

Your cloud transformation: Key accounting considerations and their broader impact

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Moving to the cloud? Enhancing your IT systems? Keep these financial and business considerations in mind

Intro

Business model change is being driven and facilitated by cloud-based technologies and other powerful software capabilities. The benefits of these cloud-based technologies are considerable. Moving data, applications and platforms to the cloud can create substantial operational and business benefits. This publication explores the financial reporting and business considerations that companies should consider as they undertake their digital journey.

To **stay relevant and grow**, many organizations are faced with a “**build versus buy**” decision with both paths having a focus on digital transformation and the related accounting implications. Regardless of a company choosing to build or buy, both options may result in significant spend to transform their technological capabilities. In such cases, companies will need to refine their accounting processes and policies to appropriately account for spend within these increasingly complex technological landscapes. For organizations that want to grow through inorganic M&A channels, the alignment of capitalization policies and processes is a focus for value creation in a deal.

This significant uptick in the volume and velocity of digital transformation initiatives, as well as expected changes in the accounting and reporting requirements¹ for software costs means that organizations must **understand the business impact** of their IT strategy, along with the resulting effects on **accounting, financial reporting, tax, and forecasting**. For instance, certain qualifying software costs can be ‘capitalized’ or deferred on the balance sheet and recognized over time rather than when incurred, minimizing immediate P&L recognition and the downstream impact to financial reporting metrics such as EBITDA and EPS. Refer to FASB US GAAP project ‘Accounting for and Disclosure of Software Costs’ for further details on anticipated changes to accounting for software costs.

¹ Refer to FASB US GAAP project ‘Accounting for and Disclosure of Software Costs’ for further details on anticipated changes to accounting for software costs.



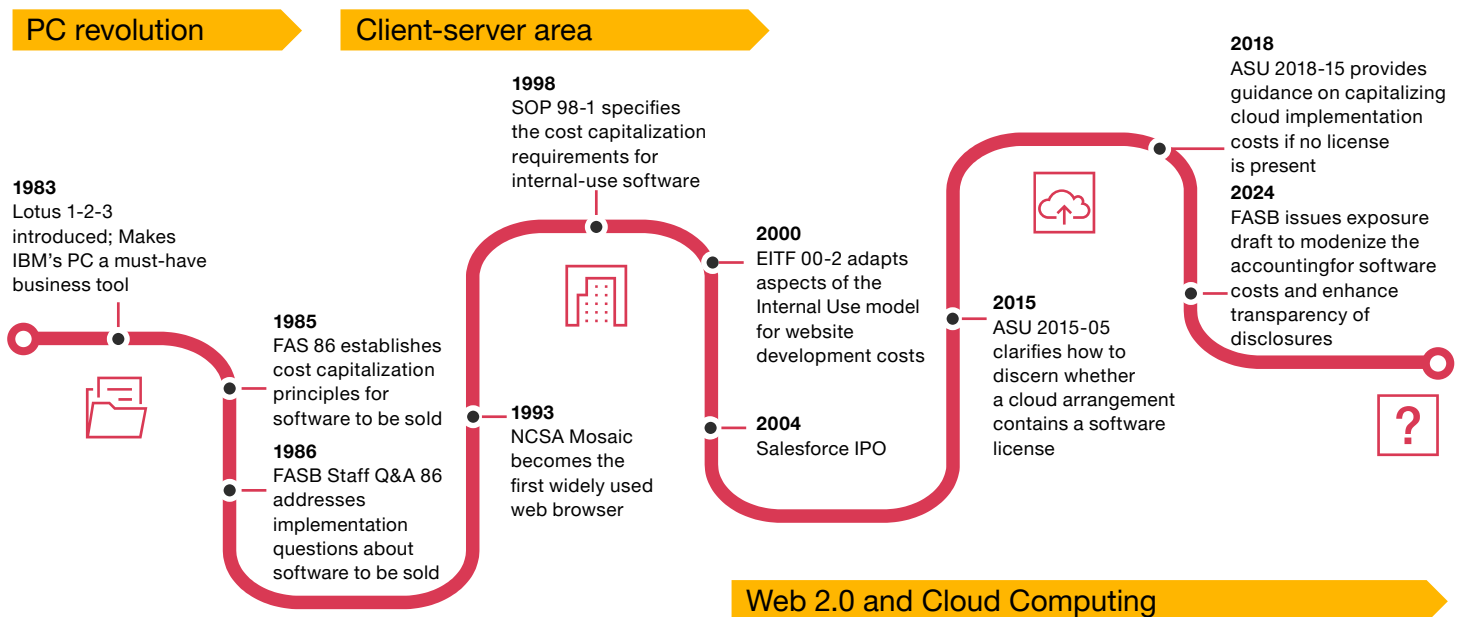
A holistic understanding of your software costs can enable better insights into key financial metrics, adherence to complex regulatory rules, and meet the needs of your stakeholders

Where we are today and how we got here

The accounting for software-related costs has evolved throughout the years but has often lagged behind changes in software development methodologies, broader digital transformation trends, and changes in product or service offerings.

Knowing where we are today and how to appropriately apply the latest accounting guidance is a great starting point for both ensuring compliance with current requirements and assessing opportunities for further optimization from a business perspective.

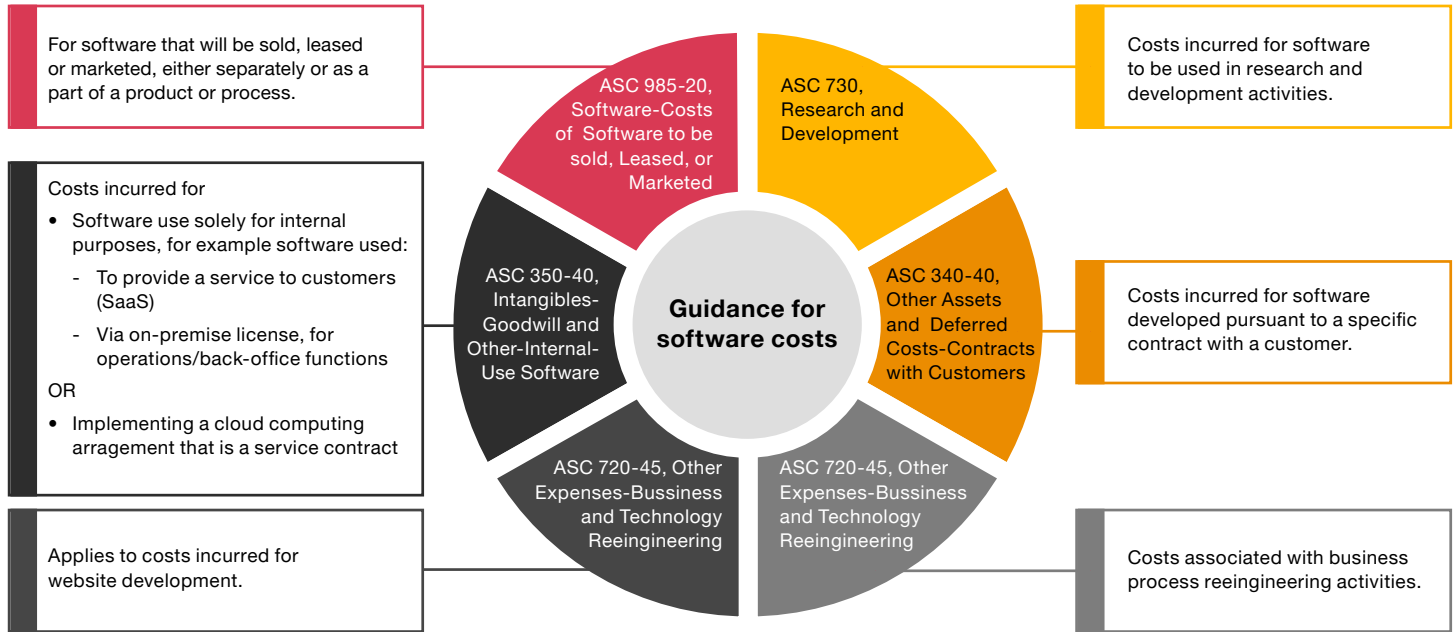
Evolution of the US GAAP rules



Current accounting guidance

Specific guidance exists to address the accounting for costs related to software that is sold, leased, or otherwise marketed; developed or obtained for internal use; and accessed through the cloud (referred to as cloud computing arrangements or “CCAs”). When developing or acquiring software, it’s important to first identify the applicable US GAAP guidance. This can be a complex assessment, as multiple topics under US GAAP guidance can apply to a single software arrangement. Application of the incorrect guidance could have material financial reporting implications, potentially requiring restatements and resulting in SOX control deficiencies.

What guidance applies: Software and software-related costs



Understanding the impact to financial metrics and other M&A transaction consideration

When assessing the financial reporting impacts of software-related spend, the accounting determinations made can have varying impacts to key financial metrics. Also, when in the context of an M&A transaction, the impacts to deal value and related financial reporting implications associated with software spend are important to keep top of mind.

| Financial Statement Line items | ASC350-40 Intenal-use software | ASC 350-40 CCA implementation costs |
|--|---|--|
| Balance sheet-capitalized costs | Fixed asset or intangible asset | Prepaid or other asset |
| Income statement-amortization of capitalized costs | Depreciation or amortization | Operating expense |
| Statement of cash flows-cash payments | Investing activities | Operating activity |

For instance, costs deemed capitalizable for internal-use software (that are not CCAs) are usually classified as PP&E or intangible assets on an organization’s balance sheet, with potentially no impact on current assets or working capital. Comparatively, capitalizable CCA implementation costs may be classified as prepaid or other current assets and could potentially impact working capital calculations .

Similarly, income statement impacts can also vary based on the nature of what is being implemented within an organization. Capitalizable CCA implementation costs are often amortized as cash operating expenses (such as SG&A), thus having no positive impact (i.e., not an addback) to key financial reporting metrics such as EBITDA. Comparatively, capitalized internal-use software costs often provide an EBITDA add-back opportunity; however, depending on how the organization defines its relevant KPIs and non-GAAP measures, capitalized types of cash outflows, such as those recognized for capitalized internal-use software, could reduce metrics such as **free cash flow**. Each organization should carefully consider its own reporting needs, performance measures and the potential reporting impact of digital investments to minimize surprises on the back end.

In light of new requirements from the FASB to further disaggregate of income statement expenses (DISE) for tabular disclosure in financial statement footnotes, organizations should also be assessing how they capture the data related to its amortization of all software costs to facilitate more granular levels of P&L reporting, as increasingly requested by investors, lenders, and other stakeholders. Refer to PwC’s [publication](#) on DISE for more information.

Additionally, as companies pursue M&A transactions, business transformation through digital investment frequently serves as a critical lever for accelerating the realization of target returns on investment (ROI). It’s important to recognize that software cost capitalization strategies can have significant implications for both the valuation and the operational integration process in a deal.

| Buy-side | Sell-side | Post-close operations/Reporting |
|--|--|---|
| <ul style="list-style-type: none"> • Impacts to EBITDA and other key financial metrics • The extent to which software costs have been capitalized should be assessed to ensure appropriate valuation and alignment with long-term growth projections | <ul style="list-style-type: none"> • Appropriate capitalization can increase enterprise value and the asset base • Overcapitalization can overstate near-term financial health and raise concerns about future impairments and cash flow generation- Considerations should be given around how capitalization affects debt covenant calculations | <ul style="list-style-type: none"> • Harmonization of accounting policies related to software costs is needed (e.g., useful lives, capitalization thresholds, tracking costs) • Operational inefficiencies may surface post-deal causing remediation efforts that impact projected ROI and overall deal success |

In joint venture arrangements, challenges often arise when venturers have differing software cost accounting policies and methods for operationalizing project accounting and cost tracking. Joint venture management must align on appropriate accounting policies and operational procedures to ensure the integrity of the joint venture’s standalone financial reporting and the venturers’ accounting for their investment. These challenges are further complicated when the joint venture operates under dual reporting standards, such as when one venturer reports under US GAAP and the other reports under IFRS. Bridging these differences is critical to ensure stakeholders can rely on consistent financial information. Establishing mechanisms to reconcile and align key areas, such as amortization schedules and cost recognition, is essential for maintaining compliance with GAAP, providing transparent financial reporting, and preventing misunderstandings between the venturers and external stakeholders.

Looking ahead – FASB project

Organizations should also monitor developments from the FASB relating to an ongoing project to modernize the accounting for software costs and enhance the transparency about an entity's software costs.

In advance of these expected targeted improvements, companies should be:

- Reviewing existing software costs accounting policies, controls and operational procedures to validate, at minimum, compliance with existing requirements (including scoping assessments),
- Inventorying potentially impacted IT projects,
- Assessing the terms of new cloud agreements being negotiated, and
- Evaluating sufficiency of its IT project approval and governance framework.



Internal use software costs: What can be capitalized/deferred?

Potentially capitalizable/deferrable

Generally expensed

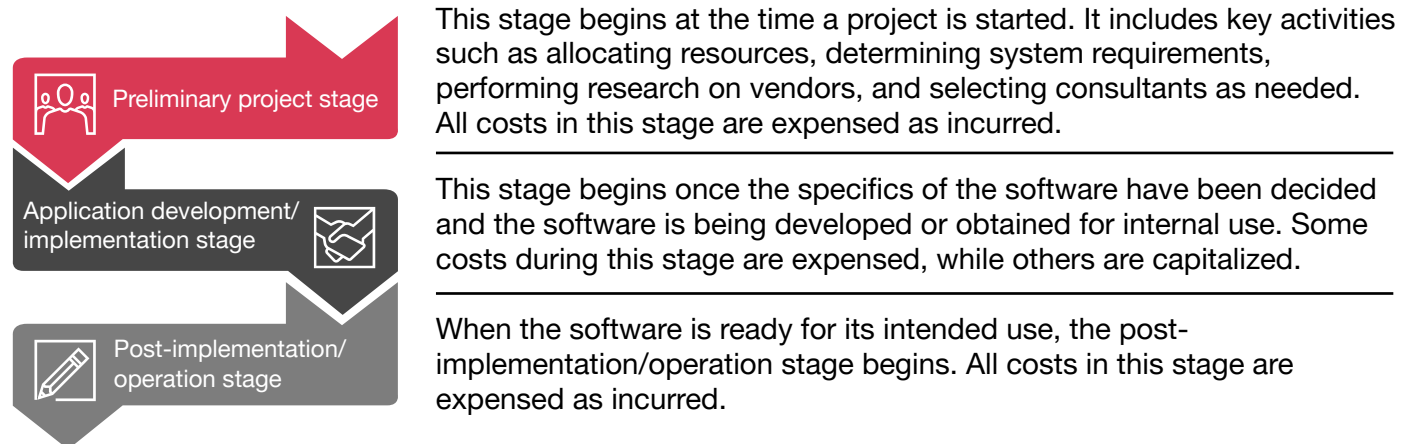
| | |
|--|--------------------------------------|
| External direct costs of materials | Research-related activities |
| Third-party service fees to develop the software | Costs for data conversion activities |
| Costs to obtain software from third parties | Costs for training activities |
| Coding and testing fees directly related to the software (including API development) | Software maintenance costs |
| Configuration/customization of software | Business process reengineering costs |
| Application upgrades (with substantial additional functionality) | Post-contract support costs |

Refer to the PwC [Software costs guide](#) for further details on accounting for software costs.

Understanding the nature of costs incurred, stage of development (as illustrated below), and the project to which the costs relate all play an important role in assessing eligibility for capitalization. This is an important area of potential judgement that can be alleviated with robust cost capitalization policies, processes, data and system functionality.

ASC 350-40 – Internal use software

The below provides a framework that may be used in bucketing the expenses related to the stages of software implementation **for both on-prem software and service contracts (such as cloud computing arrangements)**, if certain criteria are met.



Exploring emerging technologies? Relevant questions to keep in mind

Applying the guidance to emerging technologies

While software accounting guidance provides a helpful framework for assessing how to treat software costs across a variety of technological scenarios, applying it in practice can be challenging.

Investments in emerging technologies, such as Generative AI, have brought unique complexities from an accounting and financial reporting perspective. Organizational leaders should champion cross-functional collaboration within their organization, particularly in the context of capitalizing costs related to software acquisition and development when exploring these emerging technologies.

As your organization looks to investment in new technologies, consider the following when assessing the appropriate accounting and related financial reporting impacts:

- What's the nature of the technology being purchased, developed, or sold? Who controls the software for accounting purposes? What accounting guidance is relevant from a scoping perspective?
- Have we considered the accounting implications of the arrangement's contractual provisions as presently structured? Might there be opportunities to restructure the terms and conditions for a more favorable cross-functional outcome?
- How should we assess and prove that software development projects are probable of being completed?
- How should we assess costs associated with computing power (hardware, software, related services)?
- How do we manage the complexities from applying an agile software development approach? At what level should we track software costs and how?
- How should we approach data-heavy activities inherent in emerging technology development from a cost capitalization perspective? How do we distinguish R&D software projects from capitalizable internal-use software projects?



Capitalizing costs from CCA implementation

Complexities from agile software development

Key challenges in accounting for software investments stem from the changes in software development practices. Previously, a linear or “waterfall” method typically involved a sequential software design process that “flowed” steadily downwards through lengthy development phases. Accounting for investments in linear/waterfall development methods was relatively straightforward.

Current technology and software development processes now largely follow an agile (nonlinear) development life cycle. With agile software development, requirements and solutions evolve through collaboration among self-organizing, cross-functional teams with the objective of deploying new software updates at a greater velocity.

While the proposed FASB updates aim to clarify that there should be no distinction in the guidance between linear and nonlinear software development methods, operationally reconciling agile development and delivery models with outdated financial reporting rules creates complexities:

- Compared to the older linear model, the agile development process is more iterative.
- The accounting guidance is brief and principle-based, providing few prescriptive details.
- As such, sorting through the details of development costs requires judgement and often requires additional data requirements, particularly for complex operations in an agile environment.



Operational complexities observed

Software capitalization operational considerations

Determining which operational aspects of software implementation or development activities are eligible for capitalization requires judgment and an analysis of the nature of the costs incurred. As discussed earlier, this can be particularly challenging in an agile environment. Here are some of the operational challenges that could influence whether implementation activities are eligible for capitalization, which must be addressed.

Process and control challenges

Actions to consider

Determining which activities qualify for capitalization versus expense treatment

- Assess the nature of the costs incurred (e.g., implementation costs versus training costs or re-engineering costs).
- Identify direct labor, incentive compensation, engineering costs, and meals and entertainment costs.
- Segregate costs for a solution that has multiple components, such as on-premises equipment, cloud solutions, hardware, software and third-party vendors.
- Develop robust standard business processes on how team members should book software development time, ensuring the data captured is granular enough for the organization's tax, financial reporting and forecasting/budgeting needs.
- Revisit any existing capitalization thresholds, as agile ways of working may inherently mean shorter durations for each agile sprint cycle (and as such lower costs falling below pre-set thresholds).

Addressing operational complexities that may arise from agile software development

- Consider challenges for tracking sprints and related increments of work (e.g., stories) approach and the respective governance approach for consistency in tracking work across the enterprise.
- Define project intake, review and approval processes, with buy-in from cross-functional stakeholders.
- Design a process to identify, evaluate and account for unsuccessful sprints.

Assessing the accounting for implementation costs for software arrangements with multiple modules or components

- Determine the capitalized amount for multiple instances of the same hosted cloud software service used for different business units or geographies (which could be in different stages of implementation).
- Determine when amortization should begin for each module or component of the software.

Evaluating software arrangements to determine which fees represent implementation costs

- Estimate and value the portion of the fee that relates to the implementation services to apply the correct software accounting guidance to these costs. For instance, the service provider may not always separate the fees for implementation services from the fees for the ongoing hosted CCA service; instead, there may be a single monthly payment stream for all services.

Assessing cross-functional arrangements

- Account for data migration and integration into other systems.
- Develop approaches/methods for educating IT developers/engineers on accounting considerations (i.e. cross-functional education and change management framework).

To assist in addressing these challenges, companies can leverage technology through process automation. Embedding workflows as part of IT project set-up and approval, collecting sufficiently detailed PO and invoice data from external vendors, standing up robust time management processes and setting up distinct general ledger accounts are some of the solutions commonly leveraged from our observations.

Visualization tools can be used to simplify and track the end-to-end process using data already captured today or can also be set up for specific project purposes. By leveraging existing technology and embracing process automation, business decisions can be made quicker, with real-time information, leading to more efficient processes and comprehensive outcomes related to accounting treatments and technology solutions.

Additionally, a cloud computing contract may require application of multiple accounting standards. In these situations, organizations need to consider whether costs, which would otherwise have been within the scope of the software costs guidance, should be accounted for using a different standard. For example, if a CCA includes an explicit or embedded lease (e.g. dedicated equipment/servers), the company would need to determine which costs are accounted for under ASC 842, versus the software costs guidance.

Accounting for software when optimizing for other GAAP and regulatory changes

Over recent years, organizations have also implemented other accounting and regulatory standards (e.g., ESG, Pillar Two). Moreover, standards (including the upcoming changes for software costs guidance being considered by the FASB, as noted above) are evolving. As part of this continuous journey, many organizations are both revisiting their current policies and practices and exploring software solutions to automate and optimize their reporting leading to significant efficiencies.

It's important to understand that the accounting guidance could significantly impact the recognition of costs for implementation of such software. Additionally, incorporating new automation systems requires a front-loaded investment to select new systems and get them up and running.



Tax and cash impact of software development costs

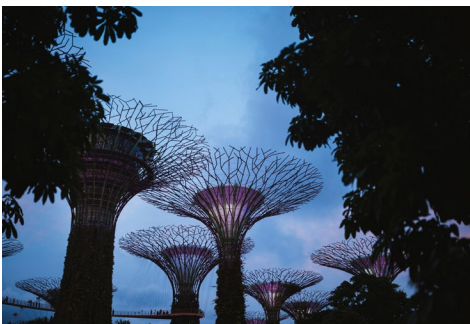
The software accounting guidance provides opportunities for enhancing tax processes and related opportunities. As the nature and location of an organization's software activities and costs incurred will inform tax and book treatment, this can also provide an opportunity to **create synergies** related to data gathering around such positions including:

Section 174



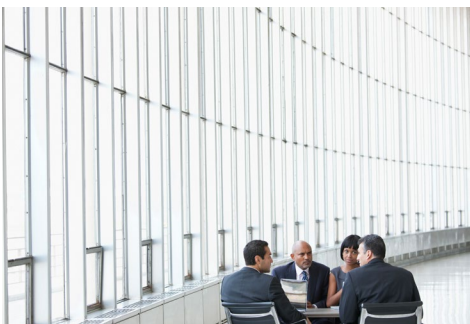
For tax years starting on or after January 1, 2022, costs meeting the definition of Section 174, R&E Expenditures, are required to be capitalized and amortized over 5 years (15 years for R&E occurring outside the US). This is a change from the historical ability to deduct or amortize such software development and research and experimentation (R&E) costs.

Section 41 research & development tax credit



Software development efforts (such as those related to cloud computing applications, solutions, and middleware), as well as the development and implementation of any new functionality or solutions relating to upcoming accounting standards into a customer's financial systems, should be analyzed for eligibility for the Research & Development Tax Credit, which could result in **permanent tax (cash) savings** for federal, state and other foreign jurisdictions.

Bonus depreciation



As a result of tax reform, capitalizable costs subject to depreciation for tax purposes may be qualified for **bonus depreciation** generally through calendar year 2027. If certain cloud related costs are associated with a lease, this would also have tax implications.

How PwC can help

PwC is a trusted resource for helping organizations of all sizes navigate the accounting and financial reporting challenges of cloud migration or IT transformation, including through investments in emerging technologies.

Our **Cloud Accounting Services** specialists can assist with financial reporting questions regarding software costs capitalization, as well as support your organization's assessment of broader business implications as you invest in the cloud, embrace automation and emerging tech (including AI), and adopt agile methodologies for software development.

Our knowledge can help you:

- anticipate accounting and controls requirements,
- understand capitalizable costs, capitalized asset useful lives and KPIs, including peer benchmarking,
- identify key data and system limitations affecting complex accounting,
- strengthen software development governance and cost monitoring frameworks,
- better align and support analyses for the tax impacts of IT development and transformation efforts, including R&D tax credit eligibility,
- assess and mitigate gaps between current practice and core accounting requirements,
- additional data requirements, particularly for complex operations in an agile environment.

Additionally, our teams of professionals across our broader spectrum of PwC services possess deep experience with analyzing the financial, tax, people, operational, and technological impacts of IT investment, including assisting you in implementation, adoption, and efforts to operationalize your accounting policies.

Where are you on your digital transformation journey and how can we help?

Reach out to the PwC contacts below to learn more:



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