



## **Technology Industry Accounting Guide**

Other Accounting and Financial Reporting Topics:  
Inventory

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*Business Acquisitions — SEC Reporting Considerations*

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*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*

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*Statement of Cash Flows*

*Transfers and Servicing of Financial Assets*

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# 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.

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# Chapter 5 — Other Accounting and Financial Reporting Topics

## 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.

# 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
<b>AI</b>	artificial intelligence
<b>AICPA</b>	American Institute of Certified Public Accountants
<b>ASC</b>	FASB Accounting Standards Codification
<b>ASR</b>	accelerated share repurchase
<b>ASU</b>	FASB Accounting Standards Update
<b>BC</b>	Basis for Conclusions
<b>BCF</b>	beneficial conversion feature
<b>C&amp;DI</b>	SEC Compliance and Disclosure Interpretation
<b>CAM</b>	critical audit matter
<b>CAQ</b>	Center for Audit Quality
<b>CCF</b>	cash conversion feature
<b>CECL</b>	current expected credit loss
<b>CIMA</b>	Chartered Institute of Management Accountants
<b>CPM</b>	cost per mille
<b>CRM</b>	customer relationship management
<b>DLOM</b>	discount for lack of marketability
<b>DTA</b>	deferred tax asset
<b>DTL</b>	deferred tax liability
<b>EBITDA</b>	earnings before interest, taxes, depreciation, and amortization
<b>EDGAR</b>	SEC's Electronic Data Gathering, Analysis, and Retrieval System
<b>EGC</b>	emerging growth company
<b>EITF</b>	FASB Emerging Issues Task Force
<b>EPS</b>	earnings per share

Abbreviation	Description
<b>ERP</b>	enterprise resource planning
<b>ex-TAC</b>	excluding traffic acquisition costs
<b>Exchange Act</b>	Securities Exchange Act of 1934
<b>FASB</b>	Financial Accounting Standards Board
<b>FAST Act</b>	Fixing America's Surface Transportation Act
<b>FIFO</b>	first in, first out
<b>FinREC</b>	AICPA Financial Reporting Executive Committee
<b>FRM</b>	SEC Financial Reporting Manual
<b>GAAP</b>	generally accepted accounting principles
<b>GAAS</b>	generally accepted auditing standards
<b>IAS</b>	International Accounting Standard
<b>IASB</b>	International Accounting Standards Board
<b>IC</b>	independent contractor
<b>ICFR</b>	internal control over financial reporting
<b>IFRS</b>	International Financial Reporting Standard
<b>IoT</b>	Internet of Things
<b>IP</b>	intellectual property
<b>IPO</b>	initial public offering
<b>IPR&amp;D</b>	in-process research and development
<b>IRC</b>	Internal Revenue Code
<b>IT</b>	information technology

Abbreviation	Description
<b>JOBS Act</b>	Jumpstart Our Business Startups Act
<b>KPI</b>	key performance indicator
<b>LIBOR</b>	London Interbank Offered Rate
<b>LIFO</b>	last in, first out
<b>LLC</b>	limited liability company
<b>M&amp;A</b>	merger and acquisition
<b>MD&amp;A</b>	Management's Discussion and Analysis
<b>NFT</b>	nonfungible token
<b>NOL</b>	net operating loss
<b>OCA</b>	SEC's Office of the Chief Accountant
<b>OEM</b>	original equipment manufacturer
<b>PBE</b>	public business entity
<b>PCAOB</b>	Public Company Accounting Oversight Board
<b>PCS</b>	postcontract customer support
<b>Q&amp;A</b>	question and answer
<b>R&amp;D</b>	research and development
<b>RMN</b>	retail media network
<b>ROU</b>	right-of-use

Abbreviation	Description
<b>S&amp;P 500</b>	Standard & Poor's 500 stock market index
<b>SaaS</b>	software as a service
<b>SAB</b>	SEC Staff Accounting Bulletin
<b>Sarbanes-Oxley</b>	Sarbanes-Oxley Act of 2002
<b>SEC</b>	U.S. Securities and Exchange Commission
<b>Securities Act</b>	Securities Act of 1933
<b>SG&amp;A</b>	selling, general, and administrative
<b>SKU</b>	separate stock-keeping unit
<b>SPAC</b>	special-purpose acquisition company
<b>SRC</b>	smaller reporting company
<b>SSP</b>	stand-alone selling price
<b>TMT</b>	Technology, Media, & Telecommunications
<b>TPA</b>	AICPA Technical Practice Aid
<b>TRG</b>	FASB/IASB transition resource group for revenue recognition
<b>VIE</b>	variable interest entity
<b>XaaS</b>	everything as a service





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