Technology Industry Accounting Guide

2023 Technology Industry Outlook

March 2023

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Foreign Currency Matters

Guarantees and Collateralizations — SEC Reporting Considerations

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Leases

Noncontrolling Interests

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SEC Comment Letter Considerations, Including Industry Insights

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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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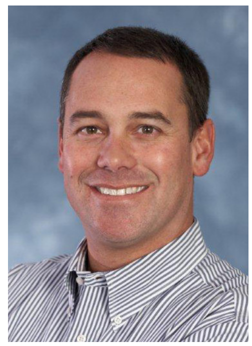

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Chapter 1 — 2023 Technology Industry Outlook[1]

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*.

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