entity's measure of progress toward completion, the expedient can only be applied to performance obligations satisfied over time (not at a point in time).

We believe that if a stand-ready SaaS arrangement (1) has a pricing structure that is solely variable on the basis of the customer's SaaS usage, (2) is priced at a fixed rate per usage, and (3) gives the entity the right to invoice the customer for its usage as it occurs, the invoice practical expedient may be applied. In such cases, the amount of revenue for which the entity has the right to invoice may reflect the value the customer has obtained from the SaaS during the period because it is a fixed rate based on the volume of the customer's SaaS usage. Accordingly, an entity with this type of arrangement is not required to estimate the amount of variable consideration to which it would be entitled at contract inception and instead can recognize revenue as the customer's usage occurs (provided that it also has the right to invoice).

The conclusion above may not be appropriate when (1) there are fixed fees (in addition to the usage-based fees), (2) there are substantive minimum usage requirements, (3) the usage price or rate varies during the contract period, or (4) up-front or back-end fees are charged. In those circumstances, it may be challenging to demonstrate that the amount the entity has the right to invoice corresponds to the value the customer has received to date. However, the invoice practical expedient may not necessarily be precluded in the following scenarios (not all-inclusive):

- The amount of fixed consideration the entity has a right to invoice does not change from period to period, and the customer's usage is expected to be consistent from period to period.
- The customer is expected to significantly exceed any minimum usage requirements.
- The usage rate changes solely on the basis of the Consumer Price Index or another metric that reflects an increase or decrease in value and directly correlates to the benefits received by the customer.
- The up-front or back-end fees are insignificant relative to the other consideration in the arrangement so that the amount the entity has the right to invoice is commensurate with the value the customer has received to date.

2.6.5.2 Applying the Variable Consideration Allocation Exception to Stand-Ready SaaS Arrangements With Usage-Based Variable Consideration

Generally, ASC 606 requires an entity to allocate the transaction price to each performance obligation on a relative stand-alone selling price basis. However, the guidance provides an exception to the general allocation principle that applies specifically to variable consideration (the "variable consideration allocation exception"). Specifically, ASC 606-10-32-39(b) states that variable consideration may be attributable to "[o]ne or more, but not all, distinct goods or services promised in a series of distinct goods or services that forms part of a single performance obligation." In addition, ASC 606-10-32-40 states the following:

> An entity shall allocate a variable amount (and subsequent changes to that amount) entirely to a performance obligation or to a distinct good or service that forms part of a single performance obligation in accordance with paragraph 606-10-25-14(b) if both of the following criteria are met:
>
> a. The terms of a variable payment relate specifically to the entity's efforts to satisfy the performance obligation or transfer the distinct good or service (or to a specific outcome from satisfying the performance obligation or transferring the distinct good or service).
>
> b. Allocating the variable amount of consideration entirely to the performance obligation or the distinct good or service is consistent with the allocation objective in paragraph 606-10-32-28 when considering all of the performance obligations and payment terms in the contract.

If an entity elects not to apply the invoice practical expedient or is precluded from applying such expedient to its stand-ready SaaS arrangements, it may be required to apply the variable consideration allocation exception to usage-based fees depending on the facts and circumstances. Because a SaaS arrangement would typically be a series of distinct services that represent a single performance obligation, an entity that does not apply the invoice practical expedient would apply the variable consideration allocation exception if the conditions in ASC 606-10-32-40 are met. An entity that receives variable consideration based on usage would typically meet the first condition in ASC 606-10-32-40(a) because the usage is usually associated with a specific outcome (e.g., the transaction is processed, or storage capacity is used). However, an entity must carefully evaluate its pricing structure to determine whether allocating variable consideration to a distinct service (e.g., each day that SaaS is provided) is consistent with the allocation objective.

Example 2-79

Application of the Variable Consideration Allocation Exception to Stand-Ready SaaS Arrangements With Variable Consideration That Is Solely Usage-Based

Entity A sells a SaaS platform that is a stand-ready performance obligation. The pricing structure for its SaaS is based solely on usage (e.g., $1 for each transaction processed). We believe that if a stand-ready SaaS arrangement has a variable pricing structure based on the customer's SaaS usage and the SaaS is priced at a fixed rate per usage, the variable consideration allocation exception may be applied.[54] This is because (1) the usage-based fees are related to a specific outcome and (2) allocation of the variable consideration to each distinct service period (e.g., each day) would meet the allocation objective (i.e., the usage-based pricing represents the amount of consideration to which the entity expects to be entitled upon the transfer of each and every distinct service, which is based on each increment of time within the series). Accordingly, A is not required to estimate the amount of variable consideration to which it would be entitled at contract inception and instead can recognize revenue as the customer's usage occurs.

[54] This assumes that the invoice practical expedient is not used. However, as discussed in Section 2.6.5.1, the invoice practical expedient could be used when a stand-ready SaaS arrangement (1) has a pricing structure that is solely variable on the basis of the customer's SaaS usage, (2) is priced at a fixed rate per usage, and (3) gives the entity the right to invoice the customer for its usage as it occurs.

Example 2-79 (continued)

However, the conclusion above may not be appropriate if the usage price or rate varies during the contract period, and an entity should give careful consideration to variable fees that increase or decrease on the basis of usage (e.g., tiered pricing). If the usage-based fees that would be allocated to each distinct service would not represent the amount of consideration to which the entity expects to be entitled upon the transfer of each distinct service (i.e., the increase or decrease in the fee is not commensurate with the efforts required by the entity to satisfy each distinct service or does not reflect the value of the specific outcome associated with usage), it may not be appropriate to conclude that the requirements to use the variable consideration allocation exception are met.

Example 2-80

Application of the Variable Consideration Allocation Exception to Stand-Ready SaaS Arrangements With Both Fixed Consideration and Usage-Based Variable Consideration

Entity B sells a SaaS platform that is a stand-ready performance obligation. The pricing structure for its SaaS includes a fixed component that is charged regardless of usage (e.g., a flat fee of $100,000 for an annual subscription) and a variable component based on usage (e.g., $1 for each transaction processed). If B uses a ratable (i.e., time-based) measure of progress for its stand-ready SaaS arrangements, the fixed consideration (e.g., $100,000) would be recognized ratably over the contractual period. In addition, as discussed in Example 2-79 above, we believe that if a stand-ready SaaS arrangement has a variable pricing structure based on the customer's SaaS usage and the SaaS is priced at a fixed rate per usage, the variable consideration allocation exception may be applied. This is because (1) the usage-based fees are related to a specific outcome and (2) allocation of the variable consideration to each distinct service period (e.g., each day) would meet the allocation objective (i.e., the usage-based pricing would represent the amount of consideration to which the entity expects to be entitled upon the transfer of each and every distinct service, which is based on each increment of time within the series). Accordingly, B is not required to estimate the amount of variable consideration to which it would be entitled at contract inception and instead can recognize the variable consideration as the customer's usage occurs (with the fixed consideration recognized ratably).

As in Example 2-79 above, the conclusion above may not be appropriate if the usage price or rate varies during the contract period.

Example 2-81

Application of the Variable Consideration Allocation Exception to Stand-Ready SaaS Arrangements With Overage Fees and Minimums That Reset Monthly

Entity C sells a SaaS platform that is a stand-ready performance obligation and uses a ratable measure of progress for the performance obligation. The pricing structure for its SaaS includes a fixed component that is based on a predetermined amount of usage (i.e., a minimum usage requirement) and a variable component that is charged if the customer exceeds the predetermined amount (i.e., "overage fees"). In one of its arrangements, C sells a one-year subscription that has a minimum usage requirement of 100,000 transactions every month. The subscription is priced at $100,000 per month ($1 for each transaction processed); if the number of transactions exceeds 100,000, additional transactions processed are also priced at $1 each. If the customer has fewer than 100,000 transactions in any month, the shortfall is not carried forward (e.g., if the customer only has 90,000 transactions in a particular month, it must still pay $100,000 that month and the next month's minimum is still 100,000 transactions). Therefore, the total fixed consideration is $1.2 million ($100,000 × 12 months), which is recognized ratably over the contractual term.

Example 2-81 (continued)

An entity's ability to apply the variable consideration allocation exception when a fixed component and overage fees exist depends on whether the minimum usage requirements are the same in each period, whether the overage fees are a fixed rate per usage, and how often the minimum usage requirements are "reset." If the minimum usage requirements are the same in each period, overage fees are a fixed rate per usage, and minimum usage requirements are reset frequently throughout the entity's reporting period (e.g., monthly), the overage fees incurred in such periods typically qualify for the variable consideration allocation exception. This is because (1) the usage-based fees are related to a specific outcome and (2) allocation of the variable consideration to each distinct service period (e.g., each month) would meet the allocation objective (i.e., the usage-based pricing represents the amount of consideration to which the entity expects to be entitled upon the transfer of each and every distinct service, which is based on each increment of time within the series).

In assessing the allocation objective, C determines that any overage fees for a particular month are solely associated with that month and reflect the value of the specific outcome associated with the overage. Accordingly, C is not required to estimate the amount of variable consideration to which it would be entitled at contract inception and instead can recognize the variable consideration as the customer's usage occurs (with the fixed consideration recognized ratably).

Example 2-82

Application of the Variable Consideration Allocation Exception to Stand-Ready SaaS Arrangements With Overage Fees and a Minimum That Does Not Reset

Assume the same facts as in Example 2-81 above except that in one of its arrangements, Entity C sells a one-year subscription that has an annual minimum usage requirement of 1.2 million transactions. The subscription is priced at a fixed fee of $1.2 million ($1 for each transaction processed); if the number of transactions exceeds 1.2 million, additional transactions processed are also priced at $1 each. Therefore, the total fixed consideration is $1.2 million, which is recognized ratably over the contractual term ($100,000 each month).

Because the minimum usage requirements do not reset, the overage fees incurred in the latter part of the year would not qualify for the variable consideration allocation exception. While the usage-based fees are related to a specific outcome, allocation of the variable consideration to each distinct service period (e.g., the latter month or months of the year) would not meet the allocation objective (i.e., the usage-based pricing does not represent the amount of consideration to which the entity expects to be entitled upon the transfer of each and every distinct service, which is based on each increment of time within the series). In assessing the allocation objective, C determines that any overage fees for a particular month (1) would not be solely associated with that month and (2) would not reflect the value of the specific outcome associated with the overage. For example, if the customer has 110,000 transactions in each month, total consideration would be $1.32 million (110,000 × $1 × 12 months) and $100,000 of fixed consideration would be recognized in each month. The overage fees would be $120,000 ($1.32 million – $1.2 million). However, if the overage fees were recognized in the specific month they related to, they would be recognized in the last 2 months of the year ($10,000 in month 11 and $110,000 in month 12). Therefore, even though the number of transactions would be the same in each month (i.e., the benefits received in the last two months are similar to those received in the first 10 months because the usage is the same), more revenue would be recognized in the last 2 months ($100,000 recognized in months 1–10, $110,000 recognized in month 11, and $210,000 recognized in month 12).

Accordingly, C would generally be required to estimate the amount of variable consideration to which it would be entitled at contract inception and to recognize both fixed and variable consideration ratably over the contract term, subject to the variable consideration constraint.[55]

[55] However, as discussed in Section 2.6.7.1, the invoice practical expedient could be used when a stand-ready SaaS arrangement (1) has a pricing structure that is solely variable on the basis of the customer's SaaS usage, (2) is priced at a fixed rate per usage, and (3) gives the entity the right to invoice the customer for its usage as it occurs. While, in this example, the fees are not solely variable, if (1) the customer is expected to significantly exceed the minimum usage requirements, (2) the minimum usage is priced at the same rate as any overages, and (3) C has the right to invoice the customer for its usage as it occurs, C may be able to use the invoice practical expedient (which would result in the recognition of both the fixed and variable fees as usage occurs rather than ratable recognition).

Example 2-83

Application of the Variable Consideration Allocation Exception to Stand-Ready SaaS Arrangements With Overage Fees and Minimums That Reset Annually

Assume the same facts as in Example 2-81 except that in one of its arrangements, Entity C sells a three-year subscription that has an annual minimum usage requirement of 1.2 million transactions. The subscription is priced at $1.2 million per year ($1 for each transaction processed); if the number of transactions exceeds 1.2 million, the additional transactions are also priced at $1 each. If the customer has fewer than 1.2 million transactions in any year, the shortfall is not carried forward (e.g., if the customer only has 1 million transactions in a particular year, it must still pay $1.2 million and the next year's minimum is still 1.2 million transactions). Therefore, the total fixed consideration is $3.6 million ($1.2 million × 3 years), which is recognized ratably over the contractual term ($100,000 in each month).

Since the minimum usage requirements are the same for each year, overage fees are a fixed rate per usage, and minimum usage requirements are reset each year, the overage fees incurred for a particular annual period typically qualify for the variable consideration allocation exception and can therefore be allocated to that year's service. This is because (1) the usage-based fees are related to a specific outcome and (2) the allocation of variable consideration to each distinct service period (e.g., each year) meets the allocation objective (i.e., the usage-based pricing represents the amount of consideration to which the entity expects to be entitled upon the transfer of each and every distinct service, which is based on each annual increment of time within the series). In assessing the allocation objective, C determines that any overage fees for a particular year are solely associated with that year and reflect the value of the specific outcome associated with the overage.

However, as in Example 2-82, because the minimum usage requirements do not reset frequently (e.g., monthly), the overage fees incurred in the latter part of each year would not qualify for the variable consideration allocation exception for the periods within each year (e.g., each month within the year). While the usage-based fees are related to a specific outcome, the allocation of variable consideration to each distinct service period (e.g., the latter month or months of the year) would not meet the allocation objective (i.e., the usage-based pricing does not represent the amount of consideration to which the entity expects to be entitled upon the transfer of each and every distinct service, which is based on each increment of time within the series). In assessing the allocation objective, C determines that any overage fees for a particular month (1) are not solely associated with that month and (2) do not reflect the value of the specific outcome associated with the overage.

Accordingly, C would generally be required to estimate the amount of variable consideration to which it would be entitled in each year and to recognize both fixed and variable consideration ratably over each annual period, subject to the variable consideration constraint. However, because the allocation objective is met on an annual basis (i.e., the overage fees for each year (1) are solely associated with that year and (2) reflect the value of the specific outcome associated with the overage for that year), the overages for a particular year can be recognized that year. For example, if C expects $100,000 in overage fees in the first year, $120,000 in overage fees in the second year, and $150,000 in overage fees in the third year, it may recognize $1.3 million[56] ratably in the first year, $1.32 million[57] ratably in the second year, and $1.35 million[58] ratably in the third year, subject to the variable consideration constraint.[59]

[56] $1.2 million fixed consideration plus $100,000 estimated variable consideration.

[57] $1.2 million fixed consideration plus $120,000 estimated variable consideration.

[58] $1.2 million fixed consideration plus $150,000 estimated variable consideration.

[59] To determine whether the invoice practice expedient can be used, see footnote 55.

Example 2-84

Application of the Variable Consideration Allocation Exception to Stand-Ready SaaS Arrangements With Overage Fees and Minimums That Increase Monthly

Assume the same facts as in Example 2-81 except that in one of its arrangements, Entity C sells a one-year subscription that has an increasing minimum usage requirement in every month, which is priced at $1 for each transaction processed. If the number of transactions exceeds the minimum requirement, the additional transactions processed are also priced at $1 each. The minimum usage starts at 100,000 transactions in the first month and increases by 10,000 in each month of the year (210,000[60] in the last month). Therefore, the total fixed consideration is $1.86 million,[61] which is recognized ratably over the contractual term.

Because the minimum usage requirements change in each month, C must carefully evaluate whether it would qualify for the variable consideration allocation exception. While the usage-based fees are related to a specific outcome, allocation of the variable consideration to each distinct service period (e.g., each month) would not be likely to meet the allocation objective (i.e., the usage-based pricing is not likely to represent the amount of consideration to which the entity expects to be entitled upon the transfer of each and every distinct service, which is based on each increment of time within the series). In assessing the allocation objective, C determines that any overage fees for a particular month are not likely to (1) be solely associated with that month or (2) reflect the value of the specific outcome associated with the overage. For example, fixed consideration of $155,000 would be recognized in each month ($1.86 million ÷ 12 months). However, if the customer had 200,000 transactions in each month, the amount of overage fees would be greater in the earlier months ($100,000[62] in the first month, $90,000[63] in the second month, and so on). Therefore, even though the number of transactions would be the same in each month, more consideration would be recognized in the earlier months (for a total of $255,000[64] recognized in the first month, $245,000[65] recognized in the second month, and so on).

Accordingly, C would generally be required to estimate the amount of variable consideration to which it would be entitled at contract inception and to recognize both fixed and variable consideration ratably over the contract term, subject to the variable consideration constraint.[66]

Example 2-85

Application of the Variable Consideration Allocation Exception to Stand-Ready SaaS Arrangements With Overage Fees and Minimums That Carry Over

Assume the same facts as in Example 2-81 except that in one of its arrangements, Entity C sells a one-year subscription that specifies a minimum usage requirement of 100,000 transactions in every month. The subscription is priced at $100,000 per month ($1 for each transaction processed); if the number of transactions exceeds 100,000, the additional transactions processed are also priced at $1 each. However, if the customer has fewer than 100,000 transactions in any month, the shortfall is carried over to the following month (e.g., if the customer only has 90,000 transactions in the first month, it must still pay $100,000 for that month but the next month's minimum becomes 110,000 transactions; and if in the second month the customer only has 95,000 transactions, it must still pay $100,000 for that month but the next month's minimum becomes 115,000. However, if in the third month the customer has 120,000 transactions, it will pay $100,000 for that month and pay $5,000 for the overage). In addition, any shortfall at the end of the year is not carried forward upon renewal. Therefore, the total fixed consideration is $1.2 million ($100,000 × 12 months), which is recognized ratably over the contractual term.

[60] $100,000 plus ($10,000 × 11 months).

[61] $100,000 + $110,000 + $120,000 + $130,000 + $140,000 + $150,000 + $160,000 + $170,000 + $180,000 + $190,000 + $200,000 + $210,000.

[62] $200,000 total fees (200,000 transactions × $1 per transaction) less $100,000 minimum in month 1.

[63] $200,000 total fees (200,000 transactions × $1 per transaction) less $110,000 minimum in month 2.

[64] $155,000 fixed consideration plus $100,000 overage fees (see footnote 60).

[65] $155,000 fixed consideration plus $90,000 overage fees (see footnote 61).

[66] We believe that for these types of arrangements, the allocation objective would only be met in limited circumstances. For example, if the number of overages was expected to be the same in each month (in line with the increase in minimums), an entity may be able to apply the variable consideration allocation exception. However, the entity must have sufficient historical data to substantiate that the number of overages will be the same in each month. In addition, to determine whether the invoice practice expedient can be used, see footnote 55.

Example 2-85 (continued)

Because the minimum usage requirements could change in each month, C must carefully evaluate whether it would qualify for the variable consideration allocation exception. As in Example 2-84, while the usage-based fees are related to a specific outcome, allocation of the variable consideration to each distinct service period (e.g., each month) may not meet the allocation objective (i.e., the usage-based pricing may not represent the amount of consideration to which the entity expects to be entitled upon the transfer of each and every distinct service, which is based on each increment of time within the series). Therefore, if the minimum usage requirements change monthly, any overage fees for a particular month may not (1) be solely associated with that month or (2) reflect the value of the specific outcome associated with the overage. Accordingly, C may be required to estimate the amount of variable consideration to which it would be entitled at contract inception and to recognize both fixed and variable consideration ratably over the contract term, subject to the variable consideration constraint.

However, if C expects the customer to exceed 100,000 transactions in every month (i.e., there is no shortfall carried over), the arrangement may be similar to that in Example 2-81, and any overage fees for a particular month would (1) be solely associated with that month and (2) reflect the value of the specific outcome associated with the overage. In that case, C would not be required to estimate the amount of variable consideration to which it would be entitled at contract inception and instead could recognize the variable consideration as the customer's usage occurs (with the fixed consideration recognized ratably).[67]

2.6.6 Sales- or Usage-Based Royalties

Under the sales- or usage-based royalty exception to the revenue standard's general rule requiring an entity to include variable consideration in the transaction price, if an entity is entitled to consideration in the form of a sales- or usage-based royalty, revenue is not recognized until (1) the underlying sales or usage has occurred and (2) the related performance obligation has been satisfied (or partially satisfied). That is, an entity is generally not required to estimate the amount of a sales- or usage-based royalty at contract inception; rather, revenue would be recognized as the subsequent sales or usage occurs (under the assumption that the associated performance obligation has been satisfied or partially satisfied).

2.6.6.1 Whether to Apply the Sales- or Usage-Based Royalty Exception to Only Part of the Royalties

In some contracts, a single sales- or usage-based royalty may be related to both a license of IP and another good or service (i.e., not a license). An entity should not split a royalty into a portion that is subject to the sales- or usage-based royalty exception and a portion that is subject to the general constraint on variable consideration in step 3. However, as explained in paragraph BC75(a) of ASU 2016-10, this guidance "does not affect the requirement to allocate fees due from a sales-based or usage-based royalty to the performance obligations (or distinct goods or services) in the contract to which the royalty relates, regardless of the constraint model the entity is required to apply."

In ASU 2016-10, the FASB also clarified that the sales- or usage-based royalty exception applies when the license is the predominant item (regardless of whether the license is distinct or combined with other goods or services as a single performance obligation) in relation to other nonlicense goods or services. That is, an entity either applies the sales- or usage-based royalty exception in its entirety (if the license to IP is predominant) or applies the general variable consideration guidance (if the license to IP is not predominant). Further, the FASB clarified in paragraph BC75(b) of the ASU that the sales- or usage-based royalty exception would also apply in "situations in which no single license is the predominant item to which the royalty relates but the royalty predominantly relates to two or more licenses promised in the contract." However, ASC 606 does not define the term "predominant." As a result, an entity will need to exercise judgment when determining whether the license to IP is predominant.

[67] To determine whether the invoice practice expedient can be used, see footnote 55.

Example 2-86

Entity LN, a professional basketball team, licenses its logo to a manufacturer of sports apparel and receives a royalty payment for each item of sports apparel sold. Entity LN has historical experience that is highly predictive of the amount of royalties that it expects to receive.

The sales- or usage-based royalty exception in ASC 606-10-55-65 states that revenue should be recognized at the **later** of when (1) the "subsequent sale or usage occurs" or (2) the "performance obligation to which some or all of the sales-based or usage-based royalty has been allocated has been satisfied (or partially satisfied)." The application of the sales- or usage-based royalty exception is not optional, and LN would be precluded from recognizing the royalty revenue until the later of (1) the actual sale of the sports apparel or (2) LN's satisfaction of the performance obligation to which the sales- or usage-based royalty is related.

Example 2-87

Entity S licenses its software (i.e., functional IP) to an OEM, which then integrates S's software with its own software for inclusion in hardware devices (e.g., computers, tablets, and smart devices) to be sold to end users. Entity S sells 5,000 licenses to the OEM for $10 per license (i.e., $50,000 in total consideration) that is paid at contract inception. In addition, S provides the OEM with 5,000 activation keys, each of which allows the OEM to download S's software for integration with the OEM's software to be included in one hardware device. The license agreement allows the OEM to acquire additional software licenses for $10 per license by requesting additional activation keys, which S readily provides to the OEM. Entity S has concluded that providing additional license keys to the OEM does not transfer any additional rights not already controlled by the OEM.

The OEM can return any activation keys that are paid for but not used to download and integrate the software for inclusion in the OEM's devices. The OEM will receive a refund of $10 per license for any activation keys returned.

Because S's consideration for the transfer of the licensed software (i.e., functional IP) is contingent on the OEM's subsequent usage, S must apply the sales- or usage-based royalty exception described in ASC 606-10-55-65. It would not be appropriate for S to recognize revenue on the sale of the license with the right of return before the OEM's subsequent usage.

Although the OEM has paid for the activation keys at contract inception, because the amounts are refundable to the extent that the OEM does not use the IP by integrating it with the OEM's software to be included in hardware devices, the consideration is in the form of a sales- or usage-based royalty. Entity S would therefore be prohibited from recognizing revenue until the subsequent sale or usage of the IP occurs (in accordance with 606-10-55-65(a)). That is, it would not be appropriate for S to estimate and constrain the amount of consideration to which it expects to be entitled and recognize such at the time the initial 5,000 licenses are transferred to the OEM.

2.6.6.2 Allocating Fixed Consideration and Sales- or Usage-Based Royalties in a Licensing Arrangement With More Than One Performance Obligation

Complexities related to the allocation of the transaction price to multiple performance obligations may arise when licensing contracts include a combination of fixed consideration and variable consideration subject to the sales- or usage-based royalty exception.

ASC 606-10

Example 35 — Allocation of Variable Consideration

55-270 An entity enters into a contract with a customer for two intellectual property licenses (Licenses X and Y), which the entity determines to represent two performance obligations each satisfied at a point in time. The standalone selling prices of Licenses X and Y are $800 and $1,000, respectively.

ASC 606-10 (continued)

Case A — Variable Consideration Allocated Entirely to One Performance Obligation

55-271 The price stated in the contract for License X is a fixed amount of $800, and for License Y the consideration is 3 percent of the customer's future sales of products that use License Y. For purposes of allocation, the entity estimates its sales-based royalties (that is, the variable consideration) to be $1,000, in accordance with paragraph 606-10-32-8.

55-272 To allocate the transaction price, the entity considers the criteria in paragraph 606-10-32-40 and concludes that the variable consideration (that is, the sales-based royalties) should be allocated entirely to License Y. The entity concludes that the criteria in paragraph 606-10-32-40 are met for the following reasons:

a. The variable payment relates specifically to an outcome from the performance obligation to transfer License Y (that is, the customer's subsequent sales of products that use License Y).
b. Allocating the expected royalty amounts of $1,000 entirely to License Y is consistent with the allocation objective in paragraph 606-10-32-28. This is because the entity's estimate of the amount of sales-based royalties ($1,000) approximates the standalone selling price of License Y and the fixed amount of $800 approximates the standalone selling price of License X. The entity allocates $800 to License X in accordance with paragraph 606-10-32-41. This is because, based on an assessment of the facts and circumstances relating to both licenses, allocating to License Y some of the fixed consideration in addition to all of the variable consideration would not meet the allocation objective in paragraph 606-10-32-28.

55-273 The entity transfers License Y at inception of the contract and transfers License X one month later. Upon the transfer of License Y, the entity does not recognize revenue because the consideration allocated to License Y is in the form of a sales-based royalty. Therefore, in accordance with paragraph 606-10-55-65, the entity recognizes revenue for the sales-based royalty when those subsequent sales occur.

55-274 When License X is transferred, the entity recognizes as revenue the $800 allocated to License X.

Case B — Variable Consideration Allocated on the Basis of Standalone Selling Prices

55-275 The price stated in the contract for License X is a fixed amount of $300, and for License Y the consideration is 5 percent of the customer's future sales of products that use License Y. The entity's estimate of the sales-based royalties (that is, the variable consideration) is $1,500 in accordance with paragraph 606-10-32-8.

55-276 To allocate the transaction price, the entity applies the criteria in paragraph 606-10-32-40 to determine whether to allocate the variable consideration (that is, the sales-based royalties) entirely to License Y. In applying the criteria, the entity concludes that even though the variable payments relate specifically to an outcome from the performance obligation to transfer License Y (that is, the customer's subsequent sales of products that use License Y), allocating the variable consideration entirely to License Y would be inconsistent with the principle for allocating the transaction price. Allocating $300 to License X and $1,500 to License Y does not reflect a reasonable allocation of the transaction price on the basis of the standalone selling prices of Licenses X and Y of $800 and $1,000, respectively. Consequently, the entity applies the general allocation requirements in paragraphs 606-10-32-31 through 32-35.

55-277 The entity allocates the transaction price of $300 to Licenses X and Y on the basis of relative standalone selling prices of $800 and $1,000, respectively. The entity also allocates the consideration related to the sales-based royalty on a relative standalone selling price basis. However, in accordance with paragraph 606-10-55-65, when an entity licenses intellectual property in which the consideration is in the form of a sales-based royalty, the entity cannot recognize revenue until the later of the following events: the subsequent sales occur or the performance obligation is satisfied (or partially satisfied).

ASC 606-10 (continued)

55-278 License Y is transferred to the customer at the inception of the contract, and License X is transferred three months later. When License Y is transferred, the entity recognizes as revenue the $167 ($1,000 ÷ $1,800 × $300) allocated to License Y. When License X is transferred, the entity recognizes as revenue the $133 ($800 ÷ $1,800 × $300) allocated to License X.

55-279 In the first month, the royalty due from the customer's first month of sales is $200. Consequently, in accordance with paragraph 606-10-55-65, the entity recognizes as revenue the $111 ($1,000 ÷ $1,800 × $200) allocated to License Y (which has been transferred to the customer and is therefore a satisfied performance obligation). The entity recognizes a contract liability for the $89 ($800 ÷ $1,800 × $200) allocated to License X. This is because although the subsequent sale by the entity's customer has occurred, the performance obligation to which the royalty has been allocated has not been satisfied.

Examples 2-88 through 2-90 below illustrate possible approaches that may be appropriate when a licensing arrangement includes (1) fixed consideration and sales- or usage-based royalties and (2) more than one performance obligation.

Example 2-88

Entity X, a subscription streaming service and production entity, enters into a four-year contract with Entity Y on January 1, 201X. The contract gives Y an exclusive license, including digital streaming rights (within specific territories), to a preexisting library of X's historical content in addition to any new content that becomes available during the four-year term. Entity X determines that there are two distinct performance obligations in accordance with ASC 606-10-25-19 through 25-22 as follows:

- A license of the preexisting library of content (i.e., the historical content) transferred to Y at the outset of the contract. Entity X determines that this is a right-to-use license of IP for which revenue is recognized at a point in time in accordance with ASC 606-10-55-63.
- A license for any new content that is transferred to Y as it becomes available throughout the duration of the contract. Entity X determines that the obligation to update the license arrangement to include new content is a stand-ready obligation to provide updates to Y over the license term. Entity X concludes that it will satisfy this obligation ratably over the four-year license term.

Entity Y is required to pay X a royalty fee of $2 per subscriber per month over the contract term, subject to a minimum guaranteed amount of $10 million. Entity X estimates that over the contract term, it is probable that X will be entitled to total royalties of $30 million. In addition, X determines that (1) the stand-alone selling price of the license of historical content is $12 million (40 percent of the total estimated transaction price) and (2) the stand-alone selling price of the license of new content is $18 million (60 percent of the total estimated transaction price). The number of subscribers to Y's service in year 1 is such that X is entitled to a royalty of $13 million.

Entity X determines that there are at least two acceptable approaches ("Approach A" and "Approach B") to allocating the $10 million guaranteed minimum fee and the $2 per subscriber royalty fee between the two performance obligations in the contract.

Whichever approach is adopted, as discussed below, X will need to consider whether it is required to constrain the amount of revenue recognized in accordance with ASC 606-10-32-11 and apply the sales- or usage-based royalty exception in ASC 606-10-55-65.

Example 2-88 (continued)

Revenue Recognition Based on Initial Allocation of Fixed and Variable Consideration

Approach A

Under Approach A, X allocates both the fixed and variable consideration to each performance obligation on the basis of the relative stand-alone selling prices of the historical and new content as follows:

	Historical Content ($ in millions)	New Content ($ in millions)	Total ($ in millions)
Allocation of initial estimate of total royalties ($30 million) to the performance obligations on a relative SSP basis	$ 12	$ 18	$ 30
Allocation of guaranteed minimum ($10 million) to the performance obligations on a relative SSP basis	4	6	10
Allocation of estimated variable consideration in excess of the guaranteed minimum ($20 million) to the performance obligations on a relative SSP basis	$ 8	$ 12	$ 20

In year 1, X recognizes revenue as follows:

- $4 million of the guaranteed minimum revenue allocated to the historical content is recognized upon the initial transfer of the historical content to Y.
- $1.5 million of the guaranteed minimum revenue is allocated to and recognized for the new content ($6 million ÷ 4 years of license term).
- The royalty payments received in excess of the $10 million guaranteed revenue are subject to the guidance in ASC 606-10-55-65 on recognizing revenue related to sales- or usage-based royalties.

Therefore, $3 million ($13 million of royalties owed for year 1 less the $10 million of guaranteed minimum revenue) is allocated on a relative stand-alone selling price basis. Accordingly, $1.2 million is allocated to and recognized for the historical content, and $1.8 million is allocated to and recognized for the new content.

Thus, the total revenue recognized in year 1 under Approach A is $8.5 million, as illustrated in the table below.

	Historical Content ($ in millions)	New Content ($ in millions)	Total ($ in millions)
Revenue recognized in year 1 from guaranteed minimum	$ 4.0	$ 1.5	$ 5.5
Revenue recognized in year 1 from variable consideration	1.2	1.8	3.0
Total revenue recognized in year 1	$ 5.2	$ 3.3	$ 8.5

Note that the royalties in excess of the guaranteed minimum that are allocated to the new content in year 1 ($1.8 million) do not need to be restricted in accordance with ASC 606-10-55-65 because the total revenue recognized for the new content ($3.3 million) is less than the amount corresponding to the measure of progress ($18 million ÷ 4 years of license term = $4.5 million).

Example 2-88 (continued)

Approach B

Under Approach B, X allocates the consideration on a first in, first out (FIFO) basis. Accordingly, the guaranteed minimum and estimated royalties are first allocated to the historical content and then to the new content, as illustrated in the table below. Note that the estimated royalties are subject to the constraint that it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is subsequently resolved.

	Historical Content ($ in millions)	New Content ($ in millions)	Total ($ in millions)
Allocation of initial estimate of total royalties ($30 million) to the performance obligations on a relative SSP basis	$ 12	$ 18	$ 30
Allocation of guaranteed minimum to the performance obligations	10	—	10
Allocation of estimated variable consideration to the performance obligations	$ 2	$ 18	$ 20

In year 1, X recognizes revenue as follows:

- $10 million of the guaranteed minimum allocated to the historical content is recognized upon the initial transfer of the historical content to Y.
- $2 million of the variable consideration allocated to the historical content is recognized when the first $2 million of royalties earned in excess of the guaranteed $10 million becomes payable by Y.
- While on a pro rata basis, X would recognize $4.5 million ($18 million ÷ 4 years of license term) with respect to the new content, X is able to recognize only $1 million with respect to the new content ($13 million of royalties owed for year 1 less the $12 million recognized with respect to the historical content) since the variable consideration is subject to the restriction in ASC 606-10-55-65 on recognizing revenue related to sales- or usage-based royalties.

Thus, the total revenue recognized in year 1 under Approach B is $13 million, as illustrated in the table below.

	Historical Content ($ in millions)	New Content ($ in millions)	Total ($ in millions)
Revenue recognized in year 1 from guaranteed minimum	$ 10	$ —	$ 10
Revenue recognized in year 1 from variable consideration	2	1	3
Total revenue recognized in year 1	$ 12	$ 1	$ 13

Revenue Recognition Based on Updated Allocation of Fixed and Variable Consideration

Each of the approaches discussed above is affected differently by a change in the estimate of royalties to which the entity expects to be entitled. The impact of any change in estimate under each approach should be carefully considered in accordance with the guidance on estimating and constraining variable consideration, whose objective is to include some or all of an amount of variable consideration estimated in the transaction price only to the extent that it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is subsequently resolved.

Example 2-88 (continued)

Suppose that after one year, X updates the transaction price in accordance with ASC 606-10-32-14 and concludes that it is probable that X will be entitled to total royalties of only $20 million over the four-year contract term as a result of changing market conditions (i.e., $10 million less than the original estimated transaction price). Under ASC 606-10-32-43, X is required to reallocate the transaction price to each performance obligation on the same basis as at contract inception. Also assume that in year 2, only $2 million in additional royalties is earned and payable to X (total consideration of $15 million has been earned to date, and there is an expectation that an additional $5 million will be received for the remaining contract term).

The effect of the updated expectations on revenue recognized in year 2 under each approach is discussed below.

Approach A

Under Approach A, X updates the allocation of the fixed and variable consideration to each performance obligation on the basis of the relative stand-alone selling prices of the historical and new content as follows:

	Historical Content ($ in millions)	New Content ($ in millions)	Total ($ in millions)
Updated estimate of total royalties ($20 million) allocated to the performance obligations on a relative SSP basis	$ 8	$ 12	$ 20
Allocation of guaranteed minimum ($10 million) to the performance obligations on a relative SSP basis	4	6	10
Allocation of estimated variable consideration ($10 million) to the performance obligations on a relative SSP basis	$ 4	$ 6	$ 10

Accordingly, revenue is recognized as follows:

	Historical Content ($ in millions)	New Content ($ in millions)	Total ($ in millions)
Cumulative fixed fees recognized in year 2	$ 4.0	$ 3.0	$ 7.0
Cumulative royalties recognized in year 2	2.0	3.0	5.0
Cumulative revenue (fixed fees and royalties) recognized in year 2	6.0	6.0	12.0
Revenue recognized in year 1 (under Approach A as previously illustrated)	5.2	3.3	8.5
Additional revenue recognized in year 2	$ 0.8	$ 2.7	$ 3.5

Note that the royalties allocated to the new content ($3 million) are not restricted in accordance with ASC 606-10-55-65 because the total revenue recognized for new content ($6 million) does not exceed the amount corresponding to the measure of progress, or ($12 million ÷ 4 years of license term) × 2 years = $6 million.

Example 2-88 (continued)

Approach B

Under Approach B, X updates the allocation of the fixed and variable consideration to each performance obligation on the basis of the relative stand-alone selling prices of the historical and new content as follows:

	Historical Content ($ in millions)	New Content ($ in millions)	Total ($ in millions)
Updated estimate of total royalties ($20 million) allocated to the performance obligations on a relative SSP basis	$ 8	$ 12	$ 20
Allocation of guaranteed minimum ($10 million) to the performance obligations	8	2	10
Allocation of estimated variable consideration ($10 million) to the performance obligations	$ —	$ 10	$ 10

As a result of the updated estimate of the transaction price, X is limited in recognizing additional revenue in year 2 when it reallocates the total expected consideration between the historical and new content. Revenue is recognized as follows:

	Historical Content ($ in millions)	New Content ($ in millions)	Total ($ in millions)
Cumulative fixed fees recognized in year 2	$ 8.0	$ 2.0	$ 10.0
Cumulative royalties recognized in year 2	—	5.0	5.0
ASC 606-10-55-65 limitation on new content	—	(1.0)	(1.0)
Cumulative revenue (fixed fees and royalties) recognized in year 2	8.0	6.0	14.0
Revenue recognized in year 1 (under Approach B as previously illustrated)	12.0	1.0	13.0
Additional revenue recognized in year 2	$ (4.0)	$ 5.0	$ 1.0

Note that the royalties allocated to the new content ($5 million) are restricted under Approach B in accordance with ASC 606-10-55-65 because the total revenue otherwise recognized for the new content ($7 million) would exceed the amount corresponding to the measure of progress, or ($12 million ÷ 4 years of license term) × 2 years = $6 million. Consequently, $1 million of the royalties received in year 2 would need to be deferred.

As noted in the tables above, Approach A and Approach B have different accounting outcomes for both the consideration recognized as revenue in year 1 of the agreement and the changes in subsequent years to the estimated consideration to which X expects to be entitled. Care should be taken in the election of a policy, and careful evaluation of the objective behind constraining estimates of variable consideration should guide this election.

Example 2-89

Entity K, a software entity, enters into a contract with Customer C to provide a software license as well as professional services. The license and professional services are distinct performance obligations. The contract consideration includes (1) an up-front payment ($30 million), (2) royalties of 8 percent of future sales (estimated to be $50 million), and (3) a reimbursement for the professional services at cost plus a fixed margin (estimated to be $20 million). Entity K has concluded that the license to IP is predominant in the arrangement.

Entity K has estimated the stand-alone selling prices of the performance obligations as follows:

Performance Obligation	SSP	
License	$	80 million
Professional services	$	20 million

Because the sales- or usage-based royalty exception is a recognition constraint (applied as part of step 5 of the revenue model), K could still consider the sales-based royalties in the estimated transaction price to be allocated even though they are subject to the sales- or usage-based royalty exception (and are constrained at contract inception). That is, K might reasonably conclude that it can allocate the royalties (estimated to be $50 million) together with the up-front fee of $30 million (a total expected amount of $80 million) entirely to the license since such allocation would be consistent with the stand-alone selling price of the license and, therefore, with the allocation objective in ASC 606-10-32-28 and ASC 606-10-32-40. Entity K could also allocate the $20 million to which it expects to be entitled for performing the professional services entirely to the professional services performance obligation. Such allocation would also be consistent with the allocation objective because the consideration to which K expects to be entitled as it performs the professional services represents the stand-alone selling price for those services. The approach described herein is consistent with the approach illustrated in Example 35, Case A, of ASC 606.

As a result of the above allocations, K would recognize (1) revenue of $30 million when the license is transferred at contract inception ($80 million total consideration allocated to the license, of which $50 million is constrained because of the sales- or usage-based royalty exception) and (2) revenue for the professional services at the contractual reimbursement rate as services are performed. Additional revenue related to the transfer of the license would be recognized as royalties become due (i.e., once sales associated with the licensed IP occur).

Example 2-90

Assume the same facts as in Example 2-89 above, except that the professional services are reimbursed by Customer C at cost with no margin (estimated to be $15 million). Since K would not typically provide professional services on a stand-alone basis for cost (i.e., with no margin), use of the allocation approach described in Example 2-89 would not result in an allocation that is consistent with the allocation objective in ASC 606-10-32-28 and ASC 606-10-32-40. Consequently, K would not be able to use the same approach in this situation.

Example 2-90 (continued)

If K continues to believe that the royalties are entirely related to the license, K could allocate the total expected transaction price ($95 million) to the performance obligations on a relative stand-alone selling price basis as follows:

Performance Obligation	SSP		Relative Allocation	Allocation of Estimated Contract Consideration	
License	$	80 million	80%	$	76 million
Professional services	$	20 million	20%	$	19 million
Total	$	100 million	100%	$	95 million

As the table illustrates, this approach would result in the allocation of $76 million to the license and $19 million to the professional services. If K concludes that the royalties are entirely related to the license (i.e., the criteria in ASC 606-10-32-40 are met), it would recognize revenue of $26 million when the license is transferred at contract inception (the $76 million allocated transaction price less the $50 million that is constrained because of the sales- or usage-based royalty exception). Further, K would recognize (1) revenue of $19 million allocated to the professional services as the professional services are performed by using a single measure of progress and (2) additional revenue related to the transfer of the license as royalties become due (i.e., once sales associated with the licensed IP occur).

2.6.7 Allocation of Consideration to a Material Right

If an entity's contract with a customer includes a material right in the form of an option to acquire additional goods or services, ASC 606-10-55-41 through 55-45 require the entity to allocate part of the transaction price to that right and recognize the associated revenue when those future goods or services are transferred or when the option expires. The allocation of consideration to all of the performance obligations in a contract as required in step 4 is performed on the basis of stand-alone selling prices, and the estimated stand-alone selling price for the material right should be adjusted for (1) "[a]ny discount that the customer could receive without exercising the option" and (2) "[t]he likelihood that the option will be exercised." As explained in paragraph BC390 of ASU 2014-09, option pricing models can be used to estimate an option's stand-alone selling price. In addition, ASC 606-10-55-45 provides an alternative to estimating the stand-alone selling price of a customer option when certain criteria are met.

2.6.7.1 Renewal Options

Paragraph BC391 of ASU 2014-09 explains that contracts could describe renewal options as either (1) renewal options, which are basically extensions of the current contract, or (2) early cancellations, which are the option for a customer to end a long contract earlier than planned. A customer option to renew could be considered an option for additional goods or services, which then opens the door for the entity to consider whether the option is a material right (i.e., a performance obligation).

When options for additional goods or services are considered material rights, an entity is required to estimate the options' stand-alone selling price so that consideration from the contract can be allocated to the options. Since renewal options are similar to options for additional goods or services, an entity would have to determine an estimate of the options' stand-alone selling price for each renewal period, which may be complex.

However, as explained in paragraphs BC392 through BC395 of ASU 2014-09, the FASB and IASB decided to provide a practical alternative for renewal options that allows an entity to "include the optional goods or services that it expects to provide (and corresponding expected customer consideration) in the initial measurement of the transaction price." This practical alternative is included in ASC 606-10-55-45, which states:

> If a customer has a material right to acquire future goods or services and those goods or services are similar to the original goods or services in the contract and are provided in accordance with the terms of the original contract, then an entity may, as a practical alternative to estimating the standalone selling price of the option, allocate the transaction price to the optional goods or services by reference to the goods or services expected to be provided and the corresponding expected consideration. Typically, those types of options are for contract renewals.

To differentiate contract renewal options from other types of options for additional goods or services (the latter of which are not eligible for the practical alternative if the optional goods or services are not similar to the original goods or services in the contract), the FASB and IASB developed two criteria that must be met for an entity to apply the practical alternative:

- The additional goods or services in the renewal options are similar to those provided in the initial contract.
- The renewal options' terms and conditions related to goods or services are the same as those of the original contract.

These concepts are illustrated by Example 51 in ASC 606.

ASC 606-10

Example 51 — Option That Provides the Customer With a Material Right (Renewal Option)

55-343 An entity enters into 100 separate contracts with customers to provide 1 year of maintenance services for $1,000 per contract. The terms of the contracts specify that at the end of the year, each customer has the option to renew the maintenance contract for a second year by paying an additional $1,000. Customers who renew for a second year also are granted the option to renew for a third year for $1,000. The entity charges significantly higher prices for maintenance services to customers that do not sign up for the maintenance services initially (that is, when the products are new). That is, the entity charges $3,000 in Year 2 and $5,000 in Year 3 for annual maintenance services if a customer does not initially purchase the service or allows the service to lapse.

55-344 The entity concludes that the renewal option provides a material right to the customer that it would not receive without entering into the contract because the price for maintenance services are significantly higher if the customer elects to purchase the services only in Year 2 or 3. Part of each customer's payment of $1,000 in the first year is, in effect, a nonrefundable prepayment of the services to be provided in a subsequent year. Consequently, the entity concludes that the promise to provide the option is a performance obligation.

55-345 The renewal option is for a continuation of maintenance services, and those services are provided in accordance with the terms of the existing contract. Instead of determining the standalone selling prices for the renewal options directly, the entity allocates the transaction price by determining the consideration that it expects to receive in exchange for all the services that it expects to provide in accordance with paragraph 606-10-55-45.

ASC 606-10 (continued)

55-346 The entity expects 90 customers to renew at the end of Year 1 (90 percent of contracts sold) and 81 customers to renew at the end of Year 2 (90 percent of the 90 customers that renewed at the end of Year 1 will also renew at the end of Year 2, that is 81 percent of contracts sold).

55-347 At contract inception, the entity determines the expected consideration for each contract is $2,710 [$1,000 + (90 percent × $1,000) + (81 percent × $1,000)]. The entity also determines that recognizing revenue on the basis of costs incurred relative to the total expected costs depicts the transfer of services to the customer. Estimated costs for a three-year contract are as follows:

Year 1	$ 600
Year 2	$ 750
Year 3	$ 1,000

55-348 Accordingly, the pattern of revenue recognition expected at contract inception for each contract is as follows:

	Expected Costs Adjusted for Likelihood of Contract Renewal		Allocation of Consideration Expected	
Year 1	$ 600	($600 × 100%)	$ 780	[($600 ÷ $2,085) × $2,710]
Year 2	675	($750 × 90%)	877	[($675 ÷ $2,085) × $2,710]
Year 3	810	($1,000 × 81%)	1,053	[($810 ÷ $2,085) × $2,710]
Total	$ 2,085		$ 2,710	

55-349 Consequently, at contract inception, the entity allocates to the option to renew at the end of Year 1 $22,000 of the consideration received to date [cash of $100,000 – revenue to be recognized in Year 1 of $78,000 ($780 × 100)].

55-350 Assuming there is no change in the entity's expectations and the 90 customers renew as expected, at the end of the first year, the entity has collected cash of $190,000 [(100 × $1,000) + (90 × $1,000)], has recognized revenue of $78,000 ($780 × 100), and has recognized a contract liability of $112,000.

55-351 Consequently, upon renewal at the end of the first year, the entity allocates $24,300 to the option to renew at the end of Year 2 [cumulative cash of $190,000 – cumulative revenue recognized in Year 1 and to be recognized in Year 2 of $165,700 ($78,000 + $877 × 100)].

55-352 If the actual number of contract renewals was different than what the entity expected, the entity would update the transaction price and the revenue recognized accordingly.

The example below further illustrates how to allocate consideration to renewal options that provide material rights to a customer.

Example 2-91

ABC Company enters into 100 separate contracts with customers to provide a perpetual software license for $10,000 and one year of PCS for $1,000. The contracts include a customer option to renew PCS for an additional year for $500. ABC Company concluded that the renewal option represents a material right and the license and PCS are distinct performance obligations. ABC Company also determined that both the perpetual license and PCS were sold at stand-alone selling prices and estimated that the customer has a 75 percent probability of renewing at the end of year 1, 50 percent at the end of year 2, 25 percent at the end of year 3, and 0 percent at the end of year 4.

Stand-Alone Selling Price Approach

Year 1 renewal = $375, or ($1,000 - $500) × 75%

Year 2 renewal = $250, or ($1,000 - $500) × 50%

Year 3 renewal = $125, or ($1,000 - $500) × 25%

Performance Obligation	SSP	Relative Allocation	Allocation of Contract Consideration
Perpetual license	$ 10,000	85.1%	$ 9,362
PCS	1,000	8.5%	936
Renewal option — year 1	375	3.2%	351
Renewal option — year 2	250	2.1%	234
Renewal option — year 3	125	1.1%	117
Total	$ 11,750	100%	$ 11,000

As a result of applying the stand-alone selling price approach, ABC Company would allocate $702 ($351 +$234 + $117) to the material right. In addition, ABC Company would recognize $10,298 in year 1.

"Look Through" Approach

If ABC Company chose to apply the practical alternative or "look through" approach, the company would estimate a hypothetical transaction price in one of two ways. The first approach is to determine the best estimate of the number of years that a customer would renew. Assume in this case that the company's best estimate is that the customer will exercise the renewal option for two years.

Performance Obligation	SSP	Relative Allocation*	Allocation of Contract Consideration
Perpetual license	$ 10,000	76.9%	$ 9,231
PCS	1,000	7.7%	923
Renewal option — year 1	1,000	7.7%	923
Renewal option — year 2	1,000	7.7%	923
Total	$ 13,000	100%	$ 12,000**

* Rounded for presentation purposes.

** $10,000 + $1,000 + ($500 × 2).

Example 2-91 (continued)

This would result in recognition of $10,154 in revenue in year 1 ($9,231 + $923) and a deferral of $846 ($11,000 − $10,154) related to the material right.

However, in a manner consistent with Example 51 in ASC 606, an entity could also use a portfolio approach to estimate the hypothetical transaction price in the "look through" model. Under this approach, the entity would use the same probabilities applied in the stand-alone selling price model to determine the hypothetical transaction price. The following table illustrates this approach:

Performance Obligation	SSP	Relative Allocation*	Allocation of Contract Consideration
Perpetual license	$ 10,000	71.6%	$ 8,394*
PCS	1,000	7.1%	839
Renewal option — year 1	1,000	7.1%	839
Renewal option — year 2	1,000	7.1%	839
Renewal option — year 3	1,000	7.1%	839
Total	$ 14,000	100%	$ 11,750**

* Rounded for presentation purposes.

** $10,000 + $1,000 + ($500 × 75%) + ($500 × 50%) + ($500 × 25%).

This would result in recognition of $9,233 in revenue in year 1 ($8,394 + $839) and a deferral of $1,767 ($11,000 − $9,233) related to the material right.

Note, however, that when a portfolio approach is applied, individual cancellations would not necessarily result in an immediate adjustment. This is because the overall estimates would incorporate a level of cancellations each period. It is only when the cancellation pattern of the overall portfolio changes that an entity would assess a potential change in estimate.

2.6.8 Changes in the Transaction Price

2.6.8.1 Allocating Changes in the Transaction Price

An entity needs to determine a contract's transaction price so that it can be allocated to the performance obligations in the contract. This determination is made at contract inception. However, after contract inception, the transaction price could change for various reasons (e.g., changes in an estimate of variable consideration). Generally, any change in the transaction price should be allocated to the performance obligations on the same basis used at contract inception. For example, if the criteria for allocating variable consideration to one or more, but not all, performance obligations are met, changes in the amount of variable consideration to which the entity expects to be entitled would be allocated to such performance obligation(s) on the same basis. If the criteria for allocating variable consideration to one or more, but not all, performance obligations are not met, changes in the transaction price after contract inception would be allocated to all of the performance obligations in the contract on the basis of the initial relative stand-alone selling prices. An entity would not reallocate the transaction price for changes in stand-alone selling prices after contract inception.

For changes in the transaction price that arise as a result of a contract modification, an entity should apply the guidance on contract modifications in ASC 606-10-25-10 through 25-13. However, if the transaction price changes after a contract modification, an entity would allocate the change as follows:

- The change in the transaction price is allocated to a performance obligation that was identified before the contract modification when (1) the change in the transaction price is attributable to variable consideration related to that performance obligation and (2) the contract modification is accounted for as if the contract was terminated and a new contract was entered into (see ASC 606-10-25-13(a)).
- In all other situations, the change in the transaction price is allocated to the unsatisfied or partially satisfied performance obligations that are identified after the contract modification.

2.6.8.2 Differentiating Changes in the Transaction Price From Contract Modifications

ASC 606-10-32-43 and 32-44 specify that an entity should allocate changes in the transaction price on the same basis as at contract inception. Application of this guidance may result in a cumulative catch-up adjustment to revenue for amounts allocated to satisfied performance obligations. In addition, ASC 606-10-32-45 states that an entity should account for changes in the transaction price that are triggered by a contract modification in accordance with the contract modification guidance in ASC 606-10-25-10 through 25-13.

An entity should consider whether the change in the price is due to (1) the resolution of variability that existed at contract inception or (2) a change in the scope or price (or both) of the contract that changes the parties' rights and obligations after contract inception.

ASC 606-10-32-42 describes a change in the transaction price as the "resolution of uncertain events or other changes in circumstances that change the amount of consideration to which an entity expects to be entitled in exchange for the promised goods or services." A change in the transaction price could result from the resolution of variable consideration (e.g., achieving a performance bonus or qualifying for a volume rebate) that was part of the contract at inception. However, the contract does not always have to specifically identify forms of variable consideration for subsequent changes to be accounted for as a change in the transaction price. The following factors could suggest that subsequent changes in the transaction price do not constitute a contract modification:

- The entity has a history of granting price concessions to customers, which may or may not have been specifically negotiated.
- The selling prices of the goods or services are highly variable, and the entity has a demonstrated history of not enforcing payment of the stated sales price (e.g., the entity has granted extended payment terms and has a history of not enforcing payment of the full contract price).
- Changes in the transaction price result from customer satisfaction issues related to the underlying product or service.

On the other hand, a contract modification is described in ASC 606-10-25-10 as "a change in the scope or price (or both) of a contract that is approved by the parties to the contract. . . . A contract modification exists when the parties to a contract approve a modification that either creates new or changes existing enforceable rights and obligations of the parties to the contract." Although contract modifications will usually result from negotiations between the parties after contract inception, finalizing the amount of concessions or other variable consideration may also require subsequent negotiations

between the parties. Therefore, the existence of negotiations is not in itself determinative of whether a change represents a change in the transaction price or a contract modification. Further, while contract modifications often include the addition or removal of goods or services, they could occasionally occur without a change in the scope of the contract (i.e., only as a result of a change in price). The following factors could suggest that a change in the transaction price should be accounted for as a modification:

- Subsequent changes in market conditions suggest that there has been a substantial change in the market price of the goods or services that was not anticipated at contract inception, which resulted in the entity's agreeing to adjust the transaction price.
- The entity has no history of granting price concessions, and the price concession is not related to the quality of the transferred goods or services.
- The entity agreed to a reduction in the transaction price for remaining goods or services to induce its customer to enter into a contract for additional goods or services.
- Technological advances and competitive pressures that did not exist at contract inception result in a significant change in the price that the entity is willing to accept for its goods or services.

An entity will need to use judgment to determine whether a change in price is the result of a change in the transaction price or a contract modification, especially when the entity provides the customer with a price concession. In situations involving a price concession, an entity will need to consider whether the price concession should have been contemplated at contract inception and thus represents a change in the transaction price. As illustrated in Example 5, Case B, of the revenue standard (ASC 606-10-55-114 through 55-116), this may be the case when the concession is related to product defects or service issues associated with products or services that have already been transferred to the customer. Had the product defects or service issues been anticipated at contract inception, the potential price concession would have been identified as a source of variable consideration under the contract.

Alternatively, a concession may result from a change in market conditions that could not have been anticipated at contract inception. The resulting change in the price of the contract changes the existing enforceable rights and obligations of the parties under the contract and should be accounted for as a contract modification in accordance with ASC 606-10-25-10 through 25-13.

The example below illustrates the identification of and accounting for a change in the transaction price that results from a contract modification.

Example 2-92

Entity X enters into a contract with Customer Y to deliver 120 smart devices (each distinct) over a 12-month period for a fixed price of $100 per device (total transaction price of $12,000). After 60 devices are transferred (for which X recognizes $6,000 in revenue), a new competitor launches a competing product that is being sold for $65 per device. Because of a change in the competitive landscape and to preserve its customer relationship, X agrees to lower the price for the remaining 60 devices to $60 per unit.

Entity X concludes that (1) its rights under the initial contract changed (having given up its right to $100 per device) and (2) it should account for the change in the transaction price as a contract modification. Consequently, X applies the guidance in ASC 606-10-25-10 through 25-13. Since the remaining devices to be transferred under the contract are distinct, X will recognize revenue of $3,600 ($60 × 60 units) as the remaining 60 devices are transferred to Y.

In contrast to the example above, the example below illustrates the identification of and accounting for a change in the transaction price that does not result from a contract modification.

Example 2-93

Entity X enters into a contract with Customer Y to deliver 120 smart devices (each distinct) over a 12-month period for a fixed price of $100 per device (total transaction price of $12,000). After 60 devices are delivered, Y identifies quality issues with the first 60 units delivered that require a small amount of rework. After negotiations, X agrees to grant Y a concession of $20 per unit (a total concession of $2,400). Entity X and Y agree that the concession will be reflected in the selling price of the remaining 60 devices (decreasing the price to $60 per device for the remaining 60 devices).

Entity X determines that it should account for the concession as a change in the transaction price since it resulted from conditions that existed in the initial contract (quality issues in the transferred devices). That is, because of the quality issue in the product (which will continue with the remaining devices), X concludes that it had a right to consideration of only $80 per device under the initial contract. Consequently, X applies the guidance in ASC 606-10-32-43 and 32-44. It records an immediate adjustment to revenue of $1,200 for the $20 per device concession granted for units already transferred to Y and will recognize revenue of $4,800 ($80 per device) as the remaining 60 devices are transferred to Y.

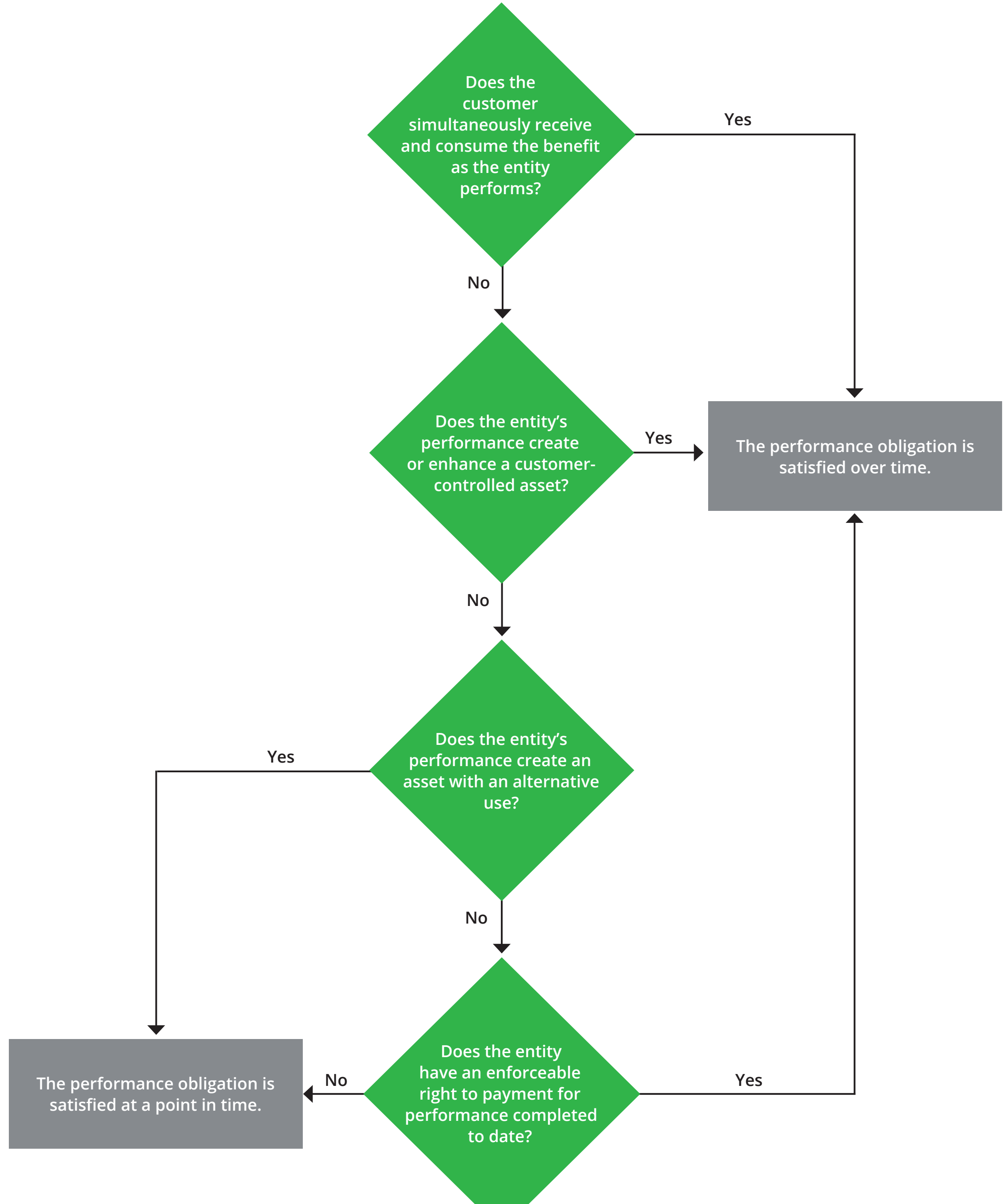
2.7 Determine When to Recognize Revenue (Step 5)

In a manner consistent with the core principle of the revenue standard — "an entity shall recognize **revenue to depict the transfer of promised goods or services to customers** in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services" (emphasis added) — step 5 focuses on recognition (i.e., **when** it is appropriate to recognize revenue).

The revenue standard requires an entity first to determine, at contract inception, whether *control* of a good or service is *transferred over time*; if so, the entity would recognize the related revenue over time in a manner consistent with the transfer of the good or service over time to the customer. If the entity cannot conclude that control is transferred over time, control is considered to be transferred at a point in time. As a result, the entity must determine at what specific point in time to recognize the related revenue. While generally speaking, goods are transferred at a point in time and services are transferred over time, this is not the case in all circumstances.

ASC 606-10-25-27 is one of the most critical paragraphs in the standard since it effectively defines whether the entity is (1) providing the customer with a service (and revenue should be recognized as the entity is performing) or (2) providing the customer with a good (and revenue should be recognized only when the entity finishes what it was obligated to do and the good is transferred or delivered to the customer).

The criteria in ASC 606-10-25-27 were developed to provide an objective basis for assessing whether control is transferred over time and, therefore, the performance obligation is satisfied over time. The flowchart below summarizes the criteria in ASC 606-10-25-27.


Does the customer simultaneously receive and consume the benefit as the entity performs?
Yes
No
Does the entity's performance create or enhance a customer-controlled asset?
Yes
The performance obligation is satisfied over time.
No
Does the entity's performance create an asset with an alternative use?
Yes
No
The performance obligation is satisfied at a point in time.
No
Does the entity have an enforceable right to payment for performance completed to date?
Yes

For technology entities, revenue related to software licenses and hardware devices is typically recognized at a point in time. However, if an entity's software license or hardware device is not distinct from an ongoing substantive service, it is not appropriate to recognize revenue related to the single performance obligation at that point in time. Rather, the entity would generally recognize revenue related to the combined performance obligation over time.

Revenue related to PCS, cloud-based services (e.g., hosting), and professional services is typically recognized over time. When a performance obligation is satisfied over time, an entity must select a measure of progress (e.g., time-elapsed, labor hours, costs incurred) to depict its progress toward complete satisfaction of that obligation. Because many PCS and cloud-based arrangements are stand-ready obligations, entities with such obligations typically use a time-elapsed (i.e., straight-line) measure of progress.

2.7.1 Transfer of Control in Software Licensing Arrangements

The application of the control-based model in the delivery of licenses requires a comprehensive understanding of the entity's arrangement with a customer and an understanding of the type of IP that is subject to the license agreement. A contract that includes a right to use software can be viewed as a contract for a good or a service. For example, software that relies on an entity's IP and is delivered only through a hosting arrangement (i.e., the customer cannot take possession of the software) is a service, whereas a software arrangement that is provided through an access code or key (i.e., the customer takes possession of on-premise software) is more like the transfer of a good. In light of these unique characteristics, the FASB and IASB established the additional implementation guidance to assist in the assessment of how and when the entity transfers control of its IP through a license to the customer since that control is transferred over time in some cases and at a point in time in other cases.

In determining whether the transfer of a license occurs over time or at a point in time, an entity should consider the indicators of the transfer of control to determine the point in time at which a license is transferred to the customer. ASC 606-10-55-58C states that revenue from a license of IP cannot be recognized before both of the following:

a. An entity provides (or otherwise makes available) a copy of the intellectual property to the customer.

b. The beginning of the period during which the customer is able to use and benefit from its right to access or its right to use the intellectual property. That is, an entity would not recognize revenue before the beginning of the license period even if the entity provides (or otherwise makes available) a copy of the intellectual property before the start of the license period or the customer has a copy of the intellectual property from another transaction. For example, an entity would recognize revenue from a license renewal no earlier than the beginning of the renewal period.

2.7.1.1 Electronic Delivery of Software

The examples below discuss the transfer of control in arrangements involving electronically delivered software.

Example 2-94

Assessing When Control Is Transferred to the Customer for a Suite of Software Licenses

Entity X enters into a five-year license agreement with Customer B under which B purchases licenses to a suite of software products consisting of five modules. At the inception of the arrangement, B is required to make a nonrefundable payment of $5 million to X for the licenses to all five modules, and the license term for the suite of licenses begins on January 1, 20X5. Customer B has previewed all five modules and accepted the software as of January 1, 20X5, but has only obtained the access codes for, and downloaded, four of the five modules. Customer B installs the modules itself and expects that it will take three months to install the four modules. Customer B does not download the fifth module immediately because of system limitations but plans to obtain the access code and install the fifth module once installation of the first four modules is complete. The access code for the fifth module is available to B on demand.

In this scenario:

- Customer B is required to pay the nonrefundable license fee at the inception of the arrangement and has accepted the software.
- The license terms have begun.
- The access code for the fifth module is available to B at any time on demand.

Assuming that no other indicators of control are present, X can reasonably conclude that control of the licenses for all five modules is transferred to B on January 1, 20X5.

Example 2-95

Assessing When Control Is Transferred to the Customer When the License Requires an Access Code or Product Key

Entity X sells software licenses to customers that represent right-to-use licenses (for which revenue is recognized at a point in time) and give customers access to the software via X's Web site. Customers need either an access code to download the software or a product key to activate the software once downloaded. The software cannot be used on the customer's hardware without the access code or the product key.

Entity X may not need to deliver the access code or product key to the customer to conclude that control of the software license has been transferred to the customer. ASC 606-10-55-58B and 55-58C state, in part:

> An entity's promise to provide a customer with the right to use its intellectual property is satisfied at a point in time. The entity should apply paragraph 606-10-25-30 to determine the point in time at which the license transfers to the customer.
>
> Notwithstanding paragraphs 606-10-55-58A through 55-58B, revenue cannot be recognized from a license of intellectual property before both:
>
> a. An entity provides (**or otherwise makes available**) a copy of the intellectual property to the customer.
>
> b. The beginning of the period during which the customer is able to use and benefit from its right to access or its right to use the intellectual property. That is, an entity would not recognize revenue before the beginning of the license period even if the entity provides (**or otherwise makes available**) a copy of the intellectual property before the start of the license period or the customer has a copy of the intellectual property from another transaction. [Emphasis added]

Entity X should consider the guidance on control in ASC 606-10-25-23 through 25-26 and the indicators in ASC 606-10-25-30 related to determining when a customer obtains control of the software license.

Example 2-95 (continued)

In some circumstances, control of the software license may be transferred to the customer before the access code or product key is delivered. In particular, there may be situations in which the access code or product key has not been delivered but is nonetheless made available to the customer at any time on demand. In such circumstances, it will be necessary to consider whether control has passed to the customer by focusing on the indicators in ASC 606-10-25-30. For example, if the customer has accepted the software, nonrefundable payment has been received, the license term has begun, and the customer has a current right to request and receive the access code or product key, X may conclude that control of the software license has been transferred even though the access code or product key has not been provided to the customer. These situations may be viewed as analogous to bill-and-hold arrangements, as discussed in ASC 606-10-55-81 through 55-84.

However, if payment terms or acceptance depends on delivery of the software access code or product key, or if X is not yet in a position to make the code or key available, it would be unlikely that X could conclude that control of a software license has been transferred until the access code or product key has been provided to the customer.

Example 2-96

Assessing When Control Is Transferred to the Customer in a Hosting Arrangement

Entity Y enters into a license and hosting software arrangement with Customer X that allows X to access via the Internet and use software that Y physically hosts on its servers. Customer X is required to pay a nonrefundable license fee of $1,000 at the inception of the arrangement. Customer X accepts the software, and the license term begins once the hosting service commences.

As part of the arrangement, X has the right to take possession of the software at any time during the contract period without incurring additional costs or diminution of the software's utility or value. That is, there are no contractual or practical barriers to X's exercising its right to take possession of the software, and X is able to benefit from the software on its own or with readily available resources.

Entity Y concludes that the software license and hosting service are each distinct and that the software license gives X a right to use Y's IP. If X exercises its right to take possession of the software, Y will immediately provide an access code that will enable X to download the software.

In this scenario:

- X is required to pay the nonrefundable license fee at the inception of the arrangement.
- X has accepted the software, and the license term begins once the hosting service commences.
- Y has made the access code available to X at any time on demand.

Therefore, assuming that no other indicators affecting the transfer of control are present, Y can reasonably conclude that control of the software license is transferred to X when the license term and hosting service begin. As a result, (1) the transaction price allocated to the license is recognized at inception of the arrangement (corresponding to its transfer of control at that point in time) and (2) the transaction price allocated to the hosting service is recognized over time.

2.7.1.2 When Control Is Transferred in Reseller Arrangements

Reseller arrangements in which a reseller purchases software from a software provider (the vendor) and then resells the software to end users are common in the software industry. In these situations, the reseller is often the vendor's customer (rather than the end user). ASC 606-10-55-58C provides that revenue cannot be recognized from a license of IP before both (1) an entity provides a copy of the IP to a customer and (2) the period during which the customer can use and benefit from the IP has begun.

Questions arise about when revenue can be recognized when sales of IP are made to resellers (e.g., distributors) rather than end users.

Example 2-97

On March 15, 20X0, Vendor A enters into a reseller arrangement with Reseller B that immediately permits B to resell 1,000 licenses of A's software (a form of functional IP) for a nonrefundable up-front fee of $200,000. Reseller B plans to resell the functional IP to end users and will provide all set-up and maintenance services directly to the end users. There is no expectation that A will undertake activities to substantively change the functionality of the IP, and there are no promised goods or services in the contract other than the license to the functional IP. Also on March 15, 20X0, A ships to B a master copy of the software; B receives the master copy on April 1, 20X0, and can use it to replicate the software for resale. Vendor A also makes the software available for download on March 15, 20X0; however, B intends to use the master copy rather than the downloaded version to replicate the software for resale.

Vendor A should recognize revenue on March 15, 20X0. As noted in ASC 606-10-55-58C, control of IP cannot be transferred (and revenue cannot be recognized) before (1) the "entity provides (or otherwise makes available) a copy of the [IP] to the customer" and (2) the "beginning of the period during which the customer is able to use and benefit from its right to access or its right to use" the IP. In a reseller arrangement, the customer is not using the functionality of the software; rather, the customer will benefit from the software through the ability to resell the software. Although B intends to use the master copy to replicate the software, the software is made available to B on March 15, 20X0, which is also when B could begin reselling the software. Therefore, on March 15, 20X0, it would be appropriate for A to recognize the nonrefundable fee of $200,000 as revenue. However, even if A does not make the software available for download and only ships B a master copy of the software, A could recognize the nonrefundable fee of $200,000 as revenue when it ships the master copy of the software to B on March 15, 20X0, if control of the master copy is transferred to B upon shipment (e.g., free on board shipping point).

2.7.1.3 Functional IP

Generally, the nature of a license to functional IP that is distinct will provide an entity's customer with the right to use the entity's IP, which results in the entity's recognition of revenue at the point in time at which control of the license is transferred to the customer. However, there are situations in which an entity grants a license to functional IP that is transferred at contract inception but also promises to provide ongoing services that are not distinct from the license (i.e., the license and ongoing services are combined into a single performance obligation).

It is **not** acceptable for an entity to recognize revenue at the point in time at which a license to functional IP is granted when the revenue is related to a single performance obligation to (1) grant the license and (2) perform ongoing substantive services that are not distinct from the license. ASC 606-10-55-57 states:

> When a single performance obligation includes a license (or licenses) of intellectual property and one or more other goods or services, the entity considers the nature of the combined good or service for which the customer has contracted (including whether the license that is part of the single performance obligation provides the customer with a right to use or a right to access intellectual property in accordance with paragraphs 606-10-55-59 through 55-60 and 606-10-55-62 through 55-64A) in determining whether that combined good or service is satisfied over time or at a point in time in accordance with paragraphs 606-10-25-23 through 25-30 and, if over time, in selecting an appropriate method for measuring progress in accordance with paragraphs 606-10-25-31 through 25-37.

Although a license to functional IP provides the customer with a right to use the entity's IP as it exists at a point in time, the presence of an ongoing substantive service that is not distinct from the license indicates that the customer cannot continue to benefit from the license without the ongoing service. In addition, the entity's performance obligation is not fully satisfied upon transfer of the license because the entity has promised to provide an ongoing substantive service that is not separable from the license. That is, the license to the functional IP and the ongoing service are inputs into a combined item.

Therefore, the nature of the entity's performance obligation involves continuing to provide the customer with an ongoing service over time. Because the entity does not fully satisfy its performance obligation upon transferring the license to the customer, it is not appropriate to recognize revenue for the single performance obligation at that point in time.

If an entity determines that a license is not distinct and should therefore be combined with other goods or services in a contract, the entity will need to evaluate the nature of the combined goods and services to determine (1) when the performance obligation is satisfied (i.e., at a point in time or over time) and (2) the appropriate method of measuring progress for revenue recognition over time, if applicable. This requirement is intended to ensure that the arrangement is accounted for in a manner that is consistent with the objective of the revenue standard. That is, revenue is recognized when (or as) control of the good or service is transferred to the customer.

For example, assume the following:

- A contract contains a software license and a two-year cloud-based service agreement.
- The license is not distinct and is therefore combined with the service agreement as a single performance obligation.

In this example, it would not be appropriate to recognize revenue related to the software license when control of the license is transferred to the customer. Rather, the transaction price would be recognized as revenue as the *combined* performance obligation is satisfied. In this case, the timing of revenue recognition would be determined on the basis of the cloud-based service that is transferred over two years.

2.7.2 License Renewals and Modifications

Renewals of and modifications to rights granted in a license arrangement occur frequently. Entities should consider the nature and provisions of license renewals and modifications when determining the appropriate accounting treatment. In addition, the discussions in this section should be considered in conjunction with the guidance on contract modifications.

Renewals or extensions of licenses should be evaluated as distinct licenses (i.e., a distinct good or service), and revenue attributed to the distinct good or service cannot be recognized until (1) the entity provides the distinct license (or makes the license available) to the customer and (2) the customer is able to use and benefit from the distinct license. The FASB observed in paragraph BC50(a) of ASU 2016-10 that "when two parties enter into a contract to renew (or extend the license period of) a license, the renewal contract is not combined with the original license contract unless [one or more of] the criteria in paragraph 606-10-25-9 [on combining contracts] have been met." Therefore, the renewal right should be evaluated in the same manner as any other additional rights granted after the initial contract (i.e., revenue should not be recognized until the customer can begin to use and benefit from the license, which is generally at the beginning of the license renewal period).

2.7.2.1 Early Renewal of a Term-Based License

In conjunction with a term-based license, entities often offer customers a renewal option under which a customer can renew the contract and extend the period over which the customer has the right to use the licensed IP. In many cases, the customer may exercise its option to renew the license before the end of the initial license term. Although the customer may already be using the licensed IP, revenue attributable to the renewed license cannot be recognized until the beginning of the renewal period.

Example 2-98

Entity P enters into a three-year license agreement with Customer B under which B licenses software from P. The license includes three years of PCS (e.g., upgrades, bug fixes, and support). In exchange for the license and PCS, B pays P total consideration of $2,700, which consists of a $1,500 up-front payment for the license and annual installment payments of $400 for PCS payable at the end of each year. The contract states that B may extend the license for one-year terms at any point during the three-year license term for additional consideration.

Other relevant information includes the following:

- Entity P has concluded that the software license and PCS are distinct performance obligations.
- The contract amounts reflect each performance obligation's stand-alone selling price.
- The software being licensed is functional IP, and the license gives B the right to use the software. As a result, P concludes that revenue allocated to the license should be recognized at the point in time that the customer obtains control of the license, which is assumed to be at contract inception.
- The PCS is determined to be a stand-ready obligation that is satisfied by P ratably over the PCS term.
- The initial contract does not include a material right.

At the end of year 2, B elects to extend the license for an additional year (i.e., the total license term would extend from three years to four years) in exchange for an additional $900 of consideration. Entity P determines that the additional license and PCS are priced at their respective stand-alone selling prices ($500 for the one-year term license and $400 for one year of PCS) and that the additional one-year term license and associated PCS are distinct performance obligations.

Entity P cannot recognize revenue allocated to the one-year renewal of the license granted to B before the expiration of the initial three-year license term.

In accordance with ASC 606-10-25-12, the contract extension is accounted for as a separate contract since the added goods and services (i.e., term license and PCS) are distinct and priced at their respective stand-alone selling prices. Although the customer already has the software subject to the one-year extension, the addition of one year to the right-to-use license creates a new distinct license that is transferred to the customer at the beginning of the extension period. ASC 606-10-55-58C states that an entity cannot recognize revenue from a license of IP before both of the following:

- The "entity provides (or otherwise makes available) a copy of the [IP] to the customer."
- "The beginning of the period during which the customer is able to use and benefit from its right to access or its right to use the [IP]."

ASC 606-10-55-58C further notes that an entity is not permitted to recognize revenue before the beginning of the license period even if the customer receives a copy of the IP before the beginning of the license period. Specifically, an entity is precluded from recognizing revenue from a license renewal before the beginning of the renewal period.

In accordance with the guidance in ASC 606-10-55-58C, P is precluded from recognizing the consideration allocated to the one-year term license (i.e., $500) until the beginning of year 4 (i.e., upon the expiration of the initial license term and beginning of the renewal period). If B prepays the $900 before the beginning of the renewal period, P would recognize that amount as a contract liability. At the beginning of year 4, P would recognize $500 immediately upon the transfer of the one-year right-to-use license to B. Entity P would then start recognizing the $400 of consideration allocated to the additional year of PCS ratably over year 4.

Example 2-99

Assume the same facts as in the example above, except that the additional consideration paid by Customer B to extend the license for a year is $600 instead of $900 (i.e., the additional license and PCS are not priced at their stand-alone selling prices, which are $500 and $400, respectively). At the time of the extension, P is still entitled to $400 for the remaining year of PCS it must provide B under the original contract.

In accordance with ASC 606-10-25-13(a), P would account for the early renewal (which is a form of a contract modification) as if it were a termination of the original contract and the creation of a new contract. Entity P would combine the additional consideration of $600 with the consideration promised by B under the original contract and not yet recognized as revenue by P (i.e., $400) and allocate the resulting sum to the remaining performance obligations under the modified contract. At the time of the modification, the three-year term license under the original contract had already been transferred to the customer along with two years of PCS. Consequently, one year of PCS still must be transferred under the original contract along with a one-year term license and an additional year of PCS, both of which were added as a result of the modification. The combined consideration of $1,000 ($600 + $400) would be allocated to the remaining performance obligations as follows:

	SSP	Relative SSP	Allocated Consideration
One-year term license	$ 500	38.5%	$ 385
Two years of PCS	400 per year	61.5%	615
Total	$ 1,300	100.0%	$ 1,000

Even though the modification is accounted for as *if it were a termination of the existing contract and the creation of a new contract*, the modification does not alter the original license term. That is, the modification does not change the original three-year term license to a two-year term license. Rather, the modification adds a one-year term license that begins after the expiration of the original three-year term license and requires P to allocate the consideration between the added one-year term license and the remaining two years of PCS. At the beginning of year 4, in a manner consistent with Example 2-98 above, P would recognize $385 immediately upon the transfer of the one-year right-to-use license to B. Further, P would start recognizing the $615 allocated to the PCS ratably at the beginning of year 3 (the time of the modification).

2.7.2.2 Unspecified Future Goods or Services in a Software Arrangement — Timing of Revenue Recognition

There can be situations in which the contract with a customer is not specific about what is promised to a customer. This type of contract could appear to be a stand-ready obligation. A common example of this situation arises in software contracts.

An entity may enter into a contract with a customer that includes two performance obligations: (1) a license of software and (2) a promise to provide unspecified updates and upgrades[68] to the software on a "when and if available" basis. The unspecified updates and upgrades are different from, and extend beyond, an assurance-type warranty.

[68] The nature of the entity's promise when it commits to provide unspecified updates and upgrades to a customer differs from the entity's obligation when it commits to deliver specified upgrades. This discussion addresses only unspecified updates and upgrades. For specified upgrades, the analysis will most likely be different since specified upgrades will often be a separate performance obligation.

When a contract with a customer transfers the rights to unspecified future updates, upgrades, or products, an entity is required to use judgment to determine whether the nature of the promise (performance obligation) is either of the following:

- To stand ready to maintain or enhance the software as needed.
- To develop and provide a new or significantly enhanced version of the software.

If the nature of the promise represents an obligation by the entity to stand ready to maintain or enhance the software as needed to ensure that the customer can continue to receive and consume the benefit of the software throughout the contract term, the value to the customer is transferred over time as the entity stands ready to perform. That is, the entity would (1) satisfy the performance obligation over time and (2) determine the appropriate measure of progress to recognize revenue over time.

If the nature of the promise represents an implied obligation to develop and provide new or significantly enhanced versions of the software through specified upgrades, the benefits of those upgrades are received and consumed when and if they are made available to the customer. That is, the performance obligation is only satisfied at the individual points in time when those upgrades are delivered to the customer.

2.7.2.3 Renewals of PCS in a Software Arrangement

It is common for an entity's software contract with a customer to include both a software license and PCS for a defined term (e.g., 12 months). In some cases, the software license is perpetual, or the term of the license is greater than the initial PCS term. After the initial PCS term, the customer may be entitled to renew the PCS at a renewal rate stated in the contract. Questions have arisen about how to account for (1) a reinstatement of PCS after the initial PCS term has lapsed (see the next section) and (2) an option to renew PCS when it is not distinct from a perpetual software license (see Section 2.7.2.3.2).

2.7.2.3.1 Reinstatement of PCS After Customer Lapse

As noted in the previous section, an entity could grant a license to software on a perpetual basis or for a term greater than the initial PCS term, with an option to renew the PCS at a stated renewal rate. If the customer does not elect to renew the PCS, the entity may not have an obligation (explicit or implied) to provide PCS to the customer after the initial PCS term. While the customer does not have the right to receive software updates or support if it does not renew the PCS, the customer retains the right to use the software in its then current state.

Although the entity does not have a contractual, legal, or implied obligation to provide PCS to the customer if the customer does not renew the PCS, the entity may continue to provide PCS as a courtesy to the customer. However, if there is no enforceable contract during the lapse period, the customer might not have the legal right to retain and use the benefits, including any software updates or enhancements, provided by the PCS during the lapse period. If the customer renews the PCS after the initial PCS term has lapsed, the entity may require the customer to pay a reinstatement fee equal to the amount that the customer would have paid for the PCS during the lapse period in addition to the fee for the remaining renewal period.

To account for a contract with a customer to reinstate PCS, an entity can use either of the following two methods depending on the nature of the PCS:[69]

- *Cumulative catch-up method ("Alternative A")* — Upon the customer's reinstatement of the PCS, the entity should record a cumulative adjustment to revenue. Under this alternative, the fee paid by the customer to reinstate the PCS should be allocated to both the PCS provided during the lapse period (software updates and enhancements provided as a courtesy during the lapse period if control of these items is transferred to the customer upon reinstatement of the PCS) and the future services to be provided over the remaining PCS term after the reinstatement. The amount allocated to the software updates and enhancements provided during the lapse period is recognized immediately because control is transferred at the point in time at which the PCS is reinstated. The amount allocated to future services is recognized over time as these services are provided.
- *Prospective method ("Alternative B")* — Upon the customer's reinstatement of the PCS, the entity should allocate the consideration in the contract (i.e., the reinstatement fee equal to what the customer would have paid during the lapse period and the fee for additional PCS) to the remaining months of PCS to be provided to the customer. This amount is recognized over time as the services are provided.

We believe that Alternative A is more appropriate if control over any updates or software enhancements already received by the customer (i.e., the right to legally retain bug fixes, updates, and enhancements that were provided during the lapse period) is transferred to the customer only at the point in time at which the PCS is reinstated. Under Alternative A, no revenue should be recognized during the lapse period because there is no contract with the customer. However, upon the customer's reinstatement of the PCS, the entity should recognize a cumulative adjustment to revenue in an amount that corresponds to the rights transferred to the customer upon reinstatement (which, under the facts of this scenario, is the reinstatement fee equal to the amount that the customer would have paid for the PCS during the lapse period). Although the customer may receive PCS during the lapse period, the customer does not have the legal right to retain the benefits from the PCS during this period; however, the rights to retain and use the benefits, updates, and enhancements are transferred to the customer if the customer renews the PCS. As noted above, the total fee charged to the customer includes a reinstatement fee equal to the amount that the customer would have paid for the PCS during the lapse period and an amount related to the PCS to be provided under the remaining PCS term. Therefore, the fee paid by the customer upon renewal is related to both the PCS still to be provided under the contract and the PCS provided during the lapse period.

Because the nature of PCS can differ among entities, additional consideration may be required if the entity does not provide upgrades, enhancements, or bug fixes as part of the PCS (e.g., when the PCS includes only support). In such cases, Alternative B may be more appropriate because the customer may not receive incremental rights upon reinstatement.

[69] The alternatives outlined in this section are premised on the assumption that the entity does not have an implied obligation to provide PCS during the lapse period.

Example 2-100

Entity V provides hospitals with communications solutions, which consist of hardware, software, and PCS for the software. On January 1, 20X1, V enters into a contract with Customer C to grant C a perpetual license to V's software and 12 months of PCS. The contract states that the PCS may be renewed on an annual basis for $1,200. Entity V concludes that the $1,200 represents the stand-alone selling price of the PCS. In addition, V concludes that its obligation to provide PCS is a stand-ready obligation that provides C with a benefit ratably over the contract term.

At the end of the initial 12-month term, C does not elect to renew the PCS and therefore does not make any further payment. Although V does not have an explicit or implicit obligation to provide any services, V continues to provide the PCS, including updates and enhancements to the software, as a courtesy to C because V expects that C will eventually reinstate the PCS. However, C does not have the legal right to retain or use the benefits of the updates or enhancements to the software until it reinstates the PCS.

On April 1, 20X2 (i.e., three months after the PCS has lapsed), C reinstates the PCS by paying V $1,200, of which $300 represents a reinstatement fee equal to the amount that C would have paid for the PCS during the lapse period. The new PCS term expires on December 31, 20X2. The $1,200 fee paid by C is intended to compensate V for the three months of PCS provided during the lapse period and the remaining nine months of PCS to be provided over the remaining period of the new PCS term. Entity V concludes that control of the rights to retain and use the benefits provided by the PCS (i.e., the right to retain or use the enhanced and updated software) during the lapse period is immediately transferred to the customer once the PCS is reinstated.

Upon reinstatement of the PCS, it would be acceptable for V to recognize $300 as revenue immediately because this represents the value of the rights that are transferred to C immediately upon reinstatement of the PCS. In that case, V would then recognize $900 as revenue over the remaining contract period ending on December 31, 20X2.

2.7.2.3.2 Options to Renew PCS When PCS Is Not Distinct From a Perpetual Software License

The example below illustrates the identification of material rights in a contract involving renewable PCS that is not distinct from a perpetual software license.

Example 2-101

On January 1, 20X9, Company LN enters into a contract with a customer to transfer a perpetual antivirus software license and provide unspecified software updates as PCS for one year in exchange for an up-front, nonrefundable fee of $3,000, which is the standard price paid by all new customers. Company LN has concluded that the software license and PCS are not distinct because the functionality and utility of the software are highly dependent on the PCS and vice versa. The updates significantly modify the functionality of the software by permitting the software to protect the customer from a significant number of additional viruses that the software did not protect against previously. The updates are also integral to maintaining the utility of the software license to the customer. Therefore, the transfer of a perpetual antivirus software license and the obligation to provide PCS constitute a single performance obligation.

At the end of the year, the customer has an option to renew the PCS on an annual basis for $300. The customer may exercise this option each year on an indefinite basis. The customer is expected to renew the PCS for four additional years after the first year of the contract.

The annual renewal options exercisable by the customer each represent a material right in LN's contract. Since the license is not distinct (separable) from the PCS, the customer is effectively renewing the single performance obligation (the combined license and PCS) each year even though the software that is being provided is in the form of a perpetual license.

Example 2-101 (continued)

Therefore, each annual renewal option represents a material right because the renewal options enable LN's customer to renew the contract at a price that is lower than the amount that new customers are typically charged (i.e., only $300 is required to renew as compared with the $3,000 that new customers must pay).

Because the material rights are accounted for as separate performance obligations, LN allocates the total transaction consideration of $3,000 for the first year to the identified performance obligations (services for the first-year contract and the material rights) on a relative stand-alone selling price basis. As described in ASC 606-10-55-45, as a practical alternative to estimating the stand-alone selling price of the renewal options, LN may be able to allocate the transaction price to the renewal options (i.e., the material rights) "by reference to the goods or services expected to be provided and the corresponding expected consideration." In accordance with ASC 606-10-55-42, the amount allocated to each annual renewal option (i.e., the material rights) would be recognized (1) as LN provides the service to which the renewal option is related or (2) when the renewal options expire.

2.7.3 Interaction of Sales- or Usage-Based Royalty Exception With Measuring Progress Toward Satisfaction of a Performance Obligation

When applying the sales- or usage-based royalty exception, an entity typically would recognize revenue when (or as) the customer's subsequent sales or usage occurs. However, if the sales- or usage-based royalties accelerate revenue recognition as compared with the entity's satisfaction (or partial satisfaction) of the associated performance obligation, the entity may be precluded from recognizing some or all of the revenue as the subsequent sales or usage occurs. This is because ASC 606-10-55-65 requires the recognition of sales- or usage-based royalties when (or as) the later of the following events occurs:

a. The subsequent sale or usage occurs.

b. The performance obligation to which some or all of the sales-based or usage-based royalty has been allocated has been satisfied (or partially satisfied).

Accordingly, revenue should be deferred if, and to the extent that, recognition based on subsequent sales or usage (i.e., criterion (a)) is judged to be in advance of satisfaction of a performance obligation (i.e., criterion (b)). Royalty arrangements can differ greatly between entities and between contracts. Therefore, the determination of whether revenue from royalties should be deferred will depend on an analysis of the specific facts and circumstances. For example, if the performance obligation to which the royalties are related is a term-based software license that is combined with PCS as a single performance obligation, it will often be helpful to consider whether the structure of the royalty payments appropriately depicts progress toward satisfying the combined performance obligation throughout the contract period. If the structure of the royalty payments does appropriately depict such progress, the criteria in ASC 606-10-55-65(a) and (b) will coincide, and no deferral of revenue will be necessary.

Whereas the amount determined under criterion (a) will be essentially a matter of fact (actual sales or usage multiplied by the applicable royalty rate), an entity will typically need to use judgment to determine the amount under criterion (b). In particular, it will be important for an entity to identify an appropriate measure of progress toward complete satisfaction of its obligation in accordance with ASC 606-10-25-31. The entity should then apply the guidance in ASC 606-10-55-65 to determine whether any revenue from royalties that have become payable on the basis of sales or usage exceeds the amount of revenue that the entity determined by applying the identified measure of progress. If so, the entity should defer that excess and recognize it as a contract liability.

Note that ASC 606-10-55-65 requires an entity to recognize revenue upon the occurrence of the **later** of the events described in ASC 606-10-55-65(a) and (b). Consequently, it is never possible to recognize revenue in advance of the amount payable under criterion (a) (actual sales or usage multiplied by the applicable royalty rate), even if royalty rates have been back-end loaded in such a way that royalties lag behind the measure of progress identified.

Example 2-102

An entity enters into a contract to provide a customer with a noncancelable three-year term-based license to the entity's software. There are no other promised goods or services in the contract. The entity determines that revenue related to the license is recognized at a point in time. The customer's estimated sales are expected to be approximately equal for each of the three years under license. For the use of the IP, the agreement requires the customer to pay the entity a royalty of 10 percent of the customer's sales in year 1, 8 percent of the customer's sales in year 2, and 6 percent of the customer's sales in year 3.

The entity should account for the royalty payments in a manner consistent with the legal form of the arrangement and in accordance with the exception to the variable consideration guidance for licenses of IP that include a sales- or usage-based royalty. Consequently, the entity would include the royalties in the transaction price on the basis of the applicable contractual rate and the customer's sales in each year and then, in accordance with ASC 606-10-55-65, recognize revenue at the later of when (1) the "subsequent sale or usage occurs" or (2) the "performance obligation to which some or all of the sales-based or usage-based royalty has been allocated has been satisfied (or partially satisfied)." Because the license is a right-to-use license for which control is transferred at the inception of the contract, the "later" of the two conditions is met when the subsequent sales occur.

2.7.4 Measuring Progress — Stand-Ready Obligations

Step 2 of the revenue model (i.e., identify the performance obligations) addresses how to assess the nature of a stand-ready obligation on the basis of what, in fact, the entity is promising to deliver to the customer (i.e., a discrete set of performance obligations over a fixed period or a performance obligation that is unlimited over a fixed period). This concept is illustrated in Example 18 of ASC 606, which is reproduced below.

ASC 606-10

Example 18 — Measuring Progress When Making Goods or Services Available

55-184 An entity, an owner and manager of health clubs, enters into a contract with a customer for one year of access to any of its health clubs. The customer has unlimited use of the health clubs and promises to pay $100 per month.

55-185 The entity determines that its promise to the customer is to provide a service of making the health clubs available for the customer to use as and when the customer wishes. This is because the extent to which the customer uses the health clubs does not affect the amount of the remaining goods and services to which the customer is entitled. The entity concludes that the customer simultaneously receives and consumes the benefits of the entity's performance as it performs by making the health clubs available. Consequently, the entity's performance obligation is satisfied over time in accordance with paragraph 606-10-25-27(a).

55-186 The entity also determines that the customer benefits from the entity's service of making the health clubs available evenly throughout the year. (That is, the customer benefits from having the health clubs available, regardless of whether the customer uses it or not.) Consequently, the entity concludes that the best measure of progress toward complete satisfaction of the performance obligation over time is a time-based measure, and it recognizes revenue on a straight-line basis throughout the year at $100 per month.

For a stand-ready obligation that is satisfied over time, an entity may measure progress toward complete satisfaction of the performance obligation by using one of various methods, including input and output methods. Although ASC 606-10-55-16 through 55-21 provide guidance on when an entity would use an output or input method, the guidance does not prescribe the use of either method. However, an entity does not have a "free choice" when selecting a measure of progress. While an entity may use either type of method, the actual method selected should be consistent with the clearly stated objective of depicting the entity's performance (i.e., the entity's satisfaction of its performance obligation in transferring control of goods or services to the customer).

Further, although ASC 606 does not permit an entity to default to a straight-line measure of progress on the basis of the passage of time (because a straight-line measure of progress may not faithfully depict the pattern of transfer), ASC 606 does not prohibit the use of a straight-line measure of progress, and such a time-based method may be reasonable in some cases depending on the facts and circumstances. An entity would need to use judgment to select an appropriate measure of progress on the basis of the arrangement's particular facts and circumstances.

Example 18 in ASC 606-10-55-184 through 55-186 illustrates a health club membership involving an entity's stand-ready obligation to provide a customer with one year of access to any of the entity's health clubs. In the example, the entity determines that the customer benefits from the stand-ready obligation evenly throughout the year.

Another example of a stand-ready obligation is a promise to make unspecified (i.e., when-and-if-available) software upgrades and updates available to a customer. The nature of the entity's promise is fundamentally one of providing the customer with assurance that any upgrades or updates developed by the entity during the period will be made available because the entity stands ready to transfer updates or upgrades when and if they become available. The customer benefits from the guarantee evenly throughout the contract period because any updates or upgrades developed by the entity during the period will be made available. As a result, a time-based measure of progress over the period during which the customer has rights to any unspecified upgrades developed by the entity would generally be appropriate unless the entity's historical experience suggests that another method would more faithfully depict the pattern of transfer of the when-and-if-available upgrades and updates to the customer.

Once an entity has determined the nature of the promise to the customer, the entity must determine how to appropriately recognize revenue. An entity must first go through steps 1 through 4 before applying step 5 to determine when to recognize revenue. Specifically, an entity must identify the nature of the promised goods and services and determine whether those goods and services are distinct before determining the appropriate pattern of revenue recognition. For example, an entity may sell products through a third-party distributor and implicitly or explicitly promise to provide a stand-ready service to the end customer. In these situations, the entity should begin to recognize revenue for a stand-ready service promised to a customer's customer when the end customer has the ability to access, and begin to consume and benefit from, the service. In addition, the pattern of revenue recognition may differ depending on the nature of the promised goods and services in the contract. Therefore, it is critical that an entity carefully assess the promised goods and services in the contract before jumping to revenue recognition in step 5. In some instances, an entity may be providing a service of standing ready to provide as many goods or services as needed by a customer when called upon (i.e., a stand-ready obligation). However, in other instances, an entity may be available to provide goods or services when called upon by a customer, but the customer only has a right to a specified amount of goods or services.

In the examples below, Entity X enters into two different contracts, one with Customer A and the other with Customer B, to provide cloud computing capacity. Because of the nature of X's business, very little incremental effort is required as X's customers use the cloud computing capacity.

Example 2-103

Contract With Customer A for a Specified Quantity

Entity X enters into a three-year contract with A, under which A receives the right to a specified quantity of cloud computing capacity on an "as needed" basis. Unused capacity is forfeited at the end of the contract term. On the basis of historical usage, X does not expect A to use the cloud computing capacity evenly through the contract term but expects A to use all of the agreed capacity before the end of the contract. Once A has used the specified quantity of capacity, A no longer has the ability to use the service, and additional capacity must be separately negotiated.

For an entity to distinguish between a stand-ready obligation and an obligation to provide a defined amount of goods or services, it will often be helpful to focus on the extent to which the customer's use of a resource affects the remaining resources to which the customer is entitled.

In the circumstances described, the nature of X's promise is to provide a fixed capacity, and its performance under the contract is demonstrated by the actual discrete delivery of capacity. In contrast to the example below, when A uses cloud computing capacity, A's usage does affect the amount of the remaining services to which A is entitled, indicating that X's promise is to deliver specified services rather than to stand ready.

As a result, X should recognize revenue in a manner that is consistent with A's usage of the capacity during the reporting period (i.e., by applying a usage-based measure of progress). It would not be appropriate for X to recognize revenue by using a ratable or straight-line method.

Example 2-104

Contract With Customer B for an Unlimited Quantity

In contrast to X's contract with A, X's contract with B is to provide unlimited cloud computing capacity as required over a three-year term. Because X has agreed to provide an unlimited quantity of cloud computing capacity, the nature of X's promise to B is to continuously stand ready to make unlimited cloud computing capacity available, and B's entitlement to future capacity is not affected by the extent to which B already used capacity. In such circumstances, straight-line revenue recognition might be an appropriate representation of X's transfer of control for this stand-ready obligation. However, X should consider information from similar contracts regarding historical patterns of performance in using judgment to select an appropriate measure of progress based on its service of making the cloud computing capacity available (which is not necessarily the same as when the customers use the capacity made available to them).

Connecting the Dots

In some arrangements — specifically, arrangements involving SaaS — it may not always be clear whether the nature of the promise is (1) an obligation to provide a specified amount of services (e.g., 5,000 transactions processed through software provided as a service) or (2) a stand-ready obligation to provide services when and if called upon (e.g., to process all of the transactions required through SaaS). Sometimes in practice, an entity may price a SaaS arrangement on the basis of volume expectations but may still be required to stand ready to provide the service for the entire contractual period regardless of whether the customer exceeds the volumes expected at contract inception. In other cases, a customer's right to use the service may terminate once the initial volumes are exceeded, or the contract would be modified once the volumes are exceeded. In all of these circumstances, an entity will need to carefully consider the contractual rights and obligations to appropriately identify the nature of the promise and to determine an appropriate measure of progress toward complete satisfaction of the performance obligation.

2.7.5 Use of a Multiple Attribution Approach (as Compared With a Single Method for Measuring Progress)

For performance obligations meeting the requirements for revenue recognition over time, the entity must select a method for measuring progress toward satisfaction of the performance obligation. Although the revenue standard indicates that an entity should apply a single method to measure progress for each performance obligation satisfied over time, stakeholders have questioned whether an entity may apply more than one method to measure progress toward satisfaction of a performance obligation that contains multiple goods and services bundled and recognized over time. Examples of such circumstances include the following:

- A cloud computing company provides hosting services to its customers for specified periods that begin once certain up-front implementation activities are completed. The customer cannot access the services in the hosting arrangement until the implementation activities are complete (and no other vendor can perform the implementation). Therefore, the hosting services are combined with the up-front activities to be one performance obligation.
- A software license is provided to a customer at contract inception. However, there is also a service associated with the license that is not considered to be distinct. Therefore, the service is combined with the license to be one performance obligation.

Stakeholders questioned whether it would be acceptable to apply two different methods for measuring progress even though the contract has only one performance obligation. The revenue standard clearly indicates that "using multiple methods of measuring progress for the same performance obligation would not be appropriate."[70] Accordingly, an entity should use a single measure of progress for each performance obligation identified in the contract. In addition, selecting a common measure of progress may be challenging when a single performance obligation contains more than one good or service or has multiple payment streams, although the selection of a measure of progress is not a free choice. Further, while a common measure of progress that does not depict the economics of the contract may indicate that the arrangement contains more than one performance obligation, it is not determinative. However, a reexamination may suggest that the contract includes more performance obligations than were initially identified.

2.7.6 Recognizing Revenue Related to Commissions Earned by an Agent

An entity (e.g., a marketplace platform) may earn revenue in the form of a sales commission; the treatment of sales commissions (i.e., the timing of recognizing the revenue related to the sales commission) may vary depending on the terms of the arrangement. In some cases in which an entity acts as an agent, it is providing a service over time; however, in other instances, an agent only provides its service at a point in time.

The timing of recognition of an agent's commission revenue depends on the nature of (1) the agreement between the agent and its customer (the principal) and (2) the promise to the customer. Revenue will be recognized at a point in time unless the criteria in ASC 606-10-25-27 are met. Accordingly, it is appropriate to focus on ASC 606-10-25-27(a) and (c):

- Does the principal simultaneously receive and consume the benefits provided by the agent's performance as the agent performs?
- Does the agent have an enforceable right to payment for performance completed to date?

[70] Quoted from Implementation Q&A 47.

In accordance with ASC 606-10-55-6, when the first of these criteria is assessed, it will be appropriate to consider whether another entity would need to substantially reperform the work that the agent has completed to date if that other entity were to fulfill the remaining performance obligation to the principal.

Often, the only promise that an agent makes to the principal is to arrange a sale, and the agent is only paid commission if it achieves a sale. In these circumstances, the criterion in 606-10-25-27(a) will typically not be met. That is, as the agent works toward achieving a sale (e.g., by maintaining a marketplace platform), the work performed is not consumed by the principal (i.e., the agent's customer) until a sale is achieved. Thus, the conditions for recognizing revenue over time are not met, and control of the "good or service" is not considered to be transferred. In these instances, the point in time at which revenue should be recognized will depend on the nature of the agent's promise to its customer, the principal. The agent may perform activities before a sale, but these activities are often performed on the agent's own behalf to fulfill the promise made to the customer, which is to complete the sale. Although there may be some limited benefit to the customer as a result of the agent's presale activities, that benefit is significantly limited unless a sale transaction is ultimately completed.

This conclusion is consistent with Example 45 of the revenue standard (ASC 606-10-55-317 through 319), which concludes that "[w]hen the entity satisfies its promise to arrange for the goods to be provided by the supplier to the customer (which, in this example, is when goods are purchased by the customer), the entity recognizes revenue in the amount of the commission to which it is entitled." The use of the word "when" suggests that this is at a point in time, whereas the use of the word "as" would have implied that the entity is delivering, and the customer is receiving, a good or service over time.

In some instances, an agent may receive nonrefundable consideration at the outset of an arrangement, which may indicate that the customer is receiving a benefit from the activities performed before the sale. That is, the agent in these circumstances may be delivering an additional service during the contractual period (e.g., a listing service). However, the mere existence of such an up-front payment does not in itself indicate that a good or service has been transferred before the ultimate sale. In all cases, careful consideration of the contractual arrangement is required, and revenue should be recognized over time only if the contract meets one of the criteria in ASC 606-10-25-27.

Example 2-105

Revenue Recognized Upon Completion of the Sale

An agent enters into an arrangement with a seller in which it promises to arrange for buyers to purchase the seller's products. The agent performs various tasks to locate a buyer, including listing the products on its marketplace platform. Once a buyer is located, the agent facilitates the purchase of the product on its platform. The agent receives a commission equal to 10 percent of the sales price of the product when a sale is completed. The seller also pays the agent a small up-front fee to help cover costs incurred by the agent before the sale. The up-front fee is nonrefundable (i.e., the agent retains the fee even if the product is not sold). The up-front fee is expected to represent approximately 5 percent of the contract consideration received by the agent, and the commission represents the remaining 95 percent.

In this example, the promise to the customer is to arrange for the sale; therefore, the performance obligation is satisfied at the time of the sale. The agent should recognize the up-front fee and commission at the point in time when the sale is completed (as discussed above, the point in time at which revenue should be recognized will depend on the nature of the promise to the customer). The listing service in this example is an activity that the agent performs to satisfy its promise (i.e., to achieve the sale), but it does not transfer a good or service to the customer.

Example 2-106

Revenue Recognized Over Time

An agent enters into an arrangement with a seller in which it promises to list the seller's products on its marketplace platform for a specified period in a manner similar to that of an online classified ad. If a buyer decides to purchase the seller's product, the buyer is directed to the seller's platform to complete the transaction. The agent receives a fee from the seller for the listing service. This fee is nonrefundable even if the product is not sold. If the product is sold, the agent also receives a commission equal to 1 percent of the sales price of the product. The listing fee is expected to represent approximately 80 percent of the contract consideration received by the agent, and the commission represents the remaining 20 percent.

In this example, the promise to the customer is the listing service. This performance obligation is satisfied over time as the customer receives the benefit of the listing (the customer simultaneously receives and consumes the benefit). Therefore, the agent should recognize the contract consideration over the listing period. The significant up-front payment is one indicator that the promise to the customer in this example is the listing service (as opposed to a promise to arrange for a sale, as in the example above). The commission represents variable consideration that the agent should estimate (unless the variable consideration meets the criteria in ASC 606-10-32-40 to be allocated to the period in which the product sale occurs) and include in the transaction price, subject to the constraint.

Example 2-107

Two Separate Performance Obligations

An agent manages a Web site that (1) lists independent sellers' products and (2) posts advertisements of independent sellers' products. Advertisements are purchased by some of the agent's customers on a stand-alone basis (i.e., they are purchased by customers that do not have any products listed on the Web site) and by other customers of the agent that are also contracting to have their products listed for sale on the Web site.

The agent enters into an arrangement with a seller in which it promises to arrange for buyers to purchase the seller's products. The products are listed on the agent's Web site, and potential buyers are able to search for and view the products. In addition, the agent agrees to advertise the product on its Web site for a fixed price per day based on the length or content of the advertisement (e.g., number of words, pictures). The seller also purchases optional "upgrade" features for an additional fee, such as premium placement of the advertisement. The seller determines the number of days to run the advertisement and the content of the advertisement. The fees for the advertisement are nonrefundable even if the product is not sold. Once a buyer is located, the agent facilitates the purchase of the product on its Web site. The agent receives a commission equal to 5 percent of the sales price of the product when a sale is completed. The nonrefundable fee for the advertisement is expected to represent approximately 50 percent of the contract consideration received by the agent, and the commission represents the remaining 50 percent.

In this example, there are two distinct promises to the customer: the advertisement and the promise to arrange for the sale. The promises are distinct because the purchase of the advertisement is optional and the seller could sell its product on the Web site without the advertisement. The agent also sells advertisements separately to other customers that do not have any products listed on the Web site. The advertising service is satisfied over time because the customer simultaneously receives and consumes the benefit over the period the advertisement is run. The promise to arrange for the sale is satisfied at the time of sale. The agent should estimate the total consideration, including the variable consideration (subject to the constraint) and allocate the consideration to the two performance obligations on the basis of stand-alone selling prices. Alternatively, if both the contract price for the advertisement and the price for arranging the sale reflect their respective stand-alone selling prices, the entity may not need to estimate the variable consideration.

If the promises were not considered distinct, the combined performance obligation may be satisfied over time (for the same reasons the advertising service is satisfied over time when it is distinct). The agent would determine the estimated transaction price, including variable consideration subject to the constraint (unless the variable consideration meets the criteria in ASC 606-10-32-40 to be allocated to the period in which the product sale occurs), and recognize revenue by using an appropriate measure of progress.

2.7.7 Recognition of Revenue Associated With Material Rights

2.7.7.1 Customer's Exercise of a Material Right

When a contract with a customer includes a material right in the form of an option to acquire additional goods or services, an entity may account for the customer's subsequent exercise of the material right either as if it were a separate contract ("Alternative A," which we generally believe is preferable) or as if it were the modification of an existing contract ("Alternative B," which we believe is acceptable). Those alternatives may be summarized as follows:

- *Alternative A (preferred)* — At the time a customer exercises a material right, an entity treats the exercise as a continuation of the original contract such that the additional consideration is allocated only to the additional performance obligation underlying the material right. In effect, therefore, the entity is treating the exercise as if it were a separate contract altogether. Under this alternative, an entity should determine the transaction price of the "new" contract and include any additional consideration to which the entity expects to be entitled as a result of the exercise. This additional consideration, along with the consideration from the original contract that was allocated to the material right, should be allocated to the performance obligation underlying the material right and recognized as revenue when or as this performance obligation is satisfied. That is, the amount allocated to the material right as part of the original contract is added to any additional amounts due (under the "new" contract) as a consequence of the customer's exercise of the material right, and that total is allocated to the additional goods or services under the "new" contract. The amounts previously allocated to the other goods and services in the original contract are not revised.
- *Alternative B (acceptable)* — It is also acceptable to account for the exercise of a material right as a contract modification since it results in a change in the scope and the price of the original contract. An entity should apply the modification guidance in ASC 606-10-25-10 through 25-13.

  Since we believe that the application of Alternative B may be complex, we recommend that entities consider consulting with their accounting advisers before electing to use this method.

The method used should be applied consistently by an entity to similar types of material rights and under similar facts and circumstances.

Example 2-108

An entity enters into a contract with a customer to provide Product X for $200 and Service Y for $100. The contract also includes an option for the customer to purchase Service Z for $300. The stand-alone selling prices of Product X, Service Y, and Service Z are $200, $100, and $450, respectively. The entity concludes that the option to purchase Service Z at a discount provides the customer with a material right. The entity's estimate of the stand-alone selling price of the material right is $100.

Example 2-108 (continued)

The entity allocates the $300 transaction price ($200 for Product X plus $100 for Service Y) to each performance obligation under the contract as follows:

	Transaction Price ($)	SSP ($)	% Allocation	Allocation ($)
Product X		200	50%	150
Service Y		100	25%	75
Material right		100	25%	75
Total	300	400	100%	300

Subsequently, when the entity has delivered Product X and has delivered 60 percent of Service Y, the customer exercises its option to purchase Service Z for $300.

Alternative A (Preferred)

The entity updates the transaction price to reflect the additional consideration receivable from the customer. The additional $300 payable after the exercise of the option is added to the amount of $75 that was previously allocated to the option to purchase Service Z, resulting in a total of $375. The amount of $375 is recognized as revenue over the period during which Service Z is transferred.

No change is made to the amount of revenue allocated to Product X and Service Y. The revenue not yet recognized with respect to Service Y (40% × $75 = $30) is recognized as revenue over the remaining period during which Service Y is transferred to the customer.

Alternative B (Acceptable)

The entity accounts for the customer's exercise of its option to purchase Service Z as a contract modification. The appropriate accounting will be different depending on whether the remaining services to be provided after the modification (i.e., Service Z and the rest of Service Y) are distinct from those transferred to the customer before the modification.

Accounting if the Remaining Services Are Distinct

If the entity determines that the remaining services to be provided after the modification are distinct from those transferred to the customer before the modification, the guidance in ASC 606-10-25-13(a) should be applied. The revenue already recognized with respect to Product X ($150) and 60 percent of Service Y ($75 × 60% = $45) is not adjusted.

After the modification, the revenue not yet recognized is determined as follows:

	$
Adjusted transaction price ($300 + $300)	600
Revenue already recognized ($150 + $45)	(195)
Revenue not yet recognized	405

Example 2-108 (continued)

The revenue not yet recognized is then allocated to the remaining performance obligations as follows:

	Transaction Price ($)	SSP ($)	% Allocation	Allocation ($)
Service Y (40%)		40	8.2%	33
Service Z		450	91.8%	372
Total	405	490	100.0%	405

Therefore, $33 is recognized as the remaining 40 percent of Service Y is delivered, and $372 is recognized as Service Z is delivered.

Accounting if the Remaining Services Are Not Distinct

If the entity determines that the remaining goods or services are not distinct, the guidance in ASC 606-10-25-13(b) should be applied and a cumulative catch-up adjustment to revenue for performance obligations satisfied over time should be recognized on the date of the modification (no adjustment is made for fully satisfied performance obligations). The updated transaction price is allocated between the two performance obligations that are satisfied over time as if the modification had been in place at the start of the contract.

	Transaction Price ($)	SSP ($)	% Allocation	Allocation ($)
Service Y		100	18.2%	82
Service Z		450	81.8%	368
Total	450*	550	100.0%	450

* Calculated as $150 ($75 allocated to Service Y plus $75 allocated to the material right) plus the $300 exercise price of the material right. The $150 allocated to Product X is excluded because the performance obligation has been fully satisfied and is distinct from Service Y and Service Z.

The cumulative catch-up adjustment is recorded because the remaining 40 percent of Service Y is not distinct from the previously delivered 60 percent of Service Y (Service Y is distinct from Service Z) and is determined as follows:

	$
Revenue based on updated allocation for 60% of Service Y (60% × $82 = $49)	49
Revenue previously recognized for Service Y ($45)	(45)
Additional revenue recognized as catch-up adjustment	4

Therefore, the remaining $33 ($82 – $49) is recognized as the entity performs the remaining 40 percent of Service Y, and $368 is recognized as Service Z is delivered.

2.7.7.2 Recognition of Revenue Related to Options That Do Not Expire

In accordance with ASC 606-10-55-41 through 55-45, when an entity provides a customer with an option to acquire additional goods or services that results in a performance obligation because the option provides a material right to the customer, the entity should (1) allocate a portion of the transaction price to the material right and (2) recognize the related revenue either when the entity transfers control of the future goods or services or when the option expires.

When a customer's option to acquire additional goods is a material right and does not expire, recognition of revenue related to the option will depend on whether the material right is (1) included in a portfolio of similar rights provided by the entity or (2) accounted for as an individual right. If the material right is included in a portfolio of similar rights, revenue related to expected unexercised options should be recognized in proportion to the pattern of rights exercised by the customers in the portfolio. If the customer option is an individual right, the entity would recognize revenue attributed to the material right when the likelihood that the customer will exercise the option is remote.

The guidance on options requires an entity to estimate the stand-alone selling price of the option at contract inception by considering the likelihood that the option will be exercised. An entity should also consider the guidance in ASC 606-10-32-11 through 32-13 on constraining estimates of variable consideration to determine whether it expects to be entitled to revenue related to unexercised options.

An entity would estimate the amount of revenue related to options that the entity expects the customer will not exercise by applying the guidance on unexercised rights in ASC 606-10-55-46 through 55-49. If there are any changes in the likelihood of exercising the option, the entity should recognize such changes as it measures progress toward satisfaction of the performance obligation. Accordingly, the entity should recognize revenue as follows:

- Recognize revenue for the portion of the transaction price allocated to the option when the option is exercised.
- If the option has not been exercised, recognize revenue either (1) in proportion to the pattern of rights exercised by customers (for material rights included in a portfolio of similar rights) or (2) at the point in time when the entity determines that the likelihood that the customer will exercise the option becomes remote (when accounting for a single material right).

Example 52 in the revenue standard (ASC 606-10-55-353 through 55-356) demonstrates the allocation and recognition of changes in the expected redemption of loyalty program points (i.e., options).

Example 2-109

Loyalty Points

An entity has a loyalty rewards program that offers customers 1 loyalty point per dollar spent; points awarded to the customers do not expire. The redemption rate is 10 points for $1 off future purchases of the entity's products.

During a reporting period, customers purchase products for $100,000 (which reflects the stand-alone selling price of the products) and earn 100,000 points that are redeemable for future purchases. The entity expects 95,000 points to be redeemed.

The entity estimates the stand-alone selling price to be $0.095 per point (totaling $9,500) on the basis of the likelihood of redemption in accordance with ASC 606-10-55-44. The points provide a material right to the customers that they would not receive without entering into a contract. Therefore, the entity concludes that the promise to provide points to the customers is a performance obligation.

Example 2-109 (continued)

The entity therefore allocates, at contract inception, the transaction price of $100,000 as follows:

- Products — $100,000 × ($100,000 stand-alone selling price ÷ $109,500) = $91,324.
- Loyalty points — $100,000 × ($9,500 stand-alone selling price ÷ $109,500) = $8,676.

End of Year 1

After one year, 20,000 points have been redeemed, and the entity continues to expect a total of 95,000 points to be redeemed. Therefore, the entity recognizes $1,827 in revenue for the 20,000 points redeemed, or (20,000 points redeemed ÷ 95,000 total points expected to be redeemed) × $8,676. The entity also recognizes a contract liability of $6,849 ($8,676 − $1,827) for the unredeemed points at the end of year 1.

End of Year 2

After two years, only 50,000 points in total have been redeemed. The entity then reassesses the total number of points that it expects the customers to redeem. Its new expectation is that 70,000 (i.e., no longer 95,000) points will be redeemed. Therefore, the entity recognizes $4,370 in revenue in year 2. To calculate this amount, the entity determines what portion of the $8,676 is to be recognized in year 2, adjusting the total expected points to be redeemed from 95,000 to 70,000: [71]

> $4,370 = [(50,000 total points redeemed ÷ 70,000 total points expected to be redeemed) × $8,676] – $1,827 recognized in year 1.

The contract liability balance is $2,479 ($6,849 − $4,370).

End of Year 3

After three years, 55,000 points in total have been redeemed, and the entity continues to expect that the customers will redeem 70,000 points in total. Therefore, the entity recognizes $620 in revenue in year 3. To calculate this amount, the entity determines what portion of the $8,676 is to be recognized in year 3 while maintaining the assumption that the total expected points to be redeemed is 70,000:

> $620 = [(55,000 total points redeemed ÷ 70,000 total points expected to be redeemed) × $8,676] – $1,827 (recognized in year 1) – $4,370 (recognized in year 2).

The contract liability balance is $1,859 ($2,479 – $620).

End of Year 4

After four years, no additional points have been redeemed, and the entity concludes that the likelihood that customers will redeem the remaining points is remote. The total revenue recognized with respect to the material right in year 4 would be the remaining contract liability balance of $1,859.

Example 2-110

Single Customer Option

An entity enters into a contract with a customer for the sale of Product A for $100. As part of the negotiated transaction, the customer also receives a coupon for 50 percent off the sale of Product B; the coupon does not expire. Similar coupons have not been offered to other customers.

The stand-alone selling price of Product B is $60. The entity estimates a 70 percent likelihood that the customer will redeem the coupon. On the basis of the likelihood of redemption, the stand-alone selling price of the coupon is concluded to be $21 ($60 sales price of Product B × 50% discount × 70% likelihood of redemption) in accordance with ASC 606-10-55-44.

[71] As a result, the impact of the change in estimated points that will be redeemed is recorded as a cumulative adjustment in year 2. Alternatively, we believe that it may be acceptable to recognize changes in estimate prospectively.

Example 2-110 (continued)

The entity concludes that the option to purchase Product B at a discount of 50 percent provides the customer with a material right. Therefore, the entity concludes that (1) this option is a performance obligation and (2) a portion of the transaction price for Product A should be allocated to this option.

The entity therefore allocates, at contract inception, the $100 transaction price as follows:

- Product A — $100 × ($100 stand-alone selling price ÷ $121) = $83.
- Product B material right — $100 × ($21 stand-alone selling price ÷ $121) = $17.

The option is not exercised during the first four years after its issuance. As a result, the entity determines that no revenue should be recognized during this period by applying the guidance in ASC 606-10-55-48, which allows revenue to be recognized "in proportion to the pattern of rights exercised by the customer." At the end of year 4, the entity determines that the likelihood that the customer will redeem the coupon has become remote and therefore recognizes the $17 in accordance with ASC 606-10-55-48.

2.7.7.3 Amortization Period of Material Rights

In certain service contracts (e.g., one-year SaaS contracts), customers are required to pay a one-time up-front fee upon initially signing up for the service. Often, the activities associated with the up-front fee do not transfer a promised good or service to the customer (e.g., customization of the underlying software associated with the SaaS). In these situations, the up-front fee is attributed to the future services to be provided under the contract with the customer, as required under ASC 606-10-55-51, and generally would give rise to a material right if the customer can renew the service each year without incurring an additional up-front fee (i.e., the renewal is offered at a significant discount). ASC 606-10-55-42 and ASC 606-10-55-51 provide the following limited guidance on how and over what period such a material right should be recognized:

> **55-42** . . . If the option provides a material right to the customer, the customer in effect pays the entity in advance for future goods or services, and the entity recognizes revenue when those future goods or services are transferred or when the option expires.
>
> **55-51** . . . The revenue recognition period would extend beyond the initial contractual period if the entity grants the customer the option to renew the contract and that option provides the customer with a material right as described in paragraph 606-10-55-42.

Often in these circumstances, the option to renew services without incurring an additional up-front fee is indefinite (i.e., the right to renew without paying an up-front fee may exist for the entire customer relationship).

Up-front fees that give rise to a material right are often recognized over the customer life. However, the fees may not necessarily be recognized over the entire customer life since the material right is not always related to all goods or services that will be provided to the customer under all anticipated contracts. Rather, an entity should determine the period over which the right to renew a contract without incurring an additional up-front fee provides a material right to the customer. When making this assessment, an entity should consider both qualitative and quantitative factors. Examples of these factors include historical and projected customer behavior and the significance of the up-front fee in relation to the contract price. In addition to evaluating qualitative factors, one way to make the assessment is to compare the renewal rate with the average rate paid by the customer for the prior periods' services. Under this approach, the discount provided upon renewal diminishes with each successive renewal as the up-front fee is attributed to additional periods of service, as illustrated in the example below.

Example 2-111

Entity A charges customers a monthly fee to obtain a bundle of services on a month-to-month basis (i.e., the contract period is one month, but customers have the right to renew the services at a consistent monthly rate).

In addition, all new customers are required to pay a one-time up-front fee to initiate the service, but this fee is not required upon renewal. No promised goods or services are transferred to customers in connection with up-front activities. Entity A determines that the ability to renew a month of services without having to pay an additional up-front fee creates a material right.

Assume the following additional facts:

- Each new customer pays a $30 up-front fee that represents the stand-alone selling price of the material right.
- The customer can renew the monthly services for $140 per month indefinitely.
- Entity A has determined that its average customer life is seven years.

Although the customer can renew the monthly services indefinitely without incurring an additional up-front fee, the period over which the right to do so represents a material right to the customer is likely to be less than seven years. While the option that exists in month 1 to renew services for month 2 provides the customer with a discount of approximately 17.6 percent as compared with the first month of services, the option to renew in month 8 provides only a 2.6 percent discount as compared with the average monthly amount paid to date. This is illustrated in the following table:

	Month								
	1	2	3	4	5	6	7	8	9
Aggregate fees paid ($140 × months of service + $30)	$ 170.00	$ 310.00	$ 450.00	$ 590.00	$ 730.00	$ 870.00	$1,010.00	$1,150.00	$1,290.00
Average monthly fee paid to date (aggregate fees ÷ months of service = <A>)	170.00	155.00	150.00	147.50	146.00	145.00	144.29	143.75	143.33
Implied discount on renewal (<A> – $140 = <B>)	$ 30.00	$ 15.00	$ 10.00	$ 7.50	$ 6.00	$ 5.00	$ 4.29	$ 3.75	$ 3.33
Discount on next renewal (<B> ÷ <A>)	17.6%	9.7%	6.7%	5.1%	4.1%	3.4%	3.0%	2.6%	2.3%

In these circumstances, it is likely that the right to renew the contract without incurring an additional up-front fee would not be material to the customer after a relatively short period. As a result, recognizing the up-front fee over the entire customer life might not be required. Accordingly, A will need to use judgment to determine when the right to renew the contract without incurring an additional up-front fee no longer provides a material right to the customer.

2.8 Principal-Versus-Agent Considerations

For an entity, deciding whether the nature of its promise is to transfer goods or services to the customer itself (as a principal) or to arrange for goods or services to be provided by another party (as an agent) is an important determination because the conclusion the entity reaches can significantly affect the amount of revenue recognized. Whereas a principal of a performance obligation will recognize revenue at the gross amount it is entitled to from its customer, an agent will present revenue at the net amount retained. An entity must use judgment when assessing whether it is acting as a principal or as an agent.

The revenue standard focuses on recognizing revenue as an entity transfers control of a good or service. Therefore, an entity is a principal in a transaction if it controls the specified goods or services before they are transferred to the customer. The revenue standard provides some indicators to help an entity determine whether it controls the underlying goods or services before they are transferred to the customer.

2.8.1 Identifying the Specified Goods or Services

The first step in the evaluation of whether an entity is acting as a principal or as an agent when another party is involved in providing goods or services to a customer is to identify the goods or services that will be transferred to the customer (i.e., the "specified goods or services" referred to in ASC 606-10-55-36A). In the amendments in ASU 2016-08, the FASB confirmed that the unit of account for evaluating whether an entity is acting as a principal or as an agent is not at the contract level. Rather, the principal-versus-agent analysis is performed for each specified distinct good or service (or distinct bundle of goods or services) that will be transferred to the customer. Accordingly, an entity could be a principal for certain aspects of a contract with a customer and an agent for others.

The unit of account to be used in the first step of the principal-versus-agent analysis could be described as being at the performance obligation level. Consequently, this part of the analysis could be performed as part of step 2 of ASC 606's revenue model. However, the revenue standard does not refer to the analysis as being conducted at the performance obligation level because the performance obligation of an agent is to arrange for another entity to transfer the specified goods or services to the customer. For an entity to determine whether it controls promised goods or services before they are transferred to a customer, it must first identify the specified goods or services that will be transferred to the customer. However, the notion of aggregating goods or services that are not distinct into performance obligations (i.e., a distinct bundle of goods or services) will apply to identifying the unit of account used in the evaluation of whether an entity is acting as a principal or as an agent. That is, the same guidance that an entity applies to identify performance obligations (ASC 606-10-25-19 through 25-22) will be used to determine the specified goods or services.

2.8.2 Determining Whether the Entity Controls the Goods or Services Before They Are Transferred to the Customer

An entity is a principal in providing a specified good or service if the entity controls that specified good or service before it is transferred to the customer. Control is defined in ASC 606-10-25-25 as "the ability to direct the use of, and obtain substantially all of the remaining benefits from, the asset. Control includes the ability to prevent other entities from directing the use of, and obtaining the benefits from, an asset." Paragraph BC120 of ASU 2014-09 describes the components of control as follows:

> a. Ability — A customer must have the present right to direct the use of, and obtain substantially all of the remaining benefits from, an asset for an entity to recognize revenue. For example, in a contract that requires a manufacturer to produce an asset for a particular customer, it might be clear that the customer will ultimately have the right to direct the use of, and obtain substantially all of the remaining benefits from, the asset. However, the entity should not recognize revenue until the customer has actually obtained that right (which, depending on the contract, might occur during production or afterwards).
>
> b. Direct the use of — A customer's ability to direct the use of an asset refers to the customer's right to deploy that asset in its activities, to allow another entity to deploy that asset in its activities, or to restrict another entity from deploying that asset.
>
> c. Obtain the benefits from — The customer must have the ability to obtain substantially all of the remaining benefits from an asset for the customer to obtain control of it. Conceptually, the benefits from a good or service are potential cash flows (either an increase in cash inflows or a decrease in cash outflows). A customer can obtain the benefits directly or indirectly in many ways, such as by using, consuming, disposing of, selling, exchanging, pledging, or holding an asset.

In addition, ASC 606-10-55-39 provides indicators to support an entity's evaluation of control.

Connecting the Dots

In the determination of whether an entity controls a specified good or service before the good or service is transferred to a customer, the control principle should be considered before the indicators of control are analyzed. As noted in paragraph BC16 of ASU 2016-08, "the indicators in paragraph 606-10-55-39 were included to support an entity's assessment of whether it controls a specified good or service before it is transferred to the customer. The indicators (a) do not override the assessment of control, (b) should not be viewed in isolation, (c) do not constitute a separate or additional evaluation, and (d) should not be considered a checklist of criteria to be met in all scenarios." Further, paragraph BC18(e) of ASU 2016-08 states, in part, that "the indicators are not an exhaustive list and merely support the assessment of control. They do not replace or override that assessment."

At the 2021 AICPA & CIMA Conference on Current SEC and PCAOB Developments, Jonathan Wiggins, senior associate chief accountant in the SEC's OCA, cautioned that the indicators of control in the principal-versus-agent analysis as outlined in ASC 606-10-55-39 are neither a checklist nor a substitute for an entity's assessment of control; rather, an entity should consider whether these indicators support its control assessment.

2.8.3 Controlling a Good Before Transferring It to a Customer

Often, it will be clear that an entity controls a good before it is transferred to a customer because the entity acquired the good (i.e., obtained control) from a third party before transfer of the good to the customer. These situations will often involve an element of inventory risk that is assumed while the good is in the entity's control.

However, other scenarios may not be as clear. Consider a situation in which an online electronics retailer holds some goods (inventory) in its warehouse but also has arrangements with some of its suppliers that allow it to direct the supplier to ship certain goods directly from the supplier's warehouse to the end customer (i.e., drop-ship arrangements in which it does not have inventory risk for all goods). This sort of an arrangement would have to be evaluated more carefully, as illustrated below.

Example 2-112

An electronics retailer has physical locations but also sells goods to its customers through its Web site. Customers can choose to purchase goods at the retailer's physical location but can purchase the same goods online. The retailer has full discretion in determining the price of the goods and generally offers the same price in stores as it does online. Customers who choose to buy electronics online enter into a contract with the retailer to purchase one or more specified goods. The retailer can satisfy its obligation to transfer a specified good to a customer either by shipping the good from one of its physical locations or by directing its supplier to ship the good from the supplier's warehouse. If the retailer directs its supplier to ship the good directly to the customer, the retailer will take title to the specific good only momentarily before title passes to the customer upon shipment. The retailer is required to pay the supplier for the good even if it does not receive payment from the customer. If the customer is not satisfied with the good or there is a defect, the customer can return the good to one of the retailer's physical locations.

In this case, because the retailer takes title to the good only momentarily before passing title on to the customer, it may not be clear whether the retailer controls the specified good before the good is transferred to the customer. That is, further consideration is required. However, the retailer may conclude that it controls the good before the good is transferred to the customer because it has the ability to direct the use of, and obtain substantially all of the remaining benefits from, the good (i.e., it directs the supplier to ship the good to the retailer's customer). In addition, after considering the control indicators discussed below, the retailer concludes that it is the principal because it is primarily responsible for satisfying the performance obligation, it has some inventory risk upon product return, and it has latitude to establish pricing — factors that further indicate that it controls the good before the good is transferred to the customer. Therefore, the retailer concludes that it should record revenue on a gross basis.

Typically, the principal in a transaction to sell goods to its customer will have legal title to the goods before they are transferred to the customer. However, ASC 606-10-55-37 states, in part, that "an entity does not necessarily control a specified good if the entity obtains legal title to that good only momentarily before legal title is transferred to a customer." Nevertheless, we do not believe that having legal title only momentarily (e.g., flash title) automatically precludes the entity from having control of the goods before they are transferred to the customer. Accordingly, the entity will need to perform a thorough analysis of the overall definition of control and the other indicators in ASC 606-10-25-30 and ASC 606-10-55-39 to determine whether it has the ability to control the goods before they are transferred to the customer.

The example below considers whether an entity's momentary legal title to goods that the entity sells to an end customer automatically precludes a determination that the entity (1) has control of the goods before selling them to the end customer and (2) is therefore the principal in the transaction.

Example 2-113

Company L, the owner and operator of retail stores that sell hardware to customers, enters into contracts with hardware manufacturers to purchase hardware. Upon receiving a purchase order from L, a manufacturer produces the hardware and ships it to L's warehouse. Company L subsequently delivers the hardware to its individual retail stores for sale to end consumers. At its own discretion, L will direct the use of the hardware by specifying the stores to which the hardware is to be delivered.

The manufacturer retains legal title to the hardware until L sells the hardware to an end consumer. Upon L's sale of the hardware to the end consumer, legal title is transferred only momentarily to L and then is immediately transferred from L to the end consumer (i.e., flash title transfer). Consequently, L has physical possession of the hardware but has legal title to the hardware only momentarily before selling it to the end consumer. However, L can obtain the economic benefits of the hardware because it has the unilateral ability to sell the hardware to an end consumer despite having legal title to the hardware only momentarily before the sale. In addition, the manufacturer does not have the ability to recall the hardware or direct it to another retailer once it has been shipped to L. Further, L is not obligated to pay the manufacturer for any hardware purchased until such hardware is sold to the end consumer.

We do not believe that having legal title to the hardware only momentarily automatically precludes L from having control of the hardware. To be considered a principal in a transaction, an entity must have control of the specified good or service before transferring that good or service to a customer, as stated in ASC 606-10-55-37. Legal title is one of the indicators of control in ASC 606-10-25-30, but that indicator alone is not determinative of whether an entity has control of an asset. As indicated in ASC 606-10-25-30(b), there are circumstances in which control of an asset can be transferred to the customer even though the seller retains legal title to the asset until the asset is sold to the end consumer. In the fact pattern outlined above, L must consider the overall definition of control and the other indicators in ASC 606-10-25-30 and ASC 606-10-55-39 to determine whether it obtains control of the hardware without taking legal title to the hardware.

ASC 606-10-25-25 states, in part:

> Control of an asset refers to the ability to direct the use of, and obtain substantially all of the remaining benefits from, the asset. Control includes the ability to prevent other entities from directing the use of, and obtaining the benefits from, an asset.

Under the facts of this example, L has the ability to direct the use of the hardware by delivering the hardware to L's individual retail stores for resale to end consumers. Further, L can obtain the remaining benefits from the hardware by selling it to end consumers. Although the manufacturer retains legal title to the hardware until it is sold, the manufacturer does not have the ability to prevent L from directing the hardware to L's retail stores and selling the hardware to end consumers. Therefore, notwithstanding that L has legal title to the hardware only momentarily and is not obligated to pay the manufacturer for the hardware until the hardware is sold to the end consumer, L controls the hardware as the principal in the transaction in the absence of any indicators under ASC 606-10-55-39 to the contrary.

2.8.4 Controlling the Right to a Service

There may also be instances in which an entity controls a right to a service and passes it on to a customer. In these instances, the entity is not providing the service, but the entity may control the right to the service by controlling the service before it is transferred to the customer. Sometimes, the entity can use the service itself, or it can transfer the right to the service to a customer. In addition, an entity may control the right to a service if it directs the service provider to perform the service on the entity's behalf for any of the entity's customers.

Example 2-114

Entity A enters into an online training service agreement with Customer B to provide training to B's employees. Entity A contracts with third-party service providers to provide online training courses that are branded as A's courses. Entity A and Customer B have agreed on a single price for the online training services.

Entity A separately enters into contracts with third-party service providers (i.e., instructors) and directs those service providers to perform each aspect of the online training by providing specific instructions on the type of content to be included. Once A enters into contracts with the third-party service providers, it can direct those service providers to perform services on A's behalf for any of its customers. The third-party service providers do not have any contractual relationship or contact with A's customers, and if there are any customer service issues, A will resolve them directly with the customer. Therefore, A is primarily responsible for providing the online training to B.

Even though A is not performing the services, it controls the right to the services by directing third-party service providers to perform each aspect of the online training services. Because A controls the right to the services, A concludes that it is acting as the principal.

The example above has similarities to a fact pattern discussed by Lauren Alexander, professional accounting fellow in the OCA, in a speech at the 2019 AICPA Conference on Current SEC and PCAOB Developments. In her speech, Ms. Alexander made the following observations related to the determination of whether an entity is a principal or an agent in a contract to provide specified services to a customer:

> Determining whether an entity is a principal or an agent in a revenue transaction can be particularly challenging when two parties are involved in providing services to a customer, especially if some of the services can only be provided by a specific service provider.
>
> In the consultation that I will discuss today, the registrant entered into contracts with customers to provide several related services in exchange for a fee. The contracts acknowledged that another service provider would provide some of the services, and the services were marketed to customers using the brand names of both the registrant and the other service provider. The registrant sought the staff's view on whether it was a principal or an agent in the revenue transaction.
>
> The registrant noted that some of the services promised in the contract were based on its proprietary content, and that it was heavily involved in providing those services to the customer, with limited involvement from the other service provider. However, due to certain regulatory restrictions, the registrant could not legally provide some of the services promised in the contract and therefore had to rely entirely on the other service provider to deliver those services.
>
> The registrant concluded that it was the principal in the transaction for each of the specified services and should record revenue on a gross basis because it controlled the services before transferring them to the customer. In reaching this conclusion, the registrant stated that it had the contractual ability to direct the other service provider to provide services to customers on its behalf, and customers did not have contractual relationships with the other service provider. The registrant asserted that it was primarily responsible for fulfilling the promise to provide the specified services.
>
> However, the registrant noted that it only had the right to dictate certain general parameters about the services to be provided by the other service provider, and that the other service provider had discretion in determining exactly how to fulfill its obligation. The registrant said that it controlled when the other service provider delivered the services, and that contractually the other service provider did not have the right to deny services to customers. Finally, the registrant was responsible for handling most customer concerns that arose from the services provided by the other service provider.
>
> In this fact pattern, the staff did not object to the registrant's conclusion that it was the principal in the transaction and should record revenue on a gross basis. The staff observed that the registrant could control the specified services by entering into a contract with another service provider in which the registrant defined the scope of services to be performed on its behalf, even if the registrant could not fulfill the contract using its own resources (that is, it could not legally provide certain of the services promised in the contract).

As discussed in previous staff speeches, we continue to observe that applying the principal versus agent guidance may require significant judgment, especially in the case of emerging business models. We encourage registrants to carefully consider their specific facts and circumstances and contractual terms, and any changes to these terms over time, when applying this guidance. [Footnotes omitted]

2.8.5 Integrating a Good or Service From a Third Party With a Good or Service Controlled by the Entity

An entity would also be a principal when it integrates a good or service provided by a third party with other goods or services controlled by the entity. The entity's performance obligation may be to transfer to the customer a distinct bundle of goods or services, a component of which is provided by the third party. The entity would need to obtain control of the third party's good or service to integrate the good or service with the other goods or services promised to the customer.

Example 2-115

Entity A enters into a contract with Customer B to develop a customized solution composed of hardware and software. Customer B requests that specific features and functionality be included in the finished solution. Entity A determines the specifications of the hardware and software, buys hardware components from a third party (either A is reimbursed by B or the contract price includes the price of the hardware components), customizes the solution by using its proprietary software, completes the installation, and performs tests to ensure that the solution is working as intended. That is, as part of its obligation to develop the customized solution for the customer, A performs a significant service of integrating the hardware components into the solution, which forms part of a single performance obligation. Entity A therefore concludes that it controls the hardware components before the components are transferred to the customer as part of the completed solution.

Connecting the Dots

We believe that an entity should evaluate the level of integration between the various inputs in identifying its performance obligations when it uses third-party goods or services as inputs to produce or deliver a combined output. In addition, the entity should consider whether it has sufficient control over those inputs to significantly integrate them into its offering.

At the 2021 AICPA & CIMA Conference on Current SEC and PCAOB Developments, Mr. Wiggins discussed situations in which an entity may conclude that it is a principal because it takes a good or service from a third party and integrates that good or service into its own offering. In his discussion of entities' contracts with customers involving a good or service from a third party, Mr. Wiggins highlighted the importance of determining (1) whether the entity is performing an integration service, (2) the nature of the integration service, (3) the significance of the integration service, and (4) whether the entity controls the third party's good or service. He noted that if an entity does not control a promised good or service from a third party, it would be unclear how the entity can significantly integrate that promised good or service with its own offering.

2.8.6 Indicators That an Entity Is Acting as a Principal

If an entity is acting as a principal, the entity controls specified goods or services before they are transferred to the customer. This may be the case even if the entity does not fulfill the promise itself but directs a third party to fulfill the obligation on its behalf. In other situations, however, it may not be clear whether the entity does in fact obtain control of the goods or services provided by a third party before they are transferred to the customer. In these circumstances, the entity will need to consider the indicators in ASC 606-10-55-39 and 55-39A when evaluating whether it is acting as a principal. Those indicators are listed and explained as follows:

ASC 606-10

55-39 Indicators that an entity controls the specified good or service before it is transferred to the customer (and is therefore a principal [see paragraph 606-10-55-37]) include, but are not limited to, the following:

a. The entity is primarily responsible for fulfilling the promise to provide the specified good or service. This typically includes responsibility for the acceptability of the specified good or service (for example, primary responsibility for the good or service meeting customer specifications). If the entity is primarily responsible for fulfilling the promise to provide the specified good or service, this may indicate that the other party involved in providing the specified good or service is acting on the entity's behalf.
b. The entity has inventory risk before the specified good or service has been transferred to a customer or after transfer of control to the customer (for example, if the customer has a right of return). For example, if the entity obtains, or commits to obtain, the specified good or service before obtaining a contract with a customer, that may indicate that the entity has the ability to direct the use of, and obtain substantially all of the remaining benefits from, the good or service before it is transferred to the customer.
c. The entity has discretion in establishing the price for the specified good or service. Establishing the price that the customer pays for the specified good or service may indicate that the entity has the ability to direct the use of that good or service and obtain substantially all of the remaining benefits. However, an agent can have discretion in establishing prices in some cases. For example, an agent may have some flexibility in setting prices in order to generate additional revenue from its service of arranging for goods or services to be provided by other parties to customers.
d. Subparagraph superseded by Accounting Standards Update No. 2016-08.
e. Subparagraph superseded by Accounting Standards Update No. 2016-08.

55-39A The indicators in paragraph 606-10-55-39 may be more or less relevant to the assessment of control depending on the nature of the specified good or service and the terms and conditions of the contract. In addition, different indicators may provide more persuasive evidence in different contracts.

We have observed that primary responsibility and inventory risk tend to be important indicators in the overall principal-versus-agent analysis under the revenue standard. However, the relevance of particular control indicators may vary depending on the fact pattern. Consequently, an entity will need to determine whether it controls the underlying goods or services before they are transferred to the customer by considering how the control indicators should be evaluated under the facts and circumstances of the entity's arrangements.

Each of the indicators in ASC 606 that an entity is acting as a principal is further discussed below.

2.8.6.1 Primary Responsibility

The entity that has primary responsibility for fulfilling the obligation to the customer is often the entity that is most visible to the customer and the entity from which the customer believes it is acquiring goods or services. Often, the entity that has primary responsibility for fulfilling the promise to transfer goods or services to the customer will assume fulfillment risk (i.e., risk that the performance obligation will not be satisfied) and risks related to the acceptability of specified goods or services. That is, such an entity will typically address customer questions and complaints, rectify service issues, accept product returns, or be primarily responsible for exchanges or refunds. For example, when a customer purchases a flight on a Web site operated by a company that aggregates flight information and facilitates payment (e.g., a travel site), the airline rather than the travel site has the primary responsibility to provide the transportation service to the customer. If the flight were to be canceled or if baggage were to be lost, the customer would contact the airline to address the issue. Although the customer initially interacted with the travel site to arrange for the flight, the airline is primarily responsible for fulfilling the obligation to provide transportation services to the customer.

Similarly, in Example 2-112, when a customer purchases a good from an online retailer's Web site that is shipped directly to the customer from the supplier, the customer would contact the retailer if there are quality issues or would return the good to the retailer if there is a defect. That is, even though the good was actually shipped directly from the supplier to the customer, the customer views the retailer as being primarily responsible for fulfilling the promise to transfer the specified good, and the retailer assumes significant risk related to fulfillment of that promise.

In some cases, it can be difficult to establish whether an entity has primary responsibility for fulfilling a promise to provide a specified good or service, and doing so may require significant judgment. For example, when two parties are involved in providing a specified good or service to a customer, both parties may have contact with the customer. Conversely, in other cases, it may be clear that an entity has primary responsibility. If it is clear that an entity has primary responsibility for fulfilling a promise to provide a specified good or service to a customer, we believe that this would typically mean that the entity is deemed to be the principal. Although ASC 606-10-55-39 lists primary responsibility as only an indicator, ASC 606-10-55-36 makes clear that when the principal-versus-agent analysis is performed, it is key to identify which party is promising to provide the specified good or service to the customer. If an entity has primary responsibility to the customer for providing a specified good or service, it will usually follow that the entity is the party that is promising to provide the good or service to the customer (i.e., the entity is a principal, not an agent), even if the entity has engaged another party to satisfy some or all of the performance obligation on its behalf.

2.8.6.2 Inventory Risk

When an entity has inventory risk, it is exposed to economic risk associated with either (1) holding the inventory before a customer is identified or (2) accepting product returns and being required to mitigate any resulting losses by reselling the product or negotiating returns with the supplier.

While holding the inventory, the entity bears the risk of loss as a result of obsolescence or destruction of inventory. This risk is generally referred to as front-end inventory risk. In the case of a service, the entity may commit to pay for a service before it identifies a customer for the service. This is also a form of inventory risk.

Another type of inventory risk is back-end inventory risk, which is economic risk assumed upon product return (when there is a general right of return). If an entity is willing to assume economic risk upon product return (and there is a general right of return), it is assuming some risk that is assumed by a principal in a transaction. However, in some instances, an entity may be willing to accept a return only if

it can return the product to the supplier, in which case back-end inventory risk may be mitigated. When combined with other factors, the existence of back-end inventory risk may lead to a conclusion that the entity controls the specified good or service before it is transferred to the customer even if another party transfers the product or service directly to the customer. In Example 2-112, the online retailer does not have inventory risk before entering into a contract with a customer because the online retailer takes title to a good only momentarily before the supplier ships the good to a customer. However, if the customer were to be dissatisfied with the good, the customer would return it to the online retailer rather than the supplier. The online retailer would then have back-end inventory risk since it would have to determine whether it can resell the good to another customer or return the good to the supplier.

2.8.6.3 Discretion in Establishing Pricing

When an entity has control over the establishment of pricing, it generally assumes substantial risks and rewards related to the demand of the specified product or service, especially when the price it is required to pay a third party for the specified good or service is fixed. In contrast, when an entity acts as an agent in a transaction, the amount that the entity earns may be fixed (either in absolute dollars per transaction or as a fixed percentage of the sales price).

When combined with other factors, pricing discretion could indicate that the entity controls the specified good or service before it is transferred to the customer. However, ASC 606-10-55-39(c) states, in part, that "an agent can have discretion in establishing prices in some cases. For example, an agent may have some flexibility in setting prices in order to generate additional revenue from its service of arranging for goods or services to be provided by other parties to customers."

Example 2-116

A food delivery service offers delivery of meals from restaurants to customers within a certain radius from a specific location in a city. Via its Web site or app, the food delivery service connects a customer with a restaurant and also delivers ordered food from the restaurant to the customer. Each restaurant indicates its prices on the food delivery service's platform and has the ability to change those prices daily. The food delivery service earns a 5 percent commission on sales from each restaurant order.

In this example, each restaurant has discretion in establishing pricing rather than the food delivery service. In addition, the restaurant is responsible for fulfilling the food ordered. This would suggest that the restaurant controls the specified good or service (i.e., the food ordered by the customer) at all times before the food is transferred to the customer.

Note, however, that the food delivery service may be the principal for the delivery service, particularly if it is primarily responsible for the delivery service, in which case it would be an agent for part of the transaction and a principal for another part.

2.8.7 Codification Examples of Promised Goods or Services for Which an Entity Is a Principal (ASC 606-10-55-320 Through 55-329)

The following implementation guidance from the revenue standard will help an entity determine whether it is acting as a principal in a contract:

ASC 606-10

Example 46 — Promise to Provide Goods or Services (Entity Is a Principal)

55-320 An entity enters into a contract with a customer for equipment with unique specifications. The entity and the customer develop the specifications for the equipment, which the entity communicates to a supplier that the entity contracts with to manufacture the equipment. The entity also arranges to have the supplier deliver the equipment directly to the customer. Upon delivery of the equipment to the customer, the terms of the contract require the entity to pay the supplier the price agreed to by the entity and the supplier for manufacturing the equipment.

55-321 The entity and the customer negotiate the selling price, and the entity invoices the customer for the agreed-upon price with 30-day payment terms. The entity's profit is based on the difference between the sales price negotiated with the customer and the price charged by the supplier.

55-322 The contract between the entity and the customer requires the customer to seek remedies for defects in the equipment from the supplier under the supplier's warranty. However, the entity is responsible for any corrections to the equipment required resulting from errors in specifications.

55-323 To determine whether the entity's performance obligation is to provide the specified goods or services itself (that is, the entity is a principal) or to arrange for those goods or services to be provided by another party (that is, the entity is an agent), the entity identifies the specified good or service to be provided to the customer and assesses whether it controls that good or service before the good or service is transferred to the customer.

a. Subparagraph superseded by Accounting Standards Update No. 2016-08.
b. Subparagraph superseded by Accounting Standards Update No. 2016-08.
c. Subparagraph superseded by Accounting Standards Update No. 2016-08.
d. Subparagraph superseded by Accounting Standards Update No. 2016-08.
e. Subparagraph superseded by Accounting Standards Update No. 2016-08.

55-323A The entity concludes that it has promised to provide the customer with specialized equipment designed by the entity. Although the entity has subcontracted the manufacturing of the equipment to the supplier, the entity concludes that the design and manufacturing of the equipment are not distinct because they are not separately identifiable (that is, there is a single performance obligation). The entity is responsible for the overall management of the contract (for example, by ensuring that the manufacturing service conforms to the specifications) and thus provides a significant service of integrating those items into the combined output — the specialized equipment — for which the customer has contracted. In addition, those activities are highly interrelated. If necessary modifications to the specifications are identified as the equipment is manufactured, the entity is responsible for developing and communicating revisions to the supplier and for ensuring that any associated rework required conforms with the revised specifications. Accordingly, the entity identifies the specified good to be provided to the customer as the specialized equipment.

ASC 606-10 (continued)

55-323B The entity concludes that it controls the specialized equipment before that equipment is transferred to the customer (see paragraph 606-10-55-37A(c)). The entity provides the significant integration service necessary to produce the specialized equipment and, therefore, controls the specialized equipment before it is transferred to the customer. The entity directs the use of the supplier's manufacturing service as an input in creating the combined output that is the specialized equipment. In reaching the conclusion that it controls the specialized equipment before that equipment is transferred to the customer, the entity also observes that even though the supplier delivers the specialized equipment to the customer, the supplier has no ability to direct its use (that is, the terms of the contract between the entity and the supplier preclude the supplier from using the specialized equipment for another purpose or directing that equipment to another customer). The entity also obtains the remaining benefits from the specialized equipment by being entitled to the consideration in the contract from the customer.

55-324 Thus, the entity concludes that it is a principal in the transaction. The entity does not consider the indicators in paragraph 606-10-55-39 because the evaluation above is conclusive without consideration of the indicators. The entity recognizes revenue in the gross amount of consideration to which it is entitled from the customer in exchange for the specialized equipment.

Example 46A — Promise to Provide Goods or Services (Entity Is a Principal)

55-324A An entity enters into a contract with a customer to provide office maintenance services. The entity and the customer define and agree on the scope of the services and negotiate the price. The entity is responsible for ensuring that the services are performed in accordance with the terms and conditions in the contract. The entity invoices the customer for the agreed-upon price on a monthly basis with 10-day payment terms.

55-324B The entity regularly engages third-party service providers to provide office maintenance services to its customers. When the entity obtains a contract from a customer, the entity enters into a contract with one of those service providers, directing the service provider to perform office maintenance services for the customer. The payment terms in the contracts with the service providers generally are aligned with the payment terms in the entity's contracts with customers. However, the entity is obliged to pay the service provider even if the customer fails to pay.

55-324C To determine whether the entity is a principal or an agent, the entity identifies the specified good or service to be provided to the customer and assesses whether it controls that good or service before the good or service is transferred to the customer.

55-324D The entity observes that the specified services to be provided to the customer are the office maintenance services for which the customer contracted and that no other goods or services are promised to the customer. While the entity obtains a right to office maintenance services from the service provider after entering into the contract with the customer, that right is not transferred to the customer. That is, the entity retains the ability to direct the use of, and obtain substantially all the remaining benefits from, that right. For example, the entity can decide whether to direct the service provider to provide the office maintenance services for that customer, or for another customer, or at its own facilities. The customer does not have a right to direct the service provider to perform services that the entity has not agreed to provide. Therefore, the right to office maintenance services obtained by the entity from the service provider is not the specified good or service in its contract with the customer.

ASC 606-10 (continued)

55-324E The entity concludes that it controls the specified services before they are provided to the customer. The entity obtains control of a right to office maintenance services after entering into the contract with the customer but before those services are provided to the customer. The terms of the entity's contract with the service provider give the entity the ability to direct the service provider to provide the specified services on the entity's behalf (see paragraph 606-10-55-37A(b)). In addition, the entity concludes that the following indicators in paragraph 606-10-55-39 provide further evidence that the entity controls the office maintenance services before they are provided to the customer:

a. The entity is primarily responsible for fulfilling the promise to provide office maintenance services. Although the entity has hired a service provider to perform the services promised to the customer, it is the entity itself that is responsible for ensuring that the services are performed and are acceptable to the customer (that is, the entity is responsible for fulfilment of the promise in the contract, regardless of whether the entity performs the services itself or engages a third-party service provider to perform the services).
b. The entity has discretion in setting the price for the services to the customer.

55-324F The entity observes that it does not commit itself to obtain the services from the service provider before obtaining the contract with the customer. Thus, the entity has mitigated its inventory risk with respect to the office maintenance services. Nonetheless, the entity concludes that it controls the office maintenance services before they are provided to the customer on the basis of the evidence in paragraph 606-10-55-324E.

55-324G Thus, the entity is a principal in the transaction and recognizes revenue in the amount of consideration to which it is entitled from the customer in exchange for the office maintenance services.

Example 47 — Promise to Provide Goods or Services (Entity Is a Principal)

55-325 An entity negotiates with major airlines to purchase tickets at reduced rates compared with the price of tickets sold directly by the airlines to the public. The entity agrees to buy a specific number of tickets and must pay for those tickets regardless of whether it is able to resell them. The reduced rate paid by the entity for each ticket purchased is negotiated and agreed in advance.

55-326 The entity determines the prices at which the airline tickets will be sold to its customers. The entity sells the tickets and collects the consideration from customers when the tickets are purchased.

55-327 The entity also assists the customers in resolving complaints with the service provided by the airlines. However, each airline is responsible for fulfilling obligations associated with the ticket, including remedies to a customer for dissatisfaction with the service.

55-328 To determine whether the entity's performance obligation is to provide the specified goods or services itself (that is, the entity is a principal) or to arrange for those goods or services to be provided by another party (that is, the entity is an agent), the entity identifies the specified good or service to be provided to the customer and assesses whether it controls that good or service before the good or service is transferred to the customer.

a. Subparagraph superseded by Accounting Standards Update No. 2016-08.
b. Subparagraph superseded by Accounting Standards Update No. 2016-08.
c. Subparagraph superseded by Accounting Standards Update No. 2016-08.
d. Subparagraph superseded by Accounting Standards Update No. 2016-08.

55-328A The entity concludes that with each ticket that it commits itself to purchase from the airline, it obtains control of a right to fly on a specified flight (in the form of a ticket) that the entity then transfers to one of its customers (see paragraph 606-10-55-37A(a)). Consequently, the entity determines that the specified good or service to be provided to its customer is that right (to a seat on a specific flight) that the entity controls. The entity observes that no other goods or services are promised to the customer.

ASC 606-10 (continued)

55-328B The entity controls the right to each flight before it transfers that specified right to one of its customers because the entity has the ability to direct the use of that right by deciding whether to use the ticket to fulfill a contract with a customer and, if so, which contract it will fulfill. The entity also has the ability to obtain the remaining benefits from that right by either reselling the ticket and obtaining all of the proceeds from the sale or, alternatively, using the ticket itself.

55-328C The indicators in paragraph 606-10-55-39(b) through (c) also provide relevant evidence that the entity controls each specified right (ticket) before it is transferred to the customer. The entity has inventory risk with respect to the ticket because the entity committed itself to obtain the ticket from the airline before obtaining a contract with a customer to purchase the ticket. This is because the entity is obliged to pay the airline for that right regardless of whether it is able to obtain a customer to resell the ticket to or whether it can obtain a favorable price for the ticket. The entity also establishes the price that the customer will pay for the specified ticket.

55-329 Thus, the entity concludes that it is a principal in the transactions with customers. The entity recognizes revenue in the gross amount of consideration to which it is entitled in exchange for the tickets transferred to the customers.

2.8.8 Determining Whether an Entity Is Acting as an Agent

If an entity concludes that it does not obtain control of a good or service before that good or service is transferred to a customer, the entity is acting as an agent. That is, the entity's performance obligation is to arrange for another party to transfer the good or service to the customer. As an agent, the entity will recognize as revenue the commission or fee it earns (i.e., the net amount of consideration retained) when or as it satisfies its performance obligation of arranging for the specified goods or services to be provided by another party. This guidance is articulated in ASC 606-10-55-38 as follows:

ASC 606-10

55-38 An entity is an agent if the entity's performance obligation is to arrange for the provision of the specified good or service by another party. An entity that is an agent does not control the specified good or service provided by another party before that good or service is transferred to the customer. When (or as) an entity that is an agent satisfies a performance obligation, the entity recognizes revenue in the amount of any fee or commission to which it expects to be entitled in exchange for arranging for the specified goods or services to be provided by the other party. An entity's fee or commission might be the net amount of consideration that the entity retains after paying the other party the consideration received in exchange for the goods or services to be provided by that party.

2.8.8.1 Codification Examples of Promised Goods or Services for Which an Entity Is an Agent (ASC 606-10-55-317 Through 55-319 and ASC 606-10-55-330 Through 55-334)

The following implementation guidance from the revenue standard will help an entity determine whether it is acting as an agent in a contract:

ASC 606-10

Example 45 — Arranging for the Provision of Goods or Services (Entity Is an Agent)

55-317 An entity operates a website that enables customers to purchase goods from a range of suppliers who deliver the goods directly to the customers. Under the terms of the entity's contracts with suppliers, when a good is purchased via the website, the entity is entitled to a commission that is equal to 10 percent of the sales price. The entity's website facilitates payment between the supplier and the customer at prices that are set by the supplier. The entity requires payment from customers before orders are processed, and all orders are nonrefundable. The entity has no further obligations to the customer after arranging for the products to be provided to the customer.

55-318 To determine whether the entity's performance obligation is to provide the specified goods itself (that is, the entity is a principal) or to arrange for those goods to be provided by the supplier (that is, the entity is an agent), the entity identifies the specified good or service to be provided to the customer and assesses whether it controls that good or service before the good or service is transferred to the customer.

a. Subparagraph superseded by Accounting Standards Update No. 2016-08.
b. Subparagraph superseded by Accounting Standards Update No. 2016-08.
c. Subparagraph superseded by Accounting Standards Update No. 2016-08.
d. Subparagraph superseded by Accounting Standards Update No. 2016-08.
e. Subparagraph superseded by Accounting Standards Update No. 2016-08.

55-318A The website operated by the entity is a marketplace in which suppliers offer their goods and customers purchase the goods that are offered by the suppliers. Accordingly, the entity observes that the specified goods to be provided to customers that use the website are the goods provided by the suppliers, and no other goods or services are promised to customers by the entity.

55-318B The entity concludes that it does not control the specified goods before they are transferred to customers that order goods using the website. The entity does not at any time have the ability to direct the use of the goods transferred to customers. For example, it cannot direct the goods to parties other than the customer or prevent the supplier from transferring those goods to the customer. The entity does not control the suppliers' inventory of goods used to fulfill the orders placed by customers using the website.

55-318C As part of reaching that conclusion, the entity considers the following indicators in paragraph 606-10-55-39. The entity concludes that these indicators provide further evidence that it does not control the specified goods before they are transferred to the customers.

a. The supplier is primarily responsible for fulfilling the promise to provide the goods to the customer. The entity is neither obliged to provide the goods if the supplier fails to transfer the goods to the customer nor responsible for the acceptability of the goods.
b. The entity does not take inventory risk at any time before or after the goods are transferred to the customer. The entity does not commit to obtain the goods from the supplier before the goods are purchased by the customer and does not accept responsibility for any damaged or returned goods.
c. The entity does not have discretion in establishing prices for the supplier's goods. The sales price is set by the supplier.

ASC 606-10 (continued)

55-319 Consequently, the entity concludes that it is an agent and its performance obligation is to arrange for the provision of goods by the supplier. When the entity satisfies its promise to arrange for the goods to be provided by the supplier to the customer (which, in this example, is when goods are purchased by the customer), the entity recognizes revenue in the amount of the commission to which it is entitled.

Example 48 — Arranging for the Provision of Goods or Services (Entity Is an Agent)

55-330 An entity sells vouchers that entitle customers to future meals at specified restaurants, and the sales price of the voucher provides the customer with a significant discount when compared with the normal selling prices of the meals (for example, a customer pays $100 for a voucher that entitles the customer to a meal at a restaurant that would otherwise cost $200). The entity does not purchase or commit itself to purchase vouchers in advance of the sale of a voucher to a customer; instead, it purchases vouchers only as they are requested by the customers. The entity sells the vouchers through its website, and the vouchers are nonrefundable.

55-331 The entity and the restaurants jointly determine the prices at which the vouchers will be sold to customers. Under the terms of its contracts with the restaurants, the entity is entitled to 30 percent of the voucher price when it sells the voucher.

55-332 The entity also assists the customers in resolving complaints about the meals and has a buyer satisfaction program. However, the restaurant is responsible for fulfilling obligations associated with the voucher, including remedies to a customer for dissatisfaction with the service.

55-333 To determine whether the entity is a principal or an agent, the entity identifies the specified good or service to be provided to the customer and assesses whether it controls the specified good or service before that good or service is transferred to the customer.

a. Subparagraph superseded by Accounting Standards Update No. 2016-08.
b. Subparagraph superseded by Accounting Standards Update No. 2016-08.
c. Subparagraph superseded by Accounting Standards Update No. 2016-08.
d. Subparagraph superseded by Accounting Standards Update No. 2016-08.

55-333A A customer obtains a voucher for the restaurant that it selects. The entity does not engage the restaurants to provide meals to customers on the entity's behalf as described in the indicator in paragraph 606-10-55-39(a). Therefore, the entity observes that the specified good or service to be provided to the customer is the right to a meal (in the form of a voucher) at a specified restaurant or restaurants, which the customer purchases and then can use itself or transfer to another person. The entity also observes that no other goods or services (other than the vouchers) are promised to the customers.

55-333B The entity concludes that it does not control the voucher (right to a meal) at any time. In reaching this conclusion, the entity principally considers the following:

a. The vouchers are created only at the time that they are transferred to the customers and, thus, do not exist before that transfer. Therefore, the entity does not at any time have the ability to direct the use of the vouchers or obtain substantially all of the remaining benefits from the vouchers before they are transferred to customers.
b. The entity neither purchases nor commits itself to purchase vouchers before they are sold to customers. The entity also has no responsibility to accept any returned vouchers. Therefore, the entity does not have inventory risk with respect to the vouchers as described in the indicator in paragraph 606-10-55-39(b).

ASC 606-10 (continued)

55-334 Thus, the entity concludes that it is an agent in the arrangement with respect to the vouchers. The entity recognizes revenue in the net amount of consideration to which the entity will be entitled in exchange for arranging for the restaurants to provide vouchers to customers for the restaurants' meals, which is the 30 percent commission it is entitled to upon the sale of each voucher.

2.8.9 Contracts in Which the Entity Is a Principal and an Agent

An entity must determine whether it is a principal or an agent at what can effectively be described as the performance obligation level (i.e., the specified good or service that is distinct), not the contract level. Therefore, in some contracts, an entity could have both performance obligations to arrange for goods or services to be provided by another entity (i.e., the entity is acting as an agent) and performance obligations to transfer goods or services to the customer itself (i.e., the entity is acting as a principal).

2.8.9.1 Illustrative Examples of Contracts in Which an Entity Is Both a Principal and an Agent

The following implementation guidance from the revenue standard illustrates a situation in which an entity is a principal and an agent in the same contract:

ASC 606-10

Example 48A — Entity Is a Principal and an Agent in the Same Contract

55-334A An entity sells services to assist its customers in more effectively targeting potential recruits for open job positions. The entity performs several services itself, such as interviewing candidates and performing background checks. As part of the contract with a customer, the customer agrees to obtain a license to access a third party's database of information on potential recruits. The entity arranges for this license with the third party, but the customer contracts directly with the database provider for the license. The entity collects payment on behalf of the third-party database provider as part of its overall invoicing to the customer. The database provider sets the price charged to the customer for the license and is responsible for providing technical support and credits to which the customer may be entitled for service down-time or other technical issues.

55-334B To determine whether the entity is a principal or an agent, the entity identifies the specified goods or services to be provided to the customer and assesses whether it controls those goods or services before they are transferred to the customer.

55-334C For the purpose of this Example, it is assumed that the entity concludes that its recruitment services and the database access license are each distinct on the basis of its assessment of the guidance in paragraphs 606-10-25-19 through 25-22. Accordingly, there are two specified goods or services to be provided to the customer — access to the third-party's database and recruitment services.

55-334D The entity concludes that it does not control the access to the database before it is provided to the customer. The entity does not at any time have the ability to direct the use of the license because the customer contracts for the license directly with the database provider. The entity does not control access to the provider's database — it cannot, for example, grant access to the database to a party other than the customer or prevent the database provider from providing access to the customer.

ASC 606-10 (continued)

55-334E As part of reaching that conclusion, the entity also considers the indicators in paragraph 606-10-55-39. The entity concludes that these indicators provide further evidence that it does not control access to the database before that access is provided to the customer.

a. The entity is not responsible for fulfilling the promise to provide the database access service. The customer contracts for the license directly with the third-party database provider, and the database provider is responsible for the acceptability of the database access (for example, by providing technical support or service credits).
b. The entity does not have inventory risk because it does not purchase or commit to purchase the database access before the customer contracts for database access directly with the database provider.
c. The entity does not have discretion in setting the price for the database access with the customer because the database provider sets that price.

55-334F Thus, the entity concludes that it is an agent in relation to the third-party's database service. In contrast, the entity concludes that it is the principal in relation to the recruitment services because the entity performs those services itself and no other party is involved in providing those services to the customer.

In the example above, an important part of the fact pattern is that the entity has no further obligations to the customer after arranging for the database access to be provided to the customer. If this is not the case (e.g., because the entity would be responsible for the acceptability of the database access), the analysis could be different.

Example 2-117

Company X, a food delivery service, offers delivery of meals from restaurants to consumers within a certain radius from a specific location in a city. Via its Web site and app, the food delivery service connects a consumer with a restaurant, processes food orders, and provides a service of delivering food to the consumer. Each restaurant has full discretion to establish the price for its food ordered through X. The food delivery service earns a 5 percent commission on sales from each restaurant order and charges a flat delivery fee of $10 per order. The restaurant is responsible for fulfilling the ordered food and addressing all consumer complaints regarding the quality of the food or an incorrect order. If the food is compromised while in transit, X is liable.

Company X is responsible for delivering the food and can change the delivery fee at its discretion. Company X takes custody of the food ordered from a restaurant, but it can deliver the food only to the consumer's location. Company X uses independent contractors (ICs) to perform the delivery service, and such ICs commit to being available to provide the delivery service at set schedules. When an IC is presented with a delivery request, that IC can decide whether to accept or reject the request. If an IC accepts a request, X will direct the IC to pick up the food at a specific restaurant and deliver the good to a specific consumer. If, instead, an IC rejects a request, X is still obligated to provide the delivery service and will attempt to find another IC to perform the delivery. In some cases, X will take a loss on the delivery service by paying an IC a rate higher than the delivery fee to fulfill the delivery.

Assume that the food and the delivery service are each capable of being distinct and distinct within the context of the contract.

In this example, X does not obtain control of the food (one of the specified goods or services) before it is transferred to the consumer. Although X takes custody of the food, it cannot redirect the food to another consumer or consume the good (the food) as a resource. Further, X is not responsible for fulfilling the food order or addressing consumer complaints, does not purchase the food before the food is transferred to the consumer, and does not have discretion to establish the price of the food. Company X is acting as an agent and arranging for the restaurant to fulfill the promise to transfer food to the consumer.

Example 2-117 (continued)

However, X is primarily responsible for providing the service of delivering the food to the consumer. If the food is compromised while in transit, X is liable to the customer. Although ICs are used to perform the delivery service and an individual IC can reject a particular delivery, X is still obligated to provide the delivery service and is required to identify another IC to complete the delivery service even if doing so results in a loss to X. Further, X has full discretion to establish the price of the delivery service. Consequently, X is the principal for the delivery service.

2.8.10 Estimating Gross Revenue as a Principal

An entity may be determined to be a principal in a contract with a customer when there is uncertainty in the transaction price that is unlikely to be resolved. Such uncertainty may arise because the entity does not have, and will not obtain, sufficient transparency into the intermediary's pricing.

As noted in paragraph BC38 of ASU 2016-08, the FASB contemplated, but ultimately rejected, amendments to ASC 606 to address these types of transactions. Rather, the Board found the guidance in step 3 of the revenue model to be helpful in the determination of what amounts are variable consideration and thus should be included in the transaction price. Specifically, paragraph BC38(c) states, in part:

> A key tenet of variable consideration is that at some point the uncertainty in the transaction price ultimately will be resolved. When the uncertainty is not expected to ultimately be resolved, the guidance indicates that the difference between the amount to which the entity is entitled from the intermediary and the amount charged by the intermediary to the end customer is not variable consideration and, therefore, is not part of the entity's transaction price.

Accordingly, for the transactions contemplated above, the Board found it reasonable for the principal to include in its transaction price the amounts known (i.e., the amounts to which the entity expects to be entitled from the intermediary).

2.8.11 Digital Advertising Industry

In a speech at the 2017 AICPA Conference on Current SEC and PCAOB Developments, Barry Kanczuker, associate chief accountant in the OCA, provided the following guidance on determining whether an entity is a principal or an agent for digital advertising space:

> I have observed that applying [the guidance in ASC 606 on determining whether an entity is a principal or an agent] can be challenging in some fact patterns. I believe that some of the challenges are amplified in certain industries, such as the digital advertising industry or other industries in the technology space, where there are often multiple parties involved in providing the good or service, and transactions often take place within the blink of an eye.
>
> Last year at this conference, [then OCA Professional Accounting Fellow] Ruth Uejio made remarks that principal versus agent considerations in evolving business models may create "unique challenges that will require sound judgment." I would like to continue this discussion. For example, I believe determining whether an entity controls a specified good or service immediately prior to the good or service being transferred to the customer may be especially challenging in certain types of service transactions, such as when enforceable contracts only exist among the parties once the service is being provided, or in transactions that take place in an instant. Topic 606 does provide indicators to support an entity's assessment of whether it controls a specified good or service before it is transferred to the customer. However, these indicators of control should not be considered a checklist of criteria. The indicators may be more or less relevant to the assessment of control depending on the nature of the specified good or service and the terms and conditions of the contract. I believe that determining the relevance of an indicator to the assessment of control in certain types of transactions will require reasonable judgment.

> As an example of the application of this guidance, I would like to share a recent pre-filing consultation that OCA received in the digital advertising space. In this consultation, the registrant's customer, an advertiser, provided the registrant with specifications of the target audience it wished to reach through its digital advertising efforts. The advertiser's specifications also included limited pricing information, such as the total advertising budget over a period of time. The registrant's technology enabled it to identify and purchase advertising space that met the advertiser's specifications on a real-time basis, as internet users in the advertiser's target audience were browsing a website or viewing an app with available advertising space. The registrant had the ultimate discretion, including pricing discretion, for individual purchases of advertising space. The advertiser held the registrant responsible for reaching the advertiser's target audience and otherwise meeting the advertiser's specifications, and typically did not receive any information from the registrant that identified the specific websites or apps from which the registrant purchased the advertising space.
>
> The registrant concluded that it was acting as a principal in the arrangement because it controlled the specified good or service before it was transferred to the customer. As part of its assessment of control, the registrant considered the indicators of control and noted that it was primarily responsible for fulfillment and had discretion in establishing the price. The staff views principal versus agent considerations to be an area that requires reasonable judgment — in this case, based on the facts and circumstances and the Topic 606 guidance, the staff did not object to the registrant's conclusion that it was the principal in the transaction.
>
> I want to be clear: an area of significant judgment does not mean that the standard permits optionality. In order to make these reasonable judgments, I believe that registrants need to "roll up their sleeves" to understand the nuances of the transactions and faithfully apply the Topic 606 model to their specific set of facts and circumstances. [Footnotes omitted]

As discussed in Mr. Kanczuker's speech above, determining whether an entity is a principal or an agent can be challenging in certain industries, particularly the digital advertising industry. In a speech at the 2020 AICPA Conference on Current SEC and PCAOB Developments, Geoff Griffin, then professional accounting fellow in the OCA, discussed another similar fact pattern. In his speech, Mr. Griffin made the following observations related to the determination of whether an entity is a principal or an agent in a contract to provide a customer with access to the entity's advertising platform:

> Significant judgment is often required when determining whether an entity is a principal or an agent in a revenue transaction. As discussed in previous staff speeches, assessing whether an entity is a principal or agent under the applicable revenue guidance can be particularly challenging in certain industries, such as the digital advertising industry or other industries in the technology space, where arrangements often involve multiple parties providing the good or service. I would like to share a fact pattern that illustrates such an arrangement.
>
> In this fact pattern, the registrant operated a platform that facilitated an advertiser's purchase of advertising space from a publisher. The registrant identified a specific advertiser's digital advertisement ("ad") before bidding on potential advertising space in an auction process. Upon winning an auction, the registrant obtained an exclusive right to the potential advertising space and immediately pre-loaded the identified advertiser's ad to the publisher's site. If a valid user reaches the stage in the publisher's app where the potential advertising space is to be displayed, the pre-loaded ad is displayed in the advertising space on the publisher's site and a revenue transaction occurs.
>
> The registrant concluded it was an agent in the transaction, despite the fact that it obtained momentary title to the advertising space, stating that it did not obtain control of the advertising space prior to transferring it to the customer. That is, the registrant concluded that it did not have the ability to direct the use of, and obtain substantially all the remaining benefits from, the publisher's advertising space. Due to certain constraints, the registrant concluded it was unable to direct the use of the potential advertising space to an ad other than the predetermined ad in the seconds between winning the auction and the time the ad was displayed on the publisher's site.
>
> As part of its assessment, the registrant considered the indicators of control set forth in the revenue recognition guidance, determining that it was not primarily responsible for fulfillment and did not have inventory risk; however, the registrant determined that it did have pricing discretion as the publisher had no ability to set or influence the price charged to advertisers. In reaching its conclusion, the registrant stated that it was not primarily responsible for fulfillment based on the terms and conditions of its contract with the advertiser. The registrant believed that the terms and conditions of its contract only obligated it to provide an advertiser with access to the platform that facilitated the customer's purchase of advertising space from publishers. Finally, the registrant stated that it did not promise its customer, explicitly or implicitly, the delivery of advertising space, nor did the customer have recourse against the registrant if its ad was not properly displayed in the advertising space or a valid user did not view the ad.

> Based on the facts and circumstances presented to OCA staff, the staff did not object to the registrant's conclusion that it was an agent in the transaction and should recognize revenue on a net basis. [Footnotes omitted]

2.8.12 Payment Processors and Facilitators

Entities have grappled with the issue of how to present revenue and the various fees related to payment processing in a manner consistent with the revenue standard. A careful evaluation of the relevant guidance is critical since the payments ecosystem — as well as the players — continues to evolve. Consideration must be given to a delivery model of the services, the parties involved in the payment transactions, and the various components in each fee arrangement. Whether an offering is integrated or independent can have a significant effect on accounting analysis.

ASC 606-10-55-36 states, in part, that "[i]f a contract with a customer includes more than one specified good or service, an entity could be a principal for some specified goods or services and an agent for others." Accordingly, for each specified service, an entity must determine whether it controls the service before the service is transferred to the customer. In other words, does the entity have the ability to direct the use of and to obtain substantially all the benefits from the service provided by other parties in the payment processing ecosystem before that service is transferred to the customer? Determining which party controls the services provided by the other parties in the payment processing ecosystem requires significant judgment; therefore, an entity may also evaluate the control indicators in ASC 606 to support its conclusion.

Factors to consider as part of this determination may include:

- The nature of the entity's contractual arrangements, relationships, and promises with the customer and other parties and the entity's potential risks of loss (e.g., chargebacks, fees due to other parties) arising from the transaction. As part of this analysis, the entity may consider whether it acts as the "merchant of record" for the transactions that it processes.
- Any contractual arrangements or relationships between the customer and the other parties in the payment processing ecosystem.
- The ability of the entity to direct other parties in the payment processing ecosystem to provide payment processing services on its behalf. As part of this analysis, the entity may consider whether it establishes underwriting guidelines, has the ability to decline transactions or withhold funds, approves customer contracts, provides customer support, and has responsibility over the resolution of customer service issues.
- Whether the customer views the entity to be primarily responsible for the payment processing services, including their acceptability.
- The ability of the entity to enhance, modify, or discontinue payment processing services.
- The ability of the entity to determine and subsequently change the parties that will be used to perform the various payment processing services.
- The ability to set the overall price paid by the customer.
- Whether the entity provides a significant service of integrating all of the services transferred to the customer.
- The entity's obligation to maintain payment processing information on behalf of the merchant, perform preauthorization services, and determine what payment processing information is provided to the other parties in the payment processing ecosystem.

2.9 Presentation

A contract with a customer creates legal rights and obligations. The rights under the contract will generally give rise to contract assets as the entity performs (or accounts receivable, if an unconditional right to consideration exists); and contract liabilities are created when consideration is received (or receivable) in advance of performance. Each reporting period, an entity is required to assess its financial position related to its contracts with customers. Depending on the extent to which an entity has performed and the amount of consideration received (or receivable) by the entity under a contract, the entity could record a contract asset or a contract liability. Contract assets and contract liabilities that arise in the same contract should be presented net.

Receivables should be recorded separately from contract assets since only the passage of time is required before consideration is due. That is, receivables are only subject to credit risk. In contrast, contract assets are subject to more than just credit risk (i.e., they are also subject to performance risk). For example, a contract asset would exist when an entity has a contract with a customer for which revenue has been recognized (i.e., goods or services have been transferred to the customer) but customer payment is contingent on a future event (i.e., satisfaction of additional performance obligations or other events).

ASC 606-10-45-5 addresses the use of alternative descriptions for contract assets and contract liabilities as follows:

ASC 606-10

45-5 This guidance uses the terms *contract asset* and *contract liability* but does not prohibit an entity from using alternative descriptions in the statement of financial position for those items. If an entity uses an alternative description for a contract asset, the entity shall provide sufficient information for a user of the financial statements to distinguish between receivables and contract assets.

Paragraph BC321 of ASU 2014-09 notes the FASB's and IASB's observation that "some industries have historically used different labels to describe contract assets and contract liabilities or may recognize them in more than one line item either in the financial statements or in the notes." ASC 606 does not prohibit an entity from using alternative terms or from using additional line items to present the assets and liabilities, but it requires an entity to provide appropriate disclosures that adequately describe the assets and liabilities.

Terms that are commonly used in practice to describe contract assets and contract liabilities include, but are not limited to, the following:

- *Contract assets* — Unbilled receivables, progress payments to be billed.
- *Contract liabilities* — Deferred revenue, unearned revenue.

2.9.1 Contract Liabilities

A contract liability would exist when an entity has received consideration but has not transferred the related goods or services to the customer. This is commonly referred to as deferred revenue. An entity may also have an unconditional right to consideration (i.e., a receivable) before it transfers goods or services to a customer.

The example below, which is reproduced from ASC 606, illustrates how an entity would account for a contract liability and receivable. (For further discussion about receivables, see Section 2.9.4.)

ASC 606-10

Example 38 — Contract Liability and Receivable

Case A — Cancellable Contract

55-284 On January 1, 20X9, an entity enters into a cancellable contract to transfer a product to a customer on March 31, 20X9. The contract requires the customer to pay consideration of $1,000 in advance on January 31, 20X9. The customer pays the consideration on March 1, 20X9. The entity transfers the product on March 31, 20X9. The following journal entries illustrate how the entity accounts for the contract:

a. The entity receives cash of $1,000 on March 1, 20X9 (cash is received in advance of performance).

Cash	$1,000	
Contract liability		$1,000

b. The entity satisfies the performance obligation on March 31, 20X9.

Contract liability	$1,000	
Revenue		$1,000

Case B — Noncancellable Contract

55-285 The same facts as in Case A apply to Case B except that the contract becomes noncancellable on January 31, 20X9. The following journal entries illustrate how the entity accounts for the contract:

a. January 31, 20X9 is the date at which the entity recognizes a receivable because it has an unconditional right to consideration.

Receivable	$1,000	
Contract liability		$1,000

b. The entity receives the cash on March 1, 20X9.

Cash	$1,000	
Receivable		$1,000

c. The entity satisfies the performance obligation on March 31, 20X9.

Contract liability	$1,000	
Revenue		$1,000

55-286 If the entity issued the invoice before January 31, 20X9, the entity would not recognize the receivable and the contract liability in the statement of financial position because the entity does not yet have a right to consideration that is unconditional (the contract is cancellable before January 31, 20X9).

2.9.2 Refund Liabilities

Some contracts with customers may result in refund liabilities owed to customers. The most common of such refund liabilities are return provisions in sales contracts that permit the customer to return the product if certain circumstances arise. These liabilities may also arise when an entity receives cash in advance, but the agreement is cancelable because of certain termination provisions in the agreement. When these provisions are present in a contract, the seller would recognize a liability to reflect its obligation to return amounts paid or payable by the customer (i.e., a refund liability).

An agreement that includes a provision for termination without penalty may not be a contract under step 1 of ASC 606 (i.e., a contract may not exist for the cancelable term). Such a provision may therefore affect the presentation of these arrangements on the balance sheet. For a cancelable contract (with a termination right without penalty), funds received in advance should not be classified as a contract liability. Funds received in advance that are associated with a cancelable term (with a termination right without penalty) should be presented separately from any contract liability as a refund liability, or similar liability.

A refund liability should not be presented together with contract liabilities that arise under the same contract. A contract liability is defined in ASC 606-10-45-2 as "an entity's obligation to transfer goods or services to a customer for which the entity has received consideration (or an amount of consideration is due) from the customer." A refund liability, however, represents the customer's conditional right to consideration from the seller (as opposed to consideration receivable from the customer) and does not represent a performance obligation. Consequently, we believe that the refund liability should be presented separately from the contract liability. Note that as a result, the refund liability would not be netted with any contract assets the entity may recognize.

2.9.3 Contract Assets

A contract asset would exist when an entity has a contract with a customer for which revenue has been recognized (i.e., goods or services have been transferred to the customer) but customer payment is contingent on a future event (e.g., satisfaction of additional performance obligations). Such an amount is commonly referred to as an unbilled receivable.

The following example from the revenue standard illustrates the recording of a contract asset for performance completed under a contract before an unconditional right to consideration exists:

ASC 606-10

Example 39 — Contract Asset Recognized for the Entity's Performance

55-287 On January 1, 20X8, an entity enters into a contract to transfer Products A and B to a customer in exchange for $1,000. The contract requires Product A to be delivered first and states that payment for the delivery of Product A is conditional on the delivery of Product B. In other words, the consideration of $1,000 is due only after the entity has transferred both Products A and B to the customer. Consequently, the entity does not have a right to consideration that is unconditional (a receivable) until both Products A and B are transferred to the customer.

55-288 The entity identifies the promises to transfer Products A and B as performance obligations and allocates $400 to the performance obligation to transfer Product A and $600 to the performance obligation to transfer Product B on the basis of their relative standalone selling prices. The entity recognizes revenue for each respective performance obligation when control of the product transfers to the customer.

55-289 The entity satisfies the performance obligation to transfer Product A.

Contract asset	$400	
Revenue		$400

ASC 606-10 (continued)

55-290 The entity satisfies the performance obligation to transfer Product B and to recognize the unconditional right to consideration.

Receivable	$1,000	
Contract asset		$400
Revenue		$600

2.9.4 Receivables

The revenue standard was not intended to change either the timing of receivable recognition or the subsequent accounting for receivables. While both contract assets and receivables are similar in that they represent an entity's right to consideration, the risks associated with each differ. Receivables are only exposed to credit risk since only the passage of time is required before receivables are due. However, contract assets are exposed to both credit risk and other risks (e.g., performance risk).

An entity could have a present and unconditional right to payment, and therefore a receivable, even if there is a refund obligation that may require the entity to pay consideration to a customer in the future (e.g., when a product is returned, or when rebates are earned on a specified volume of purchases). Since refund obligations give rise to variable consideration, they could affect the transaction price and the amount of revenue recognized. However, an entity's present right to consideration may not be affected by the potential need to refund consideration in the future. Consequently, in certain circumstances, a gross receivable could be recorded along with a liability. This is discussed further in paragraph BC326 of ASU 2014-09 and is illustrated in the following example from ASC 606:

ASC 606-10

Example 40 — Receivable Recognized for the Entity's Performance

55-291 An entity enters into a contract with a customer on January 1, 20X9, to transfer products to the customer for $150 per product. If the customer purchases more than 1 million products in a calendar year, the contract indicates that the price per unit is retrospectively reduced to $125 per product.

55-292 Consideration is due when control of the products transfer to the customer. Therefore, the entity has an unconditional right to consideration (that is, a receivable) for $150 per product until the retrospective price reduction applies (that is, after 1 million products are shipped).

55-293 In determining the transaction price, the entity concludes at contract inception that the customer will meet the 1 million products threshold and therefore estimates that the transaction price is $125 per product. Consequently, upon the first shipment to the customer of 100 products the entity recognizes the following.

Receivable	$15,000[a]	
Revenue		$12,500[b]
Refund liability		$2,500

(a) $150 per product × 100 products

(b) $125 transaction price per product × 100 products

55-294 The refund liability (see paragraph 606-10-32-10) represents a refund of $25 per product, which is expected to be provided to the customer for the volume-based rebate (that is, the difference between the $150 price stated in the contract that the entity has an unconditional right to receive and the $125 estimated transaction price).

Connecting the Dots

At the April 2016 FASB-only TRG meeting, the FASB staff noted that it has received questions about the point in time at which a receivable should be recorded under a contract with a customer (including when contract assets would be reclassified as accounts receivable). The FASB staff agreed that some confusion could have resulted from the wording in Example 38, Case B, of the revenue standard, which some believed was not aligned with the guidance that identifies a receivable as a right to consideration that is unconditional other than for the passage of time. Partly in response to stakeholders' concerns acknowledged at the meeting, the FASB later issued ASU 2016-20, which contains guidance aimed at clarifying the timing of revenue recognition related to receivables (referred to in ASU 2016-20 as "Issue 9").

At the TRG meeting, the staff also noted that it has received other questions, including inquiries about situations in which performance occurs over time and whether receivables should be recorded as performance occurs or when amounts are invoiced and due. The staff observed that there is diversity in practice today regarding how and when receivables are recorded and that such diversity is not likely to be eliminated under the revenue standard. However, the staff reiterated that these questions do not affect revenue recognition; rather, they affect the presentation of assets on an entity's balance sheet.

The example below illustrates how an entity that satisfies its sole performance obligation in a contract with a customer and plans to invoice the customer in multiple annual installments should reflect the transaction on its balance sheet.

Example 2-118

On March 1, 20X1, Entity A enters into a contract with one performance obligation (software license that is determined to be satisfied at a point in time on March 1, 20X1) for $3,600. Entity A delivers the software license on March 1, 20X1, and will invoice the customer in three equal and annual installments of $1,200 on March 1 of 20X1, 20X2, and 20X3. Payment is due by April 1 of each year.

Entity A should record a receivable for the full contract amount ($3,600) when it satisfies the performance obligation on March 1, 20X1. That is, the $3,600 should be recorded as a receivable in accordance with ASC 606-10-45-4, which states that a "receivable is an entity's right to consideration that is unconditional" and a "right to consideration is unconditional if only the passage of time is required before payment of that consideration is due." As noted in paragraph BC323 of ASU 2014-09, "making the distinction between a contract asset and a receivable is important because doing so provides users of financial statements with relevant information about the risks associated with the entity's rights in a contract. That is because although both would be subject to credit risk, a contract asset also is subject to other risks, for example, performance risk." In this scenario, A's rights are only subject to credit risk because the sole performance obligation has been satisfied as of March 1, 20X1 (i.e., A has an unconditional right to cash for the full contract amount).

The example below illustrates how an entity that satisfies its performance obligation over time in its contracts with customers and plans to invoice each customer with different payment terms should reflect the transactions on its balance sheet.

Example 2-119

On March 1, 20X1, Entity A enters into two identical (other than payment terms) noncancelable contracts with two different customers, Customer Y and Customer Z. The contracts each contain the same single performance obligation (i.e., SaaS) that is satisfied over time. The transaction price is $2,400. Each customer is issued an invoice on March 1, 20X1, and A provides continuous service from March 1, 20X1, through February 28, 20X2. Customer Y's payment is due on March 31, 20X1, but is received by A on April 15, 20X1. Customer Z's payment is due on April 15, 20X1. There are multiple views on how A should reflect these transactions on its balance sheet as of March 31, 20X1:

- *Alternative A* — Entity A should record a receivable when it issues an invoice to its customer **and** begins satisfying the performance obligation. The right to consideration is unconditional because only the passage of time up to the due date is required (since A has already begun performing the services). Accordingly, A's transactions with Y and Z would be reflected in the financial statements as follows:

Customer Y		
Receivable	2,400	
Contract liability		2,200
Revenue		200
Customer Z		
Receivable	2,400	
Contract liability		2,200
Revenue		200

- *Alternative B* — Until the invoice is due, A should build up its receivable balance incrementally as it satisfies its performance obligation. For Y, since payment is due on March 31, 20X1, the full receivable balance is recorded. For Z, the full receivable balance would be recorded once payment is due on April 15, 20X1. Accordingly, A's transactions with Y and Z would be reflected in the financial statements as follows:

Customer Y		
Receivable	2,400	
Contract liability		2,200
Revenue		200
Customer Z		
Receivable	200	
Contract asset	2,200*	
Contract liability		2,200*
Revenue		200

* Contract asset and contract liability would be netted on the face of the balance sheet.

Discussions with the FASB staff confirmed that the Board did not intend to change practice related to when receivable balances are recorded. Depending on an entity's existing accounting policies, either Alternative A or Alternative B could be acceptable.

Connecting the Dots

Contract assets and contract liabilities should be determined at the contract level (i.e., not at the performance obligation level), and only a net contract asset or net contract liability should be presented for a particular contract. Receivables, however, would be presented separately from contract assets and contract liabilities.

Implementation Q&A 34 discusses the difficulty of determining when a customer paid for a particular good or service under a contract involving multiple promised goods or services because of the fungible nature of cash. Since receivables are presented separately from contract assets and contract liabilities, the allocation of cash to performance obligations in a contract involving multiple performance obligations could also affect the recognition of receivables, contract assets, and contract liabilities. Consider the example below.

Example 2-120

On January 1, 20X1, Entity A enters into a noncancelable contract with a customer that contains two performance obligations: a software license (satisfied at a point in time) and PCS (satisfied over time from January 1, 20X1, through December 31, 20X3). Entity A issues an invoice on January 1, 20X1, for the first year (due on February 1, 20X1) and subsequently issues an invoice on each anniversary for the next two years. The transaction price of the contract is $6,000 (invoiced at $2,000 per year). As a result of allocating the transaction price to each performance obligation on a relative stand-alone selling price basis, 60 percent of revenue ($3,600) is allocated to the license and 40 percent of revenue ($2,400) is allocated to PCS. Contractually, each $2,000 invoice provides the right to receive PCS for one year ($800) and applies to one-third of the total license fee of $3,600 ($1,200). Entity A has the contractual right to bill and collect payment for the remaining license fee independently of providing any future PCS.

On January 1, 20X1, the software license is transferred to the customer and PCS commences. The customer pays the $2,000 invoice in full on February 1, 20X1. Entity A has an accounting policy of recording the receivable when amounts are invoiced and the associated performance obligation has been satisfied or has commenced.

Example 2-120 (continued)

There are multiple views on how this transaction should be presented as of and for the period ended March 31, 20X1:

- *Alternative A* — To identify the receivable amount in this contract, A must first allocate the payment made on February 1, 20X1, to the performance obligations contractually tied to the payment. Entity A would then determine the remaining receivable for performance obligations satisfied when payment is unconditional. Accordingly, the transaction would be reflected in the financial statements as follows:

License:		
Cash (60% × $2,000)	1,200	
Receivable	2,400*	
Revenue		3,600
PCS:		
Cash (40% × $2,000)	800	
Contract asset**	1,600***	
Contract liability** [($2,400 ÷ 36) × 33]		2,200
Revenue [($2,400 ÷ 36) × 3]		200
Consolidated:		
Cash	2,000	
Receivable	2,400	
Contract asset**	1,600	
Contract liability**		2,200
Revenue		3,800

* The $2,400 represents the entity's unconditional right to payment in years 2 and 3.

** Contract asset and contract liability would be netted, and net contract liability of $600 related to PCS paid in advance would be recorded.

*** The $1,600 represents the entity's right to payment in years 2 and 3 that is conditional on providing future PCS.

- *Alternative B* — Entity A would allocate cash entirely to the satisfied performance obligations (i.e., the software license and the satisfied portion of PCS) and record the remaining consideration due that is associated with the satisfied performance obligations as a receivable. Consequently, as illustrated below, A would not present any contract liability for PCS paid for by the customer before performance.

Cash	2,000	
Receivable*	1,800	
Contract asset** [($2,400 ÷ 36) × 33]	2,200	
Contract liability** [($2,400 ÷ 36) × 33]		2,200
Revenue {$3,600 + [($2,400 ÷ 36) × 3]}		3,800

* Since revenue related to fulfilling the PCS obligation is recognized under Alternative B, the entity would also record a receivable throughout the year before issuing an invoice. In year 3, the entity would present a net contract liability since payment would have been received in advance for year 3 PCS.

** Contract asset and contract liability would be netted to $0.

Because cash is fungible and can be allocated at either the contract level or the performance obligation level, either Alternative A or Alternative B could be acceptable. Entities should apply a consistent approach for similar contracts and in similar circumstances.

2.9.5 Classification as Current or Noncurrent

If an entity presents a classified balance sheet, it should determine whether certain revenue-related balances should be presented as current or noncurrent (or bifurcated between the two).

2.9.5.1 Contract Assets and Contract Liabilities

In a manner similar to the treatment of assets and liabilities related to the receipt or use of cash (e.g., receivables, prepaid assets, or debt), contract assets and contract liabilities should be bifurcated between current and noncurrent when presented in a classified balance sheet.

Note that the contract asset or contract liability determined at the contract level (i.e., after the contract assets and contract liabilities for each performance obligation within a single contract have been netted) is the contract asset or contract liability that should be bifurcated between current and noncurrent when presented in a classified balance sheet.

2.9.5.2 Refund Liabilities

The example below considers whether it is appropriate for an entity to classify refund liabilities (or similar liabilities) as a noncurrent liability in a classified balance sheet.

Example 2-121

Entity P, an entity with an operating cycle of less than 12 months, expects to return proceeds related to refund liabilities (or similar liabilities) more than 12 months after the reporting date. However, the counterparty can demand a refund of amounts previously paid at any time.

Entity P should not classify the portion that it expects to repay more than 12 months after the reporting date as a noncurrent liability in a classified balance sheet. All amounts related to such liabilities should be recorded as a current liability because the counterparty can demand a refund at any time.

On a classified balance sheet, the refund liability should not be presented as noncurrent if the customer can cancel the contract at any point or within 12 months or less. Rather, all amounts should be recorded as a current liability. The refund liability is excluded from contract liabilities because the customer must, in effect, make a separate purchase decision when the noncancelable term ends, at which point it could demand a refund of funds previously paid.

ASC 470-10-45-10, which specifies that loans due on demand should be presented as a current liability, supports this view:

ASC 470-10

45-10 The current liability classification shall include obligations that, by their terms, are due on demand or will be due on demand within one year (or operating cycle, if longer) from the balance sheet date, even though liquidation may not be expected within that period. The demand provision is not a subjective acceleration clause as discussed in paragraph 470-10-45-2.

2.9.5.3 Capitalized Contract Costs

It is acceptable for costs of obtaining or fulfilling a contract to be bifurcated between current and noncurrent in a classified balance sheet. Alternatively, in a manner similar to the treatment of (1) intangible assets, (2) inventory, or (3) property, plant, and equipment, capitalized costs of obtaining or fulfilling a contract may be presented as a single asset and neither bifurcated nor reclassified between current and noncurrent assets. That is, the assets would be classified as long-term unless they had an original amortization period of one year or less.

2.9.6 Balance Sheet Offsetting

2.9.6.1 Offsetting Contract Assets and Contract Liabilities Against Other Assets and Liabilities

ASC 606 uses the terms "contract asset" and "contract liability" (defined in ASC 606-10-20) in the context of revenue arising from contracts with customers and provides guidance on the presentation of contract assets and contract liabilities in the statement of financial position (see ASC 606-10-45-1 through 45-5). Entities may also recognize other types of assets or liabilities as a result of revenue or other transactions related to customers. Examples might include costs of obtaining a contract capitalized in accordance with ASC 340-40-25-1, financial assets or liabilities as defined in ASC 825-10-20 (e.g., receivables), and provisions as defined in ASC 460.

In practice, it will not be possible for entities to offset contract assets and contract liabilities against other assets and liabilities given that the contract assets and contract liabilities do not represent determinable amounts owed by each party. ASC 210-20 prohibits offsetting of assets and liabilities unless required or permitted by another Codification subtopic, and neither ASC 606-10 nor any other Codification subtopic includes such a requirement or permission with respect to contract assets and contract liabilities.

2.9.6.2 Offsetting Refund Liabilities Against Accounts Receivable

For an entity to offset refund liabilities against accounts receivable, all of the following criteria in ASC 210-20-45-1 must be met:

a. Each of two parties owes the other determinable amounts.
b. The reporting party has the right to set off the amount owed with the amount owed by the other party.
c. The reporting party intends to set off.
d. The right of setoff is enforceable at law.

If an entity has a legally enforceable contract and amounts have been billed (i.e., there is an unconditional right to payment for amounts billed), but because of a termination right a contract has not been identified under step 1 of ASC 606, the entity will generally recognize a refund liability (or similar liability) and accounts receivable.

If the contract is legally enforceable and the recognition of accounts receivable is appropriate, presenting the amounts net would generally be inappropriate. ASC 210-20 provides guidance on evaluating whether an asset and a liability may be netted. For example, ASC 210-20-45-1 outlines the criteria used to determine whether a right of setoff exists, including the requirement that the reporting party have both the legal right and the intent to set off. If the reporting entity does not expect the customer to terminate, it effectively believes that the customer will pay in the normal course and that the entity will provide goods or services. In such a case, the criteria related to the right of setoff would not be met and the entity should not net the amounts.

However, when the criteria related to the right of offset are met, a reporting entity is not required to net the amounts. An entity's decision to offset when the criteria in ASC 210-20-45-1 are met is an accounting policy election that should be applied consistently to all similar types of transactions.

The example below illustrates how to determine whether it is permissible to offset a refund liability against accounts receivable.

Example 2-122

Company P manufactures hardware and sells it to various retailers, which ultimately sell the hardware to end customers. Company P has concluded that the retailers are its customers and that control of the hardware is transferred to the retailers upon delivery to them. Upon receipt of the hardware, retailers have 90 days to return any unsold hardware to P. If a retailer exercises its right to return hardware, P provides a credit against the retailer's accounts receivable balance. That is, P does not pay cash to settle the refund liability; rather, it offsets the refund liability against any currently outstanding accounts receivable.[72] In accordance with ASC 606-10-32-10, P estimates a refund liability for hardware that it expects retailers to return.

Company P must evaluate the criteria in ASC 210-20 to determine whether it is permitted to offset the refund liability against accounts receivable in P's balance sheet.

In practice, P may not have the legal right to offset the refund liability against amounts receivable from a retailer. Further, the estimated refund liability may not represent a determinable amount because P estimated the refund liability by using a portfolio of information.

The notion that an entity should apply ASC 210-20 to determine whether offsetting is appropriate is consistent with the considerations related to offsetting contract assets and contract liabilities against other assets and liabilities.

2.9.7 Interaction Between ASC 606 and SEC Regulation S-X, Rule 5-03(b)

SEC Regulation S-X, Rule 5-03(b), indicates the various line items that should appear on the face of the income statement. Specifically, a registrant should separately present any amounts that represent 10 percent of the sum of income derived from net sales of tangible products, operating revenues of public utilities or others, income from rentals, revenues from services, and other revenues. Aside from minor revisions, no updates have been made to Rule 5-03(b) since the issuance of ASU 2014-09. Further, there is limited guidance on interpreting the requirements of Rule 5-03(b) — for example, the terms "income from rentals," "revenues from services," "products," and "services" are not specifically defined. Despite the long-standing need for registrants to use judgment when applying Rule 5-03(b), stakeholders have raised concerns about the interplay between Rule 5-03(b) and new accounting standards, including the revenue standard.

The interaction between ASC 606 and Rule 5-03(b) was discussed at the March 2018 CAQ SEC Regulations Committee joint meeting with the SEC staff. As indicated in the highlights of that meeting, the SEC staff noted that it is encouraging registrants to submit real-life examples of potential inconsistencies in income statement classification that may arise between ASC 606 and Rule 5-03(b). For additional information, see Deloitte's May 22, 2018, journal entry.

2.9.8 Income Statement Classification of Amortized Contract Costs

Generally, the amortization of any incremental costs of obtaining a contract that are capitalized under ASC 340-40 should be classified in the income statement as selling, general, and administrative (SG&A) expense.

[72] Company P would pay cash to settle the refund liability only if the customer did not have an outstanding accounts receivable balance.

Under ASC 340-40, an entity is required to recognize the incremental costs of obtaining a contract (i.e., those costs that would not have been incurred if the contract had not been obtained) as an asset if the entity expects to recover them.[73] When capitalized, the costs are "amortized on a systematic basis that is consistent with the transfer to the customer of the goods or services to which the asset relates." However, ASC 340-40 does not include guidance on the presentation of amortized contract costs in the income statement.

In addition, the Codification does not contain guidance on the types of expenses that represent SG&A expense or cost of sales. SEC Regulation S-X, Rule 5-03(b), provides limited guidance by indicating the various line items that should appear on the face of the income statement (if applicable). Rule 5-03(b) indicates that the cost of any tangible goods sold and the cost of any services sold are "[c]osts and expenses applicable to sales and revenues." Further, Rule 5-03(b) requires a separate line item for SG&A expenses.

Despite the limited authoritative guidance, we believe that SG&A expense in the income statement would be the preferred classification of the amortization of incremental costs of obtaining a contract that are capitalized under ASC 340-40. This is because such costs represent costs of acquiring a contract (e.g., selling costs), as opposed to costs of fulfilling a contract that generally would be included in cost of goods sold (or a similar line item).

2.10 Disclosure Requirements

The table below summarizes the revenue standard's disclosure requirements, including elections for nonpublic entities and interim requirements.

Category	Disclosure Requirements	Election Available to Nonpublic Entities	Interim Requirement (ASC 270)
Disaggregation of revenue	Disaggregate revenue into categories that depict how revenue and cash flows are affected by economic factors.	Yes[74]	Yes
	Sufficient information to understand the relationship between disaggregated revenue and each disclosed segment's revenue information.	Yes	Yes
Contract balances	Opening and closing balances (receivable, contract assets, and contract liabilities).	No	Yes
	Amount of revenue recognized from beginning contract liability balance.	Yes	Yes
	Explanation of significant changes in contract balances (using qualitative and quantitative information).	Yes	No

[73] ASC 340-40-25-4 provides a practical expedient under which "an entity may recognize the incremental costs of obtaining a contract as an expense when incurred if the amortization period of the asset that the entity otherwise would have recognized is one year or less."

[74] At a minimum, a nonpublic entity must disclose revenue that is disaggregated in accordance with the timing of transfer of goods or services (e.g., goods transferred at a point in time and services transferred over time) and qualitative information about how economic factors affect revenue and cash flows.

(Table continued)

Category	Disclosure Requirements	Election Available to Nonpublic Entities	Interim Requirement (ASC 270)
Performance obligations (including remaining performance obligations)	Qualitative information about (1) when performance obligations are typically satisfied, (2) significant payment terms, (3) the nature of goods or services promised, (4) obligations for returns of refunds, and (5) warranties.	No	No
	Amount of revenue recognized from performance obligations satisfied in prior periods (e.g., changes in transaction price estimates).	Yes	Yes
	Transaction price allocated to the remaining performance obligations:		
	• Disclosure of quantitative amounts.	Yes	Yes
	• Quantitative or qualitative explanation of when remaining performance obligation amounts will be recognized as revenue.	Yes	Yes
Significant judgments and estimates	Qualitative information about determining the timing of:		
	• Performance obligations satisfied over time (e.g., methods of measuring progress, why methods are representative of the transfer of goods or services, judgments used in the evaluation of when a customer obtains control of goods or services).	Yes[75]	No
	• Performance obligations satisfied at a point in time — specifically, the significant judgments used in the evaluation of when a customer obtains control.	Yes	No
	Qualitative and quantitative information[76] about:		
	• Determining the transaction price (e.g., estimating variable consideration, adjusting for the time value of money, noncash consideration).	Yes	No
	• Constraining estimates of variable consideration.	No	No
	• Allocating the transaction price, including estimating stand-alone selling prices and allocating discounts and variable consideration.	Yes	No
	• Measuring obligations for returns, refunds, and other similar obligations.	Yes	No

[75] The election available to nonpublic entities applies only to the requirement to disclose information about why the methods used to recognize revenue over time provide a faithful depiction of the transfer of goods or services to a customer. Nonpublic entities are still required to disclose the information about the methods used to recognize revenue over time in accordance with ASC 606-10-50-18(a).

[76] This includes the methods, inputs, and assumptions used in an entity's assessment.

(Table continued)

Category	Disclosure Requirements	Election Available to Nonpublic Entities	Interim Requirement (ASC 270)
Contract costs	Qualitative information about:		
	• Judgments made in determining the amount of the costs incurred to obtain or fulfill a contract.	Yes	No
	• The method the entity uses to determine the amortization for each reporting period.	Yes	No
	Quantitative information about:		
	• The closing balances of assets recognized from the costs incurred to obtain or fulfill a contract, by main category of asset.	Yes	No
	• The amount of amortization and any impairment losses recognized in the reporting period.	Yes	No
Practical expedients	Disclosure of practical expedients used.	Yes[77]	No

For more information, see Chapter 15 of Deloitte's Roadmap *Revenue Recognition*.

2.10.1 Impact of Termination Provisions on Disclosure

Termination provisions may significantly affect revenue recognition for technology entities. In addition, contracts with termination provisions may affect an entity's financial statement disclosures.

2.10.1.1 Effect of Termination Provisions on Disclosures Related to Remaining Performance Obligations

In an arrangement with a termination provision, an entity should not include amounts that are subject to termination without penalty in its required disclosures related to remaining performance obligations. Under the requirements outlined in ASC 606-10-50-13, an entity must disclose the "aggregate amount of the transaction price allocated to the performance obligations that are unsatisfied . . . as of the end of the reporting period."

When arrangements include provisions for termination without penalty, the amounts excluded from the assessment under step 1 of ASC 606 are, in effect, optional purchases. Any amounts that are paid or due are thus accounted for as a refund liability (or similar liability) and not a contract liability. Because these amounts are related to a cancelable arrangement for which a contract does not exist (as determined under step 1), they do not represent any part of the transaction price (as determined under step 3) related to unsatisfied performance obligations (which would be identified as part of step 2).

[77] However, nonpublic entities that have elected the practical expedient or policy election in ASU 2021-02 are required to disclose the practical expedient or policy election used.

2.10.1.2 Supplemental Disclosures Related to Termination Provisions

An entity is not necessarily precluded from separately disclosing the amounts of refund liability within the financial statement notes that discuss remaining performance obligations. An entity must not indicate that the refund liabilities are part of the transaction price related to its remaining performance obligations. However, the entity generally would not be precluded from specifying the refund liability in its financial statement notes if it properly describes this GAAP amount.

For example, an entity might provide the following disclosure:

> **Transaction Price Allocated to Remaining Performance Obligations**
>
> As of December 31, 20X7, approximately $4.5 million of revenue is expected to be recognized from remaining performance obligations. The Company expects to recognize revenue on approximately 65 percent of these amounts over the next 12 months, with the remaining balance recognized thereafter. In addition, approximately $0.8 million is recorded as a refund liability in the Company's consolidated balance sheet. This liability is generally related to amounts received from customers but is associated with termination provisions for arrangements that are cancelable at the customer's discretion (and the Company would be required to refund such amounts).

2.10.1.3 Effect of Termination Provisions on Contract Balance Disclosures

When a portion of an entity's arrangements contain termination provisions, any amounts received that are not associated with contracts identified under step 1 of ASC 606 should be recorded as a separate liability apart from the contract liability. Therefore, the entity would not be permitted to include the refund liability in its contract liability balance disclosures required by ASC 606-10-50-8. However, if the entity chooses to present a full rollforward of its contract liability, one approach may be to reclassify the refund liability as a contract liability when the termination right lapses (i.e., when the contract is no longer cancelable without penalty and the amounts are recharacterized as deferred revenue). The following table illustrates the contract liability rollforward approach for entities that elect such presentation:

	December 31, 20X8	December 31, 20X7
Balance, beginning of period	$ XX	$ XX
Deferral of revenue	XX	XX
Reclassification of refund liabilities	XX	XX
Recognition of unearned revenue	XX	XX
Balance, end of period	$ XX	$ XX

2.11 SEC Comment Letter Trends

Themes associated with SEC staff comments related to the revenue standard's application include the following:

- Significant judgments, including those related to:
    - The identification of performance obligations (e.g., whether specified software upgrades are separate performance obligations, why software and a related service such as PCS or a cloud-based service have been combined as a single performance obligation, whether a material right exists when an up-front payment is made for a SaaS arrangement, whether implementation services provided in software or SaaS arrangements are distinct).

  - The determination of the transaction price (e.g., how estimates of variable consideration were determined, whether certain incentives should be accounted for as a reduction of the transaction price).
  - The allocation of the transaction price (e.g., how variable consideration is allocated to a distinct service within a series for which the performance obligation is a SaaS; whether it is appropriate to use a residual approach to estimate the stand-alone selling price of a software license; the methods, inputs, and assumptions used to determine the stand-alone selling price).
  - The identification of the measure of progress (e.g., why a particular method used to recognize revenue over time provides a faithful depiction of the transfer of goods or services).
  - Principal-versus-agent considerations (e.g., how an entity determined that it is a principal in providing payment processing services).
- Performance obligation disclosures, including those related to:
  - When performance obligations are satisfied (e.g., when a customer obtains control over a software license, method of measuring progress for services).
  - Significant payment terms (e.g., whether a significant financing component exists).
  - The nature of goods or services promised (e.g., whether the nature of a SaaS arrangement is a promise to provide access to the SaaS or a promise to provide a specified amount of services).
- Disaggregation of revenue disclosures, including:
  - The determination of the categories in which to present disaggregated revenue information (e.g., whether the categories are appropriate given an entity's business model, whether the categories depict how revenue and cash flows are affected by economic factors).
  - Consideration of information disclosed outside the financial statements (e.g., earnings calls, investor presentations).
- Contract balance disclosures, including those associated with how the timing of satisfaction of performance obligations is related to the timing of payment and the corresponding effects on the contract asset and contract liability balances.
- Remaining performance obligation disclosures, including those related to any optional exemptions applied and when amounts are expected to be recognized.

Connecting the Dots

In the technology industry, contracts with customers typically have multiple promised goods or services (e.g., software license, PCS, professional services). Consequently, SEC staff comments issued to registrants in the technology industry frequently focus on judgments those registrants make when determining (1) the nature of promised goods or services in an arrangement, (2) distinct performance obligations, (3) the stand-alone selling prices of performance obligations, and (4) the timing of each performance obligation's delivery or performance.

For more information, see Sections 2.18 and 6.5.1.3 of Deloitte's Roadmap *SEC Comment Letter Considerations, Including Industry Insights*.

Chapter 3 — Contract Costs

3.1 Costs of Obtaining a Contract

ASC 340-40 provides the following guidance on recognizing the incremental costs of obtaining a contract with a customer:

ASC 340-40

25-1 An entity shall recognize as an asset the incremental costs of obtaining a contract with a customer if the entity expects to recover those costs.

25-2 The incremental costs of obtaining a contract are those costs that an entity incurs to obtain a contract with a customer that it would not have incurred if the contract had not been obtained (for example, a sales commission).

25-3 Costs to obtain a contract that would have been incurred regardless of whether the contract was obtained shall be recognized as an expense when incurred, unless those costs are explicitly chargeable to the customer regardless of whether the contract is obtained.

3.1.1 Considerations for Identifying Incremental Costs of Obtaining a Contract With a Customer

ASC 340-40-25-2 states that the "incremental costs of obtaining a contract are those costs that an entity incurs to obtain a contract with a customer that it would not have incurred if the contract had not been obtained (for example, a sales commission)." Application of this guidance requires an entity to identify those costs that are incurred (i.e., accrued) as a direct result of obtaining a contract with a customer. An entity should apply existing guidance outside of the revenue standard to determine whether a liability should be recognized as a result of obtaining a contract with a customer. Upon determining that a liability needs to be recorded, the entity should determine whether the related costs were incurred because, and only because, a contract with a customer was obtained.

In many circumstances, it may be clear whether particular costs are costs that an entity incurs to obtain a contract. For example, if an entity incurs a commission liability solely as a result of obtaining a contract with customer, the commission would be an incremental cost incurred to obtain a contract with a customer. However, in other circumstances, an entity may need to exercise judgment and consider existing accounting policies for liability accruals when determining whether a cost is incurred in connection with obtaining a contract with a customer. If the determination of whether a cost has been incurred is affected by other factors (i.e., factors in addition to obtaining a contract with a customer), an entity will need to take additional considerations into account when assessing whether a cost is an incremental cost associated with obtaining a contract with a customer.

The FASB staff noted the following:

- An entity should consider whether costs would have been incurred if the customer (or the entity) decided that it would not enter into the contract just as the parties were about to sign the contract. If the costs (e.g., the legal costs of drafting the contract) would have been incurred even though the contract was not executed, the costs would not be incremental costs of obtaining a contract.
- When an entity is identifying incremental costs incurred to obtain a contract, it may be important for the entity to first consider guidance outside of the revenue standard on determining whether and, if so, when a liability has been incurred. That is, other guidance will generally determine when a cost has been incurred, while ASC 340-40 provides guidance on determining whether costs should be capitalized or expensed.
- When sales commissions are paid to different levels of employees, the revenue standard does not differentiate among the commissions on the basis of the employees' respective functions or titles. For example, if an entity's commission policy on new contracts was to pay 10 percent sales commission to the sales employee, 5 percent to the sales manager, and 3 percent to the regional sales manager, all of the commissions are viewed as incremental because the commissions would not have been incurred if the contract had not been obtained.

Entities should continue to refer to existing U.S. GAAP on liability recognition to determine whether and, if so, when a liability needs to be recorded in connection with a contract with a customer. Therefore, an entity should initially apply the specific guidance on determining the recognition and measurement of the liability (e.g., commissions, payroll taxes, 401(k) match). If the entity recognizes a liability, only then should the entity determine whether to record the related debit as an asset or as an expense.

3.1.2 Sales Commissions and Compensation Structures

Commissions are often cited as an example of an incremental cost incurred to obtain a contract. The table below outlines the views related to whether commissions should be capitalized as detailed in TRG Agenda Paper 57 and broadly summarized in Implementation Q&A 78. Quoted text is from TRG Agenda Paper 57.

Topic	Example/Question	Views Discussed	View Selected by FASB Staff
Fixed employee salaries	"**Example 1:** An entity pays an employee an annual salary of $100,000. The employee's salary is based upon the employee's prior-year signed contracts and the employee's projected signed contracts for the current year. The employee's salary will not change based on the current year's actual signed contracts; however, salary in future years likely will be impacted by the current year's actual signed contracts. What amount, if any, should the entity record as an asset for incremental costs to obtain a contract during the year?"	**View A:** "Determine what portion of the employee's salary is related to sales projections and allocate that portion of the salary as an incremental cost to obtain a contract." **View B:** "Do not capitalize any portion of the employee's salary as an incremental cost to obtain a contract. The costs are not incremental costs to any contract because the costs would have been incurred regardless of the employee's signed contracts in the current year."	**View B.** "[N]one of the employee's salary should be capitalized as an incremental cost to obtain a contract. . . . Whether the employee sells 100 contracts, 10 contracts, or no contracts, the employee is still only entitled to a fixed salary." "[T]he objective of the requirements in [ASC] 340-40-25-1 is not to allocate costs that are associated in some manner with an entity's marketing and sales activity. The objective is to identify the incremental costs that an entity would not have incurred if the contract had not been obtained."

(Table continued)

Topic	Example/Question	Views Discussed	View Selected by FASB Staff
Some, but not all, costs are incremental	"**Example 2:** An entity pays a 5% sales commission to its employees when they obtain a contract with a customer. An employee begins negotiating a contract with a prospective customer and the entity incurs $5,000 of legal and travel costs in the process of trying to obtain the contract. The customer ultimately enters into a $500,000 contract and, as a result, the employee receives a $25,000 sales commission. What amount should the entity capitalize as an incremental cost to obtain the contract?"	**View A:** "The entity should capitalize only $25,000 for the sales commission. Those costs are the only costs that are incremental costs to obtain the contract because the entity would not have incurred the costs if the contract had not been obtained." **View B:** "The entity should capitalize $30,000, which includes the sales commission, legal expenses, and travel expenses. The entity would not have been able to obtain the contract without incurring those expenses."	**View A.** "[T]he sales commission is the only cost that the entity would not have incurred if the contract had not been obtained. While the entity incurs other costs that are necessary to facilitate a sale (such as legal, travel and many others), those costs would have been incurred even if the customer decided at the last moment not to execute the contract." Consider a similar situation in which an entity "incurs the same type of legal and travel expenses to negotiate a contract, but the customer decides not to enter into the contract right before the contract was to be signed by both parties. [T]he travel and legal expenses would still have been incurred even though the contract was not obtained. However, the commission would not have been incurred."

(Table continued)

Topic	Example/Question	Views Discussed	View Selected by FASB Staff
Timing of commission payments	"**Example 3:** An entity pays an employee a 4% sales commission on all of the employee's signed contracts with customers. For cash flow management, the entity pays the employee half of the commission (2% of the total contract value) upon completion of the sale, and the remaining half of the commission (2% of the total contract value) in six months. The employee is entitled to the unpaid commission, even if the employee is no longer employed by the entity when payment is due. An employee makes a sale of $50,000 at the beginning of year one. What amount should the entity capitalize as an incremental cost to obtain the contract?"	**View A:** "Capitalize half of the commission ($1,000) and expense the other half of the commission ($1,000)." **View B:** "Capitalize the entire commission ($2,000)."	**View B.** "The commission is an incremental cost that relates specifically to the signed contract and the employee is entitled to the unpaid commission. [T]he timing of payment does not impact whether the costs would have been incurred if the contract had not been obtained." "In this fact pattern, only the passage of time needs to occur for the entity to pay the second half of the commission. However, . . . there could be other fact patterns in which additional factors might impact the payment of a commission to an employee." For example, an entity could make the second half of the commission contingent upon the employee's selling additional services to the customer or upon the customer's "completing a favorable satisfaction survey about its first six months of working with the entity." Therefore, an "entity will need to assess its specific compensation plans to determine the appropriate accounting for incremental costs of obtaining a contract."

(Table continued)

Topic	Example/Question	Views Discussed	View Selected by FASB Staff
Commissions paid to different levels of employees	"**Example 4:** An entity's salesperson receives a 10% sales commission on each contract that he or she obtains. In addition, the following employees of the entity receive sales commissions on each signed contract negotiated by the salesperson: 5% to the manager and 3% to the regional manager. Which commissions are incremental costs of obtaining a contract?"	**View A:** "Only the commission paid to the salesperson is considered incremental because the salesperson obtained the contract." **View B:** "Only the commissions paid to the salesperson and the manager are considered incremental because the other employee likely would have had no direct contact with the customer." **View C:** "All of the commissions are incremental because the commissions would not have been incurred if the contract had not been obtained."	**View C.** "The new revenue standard does not make a differentiation based on the function or title of the employee that receives the commission. It is the entity that decides which employee(s) are entitled to a commission directly as a result of entering into a contract." "[I]t is possible that several commissions payments are incremental costs of obtaining the same contract. However, [stakeholders are encouraged] to ensure that each of the commissions are incremental costs of obtaining a contract with a customer, rather than variable compensation (for example, a bonus)" that would not be incremental because it also relies on factors other than sales.
Commission payments subject to a threshold	"**Example 5:** An entity has a commission program that increases the amount of commission a salesperson receives based on how many contracts the salesperson has obtained during an annual period. The breakdown is as follows: • 0-9 contracts . . . 0% commission • 10-19 contracts . . . 2% of value of contracts 1-19 • 20+ contracts . . . 5% of value of contracts 1-20+ Which commissions are incremental costs of obtaining a contract?"	**View A:** "No amounts should be capitalized because the commission is not directly attributable to a specific contract." **View B:** "The costs are incremental costs of obtaining a contract with a customer and, therefore, the costs should be capitalized."	**View B.** Both the 2 percent commission and the 5 percent commission are incremental costs of obtaining a contract. "The entity would apply other GAAP to determine whether a liability for the commission payments should be recognized. When a liability is recognized, the entity would recognize a corresponding asset for the commissions. This is because the commissions are incremental costs of obtaining a contract with a customer. The entity has an obligation to pay commissions as a direct result of entering into contracts with customers. The fact that the entity's program is based on a pool of contracts (versus a program in which the entity pays 3% for all contracts) does not change the fact that the commissions would not have been incurred if the entity did not obtain the contracts with those customers."

Some commission plans include substantive service conditions that need to be met before a commission associated with a contract (or group of contracts) is actually earned by the salesperson. In such cases, some or all of the sales commission may not be incremental costs incurred to obtain a contract with the customer since the costs were not actually incurred solely as a result of obtaining a contract with a customer. Rather, the costs were incurred as a result of obtaining a contract with a customer *and* the salesperson's providing ongoing services to the entity for a substantive period.

A commission structure could have a service condition that is determined to be nonsubstantive. In such a case, the commission is likely to be an incremental cost incurred to obtain a contract with a customer if no other conditions need to be met for the salesperson to earn the commission. In other cases, a commission plan could include a service condition, but the reporting entity determines on the basis of the amount and structure of the commission payments that part of the entity's commission obligation is an incremental cost incurred to obtain a contract with a customer (because it is *not* tied to a substantive service condition) while the rest of the commission is associated with ongoing services provided by the salesperson (because it is tied to a substantive service condition).

Sometimes, there may be other factors that affect the commission obligation, but the ultimate costs are still incremental costs incurred to obtain the contract. For example, a commission may be payable to a salesperson if a customer's total purchases exceed a certain threshold regardless of whether the salesperson is employed when the threshold is met (i.e., there is no service condition). In these cases, although no liability may be recorded when the contract with the customer is obtained (because of the entity's assessment of the customer's likely purchases), if the customer's purchases ultimately exceed the threshold and the commission is paid, the commission is an incremental cost of obtaining the contract. That is, the commission is a cost that the entity would not have incurred if the contract had not been obtained. This situation is economically similar to one involving a paid commission that is subject to clawback if the customer does not purchase a minimum quantity of goods or services.

Entities will need to carefully evaluate the facts and circumstances when factors other than just obtaining a contract with a customer affect the amount of a commission or other incurred costs. Entities should consider their existing policies on accruing costs when determining which costs are incremental costs incurred to obtain a contract with a customer.

Example 3-1

Entity A's internal salespeople earn a commission based on a fixed percentage (4 percent) of sales invoiced to a customer. Half of the commission is paid when a contract with a customer is signed; the other half is paid after 12 months, but only if the salesperson is still employed by A. Entity A concludes that there is a substantive service period associated with the second commission payment, and A's accounting policy is to accrue the remaining commission obligation ratably as the salesperson provides ongoing services to A.

Entity A enters into a three-year noncancelable service contract with a customer on January 1, 20X7. The total transaction price of $3 million is invoiced on January 1, 20X7. The salesperson receives a commission payment of 2 percent of the invoice amount ($60,000) when the contract is signed; the other half of the 4 percent commission will be paid after 12 months if the salesperson continues to be employed by A at that time. That is, if the salesperson is not employed by A on January 1, 20X8, the second commission payment will not be made. Entity A records a commission liability of $60,000 on January 1, 20X7, and accrues the second $60,000 commission obligation ratably over the 12-month period from January 1, 20X7, through December 31, 20X7.

Example 3-1 (continued)

Entity A concludes that only the first $60,000 is an incremental cost incurred to obtain a contract with a customer. Because there is a substantive service condition associated with the second $60,000 commission, A concludes that the additional cost is a compensation cost incurred in connection with the salesperson's ongoing service to A. That is, the second $60,000 commission obligation was not incurred solely to obtain a contract with a customer but was incurred in connection with ongoing services provided by the salesperson.

If the salesperson would be paid the commission even if no longer employed, or if A otherwise concluded that the service condition was not substantive, the entire $120,000 would be an incremental cost incurred to obtain a contract and would be capitalized in accordance with ASC 340-40-25-1. Entities will need to exercise professional judgment when determining whether a service condition is substantive.

Because commission and compensation structures can vary significantly between entities, an entity should evaluate its specific facts and circumstances when determining which costs are incremental costs incurred to obtain a contract with a customer. Since many entities pay sales commissions to obtain contracts with customers, questions have arisen regarding how to apply the revenue standard's cost guidance to such commissions, including:

- Whether certain commissions (e.g., commissions on contract renewals or modifications, commission payments that are contingent on future events, and commission payments that are subject to clawback or thresholds) qualify as assets.
- The types of costs to capitalize (e.g., whether and, if so, how an entity should consider fringe benefits such as payroll taxes, pension, or 401(k) match) in determining the amount of commissions to record as incremental costs.
- The pattern of amortization for assets related to multiple performance obligations (e.g., for contract cost assets related to multiple performance obligations that are satisfied over disparate points or periods of time).

Entities should continue to first refer to existing U.S. GAAP on liability recognition to determine whether and, if so, when a liability from a contract with a customer needs to be recorded. For example, an entity would apply the specific U.S. GAAP on liability recognition (e.g., commissions, payroll taxes, 401(k) match) and then determine whether to record the related debit as an asset or expense.

In addition, the revenue standard is clear that (1) an entity should amortize the asset on a systematic basis and (2) the method should reflect the pattern of transfer of goods or services to a customer to which the asset is related. That is, the asset should be amortized in a manner that reflects the benefit (i.e., revenue) generated from the asset.

3.1.2.1 Tiered Commissions

Commission plans for a specific employee that involve initial contracts and contract renewals might be established in such a way that (1) the commission is subject to a cumulative contract threshold and (2) commission rates change depending on the number (or cumulative value) of contracts signed. For instance, fixed or percentage commissions may commence or change once a specified threshold is achieved for the cumulative number or value of contracts. The examples below, which are adapted from examples considered by the FASB staff in TRG Agenda Paper 23, illustrate various cumulative threshold scenarios.

Example 3-2

Once a cumulative threshold **number** of contracts is reached, the entity pays commission on individual contracts as a percentage of the value of **each** contract in the manner shown in the table below.

Number of Contracts Signed	Commission Rate
1–5	0% commission
6–10	3% of individual contract price
11 or more	5% of individual contract price

Example 3-3

Once a cumulative threshold **value** of contracts is reached, the entity pays commission on individual contracts as a percentage of the value of **each** contract in the manner shown in the table below.

Value of Contracts Signed	Commission Rate
First $1 million	0% commission
Next $4 million	3% of individual contract price
More than $5 million	5% of individual contract price

Example 3-4

Once a cumulative threshold number of contracts is reached, the entity pays commission on the last contract as a percentage of the **cumulative value of that contract and the preceding contracts** in the manner shown in the table below, taking into account any commission already paid.

Number of Contracts Signed	Commission Rate
1–5	0% commission
6	3% of value of contracts 1–6
7–10	0% commission
11 or more	5% of value of all contracts (including commission already paid on contracts 1–6)

Example 3-5

As shown in the table below, the entity pays the first commission when the first contract is signed. Subsequently, once a cumulative threshold number of contracts is reached, the entity pays a commission on the threshold contract that is greater than the commission paid on the initial contract and takes into account any commissions previously paid. In this example, it is assumed that the entity has no history of sales employees' closing more than 15 new contracts in a period.

Number of Contracts Signed	Commission Amount	
1	$ 3,000	
10	$ 5,000	cumulative commission (including $3,000 already paid)
15	$ 10,000	cumulative commission (including $5,000 already paid)

Assume that the commissions in all of the examples above are incremental costs incurred to obtain a contract that should be capitalized in accordance with ASC 340-40-25-1.

There are at least two acceptable approaches to determining which commissions are incremental to obtaining a contract in the scenarios described above. One approach ("Approach A") would be to specifically attribute the incremental costs of each contract to that contract. For example, if no commission is paid until the fifth contract is signed, the commission would be attributed to only the fifth contract. Another approach ("Approach B") would be to accrue commission for each contract on the basis of the average commission rate expected to be paid under the commission plan. For example, although a commission is paid only once the fifth contract is signed, the commission is earned, and would be accrued, as contracts 1 through 5 are signed. Entities should consider their historical policies for recording commission liabilities when determining which approach to apply.

Under the two alternative approaches, the entity in each of the illustrative examples above should account for the tiered commissions as follows:

- Example 3-2:
  - *Approach A* — When the 6th contract is signed, the entity should capitalize 3 percent of the price of that contract and successive contracts as an incremental cost of obtaining a contract until the 11th contract is signed, at which point the entity should capitalize 5 percent of the price of that contract and successive contracts.
  - *Approach B* — The entity should estimate the total amount of commission to be earned for the period and capitalize a ratable amount of commission costs upon the signing of each contract. For example, if the entity estimates that seven contracts, each valued at $10,000, will be signed and therefore the total estimated price of the 6th and 7th contract is $20,000, it estimates the total commission to be capitalized as $600 ($20,000 × 3% commission). Upon the signing of each $10,000 contract, the entity may capitalize $86 of commission ($600 total estimated commission ÷ the 7 expected contracts signed = $86 estimated commission per contract).

- Example 3-3:
  - *Approach A* — Upon the signing of the specific contract that results in the aggregate value of over $1 million in contract value, the entity should capitalize 3 percent of the price of that contract and successive contracts as an incremental cost of obtaining a contract until the $5 million aggregate value is reached, at which point the entity should capitalize 5 percent of the price of that contract and successive contracts.
  - *Approach B* — The entity should estimate the total amount of commission to be earned for the period and capitalize a ratable amount of commission costs upon the signing of each contract. For example, if the entity estimates that three contracts will be signed with an aggregate of $4 million in contract value (contract 1 is $1 million, contract 2 is $1 million, and contract 3 is $2 million), the entity will estimate $90,000 in commissions to be capitalized, or ($4 million − $1 million) × 3% commission. The entity may capitalize the relative value for each contract:
    - Contract 1: ($1 million ÷ $4 million) × $90,000 = $22,500.
    - Contract 2: ($1 million ÷ $4 million) × $90,000 = $22,500.
    - Contract 3: ($2 million ÷ $4 million) × $90,000 = $45,000.
- Example 3-4:
  - *Approach A* — When the 6th contract is signed, the entity should capitalize 3 percent of the cumulative prices of contracts 1 through 6 as an incremental cost of obtaining the 6th contract. Similarly, when the 11th contract is signed, the entity should capitalize 5 percent of the cumulative prices of contracts 1 through 11 (less the 3 percent previously paid on contracts 1 through 6) as an incremental cost of obtaining the 11th contract. Further, the entity should capitalize 5 percent of the price of each successive contract (beyond the 11th contract) as an incremental cost of obtaining a contract.
  - *Approach B* — The entity should estimate the total amount of commission to be earned for the period and capitalize a ratable amount of commission costs upon the signing of each contract. For example, if the entity estimates that eight contracts will be signed and the estimated cumulative prices of contracts 1 through 6 will be $32,000, it will estimate $960 in commissions to be capitalized ($32,000 × 3% commission = $960). If the price of each contract is the same, the entity may capitalize $120 upon the signing of each contract ($960 total estimated commission ÷ the 8 expected contracts signed = $120 estimated commission per contract).
- Example 3-5:
  - *Approach A* — Once the initial contract is signed, the entity should capitalize $3,000 as an incremental cost of obtaining that contract. The entity would not capitalize any additional amounts when contracts 2 through 9 are signed because the next commission "tier" has not been met. Once the 10th contract is signed, the entity should capitalize an additional $2,000. Similarly, the entity would not capitalize any additional amounts when contracts 11 through 14 are signed and should capitalize an additional $5,000 once the 15th contract is signed.
  - *Approach B* — The entity should estimate the total amount of commission to be earned for the period and capitalize a ratable amount of commission costs upon the signing of each contract. For example, if the entity estimates that 11 contracts will be signed and the price of each contract is the same, it may capitalize $455 when each contract is signed ($5,000 ÷ the 11 contracts signed = $455 to be capitalized as the commission amount per contract).

3.1.2.2 Fringe Benefits

The example below illustrates the determination of whether fringe benefits such as 401(k) match contributions associated with sales commissions should be capitalized as incremental costs of obtaining contracts with customers.

Example 3-6

Entity C has a policy to match 401(k) contributions based on salaries paid to sales representatives, including sales commissions. These sales commissions are determined to meet the definition of incremental costs of obtaining contracts with customers in ASC 340-40-25-2 and are therefore capitalized in accordance with ASC 340-40-25-1.

When 401(k) match contributions (along with other fringe benefits) are attributed directly to sales commissions that are determined to be incremental costs of obtaining contracts with customers, the 401(k) match contributions also qualify as incremental costs of obtaining the contracts since such costs would not have been incurred if the contracts had not been obtained. However, incremental costs of obtaining contracts with customers would not include fringe benefits constituting an allocation of costs that would have been incurred regardless of whether a contract with a customer had been obtained.

3.1.3 Practical Expedient in ASC 340-40-25-4 for Expensing Contract Acquisition Costs

If an entity elects the practical expedient to expense incremental costs of obtaining a contract when incurred because the amortization period of the asset would have been one year or less, the entity is also required, under ASC 606-10-50-22, to disclose such election. In addition, the practical expedient should be applied consistently to contracts with similar characteristics and in similar circumstances.

The identification of contracts with similar characteristics and the evaluation of similar circumstances should be performed as an entity-wide assessment. An entity with multiple subsidiaries or business units that operate in multiple jurisdictions might determine that different subsidiaries or business units have contracts with dissimilar characteristics or dissimilar circumstances.

However, it is not permitted to apply the practical expedient selectively on a contract-by-contract basis. Further, an entity is not permitted to apply the practical expedient in ASC 340-40-25-4 to some costs attributable to performance obligations in a contract but not others. The incremental costs of obtaining a contract that are required to be capitalized in accordance with ASC 340-40-25-1 are related to the contract as a whole; the capitalized costs of obtaining a contract form a single asset even if the contract contains more than one performance obligation. The practical expedient is available only if the amortization period of the entire asset that the entity otherwise would have recognized is one year or less.

Example 3-7 below illustrates a situation in which the practical expedient in ASC 340-40-25-4 would not be available.

Example 3-7

Entity B enters into a contract with a customer to provide the following:

- Product X delivered at a point in time.
- Maintenance of Product X for one year.
- An extended warranty on Product X that covers years 2 and 3 (Product X comes with a one-year statutory warranty).

Each of the elements is determined to be a separate performance obligation.

A sales commission of $200 is earned by the salesperson. This represents $120 for the sale of Product X (payable irrespective of whether the customer purchases the maintenance or extended warranty) and an additional $40 each for the sale of the maintenance contract and the sale of the extended warranty ($80 commission for the sale of both).

The commission is determined to meet the definition of an incremental cost of obtaining the contract in ASC 340-40-25-2 and is therefore capitalized in accordance with ASC 340-40-25-1.

In this fact pattern, the entity cannot elect the practical expedient in ASC 340-40-25-4 to expense costs as incurred because the amortization period of the asset that the entity would recognize is more than one year (i.e., the extended warranty performance obligation included in the contract is for years 2 and 3). The entity may, however, determine that it is appropriate to attribute the asset created by the commission to the individual performance obligations and record amortization of the asset in an amount that corresponds to the revenue recognized as each good or service is transferred to the customer.

As previously noted, an entity is precluded from using the practical expedient in ASC 340-40-25-4 if the amortization period of the asset that the entity otherwise would have recognized is greater than one year. This restriction applies even if the amortization period is only slightly greater than one year.

Example 3-8

Entity A enters into a noncancelable contract with a customer to provide marketing services for 13 months. A commission of $100 is earned by the salesperson in connection with A's entering into the contract with the customer. The commission is determined to meet the definition of an incremental cost of obtaining the contract in ASC 340-30-25-2 and is therefore capitalized in accordance with ASC 340-40-25-1. Entity A concludes that the asset is related to the entire contract to provide 13 months of marketing services.

In this fact pattern, the entity cannot elect the practical expedient in ASC 340-40-25-4 to expense costs as incurred since the amortization period of the asset that the entity would otherwise recognize is more than one year (i.e., the 13 months in which marketing services are being performed).

3.1.4 Using the Portfolio Approach When Accounting for Contract Costs

ASC 340-40-05-1 expressly indicates that ASC 340-40 is aligned with ASC 606, stating that "[t]his Subtopic provides accounting guidance for the following costs related to a contract with a customer within the scope of Topic 606 on revenue from contracts with customers." ASC 606 is applied at the individual contract level (or to a combination of contracts accounted for under ASC 606-10-25-9). In addition, ASC 606-10-10-4 allows an entity to apply, as a practical expedient, the revenue recognition guidance to a portfolio of contracts rather than an individual contract. The practical expedient can only be used "if the entity reasonably expects that the effects on the financial statements of applying [the revenue recognition guidance] to the portfolio would not differ materially from applying [the revenue recognition guidance] to the individual contracts (or performance obligations) within that portfolio." In addition, ASC 606-10-10-3 states that an "entity shall apply this guidance, including the use of any practical expedients, consistently to contracts with similar characteristics and in similar circumstances."

If an entity reasonably expects that contract costs recorded under a portfolio approach would not differ materially from contract costs that would be recorded individually, it may apply a portfolio approach to account for the costs. The entity would use judgment in determining the characteristics of the portfolio in a manner similar to its assessment of whether a portfolio satisfies the requirements in ASC 606-10-10-4.

In applying the portfolio approach, an entity should consider paragraph BC69 of ASU 2014-09, which states that the FASB and IASB "did not intend for an entity to quantitatively evaluate each outcome and, instead, the entity should be able to take a reasonable approach to determine the portfolios that would be appropriate for its types of contracts." In determining the characteristics and composition of the portfolio, an entity should consider the nature and timing of costs incurred and the pattern of transferring control of the related good or service to the customer (e.g., amortization of the capitalized costs).

3.1.5 Determining When to Recognize and How to Measure Incremental Costs

Arrangements for the payment of some incremental costs of obtaining a contract may be complex. For example, payment of a sales commission may be (1) contingent on a future event, (2) subject to clawback, or (3) based on achieving cumulative targets.

The revenue standard does not address the issue of when to initially recognize the incremental costs of obtaining a contract. Rather, ASC 340-40 only addresses which costs to capitalize and subsequent recognition of amortization or impairment expense. Therefore, other Codification topics (e.g., ASC 275, ASC 710, ASC 712, ASC 715, and ASC 718) specify when a liability for costs should be recognized and how that liability should be measured.

If an entity concludes that a liability for incremental costs of obtaining a contract should be recognized under the relevant Codification topic, the guidance in ASC 340-40-25-1 should be applied to determine whether those recognized costs should be capitalized as an asset or recognized immediately as an expense.

3.2 Costs of Fulfilling a Contract

ASC 340-40 provides the following guidance on recognizing the costs incurred in fulfilling a contract with a customer:

ASC 340-40

15-3 The guidance in this Subtopic applies to the costs incurred in fulfilling a contract with a customer within the scope of Topic 606 on revenue from contracts with customers, unless the costs are within the scope of another Topic or Subtopic, including, but not limited to, any of the following:

a. Topic 330 on inventory
b. Paragraphs 340-10-25-1 through 25-4 on preproduction costs related to long-term supply arrangements
c. Subtopic 350-40 on internal-use software
d. Topic 360 on property, plant, and equipment
e. Subtopic 985-20 on costs of software to be sold, leased, or otherwise marketed.

ASC 340-40 (continued)

25-5 An entity shall recognize an asset from the costs incurred to fulfill a contract only if those costs meet all of the following criteria:

a. The costs relate directly to a contract or to an anticipated contract that the entity can specifically identify (for example, costs relating to services to be provided under renewal of an existing contract or costs of designing an asset to be transferred under a specific contract that has not yet been approved).
b. The costs generate or enhance resources of the entity that will be used in satisfying (or in continuing to satisfy) performance obligations in the future.
c. The costs are expected to be recovered.

25-6 For costs incurred in fulfilling a contract with a customer that are within the scope of another Topic (for example, Topic 330 on inventory; paragraphs 340-10-25-1 through 25-4 on preproduction costs related to long-term supply arrangements; Subtopic 350-40 on internal-use software; Topic 360 on property, plant, and equipment; or Subtopic 985-20 on costs of software to be sold, leased, or otherwise marketed), an entity shall account for those costs in accordance with those other Topics or Subtopics.

25-7 Costs that relate directly to a contract (or a specific anticipated contract) include any of the following:

a. Direct labor (for example, salaries and wages of employees who provide the promised services directly to the customer)
b. Direct materials (for example, supplies used in providing the promised services to a customer)
c. Allocations of costs that relate directly to the contract or to contract activities (for example, costs of contract management and supervision, insurance, and depreciation of tools and equipment used in fulfilling the contract)
d. Costs that are explicitly chargeable to the customer under the contract
e. Other costs that are incurred only because an entity entered into the contract (for example, payments to subcontractors).

25-8 An entity shall recognize the following costs as expenses when incurred:

a. General and administrative costs (unless those costs are explicitly chargeable to the customer under the contract, in which case an entity shall evaluate those costs in accordance with paragraph 340-40-25-7)
b. Costs of wasted materials, labor, or other resources to fulfill the contract that were not reflected in the price of the contract
c. Costs that relate to satisfied performance obligations (or partially satisfied performance obligations) in the contract (that is, costs that relate to past performance)
d. Costs for which an entity cannot distinguish whether the costs relate to unsatisfied performance obligations or to satisfied performance obligations (or partially satisfied performance obligations).

Because the FASB and IASB did not intend to reconsider cost guidance altogether, the revenue standard focuses on costs of fulfilling a contract that are not within the scope of another standard. Accordingly, if costs are within the scope of another standard and that standard requires them to be expensed, it is not possible to argue that they should be capitalized in accordance with ASC 340-40. In addition, only costs directly related to a contract or anticipated contract with a customer are within the scope of ASC 340-40. Costs not directly related to a contract or anticipated (specified) contract should not be evaluated for capitalization under ASC 340-40. Further, when determining whether fulfillment costs are within the scope of ASC 340-40, the reporting entity should also consider its relationship with the other entity in the arrangement. That is, if the reporting entity incurs costs and transfers consideration to

another entity, and that other entity also transfers consideration to the reporting entity in exchange for goods or services, the reporting entity should consider whether the consideration exchanged between the two parties should be accounted for as (1) consideration payable to a customer under ASC 606 or (2) consideration received from a vendor under ASC 705-20.

Connecting the Dots

Stakeholders have questioned whether costs incurred for an anticipated contract (e.g., costs for design and development or nonrecurring engineering) (1) would be within the scope of ASC 340 and therefore could be capitalized or (2) should be expensed in accordance with ASC 730. The costs incurred for an anticipated contract would pertain to a contract that is not yet obtained and whose terms might not yet be known. Factors for an entity to consider in determining whether the costs should be capitalized include, but are not limited to, (1) the likelihood or certainty that the entity will obtain the contract, (2) the likelihood that the costs will be recovered under the specific anticipated contract, (3) whether the costs create or enhance an asset that will be transferred to the customer once the entity obtains the contract (such costs could be capitalizable under other guidance), and (4) whether the costs are considered to be costs associated with research and development (R&D) and would therefore be within the scope of ASC 730 and expensed as incurred. An entity will need to carefully consider the facts and circumstances of the arrangement in determining the appropriate treatment of costs incurred before a contract was obtained.

Example 2 in ASC 340-40 illustrates how to account for costs of fulfilling a contract.

ASC 340-40

Example 2 — Costs That Give Rise to an Asset

55-5 An entity enters into a service contract to manage a customer's information technology data center for five years. The contract is renewable for subsequent one-year periods. The average customer term is seven years. The entity pays an employee a $10,000 sales commission upon the customer signing the contract. Before providing the services, the entity designs and builds a technology platform for the entity's internal use that interfaces with the customer's systems. That platform is not transferred to the customer but will be used to deliver services to the customer.

Costs to Fulfill a Contract

55-7 The initial costs incurred to set up the technology platform are as follows:

Design services	$ 40,000
Hardware	120,000
Software	90,000
Migration and testing of data center	100,000
Total costs	$ 350,000

ASC 340-40

55-8 The initial setup costs relate primarily to activities to fulfill the contract but do not transfer goods or services to the customer. The entity accounts for the initial setup costs as follows:

a. Hardware costs — accounted for in accordance with Topic 360 on property, plant, and equipment
b. Software costs — accounted for in accordance with Subtopic 350-40 on internal-use software
c. Costs of the design, migration, and testing of the data center — assessed in accordance with paragraph 340-40-25-5 to determine whether an asset can be recognized for the costs to fulfill the contract. Any resulting asset would be amortized on a systematic basis over the seven-year period (that is, the five-year contract term and two anticipated one-year renewal periods) that the entity expects to provide services related to the data center.

55-9 In addition to the initial costs to set up the technology platform, the entity also assigns two employees who are primarily responsible for providing the service to the customer. Although the costs for these two employees are incurred as part of providing the service to the customer, the entity concludes that the costs do not generate or enhance resources of the entity (see paragraph 340-40-25-5(b)). Therefore, the costs do not meet the criteria in paragraph 340-40-25-5 and cannot be recognized as an asset using this Topic. In accordance with paragraph 340-40-25-8, the entity recognizes the payroll expense for these two employees when incurred.

3.2.1 Variable Consideration and Uncertain Transaction Price

As noted above, an entity would need to be able to demonstrate whether any capitalized costs are recoverable. That is, the entity's contract with a customer needs to generate sufficient profit to recover any capitalized costs. Otherwise, no asset should be recorded or a recorded asset would be impaired. Determining whether capitalized costs are recoverable may be challenging when the contract contains variable consideration rather than fixed consideration.

When an entity enters into a contract with a customer to provide goods or services for variable consideration and the transaction price is fully or partially constrained at the time the customer obtains control of the goods or services, the entity may incur an up-front loss until the uncertainty associated with the variable consideration is resolved. That is, the amount of the asset(s) derecognized or fulfillment costs recognized exceeds the amount of revenue to be recognized on the date the entity satisfies its performance obligation(s) because of the application of the constraint on variable consideration.

An entity should not defer costs associated with transferred goods or services in a contract when variable consideration is fully or partially constrained. Rather, an entity should expense costs that are not eligible for capitalization under other authoritative literature (e.g., ASC 330 on inventory; ASC 360 on property, plant, and equipment; or ASC 985-20 on costs of software to be sold, leased, or otherwise marketed) unless (1) such costs meet the criteria to be capitalized in accordance with ASC 340-40[1] or (2) the resolution of an uncertainty giving rise to the constraint on variable consideration will result in the entity's recovery of an asset (e.g., a sales return).

[1] ASC 340-40-25-6 indicates that when costs incurred to fulfill a contract with a customer are within the scope of any other Codification topics or subtopics, such costs should be accounted for in accordance with those other topics or subtopics.

Example 3-9

Entity A, a manufacturer, sells hardware and related components to Customer B, a distributor, for resale to B's customers. The manufacturer is required to recognize revenue when, after consideration of the indicators of control in ASC 606-10-25-30, it determines that control of hardware and related components has been transferred to the distributor.

Entity A enters into a contract with B to sell hardware and related components with a cost basis of $180,000 for consideration of $200,000. However, the hardware and related components have a high risk of obsolescence, which may cause A to provide rebates or price concessions to B in the future (i.e., the transaction price is variable). The contract does not include a provision for product returns, and A does not expect to accept any return of obsolete goods.

Entity A adjusts (i.e., constrains) the transaction price and concludes that it is probable that $170,000 of the consideration will not result in a significant revenue reversal. When control of the hardware and related components is transferred to B, A recognizes revenue of $170,000 (the constrained transaction price) and costs of $180,000.[2] As a result, A incurs a loss of $10,000.

3.2.2 Initial Losses and Expected Future Profits

Questions arise about whether losses incurred on an initially satisfied performance obligation can be capitalized when an entity is expected to generate profits on the sale of optional goods or services to a customer. This scenario is illustrated in the example below.

Example 3-10

Entity E's business model includes the sale of (1) hardware and (2) parts needed to operate that hardware. It is possible for customers to source parts from other suppliers, but customers will almost always choose to purchase parts from E (the OEM). The parts are needed for the hardware to properly function for its expected economic life.

Entity E's business model is to sell the hardware at a significantly discounted price (less than the cost to manufacture the hardware) when E believes that doing so is likely to secure a profitable stream of parts sales. This initial contract is only for the hardware; it does not give E any contractual right to require that customers subsequently purchase any parts. However, E's historical experience indicates that (1) customers will virtually always subsequently purchase parts and (2) the profits on the parts sales will more than compensate for the discount given on the hardware.

The hardware has a cost of $200 and would usually be sold for a profit. However, the equipment is sold at a discounted price of $150 if subsequent parts sales are expected.

When the hardware is sold for $150, E is *not* permitted to defer an element of the cost of $200 to reflect its expectation that this sale will generate further, profitable sales in the future.

In accordance with ASC 340-40-25-6, when the costs of fulfilling a contract are within the scope of another standard, they should be accounted for in accordance with that standard. In the circumstances described, the cost of $200 is within the scope of ASC 330 and must be expensed when the hardware is sold. Further, ASC 340-40-25-8(c) requires "[c]osts that relate to satisfied performance obligations (or partially satisfied performance obligations) in the contract (that is, costs that relate to past performance)" to be expensed when incurred.

Although E expects customers to purchase additional parts that will give rise to future profits, those additional purchases are at the customer's option and are not part of the contract to sell the hardware. Since E has satisfied its obligation to deliver the hardware, it is required to recognize revenue of $150 and the $200 cost in full.

Consequently, a loss of $50 arises on the initial sale of the hardware.

[2] The entity may need to consider applying the impairment guidance in ASC 330 to similar hardware and related components held in inventory.

3.2.3 Contracts Satisfied Over Time

ASC 340-40-25-8(c) requires fulfillment costs attributed to satisfied (or partially satisfied) performance obligations to be expensed as incurred. In addition, the revenue standard requires fulfillment costs to be evaluated for expense or deferral independently of the recording of the associated revenue.

3.2.3.1 Recognition of Fulfillment Costs Incurred Before the Transfer of Goods or Services When Revenue Is Recognized Over Time

ASC 340-40-25-7 provides various examples of contract fulfillment costs, including direct labor, direct materials, and allocations of costs that are directly related to the contract (e.g., insurance, depreciation of tools and equipment used). In some contracts, fulfillment costs (e.g., implementation or other set-up costs) may be incurred before an entity begins satisfying its performance obligation. Further, in some cases, the costs incurred will enhance a resource of the entity that the entity will use in satisfying its performance obligation(s) to the customer.

An entity may need to exercise significant professional judgment when determining whether fulfillment costs incurred enhance a resource of the entity that the entity will use in satisfying its performance obligation(s) to the customer. To evaluate whether fulfillment costs meet the criterion in ASC 340-40-25-5(b) for capitalization, an entity should consider whether the costs (1) generate or enhance a resource (i.e., an asset, including a service) that will be transferred to the customer or (2) will be used by the entity in connection with transferring goods or services to the customer. The following considerations may be helpful in the evaluation:

- Is the customer's ability to benefit from the fulfillment activities limited to the use of the entity's service? If the customer cannot benefit from the entity's fulfillment activities other than from the use of the entity's service, the fulfillment costs may be enhancing the entity's resources.
- Do the fulfillment activities expand the entity's service capabilities? If the fulfillment activities are required before the entity can begin transferring services to the customer and they expand the entity's service capacity, the related fulfillment costs would most likely enhance a resource of the entity that the entity will use in satisfying its performance obligation(s) to the customer.

We do not believe that an entity needs to have physical custody of an enhanced resource for fulfillment costs to qualify for capitalization under ASC 340-40-25-5(b). For example, the criterion in ASC 340-40-25-5(b) could be met if the enhancements are made at the customer's location but will be used by the entity in connection with satisfying the performance obligation(s).

If the costs generate or enhance a resource that will be transferred to the customer, they may not enhance a resource *of the entity* that the entity will use in satisfying its performance obligation(s) to the customer. Such costs may still initially meet the criteria for capitalization (under either ASC 340-40 or other U.S. GAAP), but such costs would typically be recognized as an expense once the related asset is transferred to the customer.

Example 3-11

Entity P enters into a four-year contract with a customer to provide hosted software services. Before the hosted software services can begin, P is required to perform implementation services, which create interfaces between the customer's infrastructure and P's hosted software. The implementation services will not transfer to the customer a good or service that is distinct because the customer can only benefit from the interface connection through use of the hosted software services. For the implementation services, P charges the customer $600, which is included in the overall transaction price that is allocated to the performance obligation to provide hosted software services. Entity P incurs fulfillment costs of $500 to perform the implementation services.

Because the implementation services do not transfer a distinct good or service to the customer, the fulfillment costs of $500 do not enhance a resource that will be controlled by the customer. Rather, the fulfillment costs enhance a resource that P will use to satisfy its performance obligation. Therefore, the fulfillment costs of $500 meet the criterion in ASC 340-40-25-5(b) for capitalization.

3.2.3.2 Costs Incurred to Fulfill a Combined Performance Obligation Satisfied Over Time

ASC 340-40-25-8(c) indicates that an entity should not capitalize costs related to completely or partially satisfied performance obligations. Further, ASC 340-40-25-8(d) requires an entity to expense costs when incurred if the entity cannot determine whether the costs are related to past performance or to future performance. Accordingly, if an entity incurs costs related to past performance or cannot determine whether the costs are related to past performance or to future performance, the entity should expense the costs when incurred rather than capitalize them.

In some arrangements, costs (other than set-up costs) are incurred at or around the time an entity begins to satisfy a performance obligation. For example, an entity may physically deliver hardware used as part of a combined performance obligation to provide services (e.g., an integrated security monitoring solution) to a customer over time. That is, the hardware is not distinct; rather, it forms part of a combined performance obligation that is satisfied over time. The hardware may be recorded by the entity as inventory before it is physically transferred to the customer and would typically be derecognized by the entity once it is physically delivered to the customer since it would most likely be a fulfillment cost.

Depending on the facts and circumstances, it may or may not be acceptable under ASC 340-40 for an entity to capitalize initial fulfillment costs incurred when the costs are related to part of a combined performance obligation that will be satisfied over time. Generally, before delivery, the asset to which the fulfillment costs are related (e.g., hardware) is held in the entity's inventory and is therefore within the scope of the inventory accounting guidance of ASC 330. However, once the asset is physically transferred to the customer, the asset may no longer be within the scope of ASC 330.

We observe that when the guidance in ASC 330 is applicable, ASC 330-10-10-1 and ASC 330-10-35-2 are particularly relevant to the determination of when to recognize the cost (i.e., expense) of the asset. ASC 330-10-10-1 states:

> A major objective of accounting for inventories is the proper determination of income through the process of matching appropriate costs against revenues.

ASC 330-10-35-2 states, in part:

> The cost basis of recording inventory ordinarily achieves the objective of a proper matching of costs and revenues.

Because the cost should be recognized with the related revenue, we believe that it may sometimes be acceptable to defer the cost.

In addition, we believe that in some cases, the asset may no longer be within the scope of ASC 330 once it is deployed in a specific customer contract (i.e., once it is shipped to a customer). At this point, the costs related to the asset could be evaluated as contract fulfillment costs in accordance with ASC 340-40.

If ASC 340-40 is applicable, an entity should consider the three criteria in ASC 340-40-25-5 to determine whether capitalization of the costs is appropriate. Generally, the asset to which the costs are related is physically delivered to the customer as part of a specific contract with that customer; therefore, criterion (a) is met. Further, if the entity expects to recover the costs of the delivered asset through the transaction price, the entity would conclude that criterion (c) is met.

Unlike the evaluations of criteria (a) and (c), respectively, which are relatively straightforward, the evaluation of whether criterion (b) is met (i.e., whether the costs generate or enhance a resource of the entity that the entity will use to satisfy its performance obligation in the future) generally requires more judgment. An entity should consider the following factors to determine whether the asset delivered to the customer generates or enhances a resource of the entity that the entity will use to satisfy its performance obligation in the future (e.g., to provide the ongoing service):

- Is the customer's ability to benefit from the fulfillment activities limited to the use of the entity's service? If the customer cannot benefit from the entity's fulfillment activities other than from the use of the entity's service, the fulfillment costs may be enhancing the entity's resources.
- Do the fulfillment activities expand the entity's service capabilities? If the fulfillment activities are required before the entity can begin transferring services to the customer and they expand the entity's service capacity, the related fulfillment costs would most likely enhance a resource of the entity that the entity will use in satisfying its performance obligation(s) to the customer.

We also believe that the following additional factors are relevant to the determination of whether capitalization of the fulfillment costs is appropriate:

- Does the activity that results in delivery of the asset to the customer factor into the entity's measure of progress toward complete satisfaction of the performance obligation? For example, the entity may demonstrate that the fulfillment costs enhance a resource that will be used to satisfy the entity's performance obligation in the future if the entity does not begin satisfying its performance obligation until the asset is delivered to the customer.
- Does the entity still have some level of control or influence over the asset once the asset is physically delivered to the customer? Although the asset is physically delivered to the customer, the entity may be providing a service that requires the entity to integrate the asset and the service to deliver a combined output (e.g., because the asset and service are highly interdependent or highly interrelated). The entity may conclude that by transferring a combined service to the customer (e.g., a service that the entity delivers by using both hardware and the service), it continues to maintain some level of control or influence over the asset that is being used as an input to deliver a combined output. That is, the entity's service continues to dictate how the customer uses the asset even if the customer has physical possession. This analysis is consistent with the evaluation of whether an entity controls a good or service before the good or service is transferred to an end customer and therefore is a principal, as discussed in ASC 606-10-55-37A(c).

On the basis of the above factors, an entity should evaluate whether the fulfillment costs enhance the entity's resources that the entity will use to satisfy (or continue to satisfy) its performance obligation in the future. If the entity determines that capitalization of the related costs is appropriate in accordance with ASC 340-40-25-5, it should subsequently amortize the costs related to the asset as it transfers the related services.

Because of the level of judgment necessary to evaluate whether capitalization is appropriate — specifically, whether the asset generates or enhances a resource of the entity that the entity will use to satisfy its remaining performance obligation — we would encourage entities with similar types of arrangements to consult with their accounting advisers. Further, it may be appropriate in some cases to evaluate whether the arrangement contains a lease when the performance of the contract relies on a specified asset; see Deloitte's Roadmap *Leases* for more information on determining whether a contract is or contains a lease.

3.2.3.3 Labor Costs Incurred to Fulfill a Contract for Goods or Services When Revenue Is Recognized Over Time

ASC 340-40-25-7 provides guidance on the types of costs that constitute fulfillment costs within the scope of ASC 340-40 if they are outside the scope of other Codification topics. Costs incurred to produce goods for which revenue is recognized at a point in time would typically be treated as inventory costs within the scope of ASC 330. However, costs incurred to provide goods or services for which revenue is recognized over time would typically not be within the scope of ASC 330 since control over those goods or services is transferred to the customer as the entity performs.

Questions have arisen regarding the amounts to be included in fulfillment costs related to labor.

While "salaries and wages of employees who provide the promised services directly to the customer" are the only example of direct labor costs that is cited in ASC 340-40-25-7(a), direct labor costs also include fringe benefits and other labor-related costs incurred in compensating an employee whose primary employment efforts are directly related to a contract with a customer. In addition, ASC 340-40-25-7(c) indicates that fulfillment costs include certain allocated labor costs (i.e., indirect labor costs) related to overhead, such as those incurred for contract management and supervision.

We believe that costs that would have been capitalizable as inventory had they been within the scope of ASC 330 would typically also represent fulfillment costs directly related to a contract in accordance with ASC 340-40. ASC 330-10-30-1 provides the following guidance on determining the amounts to be included in inventory:

> As applied to inventories, cost means in principle the sum of the applicable expenditures and charges directly or indirectly incurred in bringing an article to its existing condition and location. It is understood to mean acquisition and production cost, and its determination involves many considerations.

In authoritative literature, specific references to the composition of labor costs are limited. However, the ASC master glossary's definition of direct loan origination costs includes a reference to ASC 310-20-55, which includes examples of forms of employee compensation that would be considered direct labor costs associated with originating a loan. Although the concepts discussed in the examples are specifically related to direct costs incurred in connection with loan origination activities, we believe that it is appropriate for an entity to consider the implementation guidance in ASC 310-20 by analogy to identify forms of employee compensation that should be included in the composition of labor costs.

The example in ASC 310-20-55-12 states:

> Payroll-related fringe benefits include any costs incurred for employees as part of the total compensation and benefits program. Examples of such benefits include all of the following:
>
> a. Payroll taxes
>
> b. Dental and medical insurance
>
> c. Group life insurance
>
> d. Retirement plans
>
> e. 401(k) plans
>
> f. Stock compensation plans, such as stock options and stock appreciation rights
>
> g. Overtime meal allowances.

Further, ASC 310-20-25-6 states, in part:

> Bonuses are part of an employee's total compensation. The portion of the employee's total compensation that may be deferred as direct loan origination costs is the portion that is directly related to time spent on the activities contemplated in the definition of that term and results in the origination of a loan.

We believe that in a manner consistent with the above guidance, labor costs include base pay, overtime pay, vacation and holiday pay, illness pay, shift differential, payroll taxes, and contributions to a supplemental unemployment benefit plan. Further, other employee benefit costs such as cash bonuses, profit sharing, stock bonus plans, insurance benefits, retirement benefits, and other miscellaneous benefits (both discretionary and nondiscretionary) are among the labor costs that are eligible for inclusion in fulfillment costs directly related to a contract.

3.3 Amortization and Impairment of Contract Costs

3.3.1 Amortization

ASC 340-40 does not provide specific guidance on the method an entity should use to amortize contract costs recognized as assets. Rather, ASC 340-40-35-1 requires an entity to amortize such costs "on a systematic basis that is consistent with the transfer to the customer of the goods or services to which the asset relates." Entities will therefore have to determine an appropriate method for amortizing costs capitalized in accordance with ASC 340-40-25-1 or ASC 340-40-25-5.

Amortization of capitalized costs on a "systematic basis" should take into account the expected timing of transfer of the goods and services related to the asset, which typically corresponds to the period and pattern in which revenue will be recognized in the financial statements. The pattern in which the related revenue is recognized could be significantly front-loaded, back-loaded, or seasonal, and costs should be amortized accordingly.

To determine the pattern of transfer, entities may need to analyze the specific terms of each arrangement. In determining the appropriate amortization method, they should consider all relevant factors, including (1) their experience with, and ability to reasonably estimate, the pattern of transfer and (2) the timing of the transfer of control of the goods or services to the customer. In some situations, more than one amortization method may be acceptable if it reasonably approximates the expected period and pattern of transfer of goods and services. However, certain amortization methods may be unacceptable if they are not expected to reflect the period and pattern of such transfer. When entities select a method, they should apply it consistently to similar contracts. If there is no evidence to suggest that a specific pattern of transfer can be expected, a straight-line amortization method may be appropriate.

If the pattern in which the contractual goods or services are transferred over the contract term varies significantly each period, it may be appropriate to use an amortization model that more closely aligns with the transfer pattern's variations. For example, amortization could be allocated to the periods on the basis of the proportion of the total goods or services that are transferred each period. If the cost is related to goods or services that are transferred at a point in time, the amortized cost would be recognized at the same point in time.

When the contractual goods or services are transferred over a period of uncertain duration, entities should consider whether the relationship with the customer is expected to extend beyond the initial term of a "specific anticipated contract" (as referred to in ASC 340-40-35-1 and described in ASC 340-40-25-5(a)). For example, if an entity enters into a four-year contract with a customer but the customer is expected to renew that contract for two years, the appropriate amortization period may be six years (i.e., the expected duration of the period in which the customer will purchase the related goods or services, which could be the expected life of the customer relationship).

When an entity's customer has been granted a material right to acquire future goods or services and revenue related to the material right is being deferred, it would typically be reasonable for the entity to consider the amount allocated to that right when determining the amortization method for the costs that are capitalized in accordance with ASC 340-40-25-1 or ASC 340-40-25-5.

3.3.1.1 Allocation Among Performance Obligations

When an asset is recognized for the incremental costs of obtaining a contract, ASC 340-40-35-1 requires that asset to be amortized in a manner that is "consistent with the transfer to the customer of the **goods or services to which the asset relates**" (emphasis added). When the pattern of transfer differs for separate performance obligations in a contract, it may be appropriate to allocate the costs among the performance obligations and to amortize the capitalized costs accordingly. For example, the costs could be allocated on the basis of the stand-alone selling prices of the performance obligations.

The FASB staff has noted that an entity could satisfy the requirement in ASC 340-40-35-1 in accordance with either of the following two views:[3]

> (a) View A — Allocate the asset to the individual performance obligations on a relative basis (in proportion to the transaction price allocated to each performance obligation) and amortize the respective portion of the asset based on the pattern of performance for the underlying performance obligation . . . .
>
> (b) View B — Amortize the single asset using one measure of performance considering all of the performance obligations in the contract. Use a measure that best reflects the "use" of the asset as the goods and services are transferred. Note that this approach may result in a similar pattern of amortization as View A, but without any specific allocation of the contract cost asset to individual performance obligations.

Note that an entity is not permitted to apply the practical expedient in ASC 340-40-25-4 (recognizing the "costs of obtaining a contract as an expense when incurred if the amortization period of the asset that the entity otherwise would have recognized is one year or less") to some performance obligations in a contract but not others. Therefore, when the costs of obtaining a contract are allocated to different performance obligations so that they are amortized over different periods, the practical expedient in ASC 340-40-25-4 can only be applied if all of the amortization periods are one year or less.

The example below illustrates an allocation of the costs of obtaining a contract among different performance obligations.

[3] Quoted from Implementation Q&A 75.

Example 3-12

Entity B enters into a contract with a customer to provide the following:

- Product X delivered at a point in time.
- Maintenance of Product X for one year.
- An extended warranty on Product X that covers years 2 and 3 (Product X comes with a one-year statutory warranty).

Each of the elements is determined to be a separate performance obligation.

A sales commission of $200 is earned by the salesperson. This represents $120 for the sale of Product X (payable irrespective of whether the customer purchases the maintenance or extended warranty) and an additional $40 each for the sale of the maintenance contract and the sale of the extended warranty ($80 commission for the sale of both).

The commission is determined to meet the definition of an incremental cost of obtaining the contract in ASC 340-40-25-2 and is therefore capitalized in accordance with ASC 340-40-25-1.

As discussed above, incremental costs of obtaining a contract that are capitalized in accordance with ASC 340-40-25-1 can be allocated to specific performance obligations for amortization purposes. Therefore, it would be acceptable in the circumstances under consideration to attribute the $200 commission asset in the following manner:

- *$120 to Product X* — To be expensed upon delivery of Product X to the customer.
- *$40 to the maintenance contract* — To be expensed over the one-year period of maintenance.
- *$40 to the extended warranty* — To be expensed over the two-year period of the warranty (i.e., years 2 and 3).

The asset will therefore be amortized as follows:

	Delivery (Day 1)	Year 1	Year 2	Year 3
Product X	$ 120			
Maintenance	—	$ 40		
Extended warranty	—	—	$ 20	$ 20
Total amortization expense	$ 120	$ 40	$ 20	$ 20

Note that in this fact pattern, the entity cannot apply the practical expedient in ASC 340-40-25-4 to expense the sales commission when incurred because the total amortization period for the asset exceeds one year. Neither can the expedient be applied specifically to the commission allocated to the maintenance contract (notwithstanding that it is amortized over a period of one year) because if the practical expedient is applied, it must be applied to the contract as a whole.

3.3.1.2 Determining the Amortization Period of an Asset Recognized for the Incremental Costs of Obtaining a Contract With a Customer

Stakeholders have raised questions about determining the amortization period of an asset recognized for the incurred incremental costs of obtaining a contract with a customer, including how to determine whether a commission paid on renewal is commensurate with an initial commission and under what circumstances it would be appropriate to amortize the asset over the expected customer life. The FASB staff has noted that the amortization guidance in ASC 340-40 is conceptually consistent with that on estimating the useful lives of long-lived assets. Since entities already use judgment to estimate useful lives of long-lived assets, the staff believes that entities would also do so in determining amortization periods for assets related to incremental costs of obtaining a contract.

An entity should use judgment in determining the contract(s) to which a commission is related. The staff has noted that if an entity pays a commission on the basis of only the initial contract without an expectation that the contract will be renewed (given the entity's past experience or other relevant information), amortizing the asset over the initial contract term would be an appropriate application of the revenue standard. However, if the entity's past experience indicates that a contract renewal is likely, the amortization period could be longer than the initial contract term if the asset is related to goods or services to be provided during the contract renewal term.

When estimating the amortization period of an asset arising from incremental costs of obtaining a contract, entities should (1) identify the contract(s) to which the cost (i.e., commission) is related, (2) determine whether the commission on a renewal contract is commensurate with the commission on the initial contract, and (3) evaluate the facts and circumstances to determine an appropriate amortization period that would extend beyond the contract period if there are anticipated renewals associated with the costs of obtaining the contract.

The FASB staff has confirmed that the amortization period of an asset recognized for the incremental incurred costs of obtaining a contract might be, but should not be presumed to be, the entire customer life. The staff has suggested that facts and circumstances may clearly indicate that amortizing the asset over the average customer term is inconsistent with the amortization guidance in ASC 340-40-35-1. An entity should use judgment in assessing the goods or services to which the asset is related.

In estimating the amortization period for an asset recognized in accordance with ASC 340-40-25-1 ("customer acquisition asset"), an entity will need to use judgment to identify "the goods or services to which the asset relates." The estimated amortization period could range from the initial contract term on the low end to the average customer life on the high end depending on the specific facts and circumstances. When determining the life of the customer acquisition asset, the entity will need to make judgments similar to those it makes when determining the amortization or depreciation period for other long-lived assets.

An entity should first identify the contract(s) related to the customer acquisition asset (e.g., commission payment). That is, an entity will need to consider whether the asset is related only to the initial contract with the customer or also to specific anticipated contracts (e.g., renewals) with the customer. For example, if a commission is paid on contract renewals and the commission is commensurate with the initial commission paid, the customer acquisition asset originally recorded may be related only to the initial contract.

However, if an entity's past experience indicates that a contract renewal is likely, the amortization period could be longer than the initial contract term if the asset is related to goods or services to be provided under a contract renewal. An entity will need to use judgment to determine whether the asset is related to goods or services to be provided under the contract renewal term. Amortizing an asset over a period longer than the initial contract period would not be appropriate when the entity pays a commission on a contract renewal that is commensurate with the commission paid on the initial contract.

If no commissions are incurred in connection with a contract renewal, or if the commission paid is not commensurate with the initial commission, an entity will need to use judgment when determining whether the customer acquisition asset is related to (1) all future contracts with the customer (i.e., the customer life) or (2) one or more, but not all, future contracts with the customer. The revenue standard does not require an entity to amortize a customer acquisition asset over the expected customer life. Rather, the asset should "be amortized on a systematic basis that is consistent with the transfer to the customer of the goods or service to which the asset relates." An entity will need to determine the appropriate amortization period on the basis of all relevant facts and circumstances.

Since the capitalized asset is similar to an intangible asset, an entity might consider the guidance in ASC 350-30 on determining the useful life of intangible assets. Specifically, ASC 350-30-35-3 states, in part:

> The estimate of the useful life of an intangible asset to an entity shall be based on an analysis of all pertinent factors, in particular, all of the following factors with no one factor being more presumptive than the other: . . .
>
> f. The level of maintenance expenditures required to obtain the expected future cash flows from the asset (for example, a material level of required maintenance in relation to the carrying amount of the asset may suggest a very limited useful life). As in determining the useful life of depreciable tangible assets, regular maintenance may be assumed but enhancements may not.

Entities may perform various activities geared toward maintaining customer relationships. In some instances, there may be significant barriers to a customer's changing service providers or suppliers so that once a contractual relationship is formed between an entity and a customer, little effort may be needed for the entity to retain the customer. However, in other circumstances, entities may operate in a highly competitive environment in which there are only limited barriers, if any, to a customer's switching service providers or suppliers. In these circumstances, entities may need to make additional investments or incur other costs to maintain customer relationships (e.g., invest in innovative products or services, or provide customer incentives). The additional investments may be akin to "maintenance expenditures" that may affect the useful life of a customer acquisition asset.

While an entity will need to use judgment to determine the amortization period of the customer acquisition asset, the entity might consider the following factors:

- *Incremental costs of obtaining a sale (e.g., commissions) relative to ongoing contract value* — A small commission relative to the value of the contract could suggest that the customer acquisition asset has limited value and that the asset life is relatively short. In contrast, a higher commission payment relative to the contract value (1) could suggest that the entity believes the asset to be of greater value or (2) may be related to anticipated contracts with the customer.
- *Degree of difficulty in switching service providers or suppliers* — If it is difficult for a customer to switch service providers or suppliers, the customer acquisition asset may have a longer life. Accordingly, the entity may expect that the efforts it performed to acquire the customer will provide it with value over a longer period (i.e., over some or all contract renewals). In contrast, if there are only limited barriers to a customer's switching service providers or suppliers (and there are other service providers or suppliers available to the customer), the customer acquisition asset may have a shorter life.
- *Extent to which the product or service changes over the customer life* — Significant changes in the underlying product or service over the customer life may suggest that the life of the customer acquisition asset is shorter than the customer life. That is, the asset may be related to some, but not all, anticipated contracts with the customer. For example, if a customer's decision about whether to renew a contract is influenced by enhancements made to products or services, the activities required to initially obtain the customer may not be related to all anticipated contract renewals with the customer. In contrast, if the same service or product is provided in each renewal period, the customer acquisition asset may be attributed to all anticipated contract renewals.
- *Other customer maintenance activities* — If the entity incurs significant costs (relative to the initial incremental cost incurred) to maintain a customer relationship, the useful life of the customer acquisition asset could be short. However, if only limited costs are required to maintain a customer relationship, the useful life of the customer acquisition asset could extend to all anticipated contracts with the customer (i.e., the customer life). Fulfillment costs would not be considered customer maintenance costs. Only costs that are incremental to transferring the specified goods or services to the customer should be evaluated as maintenance costs.

The above factors are not all-inclusive, and none of them are determinative. Accordingly, an entity should consider all relevant facts and circumstances when determining the amortization period for customer acquisition assets. In addition, an entity should adequately disclose the method it uses to determine the amortization for each reporting period in accordance with ASC 340-40-50-2(b).

3.3.1.2.1 Specific Anticipated Contract Not Limited to Contract Renewals

The reference to a "specific anticipated contract" in ASC 340-40-35-1 is **not** limited to contract renewals. Although the guidance in ASC 340-40-35-1 will often be relevant in the context of contract renewals, it is not limited to contract renewals for purposes of determining the amortization period for capitalized incremental costs incurred to obtain a contract.

For example, an entity may incur incremental costs of obtaining a contract to deliver one part of an overall project for a customer. The entity may have been informed that if it successfully fulfills its performance obligations under the initial contract, the customer will award the entity an additional contract to deliver other parts of the project. If the entity will not incur any further incremental costs to obtain the additional contract, it may be appropriate to regard the additional contract as a "specific anticipated contract" under ASC 340-40-35-1.

3.3.1.2.2 Evaluating Whether Commissions Paid on a Contract Renewal Are Commensurate With Commissions Paid on the Initial Contract

Paragraph BC309 of ASU 2014-09 states that amortization of an asset over a period longer than the initial contract period would not be appropriate when a commission paid on a contract renewal is commensurate with the commission paid on the initial contract.

The FASB staff has confirmed that when commissions are paid on contract renewals, an entity should evaluate whether the commission on renewal is commensurate with the initial commission by considering the amount of the commissions relative to the contracts' value. It has specifically noted that "assessing whether a renewal commission is commensurate with an initial commission solely on the basis of the level of effort to obtain the contract would not be consistent with the guidance in Subtopic 340-40."[4]

In addition, the FASB staff has clarified that it holds the following views[5] irrespective of the relative level of effort involved with obtaining the original contract and the renewal contract:

- "[I]n general, it would be reasonable for an entity to conclude that a renewal commission is 'commensurate with' an initial commission if the two commissions are reasonably proportional to the respective contract value (for example, 5% of the contract value is paid for both the initial and the renewal contract)."
- "Similarly, [it] would be reasonable for an entity to conclude that a renewal commission is not 'commensurate with' an initial commission if it is disproportionate to the initial commission (for example, 2% renewal commission as compared to a 6% initial contract commission)."

[4] Quoted from Implementation Q&A 72.
[5] See footnote 4.

3.3.1.2.3 Determining the Appropriate Amortization Period of Commissions When a Commission Paid Upon Renewal Is Not Commensurate With the Initial Commission

Stakeholders have also raised questions about the appropriate amortization period for a commission paid to an employee for obtaining an initial contract that has a high likelihood of renewal. That is, should the commission be amortized over the initial contract term, or should the amortization period include the expected renewal period? The amortization period will depend on many factors, including whether a commission is paid on contract renewals and, if so, whether the commission paid is commensurate with the initial commission.

Example 3-13

Entity X enters into a two-year contract with a customer. On signing the initial contract, X pays its salesperson $200 for obtaining the contract. An additional commission of $120 is paid each time the customer renews the contract for another two years. Assume that the $120 renewal commission is not commensurate with the $200 initial commission, which means that some of the commission paid for the initial contract should be attributed to the contract renewal as well. On the basis of historical experience, 98 percent of X's customers are expected to renew their contract for at least two more years (i.e., the contract renewal is a specific anticipated contract), and the average customer life is four years.

In this example, we believe that there are at least two acceptable approaches to amortizing the initial $200 commission and the $120 renewal commission:

- *Approach 1* — Amortize the initial commission amount of $200 over the contract period that includes the anticipated renewal (i.e., four years). When the contract is renewed, the additional $120 commission would be combined with the remaining asset and amortized over the remaining two-year period, as shown in the following table:

	Initial Contract		Renewal Contract		
	Year 1	Year 2	Year 3	Year 4	Total
Initial commission	$ 50	$ 50	$ 50	$ 50	$ 200
Renewal commission			60	60	120
Total expense recognized	$ 50	$ 50	$ 110	$ 110	$ 320

- *Approach 2* — Bifurcate the initial commission into two parts: (1) $120, the amount that is commensurate with the renewal commission and that pertains to obtaining a two-year contract, and (2) $80, the amount that is considered to be paid for obtaining the initial contract plus the anticipated renewal (i.e., the customer relationship). The $120 would then be amortized over the initial two-year contract term, and the $80 would be amortized over the entire four-year period, as shown in the following table:

	Initial Contract		Renewal Contract		
	Year 1	Year 2	Year 3	Year 4	Total
Initial commission — Part 1 ($120)	$ 60	$ 60			$ 120
Initial commission — Part 2 ($80 remainder)	20	20	$ 20	$ 20	80
Renewal commission			60	60	120
Total expense recognized	$ 80	$ 80	$ 80	$ 80	$ 320

As noted in the example above, we believe that there are multiple acceptable approaches to amortizing costs of obtaining contract assets when commissions paid upon renewal are not commensurate with the initial commission paid. The example below illustrates how the alternatives may be applied when a good or service is transferred at the inception of an arrangement and another good or service is transferred over time.

Example 3-14

Company A enters into a software arrangement with a customer in exchange for consideration of $1,300. Under the arrangement, A provides a software license ($1,000) and three years of PCS ($100 per year). In addition, the arrangement includes two years of optional PCS renewals for which the customer is able to renew at $100 per year. At contract inception, A expects that the customer will renew the PCS for both years. The corresponding commission rates for the software license and PCS (including renewals) are as follows:

Goods and Services	Price	Commission Rate		Commission
Software license	$ 1,000	10%		$ 100
Year 1 PCS	100	10%		10
Year 2 PCS	100	5%		5
Year 3 PCS	100	5%		5
Initial contract value	1,300		Initial commission	120
Year 4 PCS (expected)	100	1%		1
Year 5 PCS (expected)	100	1%		1
Total value	1,500		Total commission	$ 122
Initial contract commission	120			
Total consideration	1,500			
Percentage 1	8.0%			
Total commission	122			
Total consideration	$ 1,500			
Percentage 2	8.1%			

For purposes of this example, assume that revenue is recognized as follows:

	Year 1	Year 2	Year 3	Year 4	Year 5
Software license	$ 1,000				
PCS	100	$ 100	$ 100	$ 100	$ 100
Total revenue	$ 1,100	$ 100	$ 100	$ 100	$ 100

Example 3-14 (continued)

As illustrated above, the commission paid upon PCS renewal in years 4 and 5 is not commensurate with the commission paid on PCS in the initial contract; therefore, the initial commission is related to both the original contract and the renewal periods. We believe that in this example, there are at least two acceptable approaches to amortizing the initial $120 commission and the $2 renewal commission:

- *Approach 1* — Amortize the initial commission amount of $120 proportionately over the contract period that includes the anticipated renewals (e.g., five years) by multiplying the annual revenue amount in each year by Percentage 1. The incremental commission from years 4 and 5 would be amortized over the remaining two-year period, as shown in the following table:

	Initial Contract		Renewal Contract			
	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Initial commission	$ 88	$ 8	$ 8	$ 8	$ 8	$ 120
Renewal commission				1	1	2
Total expense recognized	$ 88	$ 8	$ 8	$ 9	$ 9	$ 122

- *Approach 2* — Amortize the total expected commission amount of $122 over the contract period that includes the anticipated renewals (e.g., five years) by multiplying the annual revenue amount by Percentage 2, as shown in the following table:

	Initial Contract		Renewal Contract			
	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Total commission	$ 90	$ 8	$ 8	$ 8	$ 8	$ 122
Total expense recognized	$ 90	$ 8	$ 8	$ 8	$ 8	$ 122

3.3.1.3 Accounting for Unamortized Contract Costs Upon Modification

ASC 606-10-25-13(a) provides that when specified criteria are met, an entity should account for a contract modification "as if it were a termination of the existing contract, and the creation of a new contract." Although the contract modification is accounted for as *if* it were a termination of the existing contract and the creation of a new contract, the original contract was not in fact terminated. Therefore, any unamortized contract costs that existed immediately before the contract modification should not be written off unless those costs are no longer **related** to the remaining goods or services. Rather, those unamortized contract costs should be carried forward into the new contract and amortized on a systematic and rational basis that is consistent with the transfer of goods or services related to the asset.

An entity will need to use judgment when determining which remaining goods or services to be transferred under the modified contract are related to the asset. Further, the entity should consider whether the asset is impaired by applying the guidance in ASC 340-40-35-3 through 35-5.

3.3.2 Impairment

ASC 340-40

35-3 An entity shall recognize an impairment loss in profit or loss to the extent that the carrying amount of an asset recognized in accordance with paragraph 340-40-25-1 or 340-40-25-5 exceeds:

a. The amount of consideration that the entity expects to receive in the future and that the entity has received but has not recognized as revenue, in exchange for the goods or services to which the asset relates ("the consideration"), less
b. The costs that relate directly to providing those goods or services and that have not been recognized as expenses (see paragraphs 340-40-25-2 and 340-40-25-7).

35-4 For the purposes of applying paragraph 340-40-35-3 to determine the consideration, an entity shall use the principles for determining the transaction price (except for the guidance in paragraphs 606-10-32-11 through 32-13 on constraining estimates of variable consideration) and adjust that amount to reflect the effects of the customer's credit risk. When determining the consideration for the purposes of paragraph 340-40-35-3, an entity also shall consider expected contract renewals and extensions (with the same customer).

35-5 Before an entity recognizes an impairment loss for an asset recognized in accordance with paragraph 340-40-25-1 or 340-40-25-5, the entity shall recognize any impairment loss for assets related to the contract that are recognized in accordance with another Topic other than Topic 340 on other assets and deferred costs, Topic 350 on goodwill and other intangible assets, or Topic 360 on property, plant, and equipment (for example, Topic 330 on inventory and Subtopic 985-20 on costs of software to be sold, leased, or otherwise marketed). After applying the impairment test in paragraph 340-40-35-3, an entity shall include the resulting carrying amount of the asset recognized in accordance with paragraph 340-40-25-1 or 340-40-25-5 in the carrying amount of the asset group or reporting unit to which it belongs for the purpose of applying the guidance in Topics 360 and 350.

35-6 An entity shall not recognize a reversal of an impairment loss previously recognized.

The objective of impairment is to determine whether the carrying amount of the contract acquisition and fulfillment costs asset is recoverable. This is consistent with other impairment methods under U.S. GAAP that include an assessment of customer credit risk and expectations of whether variable consideration will be received.

Further, the FASB decided that it would not be appropriate to reverse an impairment charge when the reasons for impairment are no longer present.

To test a contract cost asset for impairment, an entity must consider the total period over which it expects to receive an economic benefit from the asset. Accordingly, to estimate the amount of remaining consideration that it expects to receive, the entity would also need to consider goods or services under a specific anticipated contract (e.g., a contract renewal).

The FASB issued ASU 2016-20, which includes certain technical corrections that amend ASC 340-40 to clarify that for impairment testing, an entity should:

- Consider contract renewals and extensions when measuring the remaining amount of consideration the entity expects to receive.
- Include in the amount of consideration the entity expects to receive both (1) the amount of cash expected to be received and (2) the amount of cash already received but not yet recognized as revenue.

- Test for and recognize impairment in the following order: (1) assets outside the scope of ASC 340-40 (such as inventory under ASC 330), (2) assets accounted for under ASC 340-40, and (3) reporting units and asset groups under ASC 350 and ASC 360.

3.4 Onerous Performance Obligations

Guidance on accounting for certain types of onerous contracts is included within U.S. GAAP. A contract is considered onerous if the aggregate cost required to fulfill the contract is greater than the expected economic benefit to be obtained from the contract. When this condition is met, the guidance may require an entity to recognize the expected future loss before actually incurring the loss.

As indicated in ASC 605-10-05-4, existing guidance under U.S. GAAP addresses the recognition of losses on the following specific transactions (not all-inclusive):

- Separately priced extended warranty and product maintenance contracts (ASC 605-20).
- Construction- and production-type contracts (ASC 605-35).
- Certain software arrangements (ASC 985-605).

In addition, ASC 450-20 provides overall guidance on accounting for loss contingencies. Such guidance requires an entity to recognize an expected loss if the contingency is probable and the amount is reliably estimable. Further, ASC 330-10-35-17 and 35-18 provide guidance on the recognition of losses on firm purchase commitments related to inventory.

The FASB decided not to include specific guidance on accounting for onerous contracts in the revenue standard, but rather to retain existing onerous contract guidance. Consequently, contracts within the scope of the guidance referred to above may need to be evaluated as onerous contracts.

3.4.1 Separately Priced Extended Warranty and Product Maintenance Contracts

The guidance in ASC 605-20 on recognizing losses on separately priced extended warranty and product maintenance contracts may be applicable to technology entities that provide maintenance for hardware products in contracts accounted for under ASC 606. Specifically, ASC 605-20-25-6 states the following:

ASC 605-20

25-6 A loss shall be recognized on extended warranty or product maintenance contracts if the sum of the expected costs of providing services under the contracts and any asset recognized for the incremental cost of obtaining a contract exceeds the related unearned revenue (contract liability). Extended warranty or product maintenance contracts shall be grouped in a consistent manner to determine if a loss exists. A loss shall be recognized first by charging to expense any recognized asset for the incremental costs of obtaining a contract, determined in accordance with the guidance in paragraphs 340-40-25-1 through 25-4 for contracts within scope of Topic 606 on revenue from contracts with customers. If the loss is greater than the recognized asset for the incremental costs of obtaining a contract, a liability shall be recognized for the excess.

3.4.2 Construction- and Production-Type Contracts

Technology entities may enter into revenue contracts to sell customized software products that are subject to the guidance in ASC 605-35. The existing guidance in ASC 605-35-25 on provision for loss contracts was retained; however, the technical corrections of ASU 2016-20 include an update to ASC 605-35-25 that allows an entity to determine the provision for losses on contracts within the scope of ASC 605-35 at the performance obligation level or the contract level as an accounting policy election.

3.4.3 Certain Software Arrangements

Software arrangements subject to the guidance in ASC 985-605 may require a loss provision. Specifically, ASC 985-605-25-7 states the following:

ASC 985-605
25-7 If it becomes probable that the amount of the transaction price allocated to an unsatisfied or partially unsatisfied performance obligation in accordance with Topic 606 on revenue from contracts with customers will result in a loss on that performance obligation, the loss shall be recognized pursuant to Topic 450.

3.5 SEC Comment Letter Trends

The SEC staff frequently comments on the accounting for and disclosure of contract costs, including (1) the determination of whether commissions costs should be capitalized or expensed, (2) the method being used to amortize capitalized costs, (3) how the selected amortization period correlates with the period of benefit, and (4) whether the practical expedient to expense sales commissions was applied.

For example, the SEC staff may question the nature of any employee service requirement when sales commissions are expensed. In addition, when sales commissions are paid upon renewal of a contract, the SEC staff may question whether commissions paid upon renewal are commensurate with initial commissions and how the renewals are considered in the amortization period.

For more information, see Sections 2.18.3 and 6.5.1.2 of Deloitte's Roadmap *SEC Comment Letter Considerations, Including Industry Insights*.

Chapter 4 — Software and Software-Related Costs

4.1 Background

As technology evolves, entities typically incur myriad costs related to software. For example, cloud-based arrangements have revolutionized the business and technology landscape, offering more flexible and often lower-cost IT solutions that allow businesses to outsource their traditional enterprise resource planning (ERP) systems or any other on-site application to an off-site, on-demand solution. In addition, an increasing number of processes are managed by using automated solutions, such as CRM, human resources, payroll, finance, and collaboration and communication tools. This has resulted in entities' incurring increasing amounts of software-related costs as they either purchase licenses to on-premise software products or contract with vendors to access and use software solutions over the Internet (e.g., cloud computing or SaaS). Entities also frequently use hybrid deployments, in which they purchase or develop on-premise software (some of which may be deployed in a private cloud environment) and use that software in conjunction with another cloud-based third-party platform (i.e., a public cloud). Further, entities may incur costs to develop software for their own internal use as well as for external sales to customers. Entities incurring such costs will need to determine whether they represent assets that can be capitalized under the applicable accounting standards. Different accounting guidance exists for costs related to software that is (1) sold, leased, or marketed; (2) obtained or developed for internal use; and (3) accessed in a cloud-based (or hosting) arrangement that is a service contract.

It is important to determine whether software costs incurred are within the scope of ASC 985-20 or ASC 350-40 because the requirements for capitalization vary significantly between the two standards. For example, ASC 985-20-25-1 states, in part, that "[a]ll costs incurred to establish the technological feasibility of a computer software product to be sold, leased, or otherwise marketed are research and development costs." Once technological feasibility is established, the costs of producing product masters, including coding and testing, are generally capitalized until the product is available for general use.[1] Because technological feasibility is often established shortly before the software product reaches the general availability stage, many software entities do not have material costs capitalized under ASC 985-20.

By contrast, ASC 350-40 does not require the establishment of technological feasibility for capitalization but does have other requirements for capitalization depending on the stage of development. Generally, development costs incurred during the application development stage are capitalized, while costs incurred during the preliminary-project and post-implementation-operation stages are expensed as incurred. Costs incurred for internal-use software will typically meet the capitalization requirements earlier in the development cycle than costs incurred for software licensed externally. As a result, more costs typically qualify for capitalization when software is obtained or developed for internal use than those for software that is licensed externally. Further, ASC 350-40 also applies to implementation

[1] Production costs for software that is to be used as an integral part of a product or process cannot be capitalized until both (1) technological feasibility has been established and (2) all R&D activities for the other components of the product or process have been completed.

costs incurred for cloud-based (or hosting) arrangements that are service contracts. Generally, implementation costs incurred for such arrangements during the application development stage are deferred, while other costs (e.g., cloud computing and hosting costs) are expensed as incurred (unless they are related to other capitalizable assets such as hardware and on-premise software). Within ASC 350-40, guidance differs for cloud-based (or hosting) arrangements versus internal-use software (e.g., only implementation costs for cloud-based [or hosting] arrangements are eligible for deferral, and there are different presentation requirements).

Because of the above differences in capitalization requirements, the application of the incorrect guidance could have material accounting implications. In addition, complexities may arise when entities evaluate the appropriate scope as technology evolves and business models shift. For example, entities may transition from using software solutions internally to selling and marketing them. Similarly, entities may shift their business model from selling on-premise licensed solutions to SaaS arrangements. It is therefore important to understand the scope guidance and regularly reassess previous scope conclusions in a dynamic environment.

4.2 Scope Considerations

4.2.1 On-Premise Licensed Software

ASC 985-20-15-2 states that ASC 985-20 applies to the costs of "computer software to be sold, leased, or otherwise marketed as a separate product or as part of a product or process, whether internally developed and produced or purchased." Typically, software within the scope of ASC 985-20 is licensed on a nonexclusive on-premise basis, either as a perpetual or term-based (i.e., subscription-based) license, with the sale of such software accounted for under ASC 606.

In assessing how software development costs should be accounted for, entities must determine whether there is a substantive plan to market the software externally or whether one will be created during the software's development period. If either is the case, the software development costs will be subject to ASC 985-20 (see Section 4.2.2.2).

Connecting the Dots

Some on-premise software applications, such as mobile applications (apps), may not be licensed for consideration. In those circumstances, an entity must carefully evaluate whether the software is considered "sold, leased, or otherwise marketed as a separate product or as part of a product or process" under ASC 985-20. For example, an entity may sell gaming apps for consideration, and such apps would therefore be within the scope of ASC 985-20. However, gaming apps may also be offered on a "freemium" basis, with in-app sales (e.g., consideration paid to play a game without viewing ads or for virtual items that enhance the gaming experience). Even though a gaming app itself is free for download, we believe that it would still be considered "marketed as a separate product," particularly since there could be in-app sales for consideration. Further, apps may be sold as part of a product or process (see Section 4.2.1.2). For example, a thin-client app may be sold as part of a cloud-based service, but if its sole function is to enable connection to the cloud-based service, it may not be substantive enough to be considered "sold, leased, or otherwise marketed." Therefore, an entity may need to use judgment to determine whether apps that are free for download or part of a product or process are within the scope of ASC 985-20. If they are not within the scope of ASC 985-20, they could be within the scope of ASC 350-40 (see Section 4.2.2).

4.2.1.1 Software Product

A software product is defined by ASC 985-20-55-1 as having the following qualities:

- "As a product, it is complete and has exchange value."
- "As software, it is a set of programs that interact with each other. A program is further defined as a series of instructions or statements that cause a computer to do work."

A software product is a set of programs (e.g., software code) that has been packaged in such a way that it can be marketed to third parties. The software product may be sold to either end users or distributors. A software product also consists of the appropriate documentation and training materials. Determining whether a set of programs consists of a single software product or multiple software products requires judgment since ASC 985-20 does not provide specific guidance on the unit of accounting.

When determining separate software products, an entity should consider how programs are marketed. A set of programs that is separately priced and marketed would most likely be treated as a separate software product. For example, programs may be packaged and priced differently depending on the market (e.g., different geographic areas or industries). In that circumstance, each set of packaged programs may be a separate software product, with costs identified and allocated through the use of a reasonable method.

An entity could also consider the functionality and interdependence of its programs. For example, two sets of technically independent programs, for which costs can be separately identified and a basis for allocating revenue can be established, may be two separate software products. A set of programs is technically independent if other programs are not essential to the set's functionality. Therefore, the entity might be able to market that set as a separate software product because customers will be able to effectively use it without any other programs. By contrast, sets of programs that are technically interdependent may not be marketed separately. For example, if a set of programs has been developed but has no stand-alone functionality without the development of additional programs, it most likely would not be a separate software product.

A newly developed set of programs could be combined with an existing separate software product if it is integrated with and intended to replace that product. In addition, modules or add-ons with different features and functions can be developed for an existing separate software product. If a set of programs associated with a module or add-on is separately priced, it may be treated as its own separate software product. However, if that set of programs is not priced separately and revenue cannot be reasonably allocated to it, it should be treated as part of the existing software product.

A software product can either be developed by an entity's own employees or by third parties. A developer also can acquire an existing software product from a third party. Because there is no specific ownership requirement in ASC 985-20, an entity may obtain the marketing rights to licensed software (e.g., as a reseller or distributor), and the amount paid to obtain those rights would be a cost of a separate software product (or part of another software product) as though the entity had acquired or developed the program itself (i.e., as though it owned the IP outright).

4.2.1.2 Software That Is Part of a Product or Process

While software often is sold as a product that has stand-alone functionality (e.g., software used to process tax returns), software may also be embedded as part of another product that is sold, such as firmware that is embedded in smart devices (e.g., smartphones, tablets, gaming consoles, and other devices associated with the IoT).

Further, software could be sold as part of a process. While not specifically defined in ASC 985-20, a process is described in ASC 730-10-15-3 as "a system whose output is to be sold, leased, or otherwise marketed to others. A process also may be used internally as a part of a manufacturing activity or a service activity where the service itself is marketed." Therefore, if on-premise software is sold as part of a service, it would be subject to ASC 985-20. For example, an entity could sell a customer on-premise payroll software that enables the entity to provide payroll and tax services to that customer (i.e., the customer uses the on-premise software in connection with the payroll and tax services it receives from the entity).

Connecting the Dots

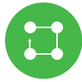
Determining whether software is sold as part of a product or process could require judgment. If software is used in the design, development, or manufacturing of a separate product or service, the software would not be within the scope of ASC 985-20 unless that software is included in the product or service sold. For example, if software is used to produce an architectural blueprint but only the output associated with the blueprint is sold to a customer, that software would not be within the scope of ASC 985-20. On the other hand, if the software is also provided with the architectural blueprint sold to the customer so that the customer can modify the architectural blueprint, that software would be within the scope of ASC 985-20.

4.2.1.3 Software Sold as Part of a Hosting Arrangement

Sometimes, software may be sold as part of a hosting arrangement,[2] such as SaaS that is accessed via an online portal. If so, the software is subject to ASC 985-20 only if both of the following criteria in ASC 985-20-15-5 are met:

a. The customer has the contractual right to take possession of the software at any time during the hosting period without significant penalty.

b. It is feasible for the customer to either run the software on its own hardware or contract with another party unrelated to the vendor to host the software.



Connecting the Dots

Some may question whether "at any time" during the hosting period means *at every point of time* during the hosting period. We do not believe that to be the case. For example, an entity's arrangements may specify that the customer will automatically obtain the software at the end of the hosting period. As long as the customer can take possession of the software at that point without significant penalty and it is feasible for the customer to run the software (either on its own or with a third-party vendor), we believe that the software license is a separate promise in the hosting arrangement and would therefore be subject to ASC 985-20.

If the above criteria are met, an entity (i.e., the vendor) would account for only the software costs under ASC 985-20. It would account for costs associated with hosting the software separately under other U.S. GAAP. For example, if the entity purchases servers to provide the hosting service, it would account for those servers as long-lived assets under ASC 360.

ASC 985-20-15-6 states that in determining whether the customer has the contractual right to take possession of the software without significant penalty, the entity must evaluate whether the customer is able to (1) "take delivery of the software without incurring significant cost" and (2) "use the software separately without a significant diminution in utility or value." This analysis depends on the facts and

2 A hosting arrangement is defined in the ASC master glossary as being "[i]n connection with accessing and using software products, an arrangement in which the customer of the software does not currently have possession of the software; rather, the customer accesses and uses the software on an as-needed basis."

circumstances of the arrangement and requires judgment. The entity may consider the following factors (not all-inclusive) in making this assessment:

- Contractual cancellation fees associated with the hosting arrangement.
- Other contractual penalties for taking possession of the software (e.g., the requirement that the customer continue to pay the hosting fees for the remainder of the hosting term even though hosting services are terminated).
- Costs to transition the software to the customer (to be used on the customer's own servers) or to the customer's third-party vendor (to be hosted by that vendor).
- Whether the utility and value of the software can be maintained upon transition (e.g., whether the customer will continue to receive updates, upgrades, and enhancements).
- Whether the software (1) has stand-alone functionality (on its own or with readily available resources) or (2) is significantly tied to other products or services that can be provided only by the entity and will no longer be provided if the customer takes possession of the software.

Determining whether a penalty or diminution in utility or value is "significant" also depends on the facts and circumstances of the arrangement and requires judgment. Significance can be evaluated both quantitatively and qualitatively. The accounting literature does not contain specific guidance on (1) which elements of the contract should be included in the measurement of the amount of the penalty or (2) the benchmark against which the entity should measure the amount of the penalty when determining whether the penalty is quantitatively significant. An entity may have an established policy for determining whether the penalty is significant. For example, in a manner consistent with other Codification subtopics, the entity may reasonably conclude that amounts above 10 percent of a given benchmark are significant. Establishing a method of determining both the elements of the contract to include in the measurement of the penalty and the benchmark against which to measure the penalty is an accounting policy decision that the entity should apply consistently.

If the criteria in ASC 985-20-15-5 are not met (i.e., the customer does not receive on-premise software), the entity accounts for the software costs under ASC 350-40 as internal-use software. However, the entity must evaluate all its arrangements. If it has other substantive arrangements in which the same software is sold, leased, or marketed (i.e., sold as on-premise software), the entity must account for the software costs under ASC 985-20 (see Section 4.2.3).

4.2.2 Internal-Use Software

ASC 350-40-15-2A describes internal-use software as having both of the following characteristics:

a. The software is acquired, internally developed, or modified solely to meet the entity's internal needs.

b. During the software's development or modification, no substantive plan exists or is being developed to market the software externally.

ASC 350-40-55-1 and 55-2 contain the following examples of fact patterns in which software is for internal use or not for internal use:

ASC 350-40

55-1 The following is a list of examples illustrating when computer software is for internal use:

a. A manufacturing entity purchases robots and customizes the software that the robots use to function. The robots are used in a manufacturing process that results in finished goods.
b. An entity develops software that helps it improve its cash management, which may allow the entity to earn more revenue.
c. An entity purchases or develops software to process payroll, accounts payable, and accounts receivable.
d. An entity purchases software related to the installation of an online system used to keep membership data.
e. A travel agency purchases a software system to price vacation packages and obtain airfares.
f. A bank develops software that allows a customer to withdraw cash, inquire about balances, make loan payments, and execute wire transfers.
g. A mortgage loan servicing entity develops or purchases computer software to enhance the speed of services provided to customers.
h. A telecommunications entity develops software to run its switches that are necessary for various telephone services such as voice mail and call forwarding.
i. An entity is in the process of developing an accounts receivable system. The software specifications meet the entity's internal needs and the entity did not have a marketing plan before or during the development of the software. In addition, the entity has not sold any of its internal-use software in the past. Two years after completion of the project, the entity decided to market the product to recoup some or all of its costs.
j. A broker-dealer entity develops a software database and charges for financial information distributed through the database.
k. An entity develops software to be used to create components of music videos (for example, the software used to blend and change the faces of models in music videos). The entity then sells the final music videos, which do not contain the software, to another entity.
l. An entity purchases software to computerize a manual catalog and then sells the manual catalog to the public.
m. A law firm develops an intranet research tool that allows firm members to locate and search the firm's databases for information relevant to their cases. The system provides users with the ability to print cases, search for related topics, and annotate their personal copies of the database.

ASC 350-40 (continued)

55-2 The following list provides examples of computer software that is not for internal use:

a. An entity sells software required to operate its products, such as robots, electronic game systems, video cassette recorders, automobiles, voice-mail systems, satellites, and cash registers.
b. A pharmaceutical entity buys machines and writes all of the software that allows the machines to function. The pharmaceutical entity then sells the machines, which help control the dispensation of medication to patients and help control inventory, to hospitals.
c. A semiconductor entity develops software embedded in a microcomputer chip used in automobile electronic systems.
d. An entity purchases software to computerize a manual catalog and then sells the computer version and the related software to the public.
e. A software entity develops an operating system for sale and for internal use. Though the specifications of the software meet the entity's internal needs, the entity had a marketing plan before the project was complete. In addition, the entity has a history of selling software that it also uses internally and the plan has a reasonable possibility of being implemented.
f. An entity is developing software for a point-of-sale system. The system is for internal use; however, a marketing plan is being developed concurrently with the software development. The plan has a reasonable possibility of being implemented.
g. A telecommunications entity purchases computer software to be used in research and development activities.
h. An entity incurs costs to develop computer software for another entity under a contract with that other entity.

In many cases, it will be obvious that software is obtained or developed solely to meet an entity's internal needs (e.g., ERP software purchased from a third-party vendor and used solely by the entity to process business transactions). In other circumstances, entities will need to carefully evaluate the manner in which the software is or will be used to determine whether it is subject to ASC 350-40.

In addition, the guidance in ASC 350-40 must be applied at the individual component or module level. While there is no specific guidance on what an individual component or module might be, an entity could consider the level of functionality each component or module provides as well as the level of interdependence between the components or modules.

Connecting the Dots

ASC 350-40-15-2 provides an example of an accounting software system that contains separate components or modules, including a general ledger, an accounts payable subledger, and an accounts receivable subledger. Determining the appropriate components or modules is important because the assessment of amortization and impairment for abandonments is performed at the component or module level. In addition, components or modules of a particular software system may be at different stages of development, and costs would need to be separately tracked, particularly in agile development environments.

4.2.2.1 Software Is Purchased for Internal Use as Part of a Hosting Arrangement

An entity may obtain internal-use software as part of a hosting arrangement with a vendor. If so, the software costs are subject to ASC 350-40 if both of the following criteria in ASC 350-40-15-4A are met:

a. The customer has the contractual right to take possession of the software at any time during the hosting period without significant penalty.
b. It is feasible for the customer to either run the software on its own hardware or contract with another party unrelated to the vendor to host the software.

The criteria above are the same as those in ASC 985-20-15-5 (see Section 4.2.1.3). If the criteria are met, the costs associated with the purchase or license of the software are subject to ASC 350-40. If the criteria are not met, the arrangement is a service contract (see Section 4.2.5).

Connecting the Dots

It is common for software to be hosted on a third-party platform or infrastructure (i.e., not the vendor's or customer's on-site platform or infrastructure). In these circumstances, it is important to determine who has the contract with that third party (i.e., whether it is the vendor's or customer's cloud instance of the third-party platform or infrastructure). If the software is hosted on an entity's (i.e., a customer's) cloud instance, the entity has possession of the software, and the costs associated with it are subject to ASC 350-40. By contrast, if the software is hosted on the vendor's cloud instance and the entity (i.e., the customer) cannot otherwise obtain possession of the software without significant penalty, the costs associated with that software are accounted for as a service arrangement and only the implementation costs are subject to ASC 350-40.

4.2.2.2 No Substantive Plan to Market the Software Externally

If the software is or will be marketed externally (i.e., marketed to be sold or licensed on an on-premise basis), the costs will be within the scope of ASC 985-20. Therefore, if a substantive plan to market the software externally exists or is being developed during the software development period, regardless of whether the software is also intended to meet an internal need, the costs will be subject to ASC 985-20. The software must be intended solely for internal use to be subject to ASC 350-40.

To be considered "substantive," a marketing plan needs to be sufficiently detailed, and its implementation should be reasonably possible.[3] ASC 350-40-15-2B states that a substantive plan "could include the selection of a marketing channel or channels with identified promotional, delivery, billing, and support activities." It also states that "routine market feasibility studies are not substantive plans to market software."

Connecting the Dots

When an entity is determining whether it has a substantive plan to market software externally, it must under ASC 350-40 evaluate its past practices and patterns. For example, if the entity has a past practice or pattern of both using software internally and selling that same software externally (or deciding to market internal-use software externally during development), a rebuttable presumption is created that any software developed by the entity is intended for sale, lease, or marketing (i.e., the software costs are subject to ASC 985-20).[4]

Example 4-1

Company A, a recording and music distribution company, is developing software that would enable users to listen to, edit, and record music files. Company A plans to use the software to create music albums that it will then sell to customers. Company A is also negotiating with four software resellers to sell them the new product. Company A's marketing department is compiling a detailed plan and designing promotional material for the new product, and implementation of the marketing plan is considered at least reasonably possible. Therefore, A has a substantive marketing plan and should account for the costs of the new software product under ASC 985-20.

[3] The ASC master glossary defines reasonably possible as "[t]he chance of the future event or events occurring is more than remote but less than likely."

[4] See ASC 350-40-15-2C and ASC 350-40-35-10.

Example 4-2

Company B is developing software that would enable it to better manage its advertising campaigns. Company B has engaged a market research firm to conduct a market survey to determine whether a market for the new software product exists. The market survey conducted by the market research firm is a routine market feasibility study and not a substantive plan to market the product. Therefore, unless and until there is a substantive plan being developed to market the software to others, B should account for the costs of the software product under ASC 350-40.

Example 4-3

Company C is developing a data management software platform that will be sold only as a cloud-based arrangement (i.e., as internal-use software; see Section 4.2.2.3). It does not have a marketing plan or intent to sell the software on an on-premise basis (i.e., customers will not have the contractual ability to take possession of the software). However, C has a past practice of selling other software products to customers on both a hosted basis and on an on-premise basis, depending on the customer's request. Therefore, while C has neither a marketing plan nor the intent to sell the data management software on an on-premise basis, its past practice creates a rebuttable presumption that the data management software is intended for sale, lease, or marketing.

Company C considers that recently, it has either transitioned or is in the process of transitioning its customers to using all of its software products on a hosted basis. In addition, for any new or modified arrangements, customers will no longer have the contractual ability to take possession of any of C's software products. Therefore, C concludes that it can overcome the rebuttable presumption that the data management software is intended for sale, lease, or marketing and the data management software is therefore subject to ASC 350-40.

4.2.2.3 Software Is Marketed or Sold Only as a Cloud-Based (or Hosting) Arrangement

If software is being marketed or sold only as a cloud-based (or hosting) arrangement, that software would be considered internal-use software. To determine whether the product is considered software to be sold, leased, or marketed, and therefore accounted for under ASC 985-20, see Section 4.2.1.

Many cloud-based or hosting arrangements include a "license" to software but allow the customer to use the software only in an entity's hosted environment (because of contractual or practical limitations, or both, to taking possession of the software). The entity's hosted environment could include its cloud instance on a third party's platform or infrastructure (i.e., the entity has a contract with a third party to host its software). Although these arrangements may include a contractual license, if the customer is unable to take possession of the software subject to the license without significant penalty, the software is for the entity's internal use in providing a service to its customers. These transactions are accounted for as service arrangements (rather than licensing arrangements) since the entity is providing the functionality of the software through a hosting arrangement (service) rather than through an actual on-premise software license that is controlled by the customer. Therefore, the costs to develop or acquire such software should be accounted for under ASC 350-40.

Connecting the Dots

ASC 350-40-15-5 specifies that software is for internal use (vs. sold as on-premise software) if it is used to develop a product or provide a service sold to a customer but the customer does not actually acquire the software or a future right to use it.

Example 4-4

Company D offers its office productivity software solution as a SaaS whereby its customers access the solution through an online portal and store data on D's secure servers. The software will always be maintained at the most up-to-date version available, and customers have rights to online and telephone support. Customers do not have the ability to take possession of the software.

Because customers are not permitted to take possession of the software and may use only D's cloud-based service, D concludes that the costs associated with its office productivity software should be accounted for under ASC 350-40.

Example 4-5

Company E is developing a CRM software solution to be marketed and sold to customers. Company E also intends to use the software internally to manage its communications and relationships with customers and potential customers.

A detailed marketing plan has already been developed for the software. The software will be provided to customers on a hosted basis (i.e., the software will be accessed by using an Internet connection) and will connect to E's proprietary data analytics platform, which has already been developed and is housed on E's own servers (i.e., it is a SaaS solution that is accessed only online). Company E's data analytics platform will be a significant part of the overall solution sold to its customers and will be significantly integrated with the CRM software solution being developed. Company E plans to provide its customers with the contractual ability to take possession of the CRM software on an on-premise basis, when requested at any point during the hosting period, without paying E a penalty or cancellation fee. However, customers will not have the contractual ability to take possession of E's data analytics platform. In addition, cancellation of the hosting service for the CRM software will also result in the cancellation of the SaaS for E's data analytics platform, which cannot be easily replicated by the customer or third-party vendors. Further, customers would incur significant costs to integrate the CRM software with other third-party data analytics platforms.

While a customer will have the "contractual right to take possession of the software at any time during the hosting period" without paying E a penalty or cancellation fee, it cannot do so without incurring a significant penalty (i.e., significant diminution in utility or value of the CRM software without E's data analytics platform). Therefore, E concludes that the software costs incurred to develop the CRM software should be accounted for under ASC 350-40.

4.2.3 Transition Between Internal-Use Software and On-Premise Licensed Software

4.2.3.1 Transition to Licensing Software Externally

After the development of internal-use software, an entity may decide to license the software externally on an on-premise basis. If so, the entity must first account for any proceeds received from the license of the software, net of any direct incremental costs (e.g., commissions, reproduction, warranties, and installation), as a reduction of the carrying amount of any costs for that software that were capitalized under ASC 350-40. It cannot recognize profit on the software until it has reduced the carrying amount to zero. When the entity has reduced the carrying amount to zero (inclusive of any amortization of the software), it can then recognize subsequent proceeds as revenue under ASC 606 (or a gain under ASC 610-20 if the contract is not with a customer).[5] Any subsequent software development costs for that software product are then subject to ASC 985-20.

[5] See ASC 350-40-35-7 and 35-8.

If the decision to market the software externally happens during its development, any software costs incurred prospectively are accounted for under ASC 985-20. As indicated above, this decision should be supported by a substantive plan before the entity switches to ASC 985-20. In addition, amortization and impairment assessments should likewise be subject to ASC 985-20.[6]

4.2.3.2 Transition to Providing Software Through a Cloud-Based Arrangement

Because there have been significant shifts over time to migrate software solutions to the cloud, it is common for software entities to sell software on both an on-premise licensed basis and a cloud basis. In those circumstances, any software costs are subject to ASC 985-20.

However, scope-related questions have arisen in situations in which an entity predominantly sells and provides a software solution through cloud-based arrangements. As long as there continue to be substantive external sales of on-premise software, we believe that the software costs should still be subject to ASC 985-20. If, instead, an entity no longer has substantive external sales of on-premise software, neither ASC 985-20 nor ASC 350-40 provides transition guidance. In that circumstance, we believe that it is reasonable to account for any future software development costs in accordance with ASC 350-40 and to account for the aggregate amount of capitalized software costs for the software prospectively under ASC 350-40 (e.g., amortization and impairment). We believe that an entity may apply judgment in determining whether there are any substantive external sales of on-premise software.

4.2.4 Hybrid Cloud-Based Software Solutions

Many entities sell hybrid cloud-based software solutions, in which on-premise licensed software is sold with cloud-based software. Often, the on-premise licensed software interacts with the cloud-based software, and in some circumstances, the on-premise licensed software may be significantly integrated, interdependent, or interrelated with the cloud-based software.

In these situations, an entity must carefully track its software costs to determine which are (1) subject to ASC 985-20 (because there are substantive sales of on-premise licensed software) or (2) subject to ASC 350-40 (because the software is sold only as a service). Even if the on-premise software is significantly integrated, interdependent, or interrelated with the cloud-based software, it generally would not be appropriate to account for all software costs under ASC 985-20 if the software that is sold only as a service is substantive. Likewise, it generally would not be appropriate to account for all software costs under ASC 350-40 if the software sold on an on-premise licensed basis is substantive.

Example 4-6

Company F has a database management system, which is software that it uses in delivering its information services to customers through an online portal. The system collects data from real-time feeds, news sources, and contributed data sources. Company F also sells an on-premise license to its data analytics and machine learning software product, which includes an interface to F's database management system and is downloaded on a customer's servers.

The costs incurred in connection with the database management system are within the scope of ASC 350-40. However, the costs of the data analytics and machine learning software product, which resides on a customer's servers, are accounted for under ASC 985-20. Therefore, F should separately track its software costs for each software solution.

[6] See ASC 350-40-35-9.

4.2.5 Cloud-Based (or Hosting) Service Arrangements

An entity may enter into a cloud-based (or hosting) arrangement with a vendor (typically for internal use). In determining whether it has purchased a software license or a service arrangement, the entity must evaluate the same considerations as described in Section 4.2.2.1. If the entity (1) does not have "the contractual right to take possession of the software at any time during the hosting period without significant penalty" or (2) it is not "feasible for the [entity] to either run the software on its own hardware or contract with another party unrelated to the vendor to host the software," the entity has entered into a service contract.[7] In this circumstance, only implementation costs incurred would be subject to ASC 350-40. An entity may need to use judgment in determining which costs are related to implementation — "implementation cost" is not a defined term because, as paragraph BC14 of ASU 2018-15 states, "[ASC] 350-40 already has appropriate guidance that entities currently apply in practice."

Connecting the Dots

When an entity incurs implementation costs for a cloud-based (or hosting) service arrangement, it may also purchase or develop internal-use software as part of that implementation. In that circumstance, the entity should separately account for the costs incurred for that internal-use software under ASC 350-40.

4.2.6 Multiple-Element Arrangements

Entities that purchase internal-use software or cloud-based services often purchase multiple elements in the same arrangement (e.g., on-premise software licenses, PCS, cloud-based services, and professional services). ASC 350-40-30-4 requires entities to allocate the cost to all individual elements on the basis of their stand-alone prices.[8]

Example 4-7

Company G purchases a three-year noncancelable software subscription from Vendor H that enables G to manage its data center (e.g., manage various IT workloads). The software can operate (1) on different types of commodity hardware that G can purchase and use on its own premises or (2) through cloud computing arrangements (both the hardware and cloud computing services can be purchased from various third-party vendors and are not part of the arrangement between G and H). The subscription arrangement includes a three-year term-based license that is delivered digitally (it can be downloaded on G's own servers or third-party servers if G chooses to access it through its vendor's cloud computing platform), as well as support and maintenance over the three-year term. Company G also purchases professional services, including training and business process reengineering services, from H in the same subscription arrangement. Company G determines that there are three elements in the arrangement and allocates the total consideration payable to H to those elements on the basis of their relative stand-alone prices. The three elements are accounted for as follows:

- Because G takes possession of the on-premise term-based software license, the amount allocated to it is capitalized as internal-use software under ASC 350-40. The capitalized software cost is then amortized on a straight-line basis over the three-year term and is subject to the impairment guidance in ASC 360.
- The amount allocated to the support and maintenance is expensed over the three-year term. If G prepays for the support and maintenance, it is initially recognized as a prepaid expense.
- The amount allocated to the professional services is expensed as incurred. If G prepays for the professional services, it is initially recognized as a prepaid expense.

[7] See ASC 350-40-15-4A through 15-4C.
[8] A stand-alone price is defined in ASC 350-40-20 as the "price at which a customer would purchase a component of a contract separately."

4.2.7 Other Guidance to Consider

Software-related costs may be subject to U.S. GAAP other than ASC 985-20 or ASC 350-40. The discussion below describes other guidance that may apply to such costs.

4.2.7.1 Web Site Development Costs

Web site development costs are subject to ASC 350-50. The guidance is similar to that in ASC 350-40. For example, under ASC 350-50-25-6, if software for a Web site is purchased or developed for an entity's internal needs, costs incurred for (1) purchased software tools or (2) internally developed software tools during the application development stage are generally capitalized. In addition, certain software acquired or developed for internal use related to Web site operation or graphics is directly within the scope of ASC 350-40.

While ASC 350-50 refers to Web site content, it does not address the accounting for such content. Therefore, Web site content is accounted for under other U.S. GAAP. For example, if an entity is a licensee in the record and music industry and relicenses music content, it would apply the guidance in ASC 928-340.

4.2.7.2 Software Used for Research and Development Activities

If software is used in R&D activities and does not have alternative future uses, it is subject to ASC 730-10. In addition, the following software costs are accounted for as R&D costs:

- For software subject to ASC 985-20, all costs incurred before the establishment of technological feasibility.[9]
- For software subject to ASC 350-40, all costs for pilot projects (i.e., "[d]esign, construction, and operation of a pilot [project] that is not of a scale economically feasible to the entity for commercial production").[10]
- For software subject to ASC 350-40, all costs associated with a particular R&D project, "regardless of whether the software has alternative future uses."[11]

Example 4-8

Company J is trying to implement a supply management system by using blockchain technology but is not certain that the supply management system can be designed to meet J's internal requirements. Company J has decided to implement its system at one of its smaller facilities for 90 days to determine whether the system will function as intended.

A project of this nature would be considered a pilot project and accounted for as R&D because J is implementing a software system, intended for company-wide implementation, on a small scale. Often these pilot projects are implemented at locations at which the risk of loss is very low or the cost to run parallel systems is not significant.

[9] See ASC 985-20-25-1.

[10] See ASC 350-40-15-7(b)(1) and ASC 730-10-55-1(h).

[11] See ASC 350-40-15-7(b)(2).

Software associated with R&D assets may be acquired in a business combination. If the software will be used for R&D activities, they are subject to the guidance in ASC 805-20 and ASC 350-30. In accordance with ASC 805-20, they are recognized as an asset and measured at fair value.

4.2.7.3 Significant Production, Modification, or Customization of Software

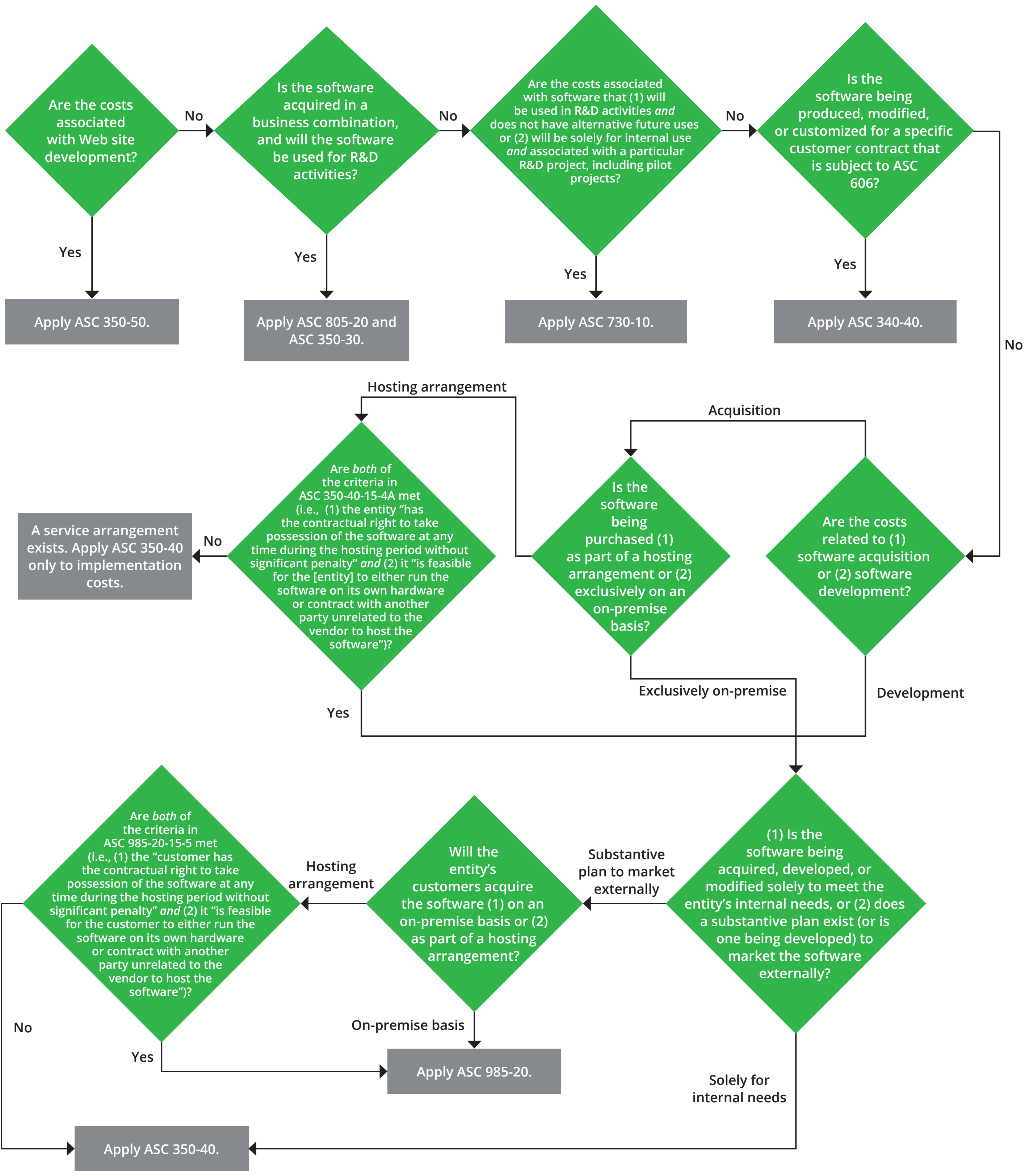
Software sold to customers in arrangements that require significant production, modification, or customization is accounted for under ASC 606. If the software is being produced, modified, or customized for a specific customer contract, the costs for such software represent fulfillment costs that are subject to ASC 340-40.

4.2.7.4 Business Process Reengineering Activities

An entity may incur costs associated with business process reengineering activities as part of developing software or implementing cloud-based solutions. Those costs are subject to ASC 720-45 and are expensed as incurred.

4.2.8 Flowchart for Determining the Appropriate Guidance

The flowchart below illustrates how an entity determines the appropriate guidance to apply to software-related costs.



Are the costs associated with Web site development?
No
Yes
Apply ASC 350-50.
Is the software acquired in a business combination, and will the software be used for R&D activities?
No
Yes
Apply ASC 805-20 and ASC 350-30.
Are the costs associated with software that (1) will be used in R&D activities *and* does not have alternative future uses or (2) will be solely for internal use *and* associated with a particular R&D project, including pilot projects?
No
Yes
Apply ASC 730-10.
Is the software being produced, modified, or customized for a specific customer contract that is subject to ASC 606?
Yes
Apply ASC 340-40.
No
Hosting arrangement
Acquisition
A service arrangement exists. Apply ASC 350-40 only to implementation costs.
No
Are *both* of the criteria in ASC 350-40-15-4A met (i.e., (1) the entity "has the contractual right to take possession of the software at any time during the hosting period without significant penalty" *and* (2) it "is feasible for the [entity] to either run the software on its own hardware or contract with another party unrelated to the vendor to host the software")?
Is the software being purchased (1) as part of a hosting arrangement or (2) exclusively on an on-premise basis?
Are the costs related to (1) software acquisition or (2) software development?
Yes
Exclusively on-premise
Development
Are *both* of the criteria in ASC 985-20-15-5 met (i.e., (1) the "customer has the contractual right to take possession of the software at any time during the hosting period without significant penalty" *and* (2) it "is feasible for the customer to either run the software on its own hardware or contract with another party unrelated to the vendor to host the software")?
Hosting arrangement
Will the entity's customers acquire the software (1) on an on-premise basis or (2) as part of a hosting arrangement?
Substantive plan to market externally
(1) Is the software being acquired, developed, or modified solely to meet the entity's internal needs, or (2) does a substantive plan exist (or is one being developed) to market the software externally?
No
Yes
On-premise basis
Apply ASC 985-20.
Solely for internal needs
Apply ASC 350-40.

4.2.9 Importance of Ongoing Reassessment of Software Costs

As described above, there are various ways in which an entity's evolving business models may affect which guidance applies when accounting for costs to develop or acquire software. These include changes in the manner in which entities are (1) developing or acquiring software solutions from their vendors for internal use and (2) marketing and delivering software solutions to their customers. In the rapidly evolving technology ecosystem, it is important for an entity to have sufficient internal controls in place to periodically reassess and document how these changes in facts and circumstances may affect the guidance the entity should apply and the related accounting.

4.3 On the Horizon

In June 2022, the FASB added to its technical agenda a project to modernize the accounting for software costs and enhance the transparency regarding an entity's software costs. The project will comprehensively address the recognition, measurement, presentation, and disclosure of costs incurred to internally develop or acquire software.

In January 2023, the Board directed the staff to conduct research on the following two models:

- *Initial development cost model* — All direct software development costs and software enhancement costs would be capitalized when it is probable that (1) the software project will be completed and (2) the software will be used to function as intended.
- *Dual model* — Certain software costs would be expensed as incurred, while other software costs would be subject to the initial development cost model.

The FASB will continue its deliberations at future Board meetings.

4.4 SEC Comment Letter Trends

The SEC staff will occasionally issue comments related to software development costs to registrants in the technology industry. For example, if a registrant only sells software as SaaS but has not capitalized any software costs, the SEC staff may ask the registrant to explain why no development costs were capitalized. The staff may also ask for more details about the development process for internal-use software, recently developed offerings, added functionality, and what consideration was given to disclosing policies related to such software. In addition, the staff may ask questions regarding the income statement classification and the description of any expenses related to software development (e.g., amortization expense or expensed development costs).

For more information, see Section 6.5.1.1 of Deloitte's Roadmap *SEC Comment Letter Considerations, Including Industry Insights*.

Chapter 5 — Other Accounting and Financial Reporting Topics

5.1 Acquisitions and Divestitures

The technology industry has undergone significant changes throughout the years, and technology entities must continually innovate to stay competitive. Specifically, technology entities must find new ways to improve the effectiveness and efficiency of their operations, increase their R&D capabilities, access new markets and data, expand their pipeline of products in development, increase their talent pool, and tap into alternative sources of innovation. As a result of these challenges and opportunities, technology entities frequently engage in M&A activity. In addition, technology entities may divest some of their noncore assets to focus on their main business lines and access the capital they need to remain competitive.

It is important for entities to correctly apply the guidance on accounting for M&A transactions because of the significantly different accounting outcomes that exist in this area of financial reporting. For example, the application of the guidance in ASC 805 on accounting for business combinations can differ significantly depending on whether the acquired entity is considered a "business" or an "asset." Similarly, application of the guidance in ASC 205 on the presentation and disclosure of discontinued operations related to divestiture transactions fundamentally affects financial statement presentation.

5.1.1 Definition of a Business

An entity must use significant judgment in (1) evaluating whether a transaction represents the acquisition of a "business" as defined in ASC 805-10 and (2) accounting for transactions after that determination has been made. Entities apply the definition of a business in ASC 805 in many areas of accounting, including acquisitions, disposals, reporting-unit determinations, and consolidation.

The distinction between businesses and assets is important because the accounting for a business combination significantly differs from the accounting for an asset acquisition. For example, an entity may acquire a mature technology entity that has substantive processes, employees, and revenue-generating products. If the acquiree meets the definition of a business, the acquirer may end up recognizing substantial goodwill. On the other hand, an entity may acquire IP that represents the sole asset purchased and does not meet the definition of a business. In that circumstance, the acquirer would not recognize any goodwill. For more information, see Section 2.4 of Deloitte's Roadmap *Business Combinations*.

5.1.2 Asset Acquisitions

In applying the framework in ASC 805, entities must account for transactions that do not meet the definition of a business as asset acquisitions. For such transactions, the accounting requirements related to transaction costs, measurement of assets acquired and liabilities assumed, and recognition of intangible assets may differ from those for business combinations.

The table below summarizes some of the key differences between the accounting for a business combination and the accounting for an acquisition of an asset group determined not to be a business.

Issue	Accounting in a Business Combination	Accounting in an Asset Acquisition
General principle	Fair value model: assets and liabilities are recognized at fair value, with certain exceptions.	Cost accumulation model: the cost of the acquisition, including certain transaction costs, is allocated to the assets acquired on the basis of relative fair values, with some exceptions. This allocation results in the recognition of those assets at other than their fair values.
Scope	Acquisition of a business as defined in ASC 805-10.	Acquisition of an asset or a group of assets (and liabilities) that does not meet the definition of a business in ASC 805-10.
Acquisition-related costs or transaction costs	Acquisition-related costs are expensed as incurred, except for costs of issuing debt and equity securities, which are accounted for under other GAAP.	Direct and incremental costs are included in the cost of the acquisition, except for costs of issuing debt and equity securities, which are accounted for under other GAAP. Indirect costs are expensed as incurred.
Contingent consideration	Recognized at fair value and classified as a liability, equity, or an asset on the acquisition date on the basis of the terms of the arrangement. Subsequently, any changes in the fair value of contingent consideration classified as a liability or as an asset are recognized in earnings until settled.	Contingent consideration that is accounted for as a derivative is recognized at fair value under ASC 815. Otherwise, such consideration generally is recognized under ASC 450 when it becomes probable and reasonably estimable.
Goodwill	If the sum of the consideration transferred, the fair value of any noncontrolling interests, and the fair value of any previously held interests exceeds the sum of the identifiable assets acquired and liabilities assumed, goodwill is recognized as the amount of the excess.	Goodwill is not recognized. Instead, any excess of the cost of the acquisition over the fair value of the net assets acquired is allocated to certain assets on the basis of relative fair values.
Gain from bargain purchase	Recognized in earnings on the acquisition date.	Generally not recognized in earnings. Instead, any excess of the fair value of the net assets acquired over the cost of the acquisition is typically allocated to certain assets on the basis of relative fair values.
Contingencies	Measured at fair value, if determinable; otherwise, measured at their estimated amounts if probable and reasonably estimable. If such assets or liabilities cannot be measured during the measurement period, they are accounted for separately from the business combination in accordance with ASC 450.	Accounted for in accordance with ASC 450 on the acquisition date and subsequently. Loss contingencies are recognized when they are probable and reasonably estimable. Gain contingencies are recognized on the earlier of when they are realized or are realizable and are thus not recognizable in an asset acquisition.

(Table continued)

Issue	Accounting in a Business Combination	Accounting in an Asset Acquisition
Intangible assets	Recognized at fair value if they are identifiable (i.e., if they are separable or arise from contractual rights).	Finite-lived intangible assets recognized on the basis of relative fair value under ASC 350-10 if they meet the asset recognition criteria in FASB Concepts Statement 5. Indefinite-lived intangible assets are recognized at amounts that do not exceed fair value.
Assembled workforce	Not recognized because it is presumed not to be identifiable.	Recognized because it is presumed to meet the asset recognition criteria in FASB Concepts Statement 5.
In-process research and development (IPR&D)	Measured at fair value and recognized as an indefinite-lived intangible asset until completion or abandonment of the related project, then reclassified as a finite-lived intangible asset and amortized.	Expensed under ASC 730 unless the IPR&D has an alternative future use.
Deferred taxes	Generally recognized for most temporary book/tax differences related to assets acquired and liabilities assumed under ASC 740.	Generally recognized for temporary book/tax differences in an asset acquisition by using the simultaneous equations method in accordance with ASC 740.
Lease classification	Under ASC 840-10-25-27, the acquirer retains the acquiree's previous lease classification "unless the provisions of the lease are modified as indicated in paragraph 840-10-35-5." Under ASC 842-10-55-11, the acquirer retains the acquiree's previous lease classification "unless there is a lease modification and that modification is not accounted for as a separate contract in accordance with paragraph 842-10-25-8."	ASC 805-50 does not provide guidance on an entity's classification of a lease acquired in an asset acquisition.
Measurement period	In accordance with ASC 805-10-25-13, the acquirer reports provisional amounts for the items for which the accounting "is incomplete by the end of the reporting period in which the combination occurs" and is allowed up to one year to adjust those provisional amounts. This time frame is referred to as the measurement period.	ASC 805-50 does not address a measurement period in the context of an asset acquisition.

For more information, see Appendix C of Deloitte's Roadmap *Business Combinations*.

5.1.3 Business Combinations

5.1.3.1 Acquired Revenue Contracts

In October 2021, the FASB issued ASU 2021-08, which requires entities to recognize and measure contract assets and contract liabilities from contracts acquired in a business combination that are within the scope of ASC 606 or ASC 610-20 by applying the guidance in ASC 606. The ASU also provides for practical expedients that allow entities to account for the aggregate effect of all modifications, and determine stand-alone selling prices, as of the acquisition date. However, the ASU does not change the accounting for customer-related intangibles, such as customer relationships, which entities are required to measure at fair value. For public business entities (PBEs), the ASU is effective for fiscal years beginning after December 15, 2022. For all other entities, the ASU is effective for fiscal years beginning after December 15, 2023. Prospective application is required for business combinations occurring on or after the effective date, but early adoption is permitted.[1]

5.1.3.2 Acquired Technology and IPR&D

Technology entities often contemplate opportunities for expanding their current portfolio of products by making strategic acquisitions. As a result, an entity may acquire substantively complete technology-based IP in a business combination (i.e., technology-based intangible assets that are not IPR&D). If those assets represent identifiable intangible assets (i.e., they arise from contractual or other legal rights or are separable), they would generally be recognized at their fair value. For more information, see Section 4.10.4.7 of Deloitte's Roadmap *Business Combinations*.

Entities may also acquire technology-based IP that is still being developed. The accounting for costs associated with the purchase of such IP currently in development as part of a business combination may vary significantly from the typical accounting treatment of R&D costs incurred by technology entities as part of their normal operations.

For example, before being acquired in a business combination, an entity may incur R&D expenditures related to the entity's continued development of software to be sold on an on-premise basis that would be expensed as incurred in accordance with ASC 985-20 and ASC 730-10. That is, before consummation of the business combination, the acquiree would not have recorded any asset related to R&D costs incurred before technological feasibility was established. To the extent that the acquiree was using or planning to use the unrecognized asset for R&D activities to further the development of the software, the asset would represent acquired IPR&D to the acquirer. For more information, see Section 4.10 of Deloitte's Roadmap *Business Combinations*.

If, instead, the acquiree incurred development costs for software that will solely be sold on a cloud basis, such development costs would be subject to the requirements of ASC 350-40, and some of those costs may have been capitalized before the business combination. In that circumstance, the capitalized development costs would not be R&D expenses and would not represent IPR&D acquired in a business combination. Rather, the acquirer would generally recognize the internal-use software, as acquired during the business combination, at its fair value if it represents an identifiable intangible asset. For more information, see Section 4.10 of Deloitte's Roadmap *Business Combinations*.

5.1.3.3 Reacquired Rights

Technology entities frequently acquire businesses in a vertical merger. As part of a business combination, an acquirer may reacquire a right that it had previously granted to the acquiree under a

[1] If the ASU is early adopted in an interim period, it must be applied retrospectively to all business combinations occurring at or after the beginning of the fiscal year that includes the interim period.

contractual arrangement. For example, the acquiree may have been granted a right to use the acquirer's technology under an exclusive IP licensing arrangement before the business combination. That reacquired right would be considered an identifiable intangible asset but would be measured on the basis of the related contract's remaining term regardless of whether a fair value measurement would reflect potential contract renewals. In addition, if the terms of the preexisting contractual relationship giving rise to a reacquired right are favorable or unfavorable relative to the terms of current market transactions for the same or similar items, the acquirer must recognize a settlement gain or loss separately from the accounting for the business combination. For more information, see Sections 4.3.7 and 6.2.2.6 of Deloitte's Roadmap *Business Combinations*.

5.1.3.4 Compensation Arrangements

Technology entities frequently acquire businesses in which significant value is attributed to the workforce. Therefore, it is important for an acquirer to evaluate the acquiree's preexisting compensation arrangements and any new or modified compensation arrangements to determine the appropriate accounting. For example, the acquiree may have arrangements in place to provide specified employees with additional compensation (e.g., stock-based compensation) or accelerated compensation (i.e., acceleration of vesting) that is predicated on a change in control. In addition, the acquirer may agree to provide contingent payments to selling shareholders who are also employees. Further, selling shareholders may decide to share some of the proceeds that they are entitled to receive with nonshareholder employees. When determining whether the acquirer should account for these arrangements as part of the business combination or separately as compensation, entities must frequently use judgment. For more information, see Sections 6.2.3 and 6.2.5 of Deloitte's Roadmap *Business Combinations*.

Stock-based compensation awards held by grantees of the acquiree are often exchanged for stock-based compensation awards of the acquirer. In this circumstance, the acquirer must analyze the terms of both the preexisting and the replacement awards to determine what portion of the replacement awards is related to precombination vesting (i.e., past goods or services) and therefore part of the consideration transferred in the business combination. The portion of replacement awards that is related to postcombination vesting (i.e., future goods or services) should be recognized as compensation cost in the postcombination period. For more information on this topic and other stock-based compensation arrangements associated with business combinations, see Chapter 10 of Deloitte's Roadmap *Share-Based Payment Awards*.

5.1.3.5 SEC Reporting Requirements

A technology entity that is an SEC registrant must also consider certain SEC reporting requirements when it acquires a business, an asset, or a group of assets. For instance, the registrant must separately evaluate whether the acquired business or assets meet the definition of a business for SEC reporting purposes under SEC Regulation S-X, Rule 11-01(d), since this definition differs from the U.S. GAAP definition of a business under ASC 805-10. For more information about the SEC's reporting requirements, see Section C.5 of Deloitte's Roadmap *Business Combinations* and Deloitte's Roadmap *SEC Reporting Considerations for Business Acquisitions*.

5.1.4 Divestitures

Technology entities frequently divest businesses and product lines to focus on their core or more profitable businesses. The determination of whether a group of assets represents a business is important not only in acquisitions but also in divestitures. Generally, ASC 810 addresses the deconsolidation and derecognition of divestitures of subsidiaries or groups of assets that meet the definition of a business. ASC 810 also applies to divestitures of subsidiaries that do not meet the

definition of a business unless such divestitures are specifically addressed by other U.S. GAAP, such as ASC 606 (revenue transactions) and ASC 610-20 (derecognition of nonfinancial assets and in-substance nonfinancial assets). For more information, including SEC reporting requirements, see Appendix F of Deloitte's Roadmap *Consolidation — Identifying a Controlling Financial Interest*. For considerations related to revenue transactions and the derecognition of nonfinancial assets, see Deloitte's Roadmap *Revenue Recognition*.

5.1.4.1 Disposals of Long-Lived Assets and Discontinued Operations

Additional considerations are required when long-lived assets (e.g., IP) are classified as held for sale or may be disposed of in ways other than by sale (e.g., abandonment). In addition, discontinued operations are reported separately from continuing operations. To be reported as a discontinued operation, the disposal must be "a strategic shift that has (or will have) a major effect on an entity's operations and financial results"[2] (e.g., major geographic area, major line of business). Therefore, the determination of whether a disposal qualifies for discontinued-operations reporting requires (1) an assessment of both qualitative and quantitative factors and (2) the use of judgment. For more information, including SEC reporting requirements, see Deloitte's Roadmap *Impairments and Disposals of Long-Lived Assets and Discontinued Operations*.

5.1.4.2 Carve-Out Financial Statements

Carve-out financial statements are commonly prepared for divestitures of businesses and product lines. A carve-out occurs when a parent entity segregates a portion of its operations and prepares a distinct set of financial information in anticipation of a sale, spin-off, or divestiture of the "carve-out entity." The carve-out entity may consist of all or part of an individual subsidiary, multiple subsidiaries (or portions of such subsidiaries), an individual segment, multiple segments, or a specific group of products.

The form and content of carve-out financial statements may vary depending on the situation. For example, if the acquisition is small, a strategic buyer of a carve-out entity may be satisfied with an unaudited balance sheet and income statement for the most recent fiscal year. Another public buyer, however, may require a full set of SEC-compliant audited financial statements, including footnotes. Further, another buyer may require that the periods be audited but may not be concerned with SEC reporting considerations. The existence of a foreign buyer could present different requirements and challenges in addition to those noted above, such as working closely with the foreign buyer on IFRS conversion of certain financial statement line items.

For more information, see Deloitte's Roadmap *Carve-Out Transactions*.

5.1.5 Common-Control Transactions

As technology entities seek to rebalance their portfolios and potentially prepare for public offerings, they may engage in common-control transactions. A common-control transaction is typically a transfer of net assets or an exchange of equity interests between entities under the control of the same parent. While a common-control transaction is similar to a business combination for the entity that receives the net assets or equity interests, such a transaction does not meet the definition of a business combination because there is no change in control over the net assets. Therefore, the accounting and reporting for a transaction between entities under common control is outside the scope of the business combinations guidance in ASC 805-10, ASC 805-20, ASC 805-30, and ASC 805-40 and is instead addressed in ASC 805-50. Since there is no change in control over the net assets from the parent's perspective, there is no

[2] Quoted from ASC 205-20-45-1B.

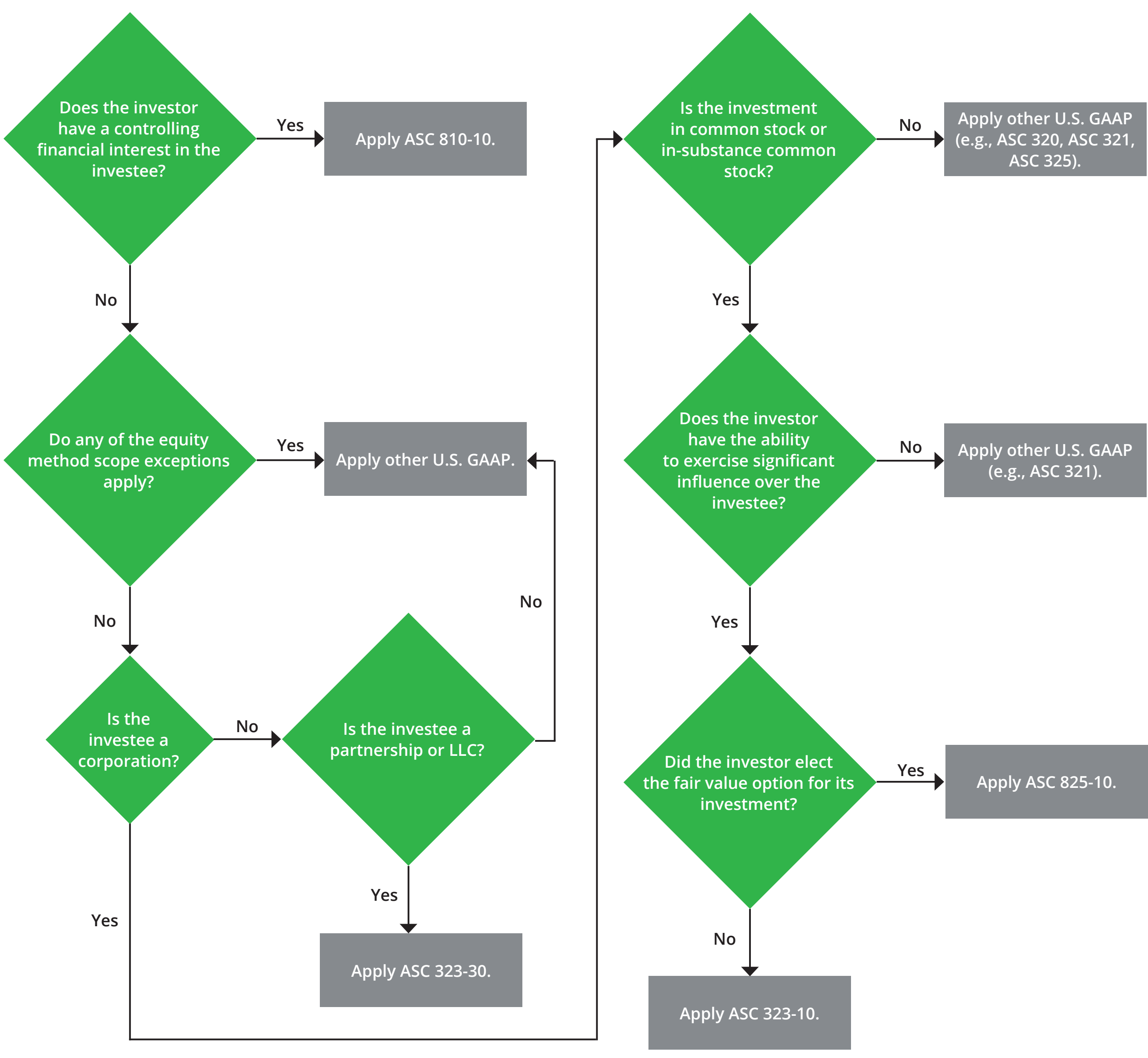
change in basis in the net assets. ASC 805-50 requires the receiving entity to recognize the net assets received at their historical carrying amounts, as reflected in the parent's financial statements.

For more information, see Appendix B of Deloitte's Roadmap *Business Combinations*.

5.1.6 Equity Method Investments and Joint Ventures

5.1.6.1 Equity Method Investments

Technology entities frequently enter into strategic partner or alliance arrangements with other entities. In many of those circumstances, the technology entity becomes an investor by purchasing an interest in the other entity. That interest should be carefully evaluated to determine whether the investor should apply ASC 810, ASC 323, or other U.S. GAAP (e.g., ASC 321). The flowchart below illustrates the relevant questions to be considered in the determination of whether an investment should be accounted for under the equity method of accounting or other U.S. GAAP.



There are presumed levels of ownership (depending on the legal form of the investee) that generally provide an investor with the ability to exercise significant influence over the investee. For example, an investment of less than 20 percent leads to a presumption that, in the absence of evidence to the contrary, an investor does not have the ability to exercise significant influence over a corporate investee.

However, the determination of whether the investor has the ability to exercise significant influence over the investee's reporting and financial policies should not be limited to the evaluation of voting rights (which can be conferred by instruments other than common stock) given that significant influence may be exhibited through other means. For example, an investor may provide technology to an investee that is critical to the investee's operational ability. Such a situation may cause the investee to be technologically dependent on the investor and, as a result, allow the investor to exert some level of influence over the investee. When determining the level of influence it can exercise, the investor should consider the terms of the licensed technology. For example, the technology granted to the investee for a period that would give the investor an option not to renew such a license would be more indicative of significant influence than if the investee had already obtained a perpetual license to such technology. When evaluating whether the investee's technological dependency provides the investor with significant influence, the investor should also consider the technology alternatives available to the investee and the costs that the investee might reasonably be expected to incur were it to license alternative technology. For example, if the investee could license similar technology from other companies without incurring significant costs, such a licensing agreement would usually not provide the investor with the ability to exercise significant influence over the operating and financial policies of the investee.

5.1.6.2 Joint Ventures

Technology entities may also enter into a joint venture with other entities in which the venturers have joint control (e.g., to jointly develop and commercialize IP). Generally, a venturer accounts for its investment in a joint venture the same way it would account for any other equity method investment. However, it is necessary to assess whether a legal entity is in fact a joint venture because this determination may affect the financial statements of the joint venture upon the venture's initial formation and thereafter.

Changing Lanes

The FASB is engaged in an active project to address a joint venture's accounting for the initial contribution of nonmonetary and monetary assets to the joint venture. On October 27, 2022, the FASB issued a proposed ASU on improvements to the accounting for joint venture formations. Under the proposed ASU, the formation of a joint venture would result in the "creation of a new reporting entity," and no accounting acquirer would be identified under ASC 805. Accordingly, a new basis of accounting would be required upon the entity's formation date (i.e., when it initially meets the definition of a joint venture) and the joint venture would measure the net assets on that formation date. In addition, upon that formation date, a joint venture's measurement of its net assets would be "equal to the fair value of 100 percent of [its] outstanding equity interests." The excess of the fair value of the joint venture as a whole over the net assets of the joint venture would be recognized as goodwill. The proposed guidance would prohibit an entity from using a measurement period when identifying and measuring the net assets, which is a departure from the measurement-period guidance in ASC 805 related to business combinations. Further, to help financial statements users understand the impact of the joint venture formation, the joint venture would be required to disclose the formation date, a qualitative description of the joint venture's purpose, the fair value of the joint venture on the formation date, the "amounts recognized by the joint venture for each major class of assets and liabilities," and a "description of the factors that make up any goodwill recognized."

For more information about the proposed ASU, see Deloitte's December 8, 2022, *Heads Up*.

5.1.6.3 SEC Reporting Requirements

A technology entity that is an SEC registrant must also consider certain SEC reporting requirements for equity method investments. If an equity method investee is considered significant to a registrant, the registrant may be required to provide the investee's separate financial statements or summarized financial information in the financial statement footnotes (or both). The amount of information a registrant must present depends on the level of significance, which is determined on the basis of the results of various tests outlined in SEC Regulation S-X.

For more information, see Deloitte's Roadmaps *Equity Method Investments and Joint Ventures* and *SEC Reporting Considerations for Equity Method Investees*.

5.1.7 SEC Comment Letter Trends

The SEC staff's comments about business combinations frequently focus on (1) the evaluation of whether a transaction should be accounted for as a business combination or an asset acquisition, (2) the identification of the accounting acquirer, (3) the allocation of the consideration transferred to identified assets acquired and liabilities assumed, (4) accounting for any contingent consideration, and (5) required disclosures.

For divestitures, the SEC staff frequently issues comments on whether certain dispositions should be presented as discontinued operations and whether all of the required disclosures under ASC 205 have been provided for dispositions presented as discontinued operations. The SEC staff may also question whether assets meet the held-for-sale criteria in ASC 360 and may inquire about items such as (1) the timeline of events leading to the sale; (2) consideration of the factors used to determine whether assets qualify for classification as held for sale, especially when assets have been classified as held for sale for an extended period or when assets are not classified as held for sale at the end of a reporting period but are sold shortly thereafter; (3) the timing of impairment testing when assets are expected to be sold or disposed of; and (4) consideration of the required disclosures for assets held for sale. In addition, for carve-out financial statements, the SEC staff may ask whether the financial statements have been appropriately prepared in accordance with SAB Topic 1.B, which indicates that the registrant's historical income statements should present all of the costs of doing business, including expenses incurred by the parent on behalf of the registrant.

For goodwill, the SEC staff frequently issues comments related to (1) disclosures in MD&A, including the critical accounting estimates section and any known uncertainties related to the potential for a material impairment charge; (2) identification of reporting units, especially when changes appear to have been made to an entity's reporting structure; and (3) interim impairment tests, including (a) whether negative trends could trigger the requirement to test goodwill for impairment between annual tests, (b) the events leading up to any impairment charge, and (c) whether an impairment should have been identified in a prior period.

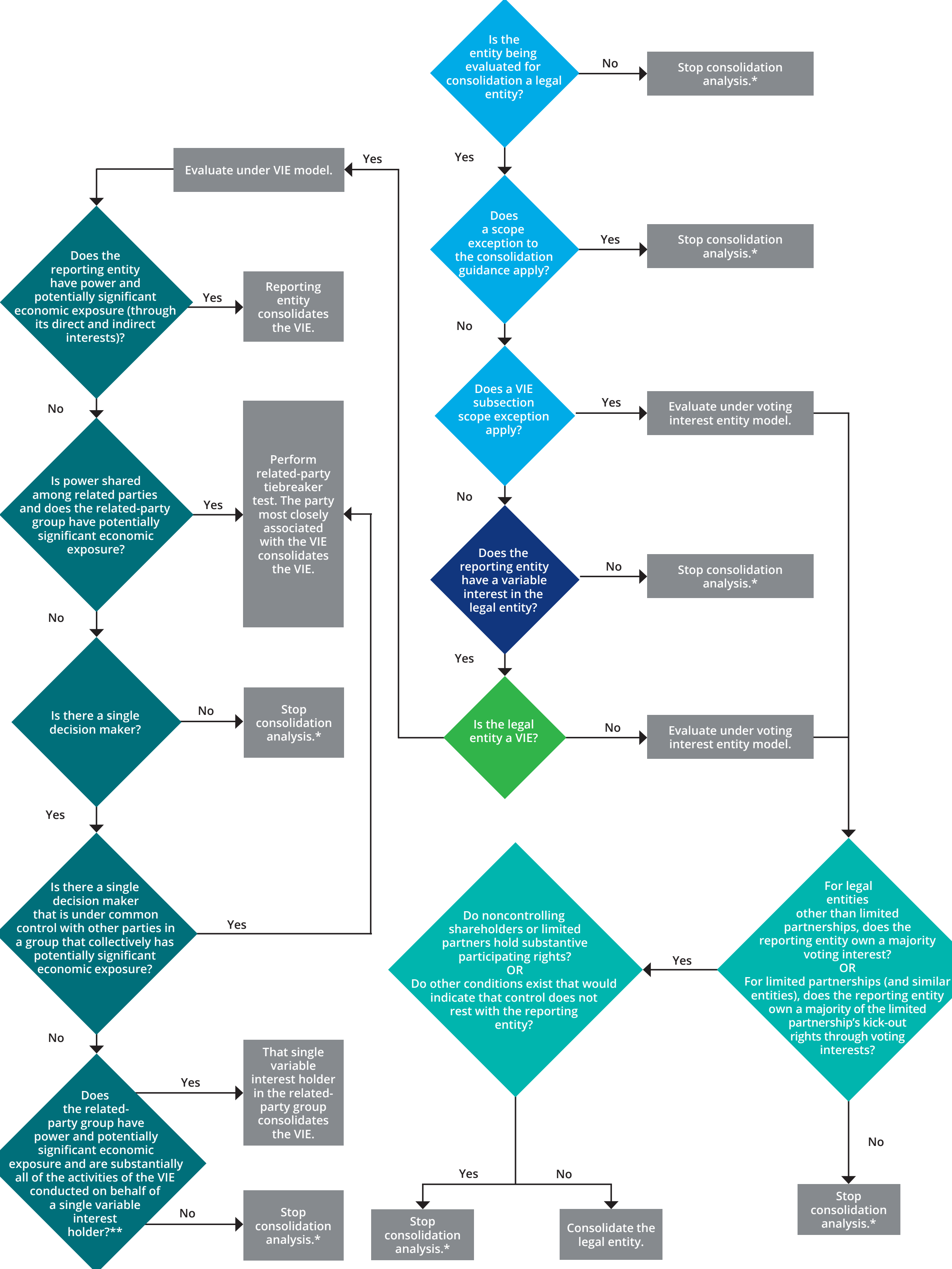
For more information, see Sections 2.1, 2.5, 2.11.1, and 4.2.4 of Deloitte's Roadmap *SEC Comment Letter Considerations, Including Industry Insights*.

5.2 Consolidation

Technology entities enter into a variety of arrangements with other parties to facilitate the research, development, or sale of their IP or products. Because technology entities may absorb the risks and rewards of other parties through interests other than those based on traditional voting equity, they must carefully analyze their arrangements with those parties to determine whether to consolidate them. However, it is important to note that the consolidation guidance is only applicable to arrangements that are structured in a separate legal entity and is not applicable to collaborative arrangements because those arrangements are not primarily conducted through a separate legal entity. The dual consolidation model under U.S. GAAP, which comprises the variable interest entity (VIE) model and the voting interest entity model, is designed to ensure that the reporting entity that consolidates another legal entity has a controlling financial interest in that legal entity. Under the voting interest entity model, a reporting entity with ownership of a majority of the voting interests of a legal entity is generally considered to have a controlling financial interest in the legal entity. Under the VIE model, the evaluation of whether the reporting entity has a controlling financial interest in a VIE focuses on (1) the obligation to absorb losses of, or the right to receive benefits from, the legal entity that could potentially be significant to the legal entity and (2) the power to direct the activities that most significantly affect the legal entity's economic performance.

5.2.1 Consolidation Decision Trees

ASC 810-10-05-6 contains a flowchart that consists of a series of decision trees to help reporting entities identify (1) which consolidation model to apply, if any; (2) whether a reporting entity should consolidate a VIE; and (3) whether a reporting entity should consolidate a voting interest entity. The flowchart below incorporates the concepts in the FASB's flowchart and serves as a guide to the consolidation accounting literature.



* Consolidation is not required; however, other GAAP may be relevant to the determination of recognition, measurement, or disclosure.

** Interests in low-income housing tax partnerships within the scope of ASU 2014-01 would not be subject to this requirement.

5.2.2 Voting Interest Entity Model Versus VIE Model

The table below summarizes the most significant differences between the voting interest entity model and the VIE model.

Concept	Voting Interest Entity Model	VIE Model	Explanation
Definition of a controlling financial interest	The usual condition for consolidation is ownership of a majority voting interest or majority of the limited partnership's kick-out rights.	A reporting entity has a controlling financial interest if it has both of the following characteristics: (1) the power to direct the activities of the entity that most significantly affect the entity's economic performance and (2) the obligation to absorb losses of — or the right to receive benefits from — the entity that could potentially be significant to the entity.	Under either model, control may not rest with the majority owner if certain conditions exist. Under the VIE model (unlike the voting interest entity model), a broader list of activities is typically considered in the determination of which party, if any, should consolidate.
Definition of participating rights	Rights that allow the limited partners or noncontrolling shareholders to block or participate in certain significant financial and operating decisions that are made in the ordinary course of business. A majority voting interest holder is precluded from consolidating if a participating right that is held by a noncontrolling shareholder is related to any significant financial and operating decision that occurs as a part of the ordinary course of the investee's business.	Rights that provide the ability to block or participate in the actions through which an entity exercises the power to direct the activities of a VIE that most significantly affect the VIE's economic performance. Participating rights only preclude another party from controlling and consolidating if they are held by a single reporting entity and unilaterally exercisable relative to all of the activities that most significantly affect the economic performance of the VIE.	While the definition of participating rights differs under the two models (i.e., under the VIE model, it encompasses a broader set of activities), the most significant difference is that the voting interest entity model precludes consolidation if a noncontrolling interest holder has a substantive participating right over **certain** significant financial and operating decisions. The VIE model precludes consolidation only if another party has substantive participating rights over **all** activities that most significantly affect the economic performance of the VIE.

(Table continued)

Concept	Voting Interest Entity Model	VIE Model	Explanation
Impact of related parties	Related parties and de facto agents are not considered.	Related parties, including de facto agents, must be considered. The identification of related parties can have a significant impact on the consolidation analysis, including potentially requiring one of the related parties to consolidate even though the reporting entity, on its own, does not have a controlling financial interest.	Related-party and de facto agency relationships may have an impact on the consolidation conclusion under the VIE model, whereas they have no impact under the voting interest entity model.
Disclosures	The required disclosures for consolidated subsidiaries are limited, including those about such subsidiaries that are not wholly owned.	In addition to the general disclosures required for consolidated voting interest entities, specific VIE disclosures about consolidated and unconsolidated VIEs must be provided.	Consolidating (or having a variable interest in) a VIE results in additional disclosure requirements.

5.2.3 VIE Consolidation Issues

Technology entities may encounter the issues discussed below when determining whether a legal entity is a VIE and should be consolidated.

5.2.3.1 Scope Exceptions

Determining whether a legal entity is subject to the VIE model includes an evaluation of whether any of the scope exceptions in ASC 810 apply. For technology entities, the scope exception for businesses may be the most relevant.

In accordance with ASC 810-10-15-17(d), a legal entity would qualify for the business scope exception to the VIE model if (1) it is a business and (2) none of the following conditions exist:

- The reporting entity, the reporting entity's related parties, or both were significantly involved in the legal entity's design or redesign — unless "the legal entity is an operating joint venture under joint control of the reporting entity and one or more independent parties or a franchisee" (e.g., a technology entity may be an investor in a joint venture that (1) constitutes a business and (2) is formed to develop a new product or technology).
- "The legal entity is designed so that substantially all of its activities either involve or are conducted on behalf of the reporting entity and its related parties." For example, a situation in which the legal entity is dedicated to developing software or other in-process technology and the reporting entity has rights to the resulting product may indicate (depending on the relative significance of those factors) that substantially all of the legal entity's activities are conducted on behalf of the reporting entity.

- "The reporting entity and its related parties provide more than half of the total of the equity, subordinated debt, and other forms of subordinated financial support to the legal entity based on an analysis of the fair values of the interests in the legal entity."
- "The activities of the legal entity are primarily related to securitizations or other forms of asset-backed financings or single-lessee leasing arrangements."

For more information, see Section 3.4.4 of Deloitte's Roadmap *Consolidation — Identifying a Controlling Financial Interest*.

5.2.3.2 Identifying Variable Interests

While there are many forms of variable interests, all variable interests will absorb portions of a VIE's variability (changes in the fair value of the VIE's net assets exclusive of variable interests) that the legal entity was designed to create. Sometimes, it is easy to identify a variable interest (e.g., equity and debt). However, the analysis is much more challenging in the evaluation of other arrangements (e.g., derivatives, leases, and decision-maker and other service-provider contracts). For example, a technology entity may have licenses, royalties, or other similar arrangements that represent variable interests in the legal entity because the contractual terms require payments from the legal entity on the basis of the legal entity's revenues or other performance indicators. Therefore, such arrangements absorb, in part, the variability associated with changes in the legal entity's performance (i.e., changes in the fair value of the legal entity's net assets). For more information, see Section 4.3 of Deloitte's Roadmap *Consolidation — Identifying a Controlling Financial Interest*.

5.2.3.3 Determining Whether a Legal Entity Is a VIE

To qualify as a VIE, a legal entity needs to satisfy only one of the following characteristics:

- The legal entity does not have sufficient equity investment at risk.
- The equity investors at risk, as a group, lack the characteristics of a controlling financial interest.
- The legal entity is structured with disproportionate voting rights, and substantially all of the activities are conducted on behalf of an investor with disproportionately few voting rights.

Technology entities may invest in development-stage entities. In determining whether the first characteristic is met, a reporting entity should consider the design of the development-stage entity and the development-stage entity's current stage of development. When the development-stage entity is still in the development stage and there is substantial uncertainty about whether the development-stage entity will proceed to the next stage, it may be appropriate to consider only the current stage in the equity sufficiency assessment. For example, a technology entity may invest in a development-stage entity that is currently in the product development stage. If a product is successfully developed, the development-stage entity plans to commence test marketing by selling the products in selected areas. If there is substantial uncertainty about whether a product will be successfully developed, only the current phase of the development-stage entity's development needs to be considered. Therefore, if the equity capital is deemed sufficient to finance the initial product development phase, the development-stage entity would be considered to have sufficient equity investment at risk. However, this determination may need to be reassessed in a subsequent period (e.g., if the development-stage entity successfully develops a product and commences test marketing in the next phase). For more information, see Section 5.2.4 of Deloitte's Roadmap *Consolidation — Identifying a Controlling Financial Interest*.

5.2.3.4 *Determining the Primary Beneficiary*

The primary beneficiary of a VIE is the party required to consolidate the VIE because it has a controlling financial interest in the VIE. Specifically, the reporting entity is the primary beneficiary if it has (1) the power to direct the activities that most significantly affect the VIE's economic performance and (2) the obligation to absorb losses or the right to receive benefits of the VIE that could potentially be significant to the VIE.

Identifying which entity has the power necessitates (1) evaluating the purpose and design of the VIE and the risks the VIE was designed to create and pass along to its variable interest holders, (2) identifying the activities related to the risks that most significantly affect the economic performance of the VIE, and (3) identifying the party that makes the significant decisions or controls the activity or activities that most significantly affect the VIE's economic performance. For more information, see Chapter 7 of Deloitte's Roadmap *Consolidation — Identifying a Controlling Financial Interest*.

Sometimes, forward starting rights or contingencies may shift power from one investor to another, as illustrated in the example below.

Example 5-1

Investor A, a technology entity, invests with Investor B, an unrelated party, in Entity C, a VIE that is designed to develop a particular IP and manufacture and market the resulting product. Whereas A has the power over the development of the IP, B has the power over the manufacturing and marketing of the resulting product. The activities and decisions related to both the development of the IP and the manufacturing and marketing of the resulting product are significant to C's economic performance.

Entity C is designed in such a way that there are two distinct stages during its life, and the manufacturing and marketing stage will not begin until the development stage is complete. In addition, there is substantial uncertainty about whether the IP can be successfully developed.

Under these circumstances, successful completion of development may be considered a substantive contingent event that results in a change in power from A to B. Therefore, the primary-beneficiary determination would focus on the first stage (i.e., development of the IP) until the development is complete, and A would initially have the power to direct the most significant activities of C. If the IP is successfully developed into a product, the primary-beneficiary determination would focus on the second stage (i.e., the manufacturing and marketing of the product), and B would have the power at that time to direct the most significant activities of C.

For more information, see Section 7.2.9 of Deloitte's Roadmap *Consolidation — Identifying a Controlling Financial Interest*.

5.2.4 SEC Comment Letter Trends

The SEC staff's comments about consolidation frequently focus on the VIE model, including (1) an explanation of the reporting entity's involvement with, and the structure of, VIEs; (2) the determination of whether an entity is a VIE; (3) the determination of whether the reporting entity is the primary beneficiary of a VIE (including reassessment of whether the reporting entity continues to be the primary beneficiary); and (4) required disclosures related to the reporting entity's interests in VIEs.

For more information, see Section 2.2 of Deloitte's Roadmap *SEC Comment Letter Considerations, Including Industry Insights*.

SEC staff comments related to noncontrolling interests have focused on the allocation of net income (loss) to the noncontrolling interest holder and the parent. Accordingly, a registrant may be asked to provide the SEC staff with detailed information about how the registrant determined the allocation, particularly when the allocation is disproportionate to the noncontrolling interest holder's investment. The SEC staff has also commented on registrants' accounting for redeemable noncontrolling interests since SEC rules still prohibit registrants from including redeemable equity in any caption titled "total equity." For more information, see Chapters 6 and 9 of Deloitte's Roadmap *Noncontrolling Interests* and Section 2.16 of Deloitte's Roadmap *SEC Comment Letter Considerations, Including Industry Insights*.

5.3 Inventory

Many technology entities manufacture (or outsource the manufacture of) various hardware and components, including semiconductor chips, servers, personal computers, and smart devices. Under ASC 330, inventory is defined as tangible personal property that is (1) "[h]eld for sale in the ordinary course of business," (2) "[i]n process of production for such sale," or (3) "[t]o be currently consumed in the production of goods or services to be available for sale." For manufacturers, inventory is characterized as finished goods, work in process, or raw materials and supplies.

5.3.1 Hardware and Components

All inventory is accounted for on the basis of its cost (i.e., "expenditures and charges directly or indirectly incurred in bringing an article to its existing condition and location," as stated in ASC 330-10-30-1). However, there are various methods for determining such cost, including FIFO; last in, first out (LIFO); and the retail inventory method. In addition to direct costs, inventoriable costs include overhead costs, such as repairs and maintenance of production equipment, utilities and rents related to the production area, production supervisory wages and compensation, costs of quality control and inspection, certain warehousing or distribution costs, and depreciation on production-related assets.

Technology entities must also consider whether inventory has become impaired, especially since the risks of impairment have increased as a result of supply-chain issues, inflationary pressures, and reduced demand. Inventory is recorded at either (1) the lower of cost or market (for inventory measured by using LIFO or the retail inventory method) or (2) the lower of cost or net realizable value (for inventory measured by using a method other than LIFO or the retail inventory method, such as FIFO). In addition, a technology entity that has entered into noncancelable long-term purchase commitments may need to consider whether it should recognize losses on the purchase commitments if it cannot recover such losses by increasing its selling prices.

5.3.1.1 Hardware and Services — Combined Performance Obligation

In some arrangements, costs (other than set-up costs) are incurred at or around the time an entity begins to satisfy a performance obligation. For example, an entity may physically deliver hardware used as part of a combined performance obligation to provide services (e.g., an integrated cybersecurity solution) to a customer over time. That is, the hardware is not distinct; rather, it forms part of a combined performance obligation that is satisfied over time. The hardware may be recorded by the entity as inventory before it is physically transferred to the customer and would typically be derecognized by the entity once it is physically delivered to the customer since it would most likely be a fulfillment cost.

Depending on the facts and circumstances, it may or may not be acceptable under ASC 340-40 for an entity to capitalize initial fulfillment costs incurred when the costs are related to part of a combined performance obligation that will be satisfied over time. Generally, before delivery, the asset to which the fulfillment costs are related (e.g., hardware) is held in the entity's inventory and is therefore within the scope of the inventory accounting guidance of ASC 330. However, once the asset is physically transferred to the customer, the asset may no longer be within the scope of ASC 330.

Under ASC 330, the cost of inventory should be recognized with the related revenue. However, the asset may no longer be within the scope of ASC 330 once it is deployed in a specific customer contract (i.e., once it is shipped to a customer). At this point, the costs related to the asset could be evaluated as contract fulfillment costs in accordance with ASC 340-40. If ASC 340-40 is applicable, an entity should consider the three criteria in ASC 340-40-25-5 to determine whether capitalization of the costs is appropriate:

> a. The costs relate directly to a contract or to an anticipated contract that the entity can specifically identify . . . .
>
> b. The costs generate or enhance resources of the entity that will be used in satisfying (or in continuing to satisfy) performance obligations in the future.
>
> c. The costs are expected to be recovered.

Generally, the asset to which the costs are related is physically delivered to the customer as part of a specific contract with that customer; therefore, criterion (a) is met. Further, if the entity expects to recover the costs of the delivered asset through the transaction price, the entity would conclude that criterion (c) is met.

Unlike the evaluations of criteria (a) and (c), respectively, which are relatively straightforward, the evaluation of whether criterion (b) is met (i.e., whether the costs generate or enhance a resource of the entity that the entity will use to satisfy its performance obligation in the future) generally requires more judgment. If the entity determines that capitalization of the related costs is appropriate in accordance with ASC 340-40, it should subsequently amortize the costs related to the asset as it transfers the related services. For more information, see Section 13.3.3.4 of Deloitte's Roadmap ***Revenue Recognition***.

5.3.1.2 Leased Hardware

There are additional considerations when a technology entity leases hardware instead of selling it. In these situations, the entity's arrangement would be subject to the guidance in ASC 842 (or ASC 840 before the adoption of ASC 842), provided that the arrangement meets the definition of a lease. If the hardware is subject to an operating lease (as opposed to a direct financing lease or sales-type lease, in which case the hardware would be accounted for under ASC 330), the entity would account for the hardware under ASC 360 rather than ASC 330. For more information about leases, see Section 5.5.

5.3.2 Software

Costs of software to be sold, leased, or marketed is subject to the guidance in ASC 985-20 and ASC 985-330. Under ASC 985-330, any costs incurred to duplicate software, produce documentation and training, and physically package the software are capitalized as inventory. However, those costs are typically not material for software entities, and under ASC 985-20, costs incurred before technological feasibility is established are expensed as R&D costs. Further, costs of developing software for internal use are subject to the guidance in ASC 350-40. For more information about whether software costs should be accounted for under ASC 985-20 or ASC 350-40, see Chapter 4.

5.3.3 SEC Comment Letter Trends

The SEC staff may ask registrants to clarify their accounting policy disclosures regarding inventory valuation, particularly the policies and estimates related to the measurement of inventory. ASC 275-10-50 requires disclosures of significant estimates applicable to inventory.

5.4 Stock-Based Compensation

To incentivize employee and nonemployee performance and align the interests of grantees and shareholders, technology entities often grant stock-based compensation awards such as stock options, restricted stock, restricted stock units, stock appreciation rights, and other equity-based instruments in exchange for goods or services or consideration paid to a customer. Such awards are accounted for under ASC 718. The amount of compensation cost to recognize is generally based on the fair value of the stock-based compensation arrangement, and ASC 718 requires entities to apply a "fair-value-based measurement method" when accounting for such arrangements.

For more information about accounting for stock-based compensation, see Deloitte's Roadmap *Share-Based Payment Awards*.

5.4.1 Valuation Considerations

Technology entities that are publicly traded typically use the observable market price in an active market to value the equity shares underlying a stock-based compensation award. However, observable market prices for a nonpublic entity's equity shares may not exist. In such an instance, a nonpublic entity could apply many of the principles of ASC 820 to determine the fair value of its common stock, often by using either a market approach or an income approach (or both). A nonpublic entity may apply a "top-down method," which involves first valuing the entity, then subtracting the fair value of debt, and then using the resulting equity valuation as a basis for allocating the equity value among the entity's different classes of equity securities. A nonpublic entity may also look to recent sales of its equity shares directly to investors or other transactions in secondary markets.

While not authoritative, the AICPA's Accounting and Valuation Guide *Valuation of Privately-Held-Company Equity Securities Issued as Compensation* (the "AICPA Valuation Guide") provides useful interpretive and best-practice guidance for valuing the equity securities of nonpublic entities. It discusses, among other topics, possible methods of allocating enterprise value to underlying securities, enterprise- and industry-specific attributes that should be considered in the determination of fair value, best practices for supporting fair value, and recommended disclosures for a registration statement. The AICPA Valuation Guide also emphasizes the importance of contemporaneous valuations from independent valuation specialists to determine the fair value of equity securities. Further, the AICPA Valuation Guide highlights differences between pre-IPO and post-IPO valuations. One significant difference is that the valuation of nonpublic entity securities often includes a discount for lack of marketability (DLOM). The DLOM can be determined by using several valuation techniques and is significantly affected by the underlying volatility of the stock and the period the stock is illiquid.

For more information, see Section 4.12 of Deloitte's Roadmap *Share-Based Payment Awards*.

5.4.1.1 Cheap Stock

The SEC often focuses on "cheap stock"[3] issues in connection with a nonpublic entity's preparation for an IPO. The SEC staff is interested in the rationale for any difference between the fair value measurements of the underlying common stock of stock-based compensation awards and the anticipated IPO price. In addition, the SEC staff will challenge valuations that are significantly lower than prices paid by investors to acquire similar stock. If the differences cannot be reconciled, a nonpublic entity may be required to record a cheap-stock charge. Since stock-based compensation awards are often a compensation tool to attract and retain employees or nonemployees, a cheap-stock charge could be material and, in some cases, lead to a restatement of the financial statements.

An entity preparing for an IPO should refer to paragraph 7520.1 of the SEC Division of Corporation Finance's (the "Division's") Financial Reporting Manual (FRM), which outlines considerations for registrants when the "estimated fair value of the stock is substantially below the IPO price." In such situations, registrants should be able to reconcile the change in the estimated fair value of the underlying equity between the award grant date and the IPO by taking into account, among other things, intervening events and changes in assumptions that support the change in fair value.

For more information, see Section 4.12.1 of Deloitte's Roadmap *Share-Based Payment Awards*.

5.4.1.2 Internal Revenue Code Section 409A

When granting stock-based compensation awards, a nonpublic entity should be mindful of the tax treatment of such awards and the related implications. Section 409A of the Internal Revenue Code (IRC) contains requirements related to nonqualified deferred compensation plans that can affect the taxability of holders of stock-based compensation awards. If a nonqualified deferred compensation plan (e.g., one issued in the form of stock-based compensation) fails to comply with certain IRC rules, the tax implications and penalties at the federal level (and potentially the state level) can be significant. Accordingly, it is imperative to establish a supportable fair market value of the stock to avoid unintended tax consequences for the issuer and holder. For more information, see Section 4.12.2 of Deloitte's Roadmap *Share-Based Payment Awards*.

5.4.2 Common-Stock Repurchase Transactions

Certain stock transactions with employees, former employees, nonemployee providers of goods or services, and customers of a nonpublic entity (collectively referred to as "grantees") involve significant judgment and complexities that may have a material impact on the nonpublic entity's financial statements. In addition, such transactions often have certain tax implications for both the nonpublic entity and its employees. These stock transactions can be between (1) the nonpublic entity and its grantees or (2) investors and the nonpublic entity's grantees.

5.4.2.1 Nonpublic Entity Purchases Shares From Grantees

To give their grantees liquidity (or for other reasons), nonpublic entities may sometimes repurchase vested common stock from them. In some cases, the price paid for the shares exceeds their fair value at the time of the transaction. When a nonpublic entity repurchases common shares from its grantees at an amount greater than the estimated fair value of the shares at the time of the transaction, the excess of the purchase price over the fair value of the common shares generally represents compensation cost. In addition, an entity's past practice of repurchasing shares, or an arrangement that permits repurchase, could affect the classification of stock-based compensation awards. For more information, see Section 4.12.3.1 of Deloitte's Roadmap *Share-Based Payment Awards*.

[3] Cheap stock refers to issuances of equity securities before an IPO in which the value of the shares is below the IPO price.

5.4.2.2 Investor Purchases of Shares From Grantees

On occasion, existing investors (such as private equity, hedge fund, or venture capital investors) intending to increase their stake in an emerging nonpublic entity may undertake transactions with other shareholders in connection with or separately from a recent financing round (e.g., a recent issuance of preferred stock). These transactions may include the purchase of shares of common or preferred stock (typically common stock) by investors from the founders of the nonpublic entity or other individuals who are also considered grantees. Because the secondary transactions are between grantees of the nonpublic entity and existing shareholders and are related to the transfer of outstanding shares, the nonpublic entity may not be directly involved in them (though it may be indirectly involved by facilitating the exchange or not exercising a right of first refusal). In other circumstances, the nonpublic entity may be actively involved in effecting a tender offer through activities such as determining or negotiating the purchase price, determining which grantees and investors can participate, or determining how many shares can be sold in the secondary transaction.

A secondary transaction may be an arm's-length fair value transaction or may otherwise provide an indication of the fair value of the entity's common stock. Such a transaction is likely to be relevant in the nonpublic entity's common stock valuation, which is typically performed by a third-party valuation firm to ensure compliance with IRC Section 409A and determine the fair-value-based measure of the nonpublic entity's stock-based compensation arrangements.

If the price paid for the shares exceeds their fair value at the time of the secondary transaction, the nonpublic entity will typically recognize the excess as compensation cost. The presumption in such a transaction is that the excess is compensation paid to grantees, and we believe that it would be difficult for an entity to demonstrate that the non–fair value transaction with grantees is clearly for purposes other than compensation. It is important for a nonpublic entity to recognize that this type of transaction may be subject to the guidance in ASC 718 because the investors are considered to be holders of an economic interest in the entity. In addition, when new investors participate in a secondary transaction with a compensatory element, they may not be dissimilar to parties that already hold economic interests in the nonpublic entity and may have similar motivations to compensate employees even though they may not hold economic interests in the entity before entering into the transaction.

Investors purchasing common stock in a secondary transaction may pay a price that is the same as, or at a small discount from, the price paid for convertible preferred stock concurrently or recently issued. In these and other circumstances in which common stock is purchased from grantees, nonpublic entities will need to carefully consider whether the price paid is an indication of the fair value of the common stock or is compensatory. While there may be indicators that the transaction is compensatory (e.g., the entity actively facilitated the transaction by determining or negotiating the purchase price and the sellers were limited to grantees), significant judgment is required in making this assessment, and all facts and circumstances related to the transaction should be considered. If the facts and circumstances reflect mixed indicators that the transaction is both an indication of the fair value of the common stock and compensatory, an entity should consider whether it should both (1) provide some weighting of the observable price in its fair value estimation in conjunction with other valuation approaches and (2) recognize compensation cost for any difference between the price paid and the ultimate fair value determination.

Shares purchased from grantees by a related party or an economic interest holder may include shares that have been vested (or have been issued as a result of the exercise of options) for less than six months (i.e., the shares are considered immature). We do not believe that a reporting entity would generally consider a history of investor purchases of immature shares from grantees (regardless of whether such purchases are conducted at fair value or at an amount that exceeds fair value) when assessing whether it has established a past practice of settling immature shares that results in a substantive liability. Generally, if the reporting entity otherwise classifies the shares as equity, purchases of such shares by the related party or economic interest holder do not satisfy a liability on the reporting entity's behalf. Rather, the purchaser (often through a tender offer to grantees that is, in part, organized by the reporting entity) is making an investment decision to establish or increase its ownership interest in the reporting entity and thereby is the party making a payment as the principal in the purchase transaction with grantees. Accordingly, a related party or an economic interest holder that directly makes such a purchase from grantees would not change the substantive terms of the stock-based compensation arrangement that requires the reclassification of the shares from equity to a liability.

For more information, see Section 4.12.3.2 of Deloitte's Roadmap *Share-Based Payment Awards*.

5.4.2.3 Tax Considerations

For tax purposes, stock repurchases are generally treated either as capital (e.g., capital gain) or as dividend-equivalent redemptions (e.g., ordinary dividend income to the extent that the entity has earnings and profits). Repurchases from grantees (e.g., current or former employees or independent contractors) give rise to questions about whether any of the proceeds should be treated as compensation for tax purposes. For more information, see Section 4.12.3.2.2 of Deloitte's Roadmap *Share-Based Payment Awards*.

5.4.3 SEC Comment Letter Trends

The SEC staff's comments about stock-based compensation frequently focus on (1) compliance with the required disclosures in ASC 718-10-50-2, (2) cheap stock considerations, (3) secondary transactions (including entity repurchases of shares from grantees), (4) significant valuation assumptions for options such as volatility and expected term, (5) accounting for profits interests, and (6) presentation of stock-based compensation expense. Many of these areas of focus are particularly relevant for financial reporting periods preceding the date on which an entity goes public.

For more information, see Section 2.21 of Deloitte's Roadmap *SEC Comment Letter Considerations, Including Industry Insights*.

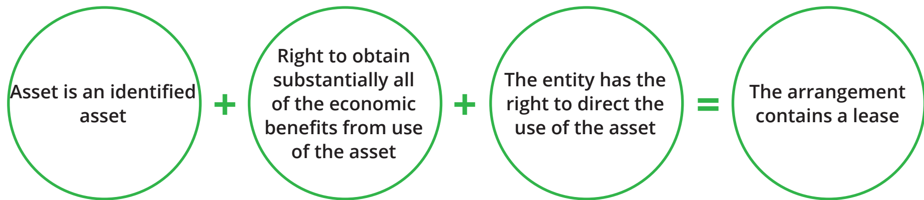
5.5 Leases

While public entities have adopted ASC 842, many nonpublic entities that have not are still grappling with implementation challenges. The most significant change under ASC 842 is its lessee model, which brings most leases onto the balance sheet. Accordingly, except for those leases that qualify for the short-term lease exemption (i.e., certain leases with a lease term of 12 months or less), the standard's lessee model requires lessees to adopt a right-of-use (ROU) asset approach that brings substantially all leases onto the balance sheet. Under this approach, a lessee records an ROU asset representing its right to use the underlying asset during the lease term and a corresponding lease liability in a manner similar to the current approach for capital leases.

For lessors, while much of the accounting in ASC 842 is largely unchanged relative to legacy GAAP (e.g., ASC 842 retains the approach for operating and capital/finance leases), a common misconception is that lessor accounting has not changed much under ASC 842. One key change is to align certain underlying principles of ASC 842 with those of the revenue standard (i.e., ASC 606).

5.5.1 Scope

One of the most significant challenges technology entities encounter in applying the leasing standard is to determine which arrangements contain leases subject to ASC 842, particularly when there are embedded leases in nonlease arrangements. ASC 842 defines a lease as "a contract, or part of a contract, that conveys the right to control the use of identified property, plant, or equipment (an identified asset) for a period of time in exchange for consideration." Identifying whether an arrangement contains a lease requires judgment and often requires an entity to understand the nuances of the contractual provisions and delivery. The graphic below summarizes the three criteria that must be met for a contract to contain a lease.



An entity is required at inception to identify whether a contract is or contains a lease. The entity will reassess whether the contract is or contains a lease only in the event of a modification to the terms and conditions of the contract.

The table below further discusses key concepts related to the definition of a lease.

Concept	Requirement	Observation
Use of an identified asset	An asset is typically considered to be an identified asset if it is explicitly specified in a contract or implicitly specified at the time the asset is made available for use by the customer. However, if the supplier has substantive rights to substitute the asset throughout the period of use **and** would benefit economically from substituting that asset, the asset is not considered "identified," and there is no lease for accounting purposes (see below).	This requirement is similar to the guidance in ASC 840-10-15 (formerly EITF Issue 01-8). An entity does not need to be able to identify the particular asset (e.g., by serial number) but must instead determine whether an identified asset is needed to fulfill the contract. Distinguishing between a lease and a capacity contract requires significant judgment. The standard clarifies that a capacity portion of an asset is an identified asset if it is physically distinct (e.g., a specific floor of a building). On the other hand, a capacity portion of a larger asset that is not physically distinct (e.g., a percentage of a pipeline) is not an identified asset unless that portion represents substantially all of the asset's capacity.

(Table continued)

Concept	Requirement	Observation
Substantive substitution rights	A supplier's right to substitute an asset is substantive only if both of the following conditions exist: • The supplier has the practical ability to substitute alternative assets throughout the period of use. • The supplier would benefit economically from the exercise of its right to substitute the asset.	The FASB established this requirement because it reasoned that if a supplier has a substantive right to substitute the asset throughout the period of use, the supplier — not the customer — controls the use of the asset. It is often difficult for a customer to determine whether a supplier's substitution right is substantive. A customer should presume that a substitution right is not substantive if it is impractical to prove otherwise.
Right to obtain economic benefits from use of the identified asset	To control the use of an identified asset, a customer must have the right to obtain substantially all of the economic benefits from use of the asset throughout the period of use. The term "substantially all" is generally 90 percent of the economic benefits of the asset.	The economic benefits from use of an asset include the primary output and by-products of the asset as well as other economic benefits from using the asset that could be realized from a commercial transaction with a third party.
Right to direct the use of the identified asset	A customer has the right to direct the use of an identified asset throughout the period of use if either of the following conditions exists: • The customer has the right to direct "how and for what purpose" the asset is used throughout the period of use. • The relevant decisions about how and for what purpose the asset is used are predetermined and (1) the customer has the right to operate (or direct others to operate) the asset throughout the period of use and the supplier does not have the right to change the operating instructions or (2) the customer designed the asset in a way that predetermines how and for what purpose the asset will be used.	The relevant rights to be considered are those that affect the economic benefits derived from the use of the asset. Customers' rights to direct the use of the identified asset include the rights to change: • The type of output produced by the asset. • When the output is produced. • Where the output is produced. On the other hand, rights that are limited to maintaining or operating the asset do not grant a right to direct how and for what purpose the asset is used.

Often, the assessment of whether a contract is or contains a lease will be straightforward. However, the evaluation will be more complicated when an arrangement involves both a service component and a leasing component or when both the customer and the supplier make decisions about the use of the underlying asset. An asset typically is identified by being explicitly specified in a contract. However, an asset also can be identified by being implicitly specified at the time the asset is made available for the customer's use.

For more information about identifying a lease, see Chapter 3 of Deloitte's Roadmap *Leases*.

5.5.1.1 Cloud Computing Arrangements

Cloud computing arrangements require the use of certain equipment (e.g., servers). While a benefit of cloud-based technologies is that an entity does not need to own and maintain servers in its facility, saving valuable space and minimizing certain costs, the equipment being used to provide the cloud-based technology could represent a lease to the entity if the lease criteria are met. Under the leasing guidance in ASC 842, if a cloud computing arrangement contains a lease of the equipment used to provide the related service, the lessee would be required to recognize on its balance sheet an asset (related to the right to use the equipment) and a liability (related to the payments owed by the lessee).

The table below provides indicators of whether a cloud computing arrangement contains a lease.

Criteria	Indicators That the Cloud Computing Arrangement Contains a Lease	Indicators That the Cloud Computing Arrangement Does Not Contain a Lease
Equipment is an identified asset	• Because of specific security and encryption requirements, only certain servers or locations can be used by the entity (i.e., the customer). • The server is explicitly specified (e.g., through a serial number) in the contract. • The server is dedicated to the entity. • The supplier does not have the contractual right to substitute the server being used by the entity (other than for maintenance or upgrade purposes).	• The entity shares the server with other customers (i.e., only a portion of server space provided). • The contract states that the entity will receive access to applications in the cloud but does not specify the server being used, and the server is not dedicated to the entity. • The supplier has the practical ability and contractual right to substitute the server being used without the entity's permission, and the supplier would not incur significant costs to switch the entity to a different server.
The entity has the right to obtain substantially all of the economic benefits from use of the equipment	• The server is dedicated to the entity. • Even if the entity does not fully use the server, the supplier does not have the right to store another customer's data on the server.	• The supplier has the right to sell unused server capacity to other customers. • The entity is limited from using all of the server's capacity.
The entity has the right to direct the use of the equipment	• The entity determines what type of data and how much data will be stored on the server as well as when the data will be transferred to and from the server. • The entity is not limited to when it can use the cloud-based technology.	• The supplier specifies what type of data and how much data will be stored on the server (excluding protective rights). • The supplier specifies when the entity can access the cloud-based technology.

The determination of whether a cloud computing arrangement contains a lease and the resulting accounting can significantly affect an entity's balance sheet and target metrics through the recognition of an additional asset and liability. In addition, certain policy elections related to lease costs (e.g., the election of a practical expedient to treat lease and nonlease components as a single component) may cause the nature and extent of the costs to be capitalized as part of the lease asset to vary. Further, the presentation and subsequent accounting and expense profile for the arrangement will vary depending on whether the lease is classified as a finance or operating lease. Because of the size of many cloud implementation projects, an entity's move to the cloud may have impacts on key performance indicators

(KPIs) and the financial statements overall; for example, EBITDA, working capital, the debt-to-equity ratio, and the return on assets may be affected by the structure of these arrangements. With these factors in mind, entities should carefully evaluate their cloud computing arrangements to determine whether the equipment being used in the arrangements represents a lease.

For an illustration of cloud computing arrangements and the related financial impacts, see Section 5.5.3.3.

5.5.1.2 *Intangible Assets*

Technology entities commonly enter into arrangements that convey rights to use intangible assets (e.g., on-premise software licenses). Customer rights to use intangible assets are outside the scope of ASC 842. As specified in ASC 842-10-15-1, entities should consider the guidance in ASC 350 when accounting for such arrangements.

5.5.2 Components of a Contract

A contract can contain both lease and nonlease components. Generally, the nonlease components are services that the supplier is also performing for the customer. For example, a technology entity may decide to (1) lease hardware and (2) sell its subscription service to the same customer. In these situations, the entity's hardware would be subject to the provisions in ASC 842, and consideration would generally be allocated to the separate lease component (i.e., the hardware) and the nonlease component (i.e., the subscription service). However, practical expedients exist for both lessees and lessors if certain conditions are met. For lessee considerations related to lease and nonlease components and lessor considerations related to those components, see Sections 5.5.3.2 and 5.5.4.2, respectively.

The table below highlights the differences between lease components, nonlease components, and "noncomponents" (i.e., activities paid for by the customer that do not transfer a good or service to the customer).

Lease Component	The right to use an underlying asset is considered a separate lease component if (1) a lessee can benefit from the use of the underlying asset either on its own or with other resources that are readily available and (2) the underlying asset is not highly dependent on or highly interrelated with other assets in the arrangement.
Nonlease Component	An activity that transfers a separate good or service to the customer is a nonlease component. For example, maintenance services consumed by the customer and bundled with the lease component in the contract would be a separate nonlease component because the performance of the maintenance transfers a service to the customer that is separate from the right to use the asset.
Noncomponent	Any activity in a contract that does not transfer a separate good or service to the lessee is neither a lease component nor a nonlease component; therefore, consideration in the contract would not be allocated to such an activity. For example, payments made by the customer for property taxes or insurance that covers the supplier's interests would not represent a component in the contract.

For more information about components of a contract, see Chapter 4 of Deloitte's Roadmap *Leases*.

5.5.3 Lessee Considerations

5.5.3.1 Lease Classification

Under ASC 842, at lease commencement, a lease is classified as a finance lease if any of the following criteria are met:

- "The lease transfers ownership of the underlying asset to the lessee by the end of the lease term."
- "The lease grants the lessee an option to purchase the underlying asset that the lessee is reasonably certain to exercise."
- "The lease term is for the major part of the remaining economic life of the underlying asset."
- "The present value of the sum of the lease payments and any residual value guaranteed by the lessee . . . equals or exceeds substantially all of the fair value of the underlying asset."
- "The underlying asset is of such a specialized nature that it is expected to have no alternative use to the lessor at the end of the lease term."

If none of the above criteria are met, the lease will be classified as an operating lease.

Finance leases are accounted for in a manner similar to how entities account for a financed purchase arrangement. The lessee recognizes interest expense and amortization of the ROU asset, which result in a greater expense in the early years of the lease than in the later years of the lease. The single lease cost related to an operating lease is recognized on a straight-line basis over the lease term unless another systematic and rational basis is more representative of the pattern in which benefit is expected to be derived from the right to use the underlying asset. Thus, the amortization of an ROU asset related to an operating lease takes into account the interest on the liability so that the expense amount remains constant. That is, the amortization of the ROU asset will increase or decrease proportionally to the change in interest expense on the liability to maintain a straight-line expense throughout the term of the lease. For both types of leases, the lessee recognizes an ROU asset for its interest in the underlying asset and a corresponding lease liability. For more information about lessee accounting, see Chapter 8 of Deloitte's Roadmap *Leases*.

5.5.3.2 Practical Expedient

ASC 842 affords lessees a practical expedient related to separating (and allocating consideration to) lease and nonlease components. That is, lessees may elect to account for the nonlease components in a contract as part of the single lease component to which they are related. The practical expedient is an accounting policy election that must be made by class of underlying asset. Accordingly, when a lessee elects the practical expedient, any portion of consideration in the contract that would otherwise be allocated to the nonlease components will instead be accounted for as part of the related lease component for classification, recognition, and measurement purposes. In addition, any payments related to noncomponents would be accounted for as part of the related lease component (i.e., the associated payments would not be allocated between the lease and nonlease components).

5.5.3.3 Cloud Computing Arrangements

Differences, even if minor, in how a cloud computing contract is structured can result in differing expense recognition patterns, including:

- Operating expense being recognized immediately as incurred.

- Costs being capitalized and recognized as interest and amortization (e.g., finance lease or internal-use software development).
- Costs being deferred over the life of the contract (e.g., cloud computing service arrangement or operating lease).

The guidance in ASC 350-40 provides for the deferral of certain costs incurred in cloud computing arrangements that are service agreements. Although an entity may find it beneficial to recognize certain costs incurred in the development phase over the life of the contract, such deferred recognition may not achieve its desired effect when all financial measures and budgetary objectives are taken into account.

The example below illustrates some of the considerations related to an entity's cloud adoption efforts and how different paths can result in significantly different financial statement and budgetary outcomes while obtaining effectively the same operational end state.

Example 5-2

Entity X is a large multilocation organization that relies heavily on its on-premise technology. Recently, X determined that it should migrate its data and applications to the cloud to provide (1) the additional flexibility it needs to support its decentralized employee base and (2) the scalability it needs to accommodate its growth.

Entity X now plans to enter into a three-year cloud contract with Vendor Y under which all of its data and applications will be migrated to the cloud. It is looking to acquire access equivalent to 1,000 terabytes of space on Y's servers. To determine the best structure for the arrangement, X considers three scenarios, which are outlined in the table below.

Scenario 1 — Operating Expense Treatment (Service)	Scenario 2 — Capitalization (Finance Lease)	Scenario 3 — Capitalization (Operating Lease)
• Contract provides X with 1,000 terabytes of space. • Space in the cloud is within a domestically located server farm. • Space provided is part of a larger server. Although X's data and applications are segregated from those of other entities through logical partitioning, X cannot specifically identify the server or servers on which its information resides because the license does not specifically identify the server or servers that hold X's information. • Vendor Y has ability to move data to another server and perform upgrades without an explicit request from X to do so. • Autoscaling is included with the contract. • The cloud hosting fee is $720,000 (paid annually in advance).	• Contract provides X with 1,000 terabytes of space. • Space in the cloud is within a domestically located server farm. • Entity X's data and applications are segregated from other entities' data and applications by being part of dedicated servers that are specifically configured to meet X's requirements and can be identified by serial number. • Entity X has direct say in any upgrades to its servers, and Y cannot make changes unless X directly requests them. • Autoscaling is included with the contract. • The cloud hosting fee is $790,000 (paid annually in advance). • The servers' estimated fair market value is $825,000. • The servers' estimated economic life is four years.	• Contract provides X with 1,000 terabytes of space. • Space in the cloud is within a domestically located server farm. • Entity X's data and applications are segregated from other organizations' data and application by being part of dedicated servers that are specifically configured to meet X's requirements and can be identified by serial number. • Entity X has direct say in any upgrades to its servers, and Y cannot make changes unless X directly requests them. • Autoscaling is included with the contract. • The cloud hosting fee is $790,000 (paid annually in advance). • The servers' estimated fair market value is $880,000. • The servers' estimated economic life is five years.

Example 5-2 (continued)

Entity X cannot take possession of the software under any of the scenarios. Up-front configuration costs, data migration costs, and application development costs are the same under each scenario since those costs are not the focus of this example. Service level agreements and all technical aspects are also considered to be comparable. In addition, the technology options explored all provide the necessary level of security. Because the operational benefits, challenges, and risks are consistent across the technology options, the deciding factor for choosing the structure of the arrangement will be the accounting treatment.

On the basis of its analysis, X determines that Scenario 1 falls under the guidance in ASC 350-40 on the implementation costs of a hosting arrangement that is a service contract.

The contract in scenario 2 is a lease (for a specified asset) that should be accounted for under ASC 842. Since (1) that contract is for three years, (2) the servers' estimated economic life is four years, and (3) the servers' estimated fair market value is $825,000, X will be using 75 percent of the useful life of the asset (major part of remaining economic life), and the net present value of payments is more than 90 percent of the fair value (substantially all of the fair value). Therefore, the lease should be classified as a finance lease.

Like the contract in Scenario 2, the contract in Scenario 3 is a lease (for a specified asset) that should be accounted for under ASC 842. However, unlike in Scenario 2, neither the test for the major part of the remaining economic life nor the test for substantially all of the fair value is met because the servers in Scenario 3 have a higher estimated fair market value and a longer estimated economic life than those in Scenario 2. Therefore, the lease is an operating lease.

These differences in the structure of the contract result in significantly different accounting treatments, as shown in the tables below.

	Overview and Financial Metric Impact		
	Scenario 1	Scenario 2	Scenario 3
Type of arrangement	Service contract	Finance lease	Operating lease
Balance sheet impact	No impact	ROU asset and liability	ROU asset and liability
Type of expense	Operating expense	Amortization expense and interest expense	Operating expense
Impact on EBITDA	EBITDA = net income	EBITDA > net income	EBITDA = net income

	Fiscal Year-End 1		
	Scenario 1	Scenario 2	Scenario 3
Cash paid	$ 720,000	$ 790,000	$ 790,000
ROU asset	—	1,527,172	1,553,285
Liability	—	1,500,758	1,500,758
Operating expense	720,000	—	790,000
Interest expense	—	52,527	—
Amortization expense	—	$ 763,586	—

Example 5-2 (continued)

	Fiscal Year-End 2		
	Scenario 1	Scenario 2	Scenario 3
Cash paid	$ 720,000	$ 790,000	$ 790,000
ROU asset	—	763,586	790,000
Liability	—	763,285	763,285
Operating expense	720,000	—	790,000
Interest expense	—	26,715	—
Amortization expense	—	$ 763,586	—

	Fiscal Year-End 3		
	Scenario 1	Scenario 2	Scenario 3
Cash paid	$ 720,000	$ 790,000	$ 790,000
ROU asset	—	—	—
Liability	—	—	—
Operating expense	720,000	—	790,000
Interest expense	—	—	—
Amortization expense	—	$ 763,586	—

For contracts that contain leases (i.e., those in Scenarios 2 and 3), X would generally be required to account for nonlease components (e.g., maintenance and other ongoing service costs) separately from the lease components. However, as noted in Section 5.5.3.2, ASC 842 offers lessees a practical expedient under which they may elect to combine lease and nonlease components and account for the combined component as a lease. Entities should carefully consider whether electing this practical expedient would achieve their desired accounting outcomes.

5.5.4 Lessor Considerations

ASC 842's most significant changes to lessor accounting (1) align the profit recognition requirements under the lessor model with those of ASC 606 and (2) amend the lease classification criteria for a lessor to make them consistent with those for a lessee. Accordingly, ASC 842 requires a lessor to use the same classification criteria discussed in Section 5.5.3.1 to classify a lease as a sales-type lease. If none of those criteria are met, the lessor evaluates whether the lease meets the two criteria it must satisfy to be considered a direct financing lease. If neither the sales-type lease criteria nor the direct financing lease criteria are met, the lease is an operating lease.

For more information about lessor accounting, see Chapter 9 of Deloitte's Roadmap *Leases*.

5.5.4.1 Variable Payments

While much of the guidance on lessor accounting is aligned with the revenue guidance in ASC 606, an important distinction between the two may affect lessors in the technology industry. Under ASC 606, variable payments are generally estimated and included in the transaction price subject to a constraint. By contrast, under ASC 842, variable lease payments not linked to an index or rate are generally excluded from the determination of a lessor's lease payments.

For example, a technology entity may sell or lease hardware for which the consideration is based entirely on the usage of the hardware. If a hardware sale is accounted for under ASC 606, the customer's variable payments to the entity may need to be estimated up front and included in the transaction price. However, if the hardware is leased and accounted for under ASC 842, the lessee's variable payments to the entity would not be included in the entity's lease payments.

5.5.4.2 Practical Expedient

Lessors can elect not to separate lease and nonlease components. This election is made by each class of underlying asset and can only be made if certain criteria are met in accordance with ASC 842-10-15-42A through 15-42C, which state the following:

ASC 842-10

15-42A As a practical expedient, a lessor may, as an accounting policy election, by class of underlying asset, choose to not separate nonlease components from lease components and, instead, to account for each separate lease component and the nonlease components associated with that lease component as a single component if the nonlease components otherwise would be accounted for under Topic 606 on revenue from contracts with customers and both of the following are met:

a. The timing and pattern of transfer for the lease component and nonlease components associated with that lease component are the same.
b. The lease component, if accounted for separately, would be classified as an operating lease in accordance with paragraphs 842-10-25-2 through 25-3.

Pending Content (Transition Guidance: ASC 842-10-65-5)

15-42A As a practical expedient, a lessor may, as an accounting policy election, by class of underlying asset, choose to not separate nonlease components from lease components and, instead, to account for each separate lease component and the nonlease components associated with that lease component as a single component if the nonlease components otherwise would be accounted for under Topic 606 on revenue from contracts with customers and both of the following are met:

a. The timing and pattern of transfer for the lease component and nonlease components associated with that lease component are the same.
b. The lease component, if accounted for separately, would be classified as an operating lease in accordance with paragraphs 842-10-25-2 through 25-3A.

ASC 842-10 (continued)

15-42B A lessor that elects the practical expedient in paragraph 842-10-15-42A shall account for the combined component:

a. As a single performance obligation entirely in accordance with Topic 606 if the nonlease component or components are the predominant component(s) of the combined component. In applying Topic 606, the entity shall do both of the following:
   1. Use the same measure of progress as used for applying paragraph 842-10-15-42A(a)
   2. Account for all variable payments related to any good or service, including the lease, that is part of the combined component in accordance with the guidance on variable consideration in Topic 606.

b. Otherwise, as an operating lease entirely in accordance with this Topic. In applying this Topic, the entity shall account for all variable payments related to any good or service that is part of the combined component as variable lease payments.

In determining whether a nonlease component or components are the predominant component(s) of a combined component, a lessor shall consider whether the lessee would be reasonably expected to ascribe more value to the nonlease component(s) than to the lease component.

15-42C A lessor that elects the practical expedient in paragraph 842-10-15-42A shall combine all nonlease components that qualify for the practical expedient with the associated lease component and shall account for the combined component in accordance with paragraph 842-10-15-42B. A lessor shall separately account for nonlease components that do not qualify for the practical expedient. Accordingly, a lessor shall apply paragraphs 842-10-15-38 through 15-42 to account for nonlease components that do not qualify for the practical expedient.

5.5.4.2.1 Lease of Smart Device and Related Subscription Services

Many technology entities offer solutions in which a customer purchases (1) a smart device with an embedded software component (e.g., firmware), (2) maintenance and support (i.e., PCS), and (3) a cloud-based service. In these offerings, the firmware allows the smart device to connect to the cloud-based application, which is physically hosted on the technology entity's systems (or hosted by the entity's cloud-computing vendor) and accessed by the customer over the Internet. Because PCS and a cloud-based service typically are sold together, are coterminous, and have the same pattern of transfer (i.e., ratably over time as stand-ready obligations), they will be referred to collectively as "subscription services."[4]

Instead of selling its smart device, an entity may decide to lease the device and sell its subscription service to the same customer. In these situations, the entity's device would be subject to the provisions in ASC 842,[5] and consideration would generally be allocated to the separate lease component (i.e., the smart device[6]) and the nonlease component (i.e., the subscription service) in accordance with the guidance in ASC 606 on allocating the transaction price to performance obligations. Because the device would be subject to the leasing guidance, the entity would not evaluate whether the leased device represents a distinct promise in accordance with ASC 606.

[4] When control of two or more goods or services is transferred at exactly the same time, or on the same basis over the same period, and if those items do not need to be segregated for presentation or disclosure purposes, it will not be necessary to unbundle each of those concurrently delivered items because the amount and timing of revenue recognized and disclosed would not differ if the items were unbundled. The FASB acknowledges this in paragraph BC116 of ASU 2014-09 and paragraph BC47 of ASU 2016-10.

[5] While it is assumed that the lease of the smart device would be subject to ASC 842, entities should carefully evaluate the scope provisions of the leasing guidance in making that determination.

[6] While the smart device may have embedded software, such software would not need to be treated as a separate nonlease component if it is essential to the functionality of the device. If the software is not essential to the functionality of the device (i.e., it is distinct from the device), the software would not be within the scope of ASC 842.

5.5.4.2.1.1 Practical Expedient Criteria

If the entity elects to use the practical expedient, it may combine the device (i.e., the lease component) and the subscription service (i.e., the nonlease component) if the subscription service would otherwise be accounted for under ASC 606 and both of the conditions in ASC 842-10-15-42A(a) and (b) are met.

As explained in ASU 2018-11, the criterion in ASC 842-10-15-42A(a) focuses on the timing and pattern of transfer (i.e., a "straight-line pattern of transfer . . . to the customer over the same time period") rather than on the timing and pattern of revenue recognition. Therefore, an entity may qualify for the practical expedient if it (1) leases a device that is classified as an operating lease and (2) sells subscription services constituting a stand-ready obligation that has a straight-line pattern of transfer over the same period as the operating lease.

Example 5-3

Entity Z leases a hardware device over a one-year period and sells a cloud-based service for the device over the same period. The cloud-based service would be subject to ASC 606 if accounted for separately from the leased device. The service is a stand-ready obligation that has a straight-line pattern of transfer over the one-year period. In addition, the leased device would be classified as an operating lease under ASC 842 if accounted for separately from the cloud-based service. The leased device similarly has a straight-line pattern of transfer over the one-year period.

Entity Z can elect the practical expedient to account for the leased device and the cloud-based service as a single combined component because (1) the cloud-based service otherwise would be accounted for under ASC 606, (2) the timing and pattern of transfer for the leased device and the cloud-based service are the same, and (3) the leased device, if accounted for separately, would be classified as an operating lease under ASC 842.

Example 5-4

Assume the same facts as in Example 5-3 above, except that the cloud-based service only has a one-month term. The customer has the option to renew the service over the one-year lease term but is not contractually obligated to do so. Therefore, the lease term for the device and the contractual service period for the cloud-based service are not coterminous.

Entity Z can elect the practical expedient to account for the leased device and the cloud-based service as a single combined component if certain conditions are met. We believe that, in some circumstances, the practical expedient can be applied even if the nonlease component is not coterminous with the lease component. Specifically, we think that if the separation of the lease component from the nonlease component would only affect presentation and disclosure (i.e., the pattern and timing of revenue recognition would not differ if the nonlease component were accounted for separately), the lessor can elect the practical expedient to combine the lease component and the nonlease component even if the timing of transfer of the nonlease component is not coterminous with the lease component. This would generally be the case when (1) the lease component and the optional nonlease component are each priced at their stand-alone selling price and an allocation between components would therefore not be necessary (i.e., they are not priced at a significant discount in such a way that a material right within the scope of ASC 606 might need to be identified) and (2) the timing and pattern of transfer of the nonlease component are the same as those of the lease component for the period over which the nonlease component will be transferred to the lessee.

This view is supported by paragraph BC31 of ASU 2018-11, which states, in part, "The Board noted that its objective in providing the practical expedient was to align the accounting by lessors under the new leases standard more closely with the revenue guidance." Further, paragraph BC116 of ASU 2014-09 notes that "Topic 606 would not need to specify the accounting for concurrently delivered distinct goods or services that have the same pattern of transfer. This is because, in those cases, an entity is not precluded from accounting for the goods or services as if they were a single performance obligation, if the outcome is the same as accounting for the goods and services as individual performance obligations."

Example 5-4 (continued)

On the basis of the Board's stated objective, we believe that the practical expedient in ASC 842-10-15-42A can be applied when the only impact is on presentation and disclosure of amounts recognized as part of the arrangement (i.e., the pattern and timing of recognition are the same), provided that the lease component, if accounted for separately, would be classified as an operating lease. Therefore, if the leased device and the cloud-based service are each priced at their stand-alone selling price and renewals of the cloud-based service are not priced at a discount, Z may elect to apply the practice expedient.

The presence of a nonlease component that is ineligible for the practical expedient does not preclude the entity from electing the expedient for the lease and nonlease components that meet the criteria. Rather, the entity would account for the nonlease components that do not qualify for the practical expedient separately from the combined lease and nonlease components that do qualify. For example, if the entity also provides professional services that do not qualify for the practical expedient, it would not necessarily be precluded from electing the practical expedient.

Example 5-5

Assume the same facts as in Example 5-3, except that Entity Z also sells implementation services that are transferred over a three-month period. The implementation services are distinct from the cloud-based service, and Z recognizes revenue for the implementation services over time by using a cost-based measure of progress under ASC 606.

Entity Z can elect the practical expedient to account for the leased device and the cloud-based service as a single combined component for the reasons stated in Example 5-3. However, because Z recognizes revenue for the implementation services by using a cost-based measure of progress over a three-month period, those services do not have the same timing and pattern of transfer as the leased device (which is transferred ratably over a one-year period). Therefore, the implementation services do not qualify for the practical expedient and should be accounted for separately under ASC 606.

This conclusion is supported by the guidance in ASC 842-10-15-42C, which states that those components that qualify for the practical expedient are combined while those components that do not qualify are accounted for separately.

5.5.4.2.1.2 Determining Which Component Is Predominant

If the entity elects to apply the practical expedient to its leased device and cloud-based service, it should determine whether the cloud-based service associated with the leased device is the predominant component of the combined component. If so, the entity is required to account for the combined component in accordance with ASC 606. Otherwise, the entity must account for the combined component as an operating lease in accordance with ASC 842.

As indicated in the Background Information and Basis for Conclusions of ASU 2018-11, the FASB decided not to include a separate definition or threshold for determining whether "the nonlease component is the *predominant* component of the combined component." Rather, the Board noted that a lessor should consider whether the lessee would "ascribe more value to the nonlease component(s) than to the lease component." Further, the Board acknowledged that the term "predominant" is used elsewhere in U.S. GAAP, including ASC 842 and ASC 606.

The Board also explained that it does not expect that an entity will need to perform a detailed quantitative analysis or allocation to determine whether the nonlease component is predominant. Rather, it is sufficient if an entity can reasonably determine, on a qualitative basis, whether to apply ASC 842 or ASC 606. Therefore, entities will need to use judgment in making this determination.

At its March 28, 2018, meeting, the FASB discussed a scenario in which the components were evenly split (e.g., a 50/50 split of value) and suggested that, in such circumstances, the combined component should be accounted for under ASC 842 because the nonlease component is not predominant. That is, the entity would need to demonstrate that the predominant element is the nonlease component; otherwise, the combined unit of account would be accounted for as a lease under ASC 842. We believe that the final language in ASU 2018-11 is intended to indicate that an entity would need to determine whether the lease or nonlease component (or components) is larger (i.e., has more value); only when the nonlease component is larger should the combined component be accounted for under ASC 606.

In discussions with the FASB staff, we confirmed that an entity needs to look at which component has more value, not *significantly* more value. In a quantitative analysis, "more value" would constitute more than 50 percent. For example, when the value of the nonlease component is 51 percent and the value of the lease component is 49 percent, the nonlease component would be the predominant component. However, the FASB staff indicated that it generally expects that entities will be able to make this determination qualitatively. We also confirmed that the language "ascribe more value to the nonlease component(s) than to the lease component" intentionally excludes the wording "ascribe significantly more value to the license" from ASC 606-10-55-65A. Accordingly, we believe that to be predominant, the nonlease component only needs to be larger (not *significantly* larger) than the lease component.

5.5.4.2.1.3 Variable Payments

The accounting for variable payments should be consistent with that for the combined component. That is, when the combined component is accounted for as a lease under ASC 842, there are no longer any nonlease (revenue) variable payments; rather, there are only variable payments related to the combined lease component, and that variability should be accounted for in accordance with ASC 842. Conversely, if the combined component is accounted for as a service under ASC 606, all variable payments related to the combined component should be accounted for in accordance with the guidance in ASC 606 on variable consideration. That is, the entity would be required to estimate the variable consideration and constrain such estimates in accordance with the guidance in ASC 606-10-32-11. The entity would also be required to consider the variable consideration guidance in ASC 606-10-32-40 to determine whether a variable amount should be allocated to a distinct good or service.

For example, if the entity elects the practical expedient and the cloud-based service is the predominant component, the single combined component (consisting of the leased device and the cloud-based service) would be accounted for under ASC 606. If the entity also charges usage-based fees for the cloud-based service, it would need to consider the variable consideration guidance in ASC 606.

5.5.5 Discount Rate

Entities will need to recognize ROU assets and lease obligations by using an appropriate discount rate at transition and on an ongoing basis. Compliance with this requirement may be difficult for entities with a significant number of leases since they will need to identify the appropriate incremental borrowing rate for each lease on the basis of factors associated with the underlying lease terms (e.g., lease tenor, asset type, residual value guarantees). That is, entities would not be permitted to use the same discount rate for all of their leases unless the leased assets and related terms are similar. See Chapter 7 of Deloitte's Roadmap *Leases* for further details on the related guidance and illustrative examples.

5.5.6 Additional Considerations Related to ASC 842

Technology entities may enter into various lease arrangements such as subleases, sale-and-leaseback arrangements, and build-to-suit arrangements. See Chapters 10 through 12 of Deloitte's Roadmap *Leases* for further details on the related guidance and illustrative examples.

In addition, ASC 842 offers a variety of practical expedients (including those discussed in Sections 5.5.3.2 and 5.5.4.2) that may be of relevance to technology entities. See Chapters 15 through 17 of Deloitte's Roadmap *Leases* for further details on the various practical expedients.

5.5.7 SEC Comment Letter Trends

The focus of the SEC staff's comments on leasing transactions has shifted from registrants' accounting under the legacy leasing guidance (codified in ASC 840) to their application of the guidance in ASC 842. Although relatively few SEC staff comments on the application of ASC 842 have been issued thus far, some observations in comments related to its application have emerged. For example, registrants have received comments on (1) how ASC 842 applies or does not apply in certain arrangements and (2) the discount rate used to calculate the amount of the lease liability and corresponding ROU asset. Other topics addressed in SEC staff comments on ASC 842 include, but are not limited to, the nature of expenses treated as initial direct costs; the determination of lease classification; accounting for leasehold improvements, including amortization; and impairment considerations related to ROU assets.

Given the relatively low volume of SEC staff comments related to ASC 842 that have been issued thus far, registrants in the technology industry should continue monitoring staff comments to identify any new comments or trends related to the leasing standard that may emerge in the future.

For more information, see Section 2.14 of Deloitte's Roadmap *SEC Comment Letter Considerations, Including Industry Insights*.

5.6 Financial Instruments

To fund the cost of operations and the development of new IP and products, technology entities frequently seek external financing. Many of their financing transactions include complex terms and conditions that require a careful accounting analysis. Consequently, technology entities must apply the highly complex, rules-based guidance in U.S. GAAP to determine whether the securities they issue are classified as liabilities, permanent equity, or temporary equity (temporary equity considerations apply to SEC registrants and non-SEC registrants that choose to apply the SEC's rules and guidance). Early-stage and smaller growth technology entities are often financed with preferred stock and warrants with complex and unusual features, whereas larger, more mature entities often have a mix of debt and equity securities with more plain-vanilla common stock capitalization.

An instrument's classification on the balance sheet will affect how returns on the instrument are reflected in an entity's income statement. Returns on liability-classified instruments are reflected in net income (e.g., interest expense or mark-to-market adjustments), whereas returns on equity-classified instruments are generally reflected in equity, without affecting net income. However, dividends and remeasurement adjustments on equity securities that are classified as temporary equity may reduce an entity's reported earnings per share (EPS).

The SEC staff historically has focused on the classification of liabilities and equity on the balance sheet when equity instruments have redemption provisions or financial instruments possess characteristics of both liabilities and equity. For example, classification of convertible debt instruments and freestanding warrants is often scrutinized since they may contain both liability and equity components under U.S. GAAP.

In addition, prospective SEC registrants in the technology industry may have previously outstanding instruments with characteristics of both liabilities and equity at the time they are approaching a potential IPO, or technology entities may issue new instruments in connection with a potential IPO. Even if certain instruments are already outstanding before an IPO, it may be appropriate for an instrument to be classified outside of permanent equity in accordance with SEC rules when public financial statements are initially filed. Further, for a technology entity that becomes a public company, there can be other accounting consequences that did not exist while the entity was private.

The discussion below highlights guidance on the accounting for financial instruments that frequently affects technology entities. The guidance cited is not intended to be all-inclusive or comprehensive; rather, the discussion focuses on targeted considerations related to the application of the guidance most relevant to the industry. To complete an analysis of the accounting for financial instruments, entities must consider all facts and circumstances and use significant judgment.

5.6.1 Liability Classification

Upon the issuance of an equity instrument, a technology entity should first evaluate whether the instrument meets the definition of a liability in accordance with ASC 480. ASC 480 provides guidance on determining whether (1) certain financial instruments with both debt-like and equity-like characteristics should be accounted for "outside of equity" (i.e., as liabilities or, in some cases, assets) by the issuer and (2) SEC registrants should present certain redeemable equity instruments as temporary equity.

Securities issued in the legal form of debt must be classified as liabilities. In addition, ASC 480 requires liability classification for three types of freestanding financial instruments that are not debt in legal form:

- Mandatorily redeemable financial instruments (e.g., mandatorily redeemable preferred stock or mandatorily redeemable noncontrolling interests).
- Obligations to repurchase the entity's equity (e.g., written put options and warrants to issue redeemable equity securities).
- Obligations to issue a variable number of equity shares (e.g., preferred stock that must be settled with a variable number of common shares that have a fixed monetary amount).

For more information, see Deloitte's Roadmap *Distinguishing Liabilities From Equity*.

5.6.2 Redeemable Equity Securities

Technology entities frequently issue redeemable equity securities, such as redeemable preferred stock or redeemable noncontrolling interests. Technology entities may also issue redeemable preferred stock that have substantive conversion options at issuance that would not be considered liabilities under ASC 480 because redemption is not certain, even though such securities are called mandatorily redeemable convertible securities.[7] Further, if redemption is required only upon the liquidation of the entity, the securities are not considered redeemable.

The SEC staff believes that redeemable equity securities are significantly different from conventional equity capital because such securities possess characteristics similar to debt as a result of the redemption obligation attached to the securities. If the instruments are not classified as liabilities, the guidance in ASC 480-10-S99-3A requires instruments to be classified outside of permanent equity in "temporary equity" if they are redeemable (1) at a fixed or determinable price on a fixed or determinable date, (2) at the option of the holder, or (3) upon the occurrence of an event that is not solely within the

[7] A conversion feature that results in settlement of the instrument through the issuance of a variable number of shares of common stock equal to a fixed monetary amount is equivalent to "share-settled" debt and would not represent a substantive conversion option.

issuer's control. To determine the appropriate classification, SEC registrants must evaluate all facts and circumstances related to events that could trigger redemption of the securities. Issuers should evaluate whether equity instruments that do not meet the definition of a liability under ASC 480 nevertheless must be presented outside of permanent equity because of any of these provisions. Because only public entities are required to present certain equity instruments as temporary equity (sometimes referred to as mezzanine equity) instead of permanent equity, the SEC staff frequently comments on this topic during the IPO process.

Start-up and other technology entities financed by private equity or venture capital firms often have one or more series of convertible preferred stock issued and outstanding. When holders of convertible preferred stock have control over the entity, the following convertible preferred stock instruments must be classified as temporary equity:

- Convertible preferred stock that contains a stated redemption feature that allows the issuer to call the security on one or more specified dates.
- Convertible preferred stock that contains a stated redemption feature that allows the holder to put the security to the issuer upon the occurrence of a specified event that can be controlled by a vote of the entity's stockholders or by actions of the entity's board of directors.

Even if a convertible preferred stock instrument does not contain a stated redemption feature (i.e., a stated call option or a stated put option), an entity must evaluate the instrument's liquidation provisions, including whether those provisions are considered "ordinary liquidation" or "deemed liquidation" provisions, to determine whether the instrument should be classified as temporary equity. Whereas an ordinary liquidation provision does not trigger the requirement to classify the convertible preferred equity in temporary equity, a deemed liquidation provision will typically trigger the requirement to classify the convertible preferred equity in temporary equity. For example, a deemed liquidation clause that includes the sale or exclusive license of substantially all of a technology entity's IP could require the convertible preferred equity to be classified in temporary equity.

If an instrument classified in temporary equity is currently redeemable, it should be adjusted to its maximum redemption amount as of the balance sheet date. However, if an instrument classified in temporary equity is not currently redeemable and a determination is made that the instrument's redeemability is not probable, subsequent adjustment of the carrying amount is not necessary until it is probable that the security will become redeemable.

For more information, see Chapter 9 of Deloitte's Roadmap *Distinguishing Liabilities From Equity*.

5.6.3 Conversion Features of Preferred Stock and Debt

A technology entity that issues convertible preferred stock or convertible debt should perform an evaluation under ASC 815 to determine whether its contracts contain embedded equity derivatives that may need to be bifurcated and accounted for separately from the host contract under ASC 815's bifurcation requirements. If an embedded conversion feature does not need to be bifurcated from the hybrid instrument as an embedded derivative, but the convertible instrument contains beneficial conversion features (BCFs) or may be settled entirely or partially in cash, the instrument may need to be separated into a liability component and an equity component. After concluding that a conversion option does not need to be bifurcated under ASC 815, an issuer should consider whether the cash conversion guidance in ASC 470-20 applies. If the hybrid instrument is not within the scope of the cash conversion guidance, the issuer should consider the BCF guidance in ASC 470-20.

However, after the adoption of ASU 2020-06, an entity will not separately present in equity an embedded conversion feature associated with a cash conversion feature (CCF) or a BCF. Instead, the entity will account for a convertible debt instrument wholly as debt, and for convertible preferred stock wholly as preferred stock (i.e., as a single unit of account), unless (1) a convertible instrument contains features that require bifurcation as a derivative under ASC 815 or (2) a convertible debt instrument was issued at a substantial premium. For an entity that has not yet adopted ASU 2020-06, applying the separation models in ASC 470-20 to convertible instruments with a BCF or CCF involves the recognition of a debt discount, which is amortized to interest expense. The ASU's elimination of these models will reduce reported interest expense and increase reported net income for an entity that issued a convertible instrument that was within the models' scope.

For more information, see Section 7.6 of Deloitte's Roadmap *Issuer's Accounting for Debt*.

5.6.4 Warrants and Debt

A technology entity may also issue both a debt instrument and a warrant on the entity's shares. The entity should consider the definition of a freestanding financial instrument in the ASC master glossary to determine whether the debt instrument and warrant represent freestanding financial instruments. A freestanding financial instrument is one that is entered into either "separately and apart from any of the entity's other financial instruments or equity transactions" or "in conjunction with some other transaction and is legally detachable and separately exercisable." When an entity issues debt together with a detachable warrant, and the debt and detachable warrant represent separate freestanding financial instruments, the proceeds received must be allocated between the debt and the warrant. The following table provides an overview of the appropriate allocation of proceeds between debt and detachable warrants at initial recognition:

	Warrant Accounted for at Fair Value, With Fair Value Changes Recognized in Earnings	**Warrant Classified as Equity**
Debt accounted for at amortized cost	With-and-without method (i.e., warrant is measured initially at fair value and debt is measured as the residual).	Relative fair value method.
Debt accounted for at fair value, with changes in fair value recognized in earnings	If the estimated fair values exceed the proceeds received, special considerations are necessary. If it is determined that the transaction price does not represent fair value, additional factors must be considered. Otherwise, a relative fair value method may be reasonable.	With-and-without method (i.e., debt is measured initially at fair value and warrant is measured as the residual).

For more information, see Sections 3.3.2.1 and 3.4.3.2 of Deloitte's Roadmap *Issuer's Accounting for Debt*.

5.6.5 Accelerated Share Repurchase Programs

Some technology companies have executed accelerated share repurchase (ASR) programs. As described in ASC 505-30-25-5, an ASR program is "a combination of transactions that permits an entity to repurchase a targeted number of shares immediately with the final repurchase price of those shares determined by an average market price over a fixed period of time. An accelerated share repurchase program is intended to combine the immediate share retirement benefits of a tender offer with the market impact and pricing benefits of a disciplined daily open market stock repurchase program."

ASC 505-30 contains unit-of-account guidance for ASR programs. Under ASC 505-30, an entity accounts for an ASR as two separate units of account: a treasury stock repurchase and a separate forward contract on the entity's shares. An entity should analyze the treasury stock repurchase and forward contract separately to determine whether ASC 480 or ASC 815 applies.

For more information, see Section 3.2.5 of Deloitte's Roadmap *Contracts on an Entity's Own Equity*.

5.6.6 Derivatives

Common financing arrangements issued by technology entities in the form of debt or equity capital may be considered to be or may contain equity derivatives (i.e., equity derivatives may be freestanding or embedded). Examples of common equity derivatives are stock warrants, stock options, and forward contracts to buy or sell an entity's shares. Equity derivatives may be classified as liabilities (or, in some cases, as assets) and measured at fair value on the balance sheet, with changes in fair value recognized in earnings. It is important to be aware of these instruments, how they are accounted for, and subsequent events that could affect such accounting. Sometimes, the measurement attribute for such instruments could be fair value as a result of an IPO or subsequent financing.

5.6.6.1 Embedded Derivatives

In addition to the considerations related to freestanding instruments (e.g., warrants or stock options) under ASC 815, an entity should evaluate whether other contracts, such as those involving preferred stock or convertible debt, contain embedded equity derivatives that may need to be bifurcated and accounted for separately from the host contract under ASC 815's bifurcation requirements. An entity identifies the terms of each embedded feature on the basis of the feature's economic payoff profile (underlying) rather than on the basis of how the feature has been formally documented. In identifying the embedded features, the entity should consider all terms of the convertible instrument. Common examples of embedded features include conversion options and redemption provisions. For more information, see Chapter 8 of Deloitte's Roadmap *Issuer's Accounting for Debt*.

5.6.6.2 Contracts on an Entity's Own Equity

ASC 815-40 provides guidance on the accounting for contracts (and features embedded in contracts) that are indexed to, and potentially settled in, an entity's own equity (also known as contracts on own equity or equity-linked financial instruments). The analysis under ASC 815-40 can be complex; in performing this analysis, an entity often must consult with its legal counsel regarding the various terms associated with the contract. In general, a contract on an entity's own equity can be classified in equity (and not remeasured while it is classified in equity) as long as it is considered to be indexed to the entity's own stock and the issuer has the ability to settle the contract by issuing its own shares under all scenarios. This determination requires an evaluation of all events that could change the settlement value (e.g., adjustments to strike price) and all events that would affect the form of settlement. For more information, see Deloitte's Roadmap *Contracts on an Entity's Own Equity*.

Many special-purpose acquisition companies (SPACs) issue warrants that must be classified as liabilities because their terms could change depending on the holder. For more information about warrants issued by SPACs and other accounting issues related to SPACs, see Deloitte's October 2, 2020 (updated April 11, 2022), *Financial Reporting Alert*.

Technology entities frequently issue financial instruments that include a provision to adjust the conversion price (other than a standard antidilution provision that applies to all shareholders). For example, an entity may provide certain investors with price protection by adjusting the strike price if there is a subsequent round of equity or convertible instrument financing at a strike price that is lower than theirs. Under a provision that triggers such price protection (a "down-round provision"), the strike price would usually be adjusted to the strike price of the subsequent transaction. Special recognition and measurement requirements apply each time a down-round feature in a freestanding equity-classified instrument is triggered. For more information, see Section 6.1.5 of Deloitte's Roadmap *Contracts on an Entity's Own Equity*.

5.6.7 Fair Value

Many Codification topics require or permit the subsequent measurement of assets or liabilities at fair value. ASC 820-10-35 provides guidance on the subsequent measurement of items at fair value and applies to both recurring and nonrecurring measurements.

The definition of fair value is based on an exit price notion. An asset, liability, or equity instrument is measured at fair value on the basis of market-participant assumptions; such measurement is not entity-specific. Entities must consider all characteristics of the asset, liability, or equity instrument that a market participant would consider in determining an exit price in the principal or most advantageous market.

Technology entities frequently issue securities with restrictions on their sale. In some cases, it is appropriate to consider a restriction on the sale or use of an asset as a characteristic of the asset that affects its fair value. Only a legal or contractual restriction on the sale or use of an asset that is specific to the asset (an instrument-specific restriction) and that would be transferred to market participants should be incorporated into the asset's fair value measurement. Thus, an entity should consider the effect of a restriction on the sale or use of an asset that it owns only if market participants would consider such a restriction in pricing the asset because they would also be subject to the restriction if they acquired the asset. Entity-specific restrictions that would not be transferred to market participants should not be considered in the determination of the asset's fair value, since doing so would be inconsistent with the exit price notion underlying the definition of fair value.

For more information, see Sections 10.1 and 10.2 of Deloitte's Roadmap *Fair Value Measurements and Disclosures (Including the Fair Value Option)*.

5.6.8 Sales of Future Revenue

Technology entities may securitize certain financial assets, such as trade receivables. In those circumstances, entities would apply ASC 860 to determine whether the transfer of financial assets should be accounted for as a sale. However, if an entity cannot recognize accounts receivable because, for example, it does not have an unconditional right to cash, the entity may instead enter into an arrangement that represents a sale of future revenue (i.e., ASC 860 applies only to transfers of recognized financial assets). For more information, see Section 2.2.2 of Deloitte's Roadmap *Transfers and Servicing of Financial Assets*.

In a sale of future revenue (such as a profit-sharing agreement, a securitization of a participation in a future revenue stream, a celebrity bond, or other contingent payment obligation that varies on the basis of future revenue or income), an entity receives an up-front lump sum payment from an investor and, in return, agrees to pass on a specified percentage or amount of its future revenue or income to that investor for a specified period. The share of revenue or income owed to the investor may be graduated (e.g., 50 percent of the first $1 million of revenue and then 25 percent of the amount in excess of $1 million) or may be different from year to year. Further, the entity might guarantee a minimum amount to be paid to the investor or there may be a maximum total amount payable. The underlying cash flows that the entity will pass on might originate from its contractual arrangements with third parties (e.g., fees and royalties that it will receive from the licensing of IP) or its operations (e.g., a specified interest in revenue, gross margin, or income of the entity or one of its subsidiaries, business segments, or product lines).

Typically, sales of future revenue are within the scope of ASC 470-10. ASC 470-10 requires a seller of future revenue to evaluate whether the offsetting entry to the proceeds received should be classified as debt or deferred income. It is generally inappropriate to record the proceeds immediately as income, because the seller maintains some continuing involvement and the earnings process is not completed when the cash is received.

ASC 470-10-25-2 requires an entity to consider six factors in determining the appropriate classification of the proceeds:

Factors That Create Rebuttable Presumption of Debt	Factors That Could Help Overcome the Debt Presumption
The "form of the transaction is debt"	The transaction purports to be a sale
"The entity has significant continuing involvement in the generation of the cash flows due the investor"	The entity is not significantly involved in the generation of the cash flows owed to the investors
"The transaction is cancelable by either the entity or the investor through payment of a lump sum or other transfer of assets by the entity"	The agreement is not cancelable
"The investor's rate of return is implicitly or explicitly limited by the terms of the transaction"	There is no cap on payments to the investor
"Variations in the entity's revenue or income underlying the transaction have only a trifling impact on the investor's rate of return"	Variations in the level of revenue or income can produce at least moderate variations in the investor's return
"The investor has any recourse to the entity relating to the payments due the investor"	The agreement includes no guarantees, recourse, or collateral provisions

For more information, see Section 7.2 of Deloitte's Roadmap *Issuer's Accounting for Debt*.

5.6.9 Current Expected Credit Losses

In June 2016, the FASB issued ASU 2016-13 (codified in ASC 326 and subsequently amended), which amends guidance on the impairment of financial instruments. The ASU adds to U.S. GAAP an impairment model (known as the current expected credit loss [CECL] model) that is based on expected losses rather than incurred losses. Under the new guidance, an entity recognizes as an allowance its estimate of expected credit losses, which is presented as either (1) an offset to the amortized cost basis of the related asset (for on-balance-sheet exposures) or (2) a separate liability (for off-balance-sheet exposures). That is, the expected credit losses estimated over the lifetime of a financial instrument are recognized at inception (i.e., on day 1). While the ASU will not affect technology entities' financial statements as significantly as those of banks, most entities have financial instruments or other assets that are subject to the CECL model once the ASU is adopted. For example, technology entities typically have trade receivables and contract assets. Entities that have yet to adopt the guidance should (1) focus on identifying which financial instruments and other assets are subject to the CECL model and (2) evaluate whether they need to make changes to existing credit impairment models to comply with the new standard. For more information, see Deloitte's Roadmap *Current Expected Credit Losses*.

5.6.10 Reference Rate Reform

In response to the market-wide migration away from the London Interbank Offered Rate (LIBOR) and other interbank offered rates, the FASB issued ASU 2020-04 (with subsequent amendments). The relief provided by the ASU, which is codified in ASC 848, is elective and applies "to all entities, subject to meeting certain criteria, that have contracts, hedging relationships, and other transactions that reference LIBOR or another reference rate expected to be discontinued because of reference rate reform." The ASU establishes a general contract modification principle that entities can apply in areas of the Codification that may be affected by reference rate reform, as well as (1) elective contract modification expedients for specific areas of the Codification, (2) certain elective hedge accounting expedients, and (3) held-to-maturity debt security classification relief. In December 2022, the FASB issued ASU 2022-06, which defers ASC 848's original sunset date of December 31, 2022, to December 31, 2024. For more information, see Chapter 8 of Deloitte's Roadmap *Hedge Accounting*. The FASB is not acting alone in its efforts to address issues related to reference rate reform. In July 2019, the SEC staff issued a statement that provides additional guidance related to reference rate reform. For more information about the staff's statement, see Deloitte's August 6, 2019, *Heads Up*.

5.6.11 Modification or Exchange of a Freestanding Equity-Classified Written Call Option

In May 2021, the FASB issued ASU 2021-04, which addresses an issuer's accounting for a modification or exchange of a freestanding equity-classified written call option (e.g., warrants) that remains equity classified after the modification or exchange. The guidance clarifies the accounting for the modification or exchange, which is treated in the same manner as if cash had been paid as consideration. The effect of the modification or exchange is measured as the difference between the option's fair value immediately before and immediately after the modification or exchange. For more information, see Section 6.1.4.2 of Deloitte's Roadmap *Contracts on an Entity's Own Equity*.

5.6.12 SEC Comment Letter Trends

5.6.12.1 Debt and Equity

The SEC staff may comment on debt restrictions, including those that limit a registrant's ability to pay dividends or transfer funds within a consolidated group. It is also important for a registrant to consider providing disclosures about debt covenant compliance in MD&A to illustrate its financial condition and liquidity.

The SEC staff has asked registrants to explain the basis for their determination of how financial instruments should be classified and their application of relevant accounting literature (e.g., ASC 480, ASC 815), particularly for financial instruments that have both debt- and equity-like characteristics. In addition, the SEC staff frequently asks registrants with redeemable securities — including registrants undertaking IPO transactions — to support the basis for their classification of such securities as debt, temporary (mezzanine) equity, or permanent equity. Further, the staff often asks registrants about the accounting for conversion features in convertible instruments, including convertible preferred securities.

For more information, see Sections 2.4 and 2.8 of Deloitte's Roadmap *SEC Comment Letter Considerations, Including Industry Insights*.

5.6.12.2 Earnings per Share

When a filing indicates that the registrant has two classes of common stock (or one class of common stock and participating securities) that have been treated as a single class in the calculation of EPS, the SEC staff often asks whether application of the two-class method in the computation of EPS under ASC 260-10-45-59A through 45-70 is required. The SEC staff may ask a registrant to substantiate the method used to calculate EPS (e.g., the two-class method or the if-converted method), and it may request additional information or disclosures about each of the registrant's classes of common stock, preferred stock, and common-stock equivalents (such as convertible securities, warrants, or options). Further, the SEC staff expects that a registrant with two classes of common stock will present both basic and diluted EPS for each class regardless of whether either class has conversion rights.

For more information, see Section 2.6 of Deloitte's Roadmap *SEC Comment Letter Considerations, Including Industry Insights*.

5.6.12.3 Fair Value

The SEC staff has requested more specific information from registrants related to valuation techniques and inputs used in fair value measurements. Registrants should consider how the fair value disclosure requirements of ASC 820-10-50 apply to their recurring and nonrecurring fair value measurements. More specifically, registrants should provide information about (1) the methods and techniques used to determine fair value and (2) the inputs to those models. In addition, entities are required to disclose quantitative information about the significant unobservable inputs used in Level 3 fair value measurements.

The SEC staff continues to ask registrants to describe the procedures they perform to validate fair value measurements obtained from third-party pricing services. The staff has also asked registrants to clarify when and how often they use adjusted rather than unadjusted quoted market prices and to disclose why prices obtained from pricing services and securities dealers were adjusted. If multiple quotes were obtained, the SEC staff may request information about how the registrant determined the ultimate value used in the financial statements.

For more information, see Section 2.7 of Deloitte's Roadmap *SEC Comment Letter Considerations, Including Industry Insights*.

5.6.12.4 Embedded Derivatives

The SEC staff may ask whether registrants have reached appropriate accounting conclusions regarding whether embedded features in hybrid instruments should be bifurcated from the host contract. Given the complexity involved in determining whether a host contract is debt-like or equity-like, registrants can expect the SEC staff to continue asking about the terms and features of convertible instruments to determine whether the registrant has (1) properly determined the nature of the host contract and (2) accounted for embedded features as stand-alone financial instruments when necessary. Registrants should consider the disclosure requirements of ASC 815-15 when making disclosures about the nature of the host contract.

For more information, see Section 2.8.1 of Deloitte's Roadmap *SEC Comment Letter Considerations, Including Industry Insights*.

5.7 Income Taxes

The accounting for income taxes under ASC 740 is sometimes very specific and can be complex. The overall objective of accounting for income taxes is to reflect (1) the amount an entity currently owes to tax authorities and (2) deferred tax assets (DTAs) and deferred tax liabilities (DTLs) for the tax effects of transactions or events that have occurred but that have not yet been reflected in a tax return or vice versa (also referred to as "basis differences" or "temporary differences"). A DTA will be recorded for items that will result in future tax deductions (sometimes referred to as a benefit or a deductible temporary difference), and DTLs are recorded for items that will result in the inclusion of future taxable income in an entity's tax return (taxable temporary difference). This balance sheet approach is used to calculate temporary differences and, in effect, takes into account the total tax that would be payable (or receivable) if all of an entity's assets and liabilities were realized at their carrying value at a specific time (the reporting date).

In accordance with ASC 740, the critical event for recognition of a DTA is the event that gives rise to the deductible temporary difference, tax credit, or net operating loss (NOL) carryforward. Once that event occurs, those tax benefits should be recognized, subject to a realizability assessment. In effect, earning taxable income in future years is treated as a confirmation of realizability and not as a prerequisite to asset recognition. At the same time, management should consider future events to record those DTAs at amounts that are more likely than not to be realized in future tax returns. In the case of DTLs, ASC 740 requires an entity to include in its balance sheet an obligation for the tax consequences of taxable temporary differences, even when losses are expected in future years.

For more information, see Deloitte's Roadmap *Income Taxes*.

5.7.1 Scope Considerations

The scope of ASC 740 is limited to "taxes based on income" when income is determined after revenues and gains are reduced by some amount of expenses and losses allowed by the jurisdiction. Therefore, a tax based on gross receipts, revenue, or capital should be accounted for under other applicable literature (e.g., ASC 450). In contrast, a tax whose base takes into account both income and expense is within the scope of ASC 740.

A common question for technology entities to consider is whether certain investment tax credits and R&D credits are within the scope of ASC 740. Credits whose realization ultimately depends on taxable income are generally recognized as a reduction of income tax expense under ASC 740. However, tax credits whose realization does not depend on the entity's generation of taxable income or the entity's ongoing tax status or tax position (e.g., refundable credits) are not considered an element of income tax accounting under ASC 740 regardless of whether the credit claims are filed in connection with a tax return. When determining the classification of these credits, an entity may consider them to be a form of government grant or assistance. If so, the entity may consider the guidance in IAS 20 by analogy.

For more information, see Section 2.7 of Deloitte's Roadmap *Income Taxes*.

5.7.2 Intra-Entity Transfers of IP

Technology entities often develop IP such as software, know-how, and other proprietary information. This IP may be developed in one jurisdiction but subsequently transferred to a subsidiary in another jurisdiction. Such transfers are often tax-motivated, and both the initial and subsequent accounting for them has historically been complex. An entity should record the current and deferred tax effects of intra-entity transfers of assets other than inventory, including the tax consequences of intra-entity asset transfers involving IP. For more information, see Section 3.3 of Deloitte's Roadmap *Income Taxes*.

5.7.3 Transfer Pricing

Many technology entities are global and operate legal entities in multiple countries. The global nature of these entities gives rise to income tax accounting issues regarding the use of transfer pricing for intra-entity and related-party transactions. Generally, transfer pricing is the pricing used for transfers of tangible property, intangible property, services, or financing between affiliated entities in different tax jurisdictions. The general transfer pricing principle is that the pricing of a related-party transaction should be consistent with the pricing of similar transactions between independent entities under similar circumstances (i.e., an arm's-length transaction).

An entity's exposure to transfer pricing primarily occurs when the entity includes in its tax return the benefit received from a related-party transaction that was not conducted as though it was at arm's length. An unrecognized tax benefit results when one of the related parties reports either lower revenue or higher costs than it can sustain under examination by the tax authority (depending on the type of transaction). While a benefit is generally more likely than not to result from such a transaction (e.g., some amount will be allowed as an interest deduction, royalty expense, or cost of goods sold), the amount of benefit is often uncertain because of the subjectivity of valuing the related-party transaction.

For more information, see Section 4.6.3 of Deloitte's Roadmap *Income Taxes*.

5.7.4 Research and Development

For many technology entities, R&D activities represent a significant focus and expenditure. Beyond the above-mentioned scope considerations related to refundable R&D tax credits, these activities may result in various income tax accounting impacts that should be accounted for in accordance with ASC 740. For example, R&D cost-sharing agreements may affect an entity's accounting for the income tax effects of stock-based compensation. In addition, an entity may acquire R&D assets in a business combination that result in the creation of temporary differences. For more information, see the next section and Section 11.3.4.3 of Deloitte's Roadmap *Income Taxes*.

5.7.5 Cost-Sharing Arrangements

Related entities that operate in different tax jurisdictions may enter into cost-sharing (or recharge) agreements under which one party is reimbursed for a portion of certain costs it incurred in undertaking shared development activities associated with intangible property. A jurisdiction may permit or require the resident entity to include stock-based compensation cost in the joint cost pool that is reimbursed (commonly referred to as the "all costs rule").

Under U.S. tax regulations, entities may generally use one of two methods in determining the appropriate amount and timing of stock-based compensation cost that is included in the joint cost pool: (1) the exercise method, under which the amount and timing are based on the award's intrinsic value as of the exercise date; or (2) the grant method, under which entities determine the amount and timing by using the award's grant-date fair-value-based measure (which, in turn, is based on U.S. GAAP compensation costs).

A technology entity should consider the impact of cost-sharing arrangements when measuring, on the basis of the tax election it has made or plans to make, the initial and subsequent deferred tax effects associated with its stock-based compensation costs. If regulations in a particular jurisdiction vary significantly from those in the U.S. federal tax jurisdiction, the entity should consult with its accounting advisers regarding the appropriate accounting treatment. For more information, see Section 10.5 of Deloitte's Roadmap *Income Taxes*.

When a parent company grants stock-based compensation awards to its subsidiary's employees and the subsidiary reimburses the parent company for the awards, the subsidiary will need to account for its intercompany recharge agreement if it files stand-alone financial statements. Depending on the facts and circumstances, the subsidiary's financial statements may reflect the reimbursement as a reduction in contributed capital or a distribution, either of which could result in an intercompany payable depending on the timing.

5.7.6 Valuation Allowances

Technology entities, particularly emerging growth entities, frequently incur losses over an extended period to invest in R&D and marketing as well as reward employees with stock-based compensation. A technology entity that has recurring losses or other negative evidence must consider all available evidence, both positive and negative, to determine whether a valuation allowance against its DTAs is needed. This analysis can be quite complex depending on the entity's facts and circumstances. Significant judgment is often required, and it is difficult to assert that the entity will have future taxable income exclusive of reversing taxable temporary differences when it has cumulative losses in recent years. Further, tax-planning strategies must meet certain criteria to be treated as a source of taxable income, and evaluation of those criteria is often not straightforward. For more information, see Chapter 5 of Deloitte's Roadmap *Income Taxes*.

5.7.7 IRC Section 382 Limitations on NOL Carryforwards

Because of the significant up-front costs required for entities to bring new technologies to market, it is common for entities in the technology industry to generate losses in the early stage of development. Entities can generally benefit from these losses in the form of NOL carryforwards that offset future taxable income.

However, IRC Section 382 provides that loss corporations may be subject to a limitation on the amount of the NOL carryforward that can be realized in periods after a change in ownership (the “Section 382 limitation”). While ownership changes can result from a business combination or an IPO transaction, they can also be driven by a new round of equity financing that affects the company’s ownership structure when certain thresholds are met.

The determination of a Section 382 limitation involves a high degree of complexity and requires careful evaluation. An assessment of potential limitations on NOL carryforwards should be included as part of an entity’s ongoing tax-planning and tax-forecasting strategies, and the impacts of such limitations on potential funding, exit plans, or acquisition portfolio strategies should also be considered.

5.7.8 SEC Comment Letter Trends

SEC staff comments frequently focus on (1) valuation allowances, (2) disclosures related to the income tax rate, (3) tax effects of significant or unusual transactions that occurred during the period, and (4) noncompliance with disclosure requirements (e.g., omission of required disclosures).

The SEC staff may ask a registrant to provide early-warning disclosures to help financial statement users understand key estimates and assumptions that the registrant made in recording items related to income taxes and how changes to those estimates and assumptions could potentially affect the financial statements in the future. The SEC staff also may issue comments on non-GAAP measures with a particular focus on the income tax impact of the adjustments made to the GAAP measures.

Historically, the SEC staff has stated that boilerplate language should be avoided with respect to income tax disclosures within MD&A and that approaches more conducive to effective disclosure would include:

- Using the income tax rate reconciliation as a starting point and describing the details of the material items.
- Discussing significant foreign jurisdictions, including statutory rates, effective rates, and the current and future impact of reconciling items and uncertain tax positions.
- Providing meaningful disclosures about known trends and uncertainties, including expectations regarding the countries where registrants operate.

For more information, see Section 2.12 of Deloitte’s Roadmap *SEC Comment Letter Considerations, Including Industry Insights*.

5.8 Contingencies and Loss Recoveries

ASC 450 defines a contingency as an “existing condition, situation, or set of circumstances involving uncertainty . . . that will ultimately be resolved when one or more future events occur or fail to occur.” In the technology industry, contingencies often arise as a result of patent litigation cases, such as lawsuits filed against an entity for patent infringement. Technology entities also are facing increased risks associated with antitrust lawsuits and compliance with various regulatory requirements in different regimes, particularly risks related to consumer privacy, prevention of anticompetitive practices, cybersecurity incidents, discrimination, and classification of workers as employees rather than independent contractors. Technology entities should monitor the tightening regulatory environment in the United States and globally, especially as the regulatory environment continues to evolve quickly.

5.8.1 Loss Contingencies

Contingent liabilities are liabilities for which the possible loss outcome is unknown or uncertain, such as those associated with pending litigation or product warranties. The likelihood that a liability has been incurred ranges from “remote”[8] to “reasonably possible”[9] to “probable.”[10] The ASC master glossary’s definitions of these terms provide no quantitative thresholds; accordingly, entities need to exercise judgment when applying the terms. While there is diversity in practice related to the likelihood percentage that entities consider “probable” to represent, the threshold for “probable” would need to be at least 70 percent. Although “remote” is not discussed quantitatively in any guidance issued by the FASB, in practice, this term is used to indicate a likelihood of 10 percent or less.

Accrual of a loss contingency is required when (1) it is probable that a loss has been incurred and (2) the amount can be reasonably estimated. An entity must determine the probability of the uncertain event and demonstrate its ability to reasonably estimate the loss from it to accrue a loss contingency. Loss contingencies that do not meet both of these criteria for recognition may need to be disclosed in the financial statements. Various disclosure considerations are required under ASC 450-20 and ASC 275; and SEC Regulation S-K, Item 303, requires discussion of items that might affect an entity’s liquidity or financial position in the future, including contingent liabilities.

For more information, see Chapter 2 of Deloitte’s Roadmap *Contingencies, Loss Recoveries, and Guarantees*.

5.8.1.1 Elements of a Litigation Settlement

Technology entities may enter into litigation settlements in which the settlement agreement includes past obligations and disputes and modifies the ongoing contractual terms of the business relationship. In those circumstances, a litigation settlement may also include a separate element (such as a revenue element). It is important to identify the different elements and understand the nature of each item, and entities should consider whether the principles in ASC 606 on allocating consideration to different elements of a contract with a customer that are partially within the scope of ASC 606 and partially within the scope of another topic is appropriate.

For more information, see Section 2.2.5 of Deloitte’s Roadmap *Contingencies, Loss Recoveries, and Guarantees*.

5.8.1.2 Incurrence of a Future Cost of Doing Business

Technology entities sometimes settle litigation by altering the terms of future business arrangements. However, it is not always clear how to distinguish between the settlement of a past liability and the incurrence of a future cost of doing business. For technology entities, the incurrence of a future cost of doing business is often indicated by a payment stream that is contingent on the future sale of products or services in the ordinary course of business (e.g., royalties due to a licensor for the license and use of IP).

A technology entity may sometimes agree to settle a claim by agreeing to offer the claimant(s) a price concession on future purchases of the entity’s goods or services by the claimant(s). In such a scenario, the claimant(s) will be required to make an independent future purchasing decision to realize the benefit of the settlement. An entity that is obligated to provide such price concessions in connection with a settlement will need to assess whether the settlement (1) represents a liability that should be currently recognized for the estimated settlement amount or (2) should be accounted for as a sales incentive in

[8] As defined in the ASC master glossary, “remote” means that the “chance of the future event or events occurring is slight.”

[9] As defined in the ASC master glossary, “reasonably possible” means that the “chance of the future event or events occurring is more than remote but less than likely.”

[10] As defined in the ASC master glossary, “probable” means that the “future event or events are likely to occur.”

accordance with ASC 606, which generally results in the entity's accounting for the sales incentive at the time the claimant or claimants use the price concession in connection with the purchase of the entity's goods or services.

Irrespective of when the future price concession is accounted for, any settlement with a customer or a vendor would need to be evaluated in accordance with ASC 606 or ASC 705-20, respectively, regarding the income statement presentation of the settlement. That is, the settlement may need to be characterized as a reduction of revenue from a customer under ASC 606 or a reduction of the purchase price of goods or services acquired from a vendor under ASC 705-20.

For more information, see Section 2.2.6 of Deloitte's Roadmap *Contingencies, Loss Recoveries, and Guarantees*.

5.8.2 Gain Contingencies

The standard for recognition of gain contingencies is substantially higher than that for recognition of loss contingencies. ASC 450-30 indicates that a gain contingency should usually not be recognized before realization (i.e., the earlier of when the gain is realized or when it is realizable). A gain contingency should not be recognized even if realization is considered probable.

Because of the number of uncertainties inherent in a litigation proceeding, gain contingencies resulting from favorable legal settlements generally cannot be recognized in income until cash or other forms of payment are received. Gain recognition is not appropriate when a favorable legal settlement remains subject to appeal or other potential reversals. Often, gain contingency recognition will be deferred even after a court rules in favor of a plaintiff. Although an entity may be certain that it will receive proceeds from a legal settlement because there is no possibility of additional appeals, there may still be other uncertainties that indicate that the gain has not yet been realized. If a legal settlement is reached but is pending regulatory or legislative approval, gain recognition is not appropriate until all required levels of regulatory and legislative approval have been obtained. This is the case even if the entity can demonstrate that the settlement meets all criteria that are evaluated by a regulatory body when it is determining whether to grant approval.

For more information, see Chapter 3 of Deloitte's Roadmap *Contingencies, Loss Recoveries, and Guarantees*.

5.8.3 Loss Recoveries

Technology entities may be entitled to recoveries pertaining to a previously recognized financial statement loss (e.g., an impairment of an asset or incurrence of a liability), as well as recoveries from business interruption insurance. Loss recoveries may be received from litigation settlements, insurance proceeds, or reimbursement of an employee's fraudulent activities through liquidation of the employee's assets.

The table below summarizes the four accounting models that an entity should consider when determining the recognition and measurement of expected proceeds related to a recovery: (1) the loss recovery model, (2) the gain contingency model, (3) a determinable mix of the loss recovery and gain contingency models (the "determinable mix model"), and (4) an indeterminable mix of the loss recovery and gain contingency models (the "indeterminable mix model").

Loss recovery model	An asset for which realization is probable should be recognized only up to the amount of the previously recognized loss. The analysis of whether recovery is probable is consistent with the guidance on loss contingency recognition.
Gain contingency model	Recovery proceeds related to a loss that has not been recognized in the financial statements should be accounted for as a gain contingency.
Determinable mix model	A combination of the loss recovery and gain contingency models is applied when recovery proceeds are expected to exceed the amount of the previously recognized loss. The probable recovery proceeds equal to the amount of the recognized loss should be accounted for by using the loss recovery model. The expected proceeds in excess of the recognized loss should be accounted for by using the gain contingency model. For an entity to apply the determinable mix model, there must be a direct linkage between the recovery proceeds and the specifically identifiable recognized loss.
Indeterminable mix model	An indeterminable mix of the loss recovery and gain contingency models results from a situation in which there is no clear evidence that the amount of the recovery proceeds is a recovery of previously recognized losses or costs (i.e., there is no direct linkage) or the amount of the loss or costs previously incurred is not objectively quantifiable (i.e., the losses or costs are not specific, incremental, identifiable costs or losses). Under these circumstances, the application of the gain contingency model would be appropriate for the entire amount of the recovery proceeds.

For more information, see Chapter 4 of Deloitte's Roadmap *Contingencies, Loss Recoveries, and Guarantees*.

5.8.4 SEC Comment Letter Trends

The SEC staff continues to closely monitor SEC registrants' contingency disclosures, and it comments when such disclosures do not comply with U.S. GAAP or SEC rules and regulations.

The SEC staff frequently comments on:

- Lack of specificity regarding the nature of the matter.
- Lack of quantification of amounts accrued, if any, and possible loss or range of loss and/or disclosure about why such an estimate cannot be made.
- Insufficient detail about judgments and assumptions underlying significant accruals.
- Unclear language in disclosures (e.g., not using terms that are consistent with accounting literature, such as "probable" or "reasonably possible") and failure to consider the disclosure requirements of ASC 450, SAB Topic 5.Y, and SEC Regulation S-K, Item 103.
- Lack of disclosure of an accounting policy related to accounting for legal costs (when material) and uncertainties in loss contingency recoveries, including (1) whether ranges of reasonably possible losses are disclosed gross or net of anticipated recoveries from third parties, (2) risks regarding the collectibility of anticipated recoveries, and (3) the accounting policy for uncertain recoveries.

For more information about SEC comment letter themes related to contingencies, see Section 2.3 of Deloitte's Roadmap *SEC Comment Letter Considerations, Including Industry Insights*.

5.9 Digital Assets

An increasing number of entities, including those in the technology industry, are investing or transacting in digital assets. While bitcoin is the largest cryptocurrency by market capitalization, it is just one type of digital asset. Other digital assets include, but are not limited to, other crypto assets such as ether, stablecoins, equity and derivative tokens, and nonfungible tokens (NFTs).

Investing in or otherwise being in the business of selling or using digital assets may present technology entities with a host of opportunities. However, with those opportunities come challenges, including understanding the legal and regulatory landscape, tax implications, accounting treatments, and internal control considerations. When performing a risk assessment, entities should consider a host of risks, including those associated with (1) compliance; (2) regulation; (3) cybersecurity; (4) operational, financial, strategic, and reputational matters; and (5) the control environment.

5.9.1 AICPA Practice Aid

To address some of the accounting and auditing challenges arising from digital assets, the AICPA Digital Assets Working Group issued the AICPA Practice Aid *Accounting for and Auditing of Digital Assets* (the "AICPA Practice Aid"). Some of the accounting issues discussed in the AICPA Practice Aid that might be relevant to technology entities are summarized below. However, note that the AICPA Practice Aid is an evolving document that does not address all the myriad issues that arise in practice, including (1) principal-versus-agent determinations related to digital asset exchanges and marketplaces and (2) recognition of revenue from the sale of NFTs (e.g., determining whether the guidance on licensing of IP is applicable).

5.9.1.1 Accounting for Digital Assets Classified as Indefinite-Lived Intangible Assets

Because digital assets lack physical substance, most technology entities that own such assets, particularly crypto assets, will account for them as indefinite-lived intangible assets under ASC 350[11] unless they represent financial instruments or financial assets.

5.9.1.1.1 Initial Recognition and Measurement

An entity that purchases digital assets classified as indefinite-lived intangible assets will initially record them at cost.

If an entity does not purchase a digital asset but instead receives it as consideration for selling a good or service to a customer under ASC 606, the digital asset will be treated as noncash consideration, which is generally recorded on the basis of the digital asset's fair value at contract inception. However, if the entity is receiving the digital asset in the future in exchange for a good or service that it has already transferred (i.e., the exchange is not concurrent), the entity should consider the guidance in ASC 815 to determine whether a derivative or embedded derivative exists.

If an entity holds a digital asset in a "wallet" hosted by a third party, it should determine whether it has control of the asset before recognizing the asset in its financial statements. If the entity does not control the digital asset, it should recognize a right to receive the digital asset and evaluate whether it needs to recognize an embedded derivative under ASC 815. The control analysis depends on the specific facts and circumstances, and a legal analysis is sometimes required since applicable laws and regulations, as well as contractual terms, would need to be considered.

For more information, see Questions 1 through 3, 10, and 24 of the AICPA Practice Aid.

[11] This discussion assumes that the reporting entity does not apply ASC 940 or ASC 946.

5.9.1.1.2 Subsequent Accounting

Under ASC 350, an indefinite-lived intangible asset is not amortized but should be tested for impairment at least annually. If digital assets were acquired at different times, the unit of account would typically be each digital asset unit (or divisible fraction of a unit) rather than a bundle of digital assets purchased at different prices. If an impairment analysis is required for a digital asset, an impairment loss is recognized at that time if the carrying amount of the digital asset exceeds its fair value, even if the fair value has recovered by the end of the same reporting period. If the same digital asset is being exchanged at a price below the entity's current carrying value, this may be an impairment indicator and an impairment loss may need to be recorded. The entity should monitor relevant pricing information and use the framework in ASC 820 in determining the fair value of its digital asset.

For more information, see Questions 4 through 7 and 16 through 21 of the AICPA Practice Aid.

5.9.1.1.3 Derecognition

If an entity sells some of its digital assets that were acquired at different times, it should determine which assets have been sold for purposes of determining the cost basis. If it is not possible to determine which assets have been sold, the entity should develop a reasonable and rational method (e.g., FIFO method). In addition, when the entity sells a digital asset, it should determine whether the sale should be accounted for under ASC 606 (because the digital asset is an output of the entity's ordinary activities and the counterparty is a customer). If the counterparty is not a customer, the entity would most likely apply ASC 610-20.

For more information, see Questions 8 and 9 of the AICPA Practice Aid.

5.9.1.2 Stablecoins

Some entities may hold stablecoins, which are generally pegged to the value of a more traditional asset (e.g., fiat currency). Because there are different types of stablecoins, determining the appropriate accounting guidance to apply will depend on the specific facts and circumstances associated with the stablecoin. For example, the stablecoin may be subject to ASC 310, ASC 320, ASC 321, ASC 323, ASC 810, ASC 815, or ASC 825.

For more information, see Questions 22 and 23 of the AICPA Practice Aid.

5.9.1.3 Mining

An entity may operate as a crypto asset miner that receives transaction fees and block rewards, both in the form of crypto assets. In accounting for transaction fees and block rewards, the entity should consider ASC 350 and whether the application of ASC 606 is appropriate.

An entity may also share its computing infrastructure as part of a mining pool operated by another entity. In these circumstances, the entity should consider whether its arrangement is subject to ASC 842, ASC 606 (including the principal-versus-agent guidance), or ASC 808.

For more information, see Questions 27 and 28 of the AICPA Practice Aid.

5.9.2 NFTs

NFTs are units of data stored and transferred on a digital ledger (i.e., a blockchain) that each represent a unique digital item and therefore are not interchangeable. They can represent rights associated with digital files such as art, audio, videos, items in video games, and other forms of creative work. NFTs can also provide other rights, such as ownership of virtual land or even real-world assets and services. NFTs give users true ownership over their entitlements and enable them to monetize and transfer value.

The first step to grasping the accounting implications of transactions that involve NFTs is fully understanding the rights represented and what has actually been transferred. This is critical to determining the appropriate accounting treatment, including the applicable accounting guidance.

5.9.2.1 Issuer's or Developer's Accounting for NFTs

The nature of NFTs sold by an issuer or developer poses unique accounting challenges. The discussions below highlight common accounting considerations for entities that issue or develop NFTs.

5.9.2.1.1 Revenue Recognition

Entities that issue or develop NFTs may conclude that their arrangements to sell NFTs are subject to the revenue guidance in ASC 606. An entity's arrangement to sell an NFT will generally be within the scope of ASC 606 if it represents a contract with a counterparty that obtains an NFT in exchange for consideration and the NFT is an output of the entity's ordinary activities. In addition, if the arrangement is within the scope of ASC 606, the entity will need to make a determination of when a contract exists by assessing various criteria, such as whether there are enforceable rights and obligations and whether the consideration is collectible. For further guidance, see Chapters 3 and 4 of Deloitte's Roadmap *Revenue Recognition*.

Some rights associated with NFTs may not be subject to the guidance in ASC 606. For example, an entity may sell an NFT that does not provide the purchaser with any ownership or license rights to the underlying IP. Rather, the entity may retain all rights to the IP and only sell to the purchaser a right to future revenue streams associated with the IP. For instance, the entity may own music rights and sell an NFT that provides the purchaser with a percentage of the royalties that the entity earns on those music rights. In this circumstance, the entity must carefully evaluate whether the transaction represents the sale of future revenue that is subject to the guidance in ASC 470.[12]

5.9.2.1.1.1 Performance Obligations

The rights attached to NFTs may include multiple promised goods and services. Entities that sell NFTs will need to evaluate whether those promised goods and services are separate performance obligations. Identifying performance obligations is critical because a performance obligation is the unit of account for which revenue is recognized, which could affect the timing of revenue recognition.

For example, an entity may sell an NFT in a metaverse that represents the user's digital rendering of its avatar. That NFT may provide the user with various digital rights, including free digital collectibles, loyalty rewards, enhanced gaming experiences, and VIP access to events in the metaverse (e.g., virtual concerts). Some NFTs may also convey a right to a tangible good, such as a luxury bag or pair of sneakers. Because there are multiple promised goods and services, the entity must determine whether each promised good or service is distinct and therefore a separate performance obligation.

[12] Further, digital assets vary in complexity and may contain features that are not subject to the guidance in ASC 606. For example, certain digital assets may represent or include financial instruments that are subject to the guidance in ASC 815 or ASC 860. This Guide does not address all features that may exist in an NFT and therefore does not discuss all accounting guidance that may apply.

If multiple performance obligations are identified, the entity will generally need to determine their respective stand-alone selling prices and allocate the transaction price on the basis of those stand-alone selling prices. Determining stand-alone selling prices can be challenging, particularly when selling NFTs is a new business model for the entity. The entity will also have to assess how control of each performance obligation is transferred to the customer (i.e., at a point in time or over time) to determine the appropriate timing and pattern of revenue recognition. For example, revenue related to a performance obligation that represents a license to functional IP may be recognized at a point in time, whereas revenue related to a performance obligation that represents a hosting service or gaming experience may be recognized over time.[13]

For further guidance, see Chapters 5, 7, and 8 of Deloitte's Roadmap ***Revenue Roadmap***.

5.9.2.1.1.2 Transaction Price

An entity that sells an NFT to a customer may charge a fixed fee for that NFT. However, the customer may also be required to pay variable consideration (e.g., usage-based fees). In addition, if the customer has the right to sell the NFT (whether on or off platform), the entity that originally issued or developed the NFT may be due a royalty upon each sale. Therefore, the total transaction price for an NFT may include various payment streams. Variable consideration is generally estimated up front and is subject to a "constraint" to ensure that it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur. However, there are certain exceptions in ASC 606 that would not require the entity to estimate variable consideration at contract inception. Further, the entity may receive crypto assets or other digital assets in exchange for the NFT rather than fiat currency. In those circumstances, the entity would be required to measure any noncash consideration at its estimated fair value at contract inception. For further guidance, see Chapter 6 of Deloitte's Roadmap ***Revenue Recognition***.

5.9.2.1.1.3 License of IP

Many NFTs do not transfer control or ownership of the underlying IP but grant the purchaser a license to it. For example, an entity may retain ownership of digital art and grant a purchaser of an NFT an exclusive license to use and display such digital art. In this circumstance, the entity should consider the supplemental guidance in ASC 606 that addresses the licensing of IP. For further guidance, see Chapter 12 of Deloitte's Roadmap ***Revenue Recognition***.

5.9.2.1.1.4 Principal-Versus-Agent Considerations

Sometimes an intermediary is involved in the sale of NFTs. For example, NFTs that are collectibles may be sold by entities in off-platform marketplaces. When more than one party is involved in providing an NFT to an end customer, the parties must determine which party controls the NFT before it is transferred to the end customer.

If the entity that issues or develops the NFT controls the NFT before it is transferred to the end customer, the issuer or developer is the principal in the transaction with the end customer, recognizes revenue on the basis of the gross amount paid by the end customer, and separately recognizes the cost of the amount paid to the marketplace for facilitating the transaction. Because the marketplace does not obtain control of the NFT before the NFT is transferred to the end customer, it is an agent in the transaction and recognizes revenue on the basis of the net amount retained.

By contrast, if the marketplace obtains control of the NFT before the NFT is transferred to the end customer, it is the principal in the transaction with the end customer, recognizes revenue on the basis of the gross amount paid by the end customer, and separately recognizes the cost of the amount

[13] If a company provides storage or custodial services for its customers' NFTs, it should also consider the applicability of the guidance in SAB 121.

paid to the issuer or developer for the NFT. In this case, the issuer or developer is the principal in the transaction with the marketplace (i.e., the customer of the issuer or developer is the marketplace rather than the end customer) and recognizes revenue on the basis of the amount received from the marketplace (not the gross amount paid by the end customer).

An entity that develops and operates a metaverse may also offer third-party creators (who may also be users in the metaverse) the ability to develop and sell their own NFTs. The same principal-versus-agent considerations described above would apply to the entity that offers a creator economy.

For further guidance, see Chapter 10 of Deloitte's Roadmap ***Revenue Recognition***.

5.9.2.1.2 Development Costs

In addition to determining the appropriate accounting for the sale of NFTs, entities that develop NFTs must determine the appropriate accounting treatment for development costs incurred, including which accounting guidance to apply. Depending on the applicable accounting guidance, those costs may be (1) capitalized or deferred on the balance sheet or (2) expensed as incurred. Therefore, an entity that develops NFTs will need to understand the underlying IP being developed, the rights that will be conveyed to the purchaser, and the nature of the costs incurred. Because an NFT typically conveys digital rights rather than tangible property, the development costs will most likely not be subject to the inventory guidance in ASC 330. Instead, much of the development costs may be associated with developing software.

If development costs are software costs and the purchaser of the NFT will obtain possession of the software, the software development costs may be subject to the guidance in ASC 985-20. Under ASC 985-20, most software development costs are expensed as incurred because such costs are considered R&D expenses until technological feasibility is established. Because technological feasibility is typically established late in the development cycle, often very little is capitalized.

On the other hand, it is possible that the purchaser lacks the ability to take possession of the software and that the developer of the NFT will host the software on its own platform. For example, an NFT may give the purchaser the right to virtual items in a metaverse that are only accessible online and hosted by the developer. In that circumstance, the software development costs for those virtual items may be subject to the guidance in ASC 350-40. Under ASC 350-40, certain software development costs incurred during the application development stage are capitalized. Because the application development stage typically occurs before technological feasibility is established, more software development costs tend to be capitalized under ASC 350-40 than under ASC 985-20. For further guidance on scope considerations related to the accounting for software and software-related costs, see Chapter 4.

5.9.2.2 Investor's or Purchaser's Accounting for NFTs

Today, most investors in NFTs are individuals. However, other entities have begun exploring investments in NFTs, including ownership of virtual land in metaverses. Like an NFT issuer or developer, an NFT investor or purchaser must determine the nature of the rights the NFT conveys to determine the appropriate accounting treatment. For example, the NFT may convey the right to a plot of virtual land in the metaverse that, like other digital assets, would generally be subject to the guidance in ASC 350 rather than ASC 360.[14] Because of the unique nature of the NFT, it may be difficult for the investor or purchaser to determine (1) whether the asset should be amortized and, if so, over what estimated life; and (2) whether the asset is impaired and, if so, by how much. In addition, the investor or purchaser may receive a bundle of rights with the purchase of the NFT, such as a right to physical goods (e.g., branded

[14] This Guide does not address accounting considerations for entities that apply specialized industry guidance, such as that in ASC 940 or ASC 946.

clothing or physical artwork), entrance to a virtual concert, lifetime membership to an elite club, and other items that could include services to be received in the future. The transaction price paid by the investor or purchaser would typically need to be allocated to the multiple elements acquired on the basis of their fair values, which, like the stand-alone selling prices that an NFT issuer or developer uses to allocate the transaction price to multiple performance obligations, may be challenging to determine. Further, the investor or purchaser would have to evaluate the nature of the underlying rights acquired to determine which accounting guidance to apply to each right. For example, if the investor or purchaser pays up front and will receive services in the future (e.g., hosting of virtual items associated with the NFT, gaming experiences), the allocated cost may represent a prepaid asset.

5.9.3 SEC Staff Views on the Accounting for Certain Crypto Lending Arrangements

At the 2022 AICPA & CIMA Conference on Current SEC and PCAOB Developments, the SEC staff provided its views on the accounting for crypto lending arrangements. Specifically, the SEC staff stated that it has observed different approaches in the application of U.S. GAAP or IFRS® Accounting Standards to crypto lending transactions and that it believes that some of the approaches do not faithfully represent the underlying economics of the transactions or serve the needs of investors. Rather, for certain crypto lending fact patterns, the SEC staff would not object if the lending entity (1) derecognized crypto assets when they are lent to the borrower and (2) recognized an asset that reflects the lending entity's right to receive the crypto assets back from the borrower. For more information about the SEC staff's views on the accounting for and disclosure of certain crypto lending arrangements, see Deloitte's December 18, 2022, *Heads Up*.

5.9.4 Staff Accounting Bulletin No. 121

On March 31, 2022, the SEC issued SAB 121, which (1) provides the SEC staff's view that it would be appropriate for an entity that has an obligation to safeguard crypto assets to record a liability and corresponding asset on its balance sheet at the fair value of the crypto assets and (2) adds Section FF to SAB Topic 5 (this section, as noted in SAB 121, includes "interpretive guidance for entities to consider when they have obligations to safeguard crypto-assets"). Although the determination of whether an entity has an obligation to safeguard crypto assets and therefore is within the scope of SAB 121 will depend on the entity's specific facts and circumstances, the AICPA Practice Aid contains a nonexhaustive list of factors that the entity may consider when determining whether it has a safeguarding obligation. For more information on SAB 121, see Deloitte's April 6, 2022 (updated July 28, 2022), *Financial Reporting Alert* and Appendix B of the AICPA Practice Aid.

5.9.5 On the Horizon

In May 2022, the FASB added to its technical agenda a project on improving the accounting for and disclosure of certain digital assets (i.e., crypto assets). Since then, the Board has made the following tentative decisions:

- *Scope* — A digital asset held by an entity that meets all the following criteria would be within the scope of the project:
  - It meets the U.S. GAAP definition of an intangible asset.
  - The holder is not provided with enforceable rights to, or claims on, goods, services, or other assets.
  - The asset resides on a blockchain or other distributed ledger.
  - It is secured by cryptography.

  - It is fungible.

  Crypto assets created or issued by an entity or its related parties would be excluded from the scope of the project, and the criteria above would exclude wrapped tokens.

- *Recognition and measurement* — All entities would measure crypto assets at fair value in accordance with ASC 820 regardless of whether the crypto assets have a quoted price in active markets. Subsequent changes in fair value would be recognized in net income, and commissions and other transaction costs related to the acquisition of crypto assets would be expensed as incurred (unless industry-specific guidance stipulates otherwise).

- *Presentation and classification* — The aggregate amount of crypto assets would be presented on the balance sheet separately from other intangible assets that are measured through the use of other measurement bases (e.g., intangible assets that are measured at cost less impairment). Changes in the carrying amount (e.g., impairments and amortization) of other intangible assets that are measured through the use of other measurement bases (e.g., goodwill and other intangible assets subject to ASC 350) would be presented separately on the income statement from gains and losses on crypto assets. Crypto assets received as noncash consideration in the ordinary course of business that are converted nearly immediately into cash would be classified as operating cash inflows.

- *Disclosures*:
  - In both interim and annual periods, the following would be disclosed:
    - Significant crypto asset holdings, including the name, cost basis, fair value, and number of units of each significant crypto asset held as well as how the cost basis was determined (e.g., average cost, specific identification). Fair value and cost basis of the entity's other insignificant crypto asset holdings may be aggregated into a single line item.
    - The nature and duration of restrictions on the sale of crypto assets, and circumstances that could cause a lapse in the restrictions.
    - All ASC 820 disclosure requirements for crypto assets.
  - At year-end, the following would be disclosed:
    - A reconciliation of activity for crypto holdings. The reconciliation would include information such as purchases, sales, gains, and losses during the period and a description of purchases and sales made during the period.
    - The difference between the sale price and the cost basis of crypto assets sold during the period.

- *Transition and effective date* — Upon adoption, a cumulative-effect adjustment would be recognized in retained earnings at the beginning of the annual period. Early adoption would be permitted, including in any interim period. All entities (including nonpublic entities) would be subject to the same transition and effective date requirements.

- *Next steps* — A proposed ASU will be issued with a 75-day comment period.

For more information about the Board's tentative decisions to date, see Deloitte's September 8, 2022; October 18, 2022; and December 23, 2022, *Heads Up* newsletters.

5.10 Non-GAAP Financial Measures and Metrics

5.10.1 Non-GAAP Financial Measures

While an entity's financial statements must be prepared in accordance with GAAP, many entities also elect to disclose non-GAAP financial measures[15] — that is, numerical measures of an entity's financial performance, financial position, or cash flows for which the GAAP counterparts are adjusted in some fashion. Examples of common non-GAAP financial measures include EBITDA, adjusted EBITDA, adjusted earnings or adjusted EPS, and free cash flow.

When using non-GAAP financial measures, an SEC registrant must be aware of certain SEC requirements, including the rules in SEC Regulation G and SEC Regulation S-K, Item 10(e). In addition, the SEC staff has published a number of Compliance and Disclosure Interpretations (C&DIs) (which are updated periodically) to clarify its views on many non-GAAP presentation issues. SEC officials have indicated in public forums that the SEC is looking for full compliance with the C&DIs in SEC filings.

The key requirements for disclosure of non-GAAP information in SEC filings, including press releases, are related to the following:

- *Prominence* — The most directly comparable GAAP measure should be presented with equal or greater prominence.
- *Not misleading* — A non-GAAP measure should not be presented in a misleading manner.
- *Reconciliation* — Registrants should present a quantitative reconciliation of the non-GAAP measure to the most directly comparable GAAP measure and should transparently describe all adjustments.
- *Clear labeling* — Registrants should clearly label and describe non-GAAP measures and adjustments but should not, for example, use titles or descriptions that are confusingly similar to those used for GAAP financial measures.
- *Usefulness and purpose* — Registrants should disclose why they believe the non-GAAP measure provides useful information to investors and, to the extent material, provide a statement disclosing the additional purposes, if any, for management's use of the non-GAAP measure.

The SEC staff has frequently cited its C&DI on prominence, Question 102.10, when commenting on non-GAAP measures. Accordingly, it may be helpful for a registrant to note the following:

- If GAAP and non-GAAP measures are presented in a particular section of a document, the GAAP measures should be presented before the non-GAAP measures. For example, if a registrant wants to use certain non-GAAP measures in its discussion of results of operations, it should consider the order of presentation and discuss the GAAP results before the non-GAAP measures.
- When a registrant reconciles a non-GAAP measure to the most comparable GAAP measure, it should start with the GAAP measure.
- The registrant should not present a non-GAAP measure in more detail, or emphasize it more, than the comparable GAAP measure.

[15] SEC Regulation S-K, Item 10(e)(2), defines a non-GAAP financial measure as "a numerical measure of a registrant's historical or future financial performance, financial position or cash flows that:

(i) Excludes amounts, or is subject to adjustments that have the effect of excluding amounts, that are included in the most directly comparable measure calculated and presented in accordance with GAAP in the statement of comprehensive income, balance sheet or statement of cash flows (or equivalent statements) of the issuer; or

(ii) Includes amounts, or is subject to adjustments that have the effect of including amounts, that are excluded from the most directly comparable measure so calculated and presented."

- The disclosures related to non-GAAP purpose and use should not state or imply that the non-GAAP measures are superior to, provide better information about, or more accurately represent the results of operations than GAAP measures.
- Certain presentations that give undue prominence to non-GAAP information, such as a full non-GAAP income statement, are prohibited.
- If non-GAAP measures are presented in a chart or graphic, the chart or graphic should include the most directly comparable GAAP measures or they should be displayed in an equally prominent location.

An overriding theme of the SEC's guidance on the use of or references to non-GAAP measures in public statements or disclosures is that they should not be misleading. Section 100 of the C&DIs also provides examples of potentially misleading non-GAAP measures, including those that:

- Exclude normal, recurring cash operating expenses necessary for business operations.[16]
- Are presented inconsistently between periods, such as by adjusting an item in the current reporting period, but not a similar item in the prior period, without appropriate disclosure about the change and an explanation of the reasons for it.
- Exclude certain nonrecurring charges but do not exclude nonrecurring gains (e.g., "cherry picking" non-GAAP adjustments to achieve the most positive measure).
- Are based on individually tailored accounting principles, including certain adjusted revenue measures.

In addition to the examples discussed in the C&DIs, various other presentations could be considered misleading depending on the facts and circumstances.

For more information, see Deloitte's Roadmap *Non-GAAP Financial Measures and Metrics*.

5.10.2 Metrics and KPIs

Financial or operational metrics, sometimes called KPIs, may also be included in a registrant's SEC filing to illustrate the size, profitability, and growth of the business or other relevant trends such as customer acceptance or retention. Metrics used by technology entities could include items such as:

- Annual recurring revenue.
- Bookings.
- Weighted average duration of contracts.
- The number of Web page views.
- Total customers or subscribers, the number of those who are active, or changes in either number.
- Operating or contribution margin.
- Customer retention rates (e.g., net revenue retention or core customer retention).
- Average revenue per user.

[16] Section 100.01 of the C&DIs states, in part, that "[w]hen evaluating what is a normal, operating expense, the staff considers the nature and effect of the non-GAAP adjustment and how it relates to the company's operations, revenue generating activities, business strategy, industry and regulatory environment. The staff would view an operating expense that occurs repeatedly or occasionally, including at irregular intervals, as recurring."

- Daily or monthly (1) number of active users or (2) usage.
- Number of "likes."
- Total impressions.

The SEC has indicated that registrants should consider the need to disclose KPIs or metrics that management uses in managing its business within MD&A, because such information may be material to an investor's understanding of the registrant's performance. For example, if a registrant that operates a gaming platform discloses online users and there are subsets of those online users that are material to an investor's understanding of the registrant's results of operations and financial position, the registrant should consider disclosing the subsets and explaining any differences between them. For some platforms, the monetization of U.S. users may differ from that of international users, and the monetization of mobile users may differ from that of desktop users. In addition, if a registrant that operates a marketplace platform discloses the number of visitors to its Web site, it should disclose how that metric is clearly and directly related to its results of operations and financial position. The registrant may disclose the number of individuals who visited its Web site but fail to note how this number differs from the number of visitors who actually purchased goods. Further, some e-commerce retailers disclose gross merchandise volume when they do not own the merchandise sold on their Web sites and record revenue on a net basis. Such disclosures should discuss why this metric is important and how it is linked to the registrant's results.

Metrics may be based on GAAP amounts, non-GAAP amounts, nonfinancial amounts, or any combination thereof. When using metrics, registrants should first consider whether an existing regulatory framework applies. For example, metrics based on non-GAAP measures would be subject to the requirements in SEC Regulation G and SEC Regulation S-K, Item 10(e). If metrics are not subject to an existing framework, registrants should consider what additional information they may need to present for investors to understand the metric presented. As clarified in interpretive guidance issued by the SEC in January 2020, the SEC would generally expect the following disclosures to accompany all KPIs and metrics in MD&A:

- A clear definition of the metric and how it is calculated.
- A statement indicating the reasons why the metric provides useful information to investors.
- A statement indicating how management uses the metric in managing or monitoring the performance of the business.
- Whether there are estimates or assumptions underlying the metric or its calculation that may be important for investors to understand.
- Disclosures accompanying any changes in the calculation or presentation of KPIs and metrics from period to period.

The guidance also reminds registrants of the importance of maintaining effective disclosure controls and procedures related to KPIs and metrics, including maintaining consistency and accuracy of disclosures.

For more information about the presentation and use of metrics and KPIs, see Section 2.4 of Deloitte's Roadmap *Non-GAAP Financial Measures and Metrics*.

5.10.3 SEC Comment Letter Trends

SEC comments have continued to cover a wide range of matters related to non-GAAP measures and metrics.

Although there has been a decline in the number of comments related to prominence of non-GAAP measures, that topic has remained a focus of the staff. Comments have also focused on enhancing the disclosure related to the purpose and use of such measures, reconciliation requirements, and clear labeling. For example, a registrant in the technology industry may disclose revenue excluding traffic acquisition costs (ex-TAC) as a key non-GAAP measure. The SEC staff may request that the registrant reconcile the amount to GAAP gross profit (instead of revenue) and revise the title of the non-GAAP measure to better reflect the measure's nature (e.g., the registrant may decide to change the title to contribution ex-TAC). In addition, if a registrant does not present a gross profit subtotal on the face of the income statement but discusses cost of sales excluding depreciation and amortization in MD&A, it should disclose that the measure is a non-GAAP measure and comply with the applicable disclosure requirements. Further, the SEC has questioned the nature of certain adjustments that may be potentially misleading, such as those that use individually tailored accounting principles.

With respect to metrics and KPIs, SEC comments often request disclosures explaining or clarifying how a metric is calculated, why the metric provides useful information to investors, and how management uses the metric in managing the business. In addition, the SEC staff may raise questions when changes are not appropriately quantified and it is unclear whether metrics represent KPIs. Because of the vast volume of metrics used, the SEC staff has been concerned that (1) metrics may not be presented with appropriate context and (2) the link between registrants' key metrics and their income and future profitability may not be clear. Registrants should review their metrics to ensure that the metrics are clearly defined, portray a balanced discussion, and remain relevant.

For more information, see Sections 3.4 and 6.5.1.4 of Deloitte's Roadmap *SEC Comment Letter Considerations, Including Industry Insights*.

5.11 Initial Public Offerings

After a record-breaking year for IPOs and SPACs in 2021, the market began slowing down significantly in 2022 amid various challenges, including volatile markets, geopolitical conflicts, inflation, interest rate increases, supply-chain issues, and COVID-19 (which has continued to affect the global economy). Despite such challenges, private technology entities continue to evaluate the methods used to go public in anticipation of better market conditions in the future. Such methods include a "traditional" IPO, in which a private entity sells its equity in a public underwritten offering. However, over the past several years, nontraditional IPOs have become more popular. Rather than undertaking traditional IPOs, some private operating entities have chosen to merge with SPACs to raise capital or use other financing alternatives, such as direct listings. Nevertheless, the volume of SPACs has declined significantly in the past year.

Before an entity commences a public offering of securities, it must file a registration statement with the SEC under the applicable securities laws. Both the form used to file the registration statement and the filing and review process will depend on the nature of the offering. Entities undertaking a traditional IPO can voluntarily submit a draft registration statement to the SEC staff for confidential, nonpublic review. The ability to file confidentially is a significant benefit because it allows entities to keep potentially sensitive information from customers or competitors until later in the IPO process. Confidential initial submissions are subsequently filed publicly no later than 15 days before (1) a roadshow or (2) the requested effective date of the registration statement if no roadshow is planned.

Once submitted to or filed with the SEC, a registration statement is reviewed by the Division staff, which will generally complete its initial review and furnish its first set of comments within 30 calendar days. The entity then responds to each of the staff's comments and reflects edits to the draft registration statement in an amended filing, which the staff will also review. An entity can expect several rounds of comment letters containing follow-up questions on responses to original comments as well as additional comments on new information included in the amended registration statement. After the initial review, subsequent comments are typically furnished within two weeks. For more information about typical SEC staff comments, see Deloitte's Roadmap *SEC Comment Letter Considerations, Including Industry Insights*.

5.11.1 Types of Issuers

The requirements for an IPO can vary from entity to entity. Factors that may affect the requirements include:

- Whether the entity is a domestic issuer or a foreign private issuer.
- Whether the entity qualifies as a smaller reporting company (SRC).
- Whether the entity qualifies as an emerging growth company (EGC).

Once an entity completes a public offering and becomes an SEC registrant, it will also need to determine its SEC filer status as a large accelerated filer, an accelerated filer, or a nonaccelerated filer, which will further affect the entity's filing obligations and deadlines. An entity undertaking an IPO will initially be considered a nonaccelerated filer since large accelerated or accelerated filers must have filed at least one annual report and must have been subject to the requirements of Sections 13(a) and 15(d) of the Securities Exchange Act of 1934 (the "Exchange Act") for at least 12 months. Accordingly, a registrant generally cannot be considered a large accelerated or accelerated filer for its first Form 10-K filing as a public entity. For more information about the types of issuers, see Section 1.2 of Deloitte's Roadmap *Initial Public Offerings*.

5.11.1.1 Smaller Reporting Companies

A registrant may qualify as an SRC on the basis of either a public float test or a revenue test. The thresholds for qualification as an SRC are as follows:

Criteria	Definition
Public float test	Less than $250 million of public float as of the last business day of the registrant's second fiscal quarter
Revenue test	Less than $100 million of revenue as of the most recently completed fiscal year for which audited financial statements are available and public float less than $700 million as of the last business day of the registrant's second fiscal quarter

A key feature of reducing the reporting burden on SRCs is the scaling back of the requirements in both SEC Regulation S-X and SEC Regulation S-K.

An entity may qualify as both an SRC and an EGC; however, unlike the five-year limit for qualifying as an EGC, there is no time limit for qualifying as an SRC.

In addition, after its IPO, an entity could both (1) qualify as an SRC and be eligible for the scaled disclosure requirements available to such an entity and (2) be an accelerated filer and subject to those requirements, including the shorter deadlines for periodic filings and the requirement to include in the entity's filings an auditor's attestation report on internal control over financial reporting (ICFR), as required by Section 404(b) of the Sarbanes-Oxley Act of 2002 ("Sarbanes-Oxley").

The table below further summarizes the initial assessment criteria for SRC status on the basis of public float and revenue levels in the context of the requirements in Section 404(b) of Sarbanes-Oxley.

	Definition		
Status	**Public Float**	**Annual Revenues**	**Sarbanes-Oxley Section 404(b) Requirement**
SRC and nonaccelerated filer	Less than $75 million	No limit	No
	$75 million to less than $700 million	Less than $100 million	No
SRC and accelerated filer	$75 million to less than $250 million	$100 million or more	Yes

For more information about SRCs, see Section 1.5 of Deloitte's Roadmap *Initial Public Offerings*.

5.11.1.2 Emerging Growth Companies

An EGC is a category of issuer that was established in 2012 under the Jumpstart Our Business Startups Act (commonly known as the "JOBS Act") and was granted additional accommodations in 2015 under the Fixing America's Surface Transportation Act (commonly known as the "FAST Act"). The less stringent regulatory and reporting requirements for EGCs are intended to encourage such entities to undertake public offerings. A private entity undertaking an IPO will generally qualify as an EGC if it (1) has total annual gross revenues of less than $1.235 billion during its most recently completed fiscal year and (2) has not issued more than $1 billion in nonconvertible debt in the past three years. Once an entity completes its IPO, it must meet additional criteria to retain EGC status.

There are many potential benefits for registrants that file an IPO as an EGC. For example, EGCs:

- Need only two years of audited financial statements in an IPO of common equity.[17]
- May omit financial information (including audited financial statements) from an IPO registration statement if that financial information is related to periods that are not reasonably expected to be required at the time the registration statement becomes effective.
- May elect not to adopt new or revised accounting standards until they become effective for private entities (i.e., nonissuers).
- Are eligible for reduced executive compensation disclosures.

After a registrant files an IPO as an EGC, provided that the registrant retains its EGC status, additional accommodations are available for its ongoing reporting obligations. One of the most significant of these accommodations exempts EGCs from the requirement to obtain, from the entity's independent registered public accounting firm, an auditor's report on the entity's ICFR. EGCs are also exempt, unless

[17] This accommodation is limited to an IPO of common equity. As the SEC clarifies in paragraph 10220.1 of the FRM, an entity will generally need to include three years of audited financial statements when entering into an IPO of debt securities or filing an Exchange Act registration statement, such as a Form 10, to register securities.

the SEC deems it is necessary, from any future PCAOB rules that may require (1) rotation of independent registered public accounting firms or (2) supplements to the auditor's report, such as communications regarding critical audit matters (CAMs), which are required for certain other issuers.[18]

After going public, a registrant will retain its EGC status until the earliest of:

- The last day of the fiscal year in which its total annual gross revenues exceed $1.235 billion.
- The date on which it has issued more than $1 billion in nonconvertible debt securities during the previous three years.
- The date on which it becomes a large accelerated filer (which is an annual assessment performed on the last day of the fiscal year on the basis of public float as of the end of the second fiscal quarter). To be considered a large accelerated filer, the registrant must have filed at least one annual report and must have been subject to the requirements of Sections 13(a) and 15(d) of the Exchange Act for at least 12 months. Accordingly, the registrant generally cannot be considered a large accelerated filer for its first Form 10-K filing as a public entity.
- The last day of the fiscal year after the fifth anniversary of the date of the first sale of common equity securities under an effective Securities Act of 1933 (the "Securities Act") registration statement for an EGC.

As noted above, an EGC may elect to adopt new accounting standards on the basis of effective dates that apply to non-PBEs (e.g., the option to first adopt a new standard in annual financial statements). However, such an election is available only for as long as the entity qualifies as an EGC. An entity may lose EGC status after the effective date for PBEs but before the effective date for non-PBEs. As discussed in paragraph 10230.1 of the FRM, the SEC staff generally expects an EGC that loses its EGC status to comply with the PBE requirements in the first filing after loss of EGC status. Accordingly, a registrant that loses EGC status before adopting a new standard should reflect such adoption as of the beginning of the current fiscal year. Previously issued financial statements do not need to be amended unless the standard requires full retrospective application. Entities that lose EGC status during the IPO process would reflect adoption of any deferred standards in their first periodic report (i.e., on Form 10-Q or Form 10-K) after the IPO. Entities that lose EGC status after their IPO would reflect adoption of any deferred standards in their next periodic report (i.e., on Form 10-Q or Form 10-K) after loss of EGC status.

For more information about EGCs, see Section 1.6 of Deloitte's Roadmap *Initial Public Offerings*.

5.11.2 Types of IPOs

An IPO represents a private entity's initial registration of debt or equity securities with the SEC. However, there are many ways in which an entity can become public, including:

- Sale of newly issued common shares to the public.
- The exchange of debt securities previously issued in a private transaction for registered debt securities.
- The registering of currently outstanding equity securities.
- The distribution of shares in a spin-off transaction by a public company.
- The registering of securities that are issued by a SPAC.

[18] CAMs are required for audits of all issuers except (1) brokers and dealers; (2) registered investment companies other than business development companies; (3) employee stock purchase, savings, and similar plans; and (4) EGCs.

Regardless of the nature of the IPO transaction or the type of securities registered, upon effectiveness, the issuer will be "public" and will therefore be required to begin complying with the periodic reporting requirements of the Exchange Act (e.g., filing of Forms 10-K, 10-Q, and 8-K). For more information about the types of IPOs, see Section 1.3 of Deloitte's Roadmap *Initial Public Offerings*.

5.11.2.1 Special-Purpose Acquisition Companies

A SPAC is a newly created entity that raises cash in an IPO and uses it to fund the acquisition of one or more private operating entities. After the IPO, the SPAC's management looks to complete an acquisition of a target entity within the period specified in its governing documents (e.g., 24 months). If an acquisition cannot be completed within this time frame, the cash raised in the IPO must generally be returned to investors. Because SPACs hold no assets other than cash before completing an acquisition, they are nonoperating public "shell companies" as defined by the SEC. If a target is identified and the SPAC is able to successfully complete the acquisition transaction, the private operating entity target will succeed to the SPAC's filing status as a result of the merger. On the closing date of the acquisition, the former private operating entity, as the predecessor to the SPAC registrant, becomes a public entity and must be able to meet all the public-entity reporting requirements applicable to the combined entity.

For more information about SPACs, see Section 1.7 of Deloitte's Roadmap *Initial Public Offerings* and Deloitte's October 2, 2020 (updated April 11, 2022), *Financial Reporting Alert*.

5.11.2.2 Offerings Made in Accordance With Regulation A

Regulation A, as amended in 2015 (also referred to as Reg A or Reg A+), provides an exemption from the ordinary requirements of the Securities Act. This exemption allows U.S. and Canadian entities to raise up to $75 million in a 12-month period by issuing certain types of securities, including equity securities. Regulation A requires that certain disclosure documents be submitted via EDGAR and allows for the confidential review of offering documents.

For more information about Regulation A, see Section 1.8 of Deloitte's Roadmap *Initial Public Offerings*.

5.11.3 The IPO Registration Statement

While the nature of the IPO may vary, before an entity may commence a public offering of securities, the entity, or "registrant," must file a registration statement with the SEC under the applicable securities laws. The registration statement contains extensive financial and business-related disclosures about the entity and the securities being offered. A registrant provides such disclosures in accordance with (1) Regulation S-X, which sets forth the SEC's reporting requirements for the financial statements, and (2) Regulation S-K, which sets forth the SEC's reporting requirements for information outside the financial statements.

Once submitted to or filed with the SEC, an IPO registration statement is processed and reviewed by the staff of the Division. The purpose of the review is to determine whether the registration statement complies with the SEC's disclosure requirements. An entity can generally expect the staff to complete its initial review and furnish the first set of comments within 30 calendar days. The entity would then respond to each of the SEC's comments and reflect requested edits, as well as any other updates, in an amended IPO registration statement, which the SEC will also review. After the initial filing, the SEC's review time can vary significantly but typically is within two weeks. An entity can expect several rounds of comment letters with follow-up questions on responses to original comments as well as additional comments on new information included in the amended registration statement.

Depending on the length of time between amendments, financial statements and other information included in the registration statement may need to be updated to reflect subsequent periods. Certain information, such as estimated pricing of the IPO and related disclosures, may not be known as of the initial filing date and therefore is not added until a later amendment. However, the SEC expects each draft of the registration statement to be substantially complete at the time of its submission, unless there are specific accommodations for omitting otherwise required information.

Once all the staff's comments are cleared, an entity will typically print a preliminary prospectus, commonly referred to as a "red herring," and go on a "roadshow" to meet with and present to prospective investors. After the roadshow, the entity and its counsel may request that the SEC declare the registration statement "effective" at a certain date and time, after which the securities will be registered and, if listed on an exchange, begin trading.

Most registration statements will only become effective after the SEC comment process has been completed and an effective date has been requested by the entity and granted by the SEC.

Entities may confidentially submit certain IPO registration statements to the SEC. The ability to file nonpublicly is a significant benefit because it allows entities to keep potentially sensitive information from customers or competitors until later in the IPO process. It also lets entities confidentially respond to SEC comments, update the draft registration statement, and continue to assess market conditions throughout the IPO process and enables them to delay or withdraw the IPO, if desired, without public scrutiny.

While draft registration statements may be initially submitted nonpublicly, an entity will eventually be required to publicly file all previously submitted drafts unless it elects to withdraw the IPO. Specifically, all comments and the related responses, even if they were previously submitted confidentially, will be posted to the SEC's Web site no earlier than 20 days after the review is completed by the staff or the registration statement is declared effective. All confidential submissions must be filed publicly no later than 15 days before (1) a roadshow or (2) the requested effective date of the registration statement if no roadshow is planned.

For more information about the IPO registration statement, see Section 1.4 of Deloitte's Roadmap *Initial Public Offerings*.

5.11.4 Identifying the Required Financial Statements for the Registration Statement

One of the more challenging aspects of preparing for an IPO is ensuring that the entity has identified the appropriate financial statements to include in the filing. There are many considerations related to determining the appropriate financial statements to include in the IPO registration statement. For example, an entity will need to identify and prepare the financial statements both for the registrant and for any predecessor entities. In addition to the complexities associated with identifying the required financial statements for the registrant and its predecessor(s), the entity must consider other potential financial statement requirements that may result in additional meaningful historical financial information for investors in the IPO. The specific requirements could be related to significant business acquisitions, equity method investments, guarantors of registered securities, or entities that collateralize registered securities.

When the circumstances are particularly complex, registrants may wish to submit a prefiling letter to the Division to preclear the planned financial statement presentation and avoid surprises or potential delays during the SEC's review of their IPO filing. Registrants may wish to seek modifications to their financial reporting requirements when the application of a rule results in the requirement to provide more information than the registrant believes is necessary. For example, a registrant may submit a prefiling letter in accordance with SEC Regulation S-X, Rule 3-13, referred to as a Rule 3-13 waiver, in which it requests to omit the financial statements for a significant acquired business, real estate acquisition, or equity method investment.

Some of the more significant considerations in the determination of the financial statements include, but are not limited to, issues related to the following:

- Registrant determination.
- Recently organized registrant (e.g., shell company such as a SPAC) financial statements, which could include predecessor financial statements or carve-out financial statements.
- Financial statement periods, including interim financial statements and age of financial statements.
- Omission of certain financial information.
- Waiver and other requests.
- Businesses acquired or to be acquired.
- Equity method investees.
- Guarantors and issuers of guaranteed securities registered or being registered.
- Securities that collateralize registered securities.

For more information about (1) identifying the required financial statements for the registration statement, (2) financial statement preparation and disclosure requirements, and (3) other registration statement reporting (including MD&A and pro forma financial information), see Chapters 2, 3, and 4, respectively, of Deloitte's Roadmap *Initial Public Offerings*.

5.11.5 Accounting Matters

This section highlights common accounting issues addressed in preparing financial statements for inclusion in an IPO registration statement. While some of the guidance may be directly applicable, some of it may be applied to IPO registration statements by analogy, may be complex, and may require significant judgment. Understanding the structure and substance of the transactions to effect the IPO is critical to making sound and reasonable judgments. During its comment process, the SEC staff will frequently ask management to explain the basis for those judgments, alternatives considered, and why the information provided to the user is representationally faithful. For additional observations related to frequently issued SEC staff comments, see Deloitte's Roadmap *SEC Comment Letter Considerations, Including Industry Insights*.

Some common accounting issues that arise in preparing IPO financial statements include, but are not limited to, the following:

- Carve-out considerations (see Section 5.2.1 of Deloitte's Roadmap *Initial Public Offerings* and Deloitte's Roadmap *Carve-Out Transactions*).
- Spin-off transactions (see Section 5.2.2 of Deloitte's Roadmap *Initial Public Offerings* and Section 1.2.3 of Deloitte's Roadmap *Carve-Out Transactions*).

- Reorganization in anticipation of an IPO (see Section 5.2.3 of Deloitte's Roadmap *Initial Public Offerings* and Appendix B of Deloitte's Roadmap *Business Combinations*).
- Related-party transactions (see Section 5.3 of Deloitte's Roadmap *Initial Public Offerings*).
- Business combinations (see Section 5.4 of Deloitte's Roadmap *Initial Public Offerings* and Deloitte's Roadmaps *Business Combinations* and *SEC Reporting Considerations for Business Acquisitions*).
- Valuation of financial instruments (see Section 5.5 of Deloitte's Roadmap *Initial Public Offerings* and Deloitte's Roadmap *Fair Value Measurements and Disclosures (Including the Fair Value Option)*).
- Liabilities, equity, and temporary equity (see Section 5.6 of Deloitte's Roadmap *Initial Public Offerings* and Deloitte's Roadmaps *Convertible Debt (Before Adoption of ASU 2020-06)*, *Issuer's Accounting for Debt*, and *Distinguishing Liabilities From Equity*).
- Offering costs (see Section 5.7 of Deloitte's Roadmap *Initial Public Offerings* and Deloitte's Roadmaps *Convertible Debt (Before Adoption of ASU 2020-06)*, *Issuer's Accounting for Debt*, and *Distinguishing Liabilities From Equity*).
- Stock-based compensation (see Section 5.8 of Deloitte's Roadmap *Initial Public Offerings* and Deloitte's Roadmap *Share-Based Payment Awards*).
- Income taxes (see Section 5.9 of Deloitte's Roadmap *Initial Public Offerings* and Deloitte's Roadmap *Income Taxes*).
- Earnings per share (see Section 5.10 of Deloitte's Roadmap *Initial Public Offerings* and Deloitte's Roadmap *Earnings per Share*).
- Segments (see Section 5.11 of Deloitte's Roadmap *Initial Public Offerings* and Deloitte's Roadmap *Segment Reporting*).
- Subsequent events (see Section 5.12 of Deloitte's Roadmap *Initial Public Offerings*).
- Unwinding private-entity accounting elections and practical expedients (see Section 3.4 of Deloitte's Roadmap *Initial Public Offerings*).

5.11.6 Audit Considerations

After the financial statement requirements have been identified for a registration statement, the next step for the registrant's audit committee[19] is to engage auditors to complete the necessary audits and reviews of the financial statements, as applicable. The SEC indicates on its Web site that the Securities Act, which governs registration statements, has two fundamental goals: (1) to "require that investors receive financial and other significant information concerning securities being offered for public sale" and (2) to "prohibit deceit, misrepresentations, and other fraud in the sale of securities." In accordance with these objectives, the Securities Act requires that an independent registered public accounting firm audit annual financial statements and read certain other financial information included in the registration statement. In addition, interim financial statements included in the registration statement may be subject to a review under PCAOB standards. In some instances, stub-period financial statements may also need to be audited.

Audited financial statements to be included in the IPO registration statement often will be subject to additional audit procedures because the standards governing audits of public entities are different from those for private entities. Specifically, the financial statement audits performed for a private entity and

[19] If the entity has not yet formed an audit committee, other governing bodies the entity has charged with governance, such as a board of directors or owners, may fulfill this role before the entity becomes a public entity.

its independent auditor are subject to the auditing standards issued by the AICPA's Auditing Standards Board; however, audits of financial statements included in a registration statement filed with the SEC need to be performed in accordance with PCAOB standards. Although the auditor may have previously expressed an opinion on the annual financial statements in accordance with AICPA auditing standards (i.e., auditing standards generally accepted in the United States, or "U.S. GAAS"), the auditor will need to issue an auditor's report on the required annual financial statements in accordance with PCAOB standards for inclusion in the registration statement, or in accordance with both U.S. GAAS and PCAOB standards when the entity is submitting its draft registration statement confidentially. To issue this auditor's report, the auditor must be registered with the PCAOB and comply with all relevant PCAOB requirements.

Some common audit issues that arise in preparing IPO financial statements include, but are not limited to, the following:

- Independence considerations.
- Changes in auditors.
- Completing audits and reviews.
- Consents.
- Comfort letters.
- ICFR.
- Critical audit matters.

For more information about audit considerations, see Chapter 6 of Deloitte's Roadmap ***Initial Public Offerings***.

Appendix A — Titles of Standards and Other Literature

AICPA Literature

Accounting and Valuation Guide

Valuation of Privately-Held-Company Equity Securities Issued as Compensation

Audit and Accounting Guide

Revenue Recognition

Practice Aid

Accounting for and Auditing of Digital Assets

FASB Literature

ASC Topics

ASC 205, *Presentation of Financial Statements*

ASC 210, *Balance Sheet*

ASC 235, *Notes to Financial Statements*

ASC 260, *Earnings per Share*

ASC 270, *Interim Reporting*

ASC 275, *Risks and Uncertainties*

ASC 310, *Receivables*

ASC 320, *Investments — Debt Securities*

ASC 321, *Investments — Equity Securities*

ASC 323, *Investments — Equity Method and Joint Ventures*

ASC 325, *Investments — Other*

ASC 326, *Financial Instruments — Credit Losses*

ASC 330, *Inventory*

ASC 340, *Other Assets and Deferred Costs*

ASC 350, *Intangibles — Goodwill and Other*

ASC 360, *Property, Plant, and Equipment*

ASC 405, *Liabilities*

ASC 450, *Contingencies*

ASC 460, *Guarantees*

ASC 470, *Debt*

ASC 480, *Distinguishing Liabilities From Equity*

ASC 505, *Equity*

ASC 605, *Revenue Recognition*

ASC 606, *Revenue From Contracts With Customers*

ASC 610, *Other Income*

ASC 705, *Cost of Sales and Services*

ASC 710, *Compensation — General*

ASC 712, *Compensation — Nonretirement Postemployment Benefits*

ASC 715, *Compensation — Retirement Benefits*

ASC 718, *Compensation — Stock Compensation*

ASC 720, *Other Expenses*

ASC 730, *Research and Development*

ASC 740, *Income Taxes*

ASC 805, *Business Combinations*

ASC 808, *Collaborative Arrangements*

ASC 810, *Consolidation*

ASC 815, *Derivatives and Hedging*

ASC 820, *Fair Value Measurement*

ASC 825, *Financial Instruments*

ASC 840, *Leases*

ASC 842, *Leases*

ASC 845, *Nonmonetary Transactions*

ASC 848, *Reference Rate Reform*

ASC 860, *Transfers and Servicing*

ASC 940, *Financial Services — Brokers and Dealers*

ASC 944, *Financial Services — Insurance*

ASC 946, *Financial Services — Investment Companies*

ASC 985, *Software*

ASUs

ASU 2014-01, *Investments — Equity Method and Joint Ventures (Topic 323): Accounting for Investments in Qualified Affordable Housing Projects* — a consensus of the FASB Emerging Issues Task Force

ASU 2014-09, *Revenue From Contracts With Customers (Topic 606)*

ASU 2016-08, *Revenue From Contracts With Customers (Topic 606): Principal Versus Agent Considerations (Reporting Revenue Gross Versus Net)*

ASU 2016-10, *Revenue From Contracts With Customers (Topic 606): Identifying Performance Obligations and Licensing*

ASU 2016-12, *Revenue From Contracts With Customers (Topic 606): Narrow-Scope Improvements and Practical Expedients*

ASU 2016-13, *Financial Instruments — Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*

ASU 2016-20, *Technical Corrections and Improvements to Topic 606, Revenue From Contracts With Customers*

ASU 2018-07, *Compensation — Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting*

ASU 2018-11, *Leases (Topic 842): Targeted Improvements*

ASU 2018-15, *Intangibles — Goodwill and Other — Internal-Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract* — a consensus of the FASB Emerging Issues Task Force

ASU 2019-08, *Compensation — Stock Compensation (Topic 718) and Revenue From Contracts With Customers (Topic 606): Codification Improvements — Share-Based Consideration Payable to a Customer*

ASU 2020-04, *Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting*

ASU 2020-06, *Debt — Debt With Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging — Contracts in Entity's Own Equity (Subtopic 815-40): Accounting for Convertible Instruments and Contracts in an Entity's Own Equity*

ASU 2021-02, *Franchisors — Revenue From Contracts With Customers (Subtopic 952-606): Practical Expedient*

ASU 2021-04, *Earnings per Share (Topic 260), Debt — Modifications and Extinguishments (Subtopic 470-50), Compensation — Stock Compensation (Topic 718), and Derivatives and Hedging — Contracts in Entity's Own Equity (Subtopic 815-40): Issuer's Accounting for Certain Modifications or Exchanges of Freestanding Equity-Classified Written Call Options* — a consensus of the FASB Emerging Issues Task Force

ASU 2021-08, *Business Combinations (Topic 805): Accounting for Contract Assets and Contract Liabilities From Contracts With Customers*

ASU 2022-06, *Reference Rate Reform (Topic 848): Deferral of the Sunset Date of Topic 848*

Concepts Statements

No. 5, *Recognition and Measurement in Financial Statements of Business Enterprises*

No. 8, *Conceptual Framework for Financial Reporting — Chapter 4,* Elements of Financial Statements

Proposed ASU

No. 2022-ED300, *Business Combinations — Joint Venture Formations (Subtopic 805-60): Recognition and Initial Measurement*

IRC

Section 382, "Limitation on Net Operating Loss Carryforwards and Certain Built-In Losses Following Ownership Change"

Section 409A, "Inclusion in Gross Income of Deferred Compensation Under Nonqualified Deferred Compensation Plans"

IFRS Literature

IFRS 15, *Revenue From Contracts With Customers*

IAS 20, *Accounting for Government Grants and Disclosure of Government Assistance*

SEC Literature

FRM

Topic 7, "Related Party Matters"

Topic 10, "Emerging Growth Companies"

Interpretive Release

No. 33-10751, *Commission Guidance on Management's Discussion and Analysis of Financial Condition and Results of Operations*

Regulation S-K

Item 10(e), "General; Use of Non-GAAP Financial Measures in Commission Filings"

Item 103, "Business; Legal Proceedings"

Item 303, "Management's Discussion and Analysis of Financial Condition and Results of Operations"

Regulation S-X

Rule 3-13, "Filing of Other Financial Statements in Certain Cases"

Rule 5-03, "Statements of Comprehensive Income"

Rule 11-01, "Presentation Requirements"

SAB Topics

No. 1, "Financial Statements"

- No. 1.B, "Allocation of Expenses and Related Disclosure in Financial Statements of Subsidiaries, Divisions or Lesser Business Components of Another Entity"
- No. 1.M, "Materiality"

No. 5.Y, "Miscellaneous Accounting; Accounting and Disclosures Relating to Loss Contingencies"

Securities Exchange Act of 1934

Section 13, "Periodical and Other Reports"

Section 15(d), "Registration and Regulation of Brokers and Dealers; Supplementary and Periodic Information"

Superseded Literature

AICPA Technical Practice Aid

Section 5100.68, "Revenue Recognition: Fair Value of PCS in Perpetual and Multi-Year Time-Based Licenses and Software Revenue Recognition"

EITF Abstract

Issue No. 01-8, *Determining Whether an Arrangement Contains a Lease*

FASB Concepts Statement

No. 6, *Elements of Financial Statements* — a replacement of FASB Concepts Statement No. 3 (incorporating an amendment of FASB Concepts Statement No. 2)

Other Literature

FASB TRG Agenda Papers

TRG Agenda Paper 23, *Incremental Costs of Obtaining a Contract*

TRG Agenda Paper 41, *Measuring Progress When Multiple Goods or Services Are Included in a Single Performance Obligation*

TRG Agenda Paper 44, *July 2015 Meeting — Summary of Issues Discussed and Next Steps*

TRG Agenda Paper 57, *Capitalization and Amortization of Incremental Costs of Obtaining a Contract*

TRG Agenda Paper 59, *Payments to Customers*

TRG Agenda Paper 60, *November 2016 Meeting — Summary of Issues Discussed and Next Steps*

Appendix B — Abbreviations

Abbreviation	Description
AI	artificial intelligence
AICPA	American Institute of Certified Public Accountants
ASC	FASB Accounting Standards Codification
ASR	accelerated share repurchase
ASU	FASB Accounting Standards Update
BC	Basis for Conclusions
BCF	beneficial conversion feature
C&DI	SEC Compliance and Disclosure Interpretation
CAM	critical audit matter
CAQ	Center for Audit Quality
CCF	cash conversion feature
CECL	current expected credit loss
CIMA	Chartered Institute of Management Accountants
CPM	cost per mille
CRM	customer relationship management
DLOM	discount for lack of marketability
DTA	deferred tax asset
DTL	deferred tax liability
EBITDA	earnings before interest, taxes, depreciation, and amortization
EDGAR	SEC's Electronic Data Gathering, Analysis, and Retrieval System
EGC	emerging growth company
EITF	FASB Emerging Issues Task Force
EPS	earnings per share

Abbreviation	Description
ERP	enterprise resource planning
ex-TAC	excluding traffic acquisition costs
Exchange Act	Securities Exchange Act of 1934
FASB	Financial Accounting Standards Board
FAST Act	Fixing America's Surface Transportation Act
FIFO	first in, first out
FinREC	AICPA Financial Reporting Executive Committee
FRM	SEC Financial Reporting Manual
GAAP	generally accepted accounting principles
GAAS	generally accepted auditing standards
IAS	International Accounting Standard
IASB	International Accounting Standards Board
IC	independent contractor
ICFR	internal control over financial reporting
IFRS	International Financial Reporting Standard
IoT	Internet of Things
IP	intellectual property
IPO	initial public offering
IPR&D	in-process research and development
IRC	Internal Revenue Code
IT	information technology

Abbreviation	Description
JOBS Act	Jumpstart Our Business Startups Act
KPI	key performance indicator
LIBOR	London Interbank Offered Rate
LIFO	last in, first out
LLC	limited liability company
M&A	merger and acquisition
MD&A	Management's Discussion and Analysis
NFT	nonfungible token
NOL	net operating loss
OCA	SEC's Office of the Chief Accountant
OEM	original equipment manufacturer
PBE	public business entity
PCAOB	Public Company Accounting Oversight Board
PCS	postcontract customer support
Q&A	question and answer
R&D	research and development
RMN	retail media network
ROU	right-of-use

Abbreviation	Description
S&P 500	Standard & Poor's 500 stock market index
SaaS	software as a service
SAB	SEC Staff Accounting Bulletin
Sarbanes-Oxley	Sarbanes-Oxley Act of 2002
SEC	U.S. Securities and Exchange Commission
Securities Act	Securities Act of 1933
SG&A	selling, general, and administrative
SKU	separate stock-keeping unit
SPAC	special-purpose acquisition company
SRC	smaller reporting company
SSP	stand-alone selling price
TMT	Technology, Media, & Telecommunications
TPA	AICPA Technical Practice Aid
TRG	FASB/IASB transition resource group for revenue recognition
VIE	variable interest entity
XaaS	everything as a service

Deloitte.

This publication contains general information only and Deloitte is not, by means of this publication, rendering accounting, business, financial, investment, legal, tax, or other professional advice or services. This publication is not a substitute for such professional advice or services, nor should it be used as a basis for any decision or action that may affect your business. Before making any decision or taking any action that may affect your business, you should consult a qualified professional advisor. Deloitte shall not be responsible for any loss sustained by any person who relies on this publication.

The services described herein are illustrative in nature and are intended to demonstrate our experience and capabilities in these areas; however, due to independence restrictions that may apply to audit clients (including affiliates) of Deloitte & Touche LLP, we may be unable to provide certain services based on individual facts and circumstances.

The *FASB Accounting Standards Codification*® material is copyrighted by the Financial Accounting Foundation, 401 Merritt 7, PO Box 5116, Norwalk, CT 06856-5116, and is reproduced with permission.

Copyright © 2023 Deloitte Development LLC. All rights reserved.