



# Hot Topic: Software costs

## Are changes coming to software development cost capitalization?



February 2022

### FASB asked to modernize software cost guidance for agile software development and increasingly blurred lines between internal- and external-use software

#### Background

The guidance in US GAAP on accounting for software development costs is principally contained in ASC Subtopics 350-40 (internal-use software) and 985-20 (software to be sold, leased or marketed). The guidance in these Subtopics still mostly reflects the original standards<sup>1</sup> underlying them, which were issued approximately 25 and 35 years ago, respectively. KPMG Handbook, [Software and website costs](#), explains and provides guidance on applying these subtopics.

In July 2021, the FASB issued its Invitation to Comment, [Agenda Consultation](#) (the ITC). The comment period ended in September 2021. More than 500 [comment letters](#) were received; however, more than 400 of them addressed only accounting issues around crypto and other digital assets. With respect to software costs, the ITC asked (Question 19) stakeholders:

- to articulate what challenges they perceive in practice to applying the capitalization guidance in ASC 350-40 and ASC 985-20; and
- to suggest improvements that could be made to ASC 350-40 and/or ASC 985-20 to resolve those challenges, which could include eliminating a cost capitalization threshold entirely.

In addition, the ITC invited respondents to comment on which new or existing projects should take priority for the FASB (Question 2).

This Hot Topic summarizes the feedback received by the FASB to these questions and provides example comments furnished by ITC respondents to illustrate.

In December 2021, the FASB [added a project to its research agenda](#) that will consider possible changes to software cost accounting. We expect the FASB to meet in coming months to decide whether a formal project will be added to its technical agenda.

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<sup>1</sup> AICPA Statement of Position (SOP) 98-1, Accounting for the Costs of Computer Software Developed or Obtained for Internal Use, and Statement of Financial Accounting Standards No. 86 (FAS 86), Accounting for the Costs of Computer Software to Be Sold, Leased, or Otherwise Marketed.

## Key impacts

Changing US GAAP accounting for software development costs was named a priority by many respondents to the ITC. Suggested changes generally centered on remedying two perceived weaknesses of current US GAAP.

- First, current US GAAP is outdated; the guidance in ASC 350-40 and ASC 985-20 does not align with modern software development methods (namely, agile software development). This:
  - creates costs and complexity for preparers; and
  - often results in non-comparable financial information for financial statement users because there is diversity in how preparers apply the existing guidance to agile software development.

Respondents broadly recommended that the FASB modernize the software cost guidance in US GAAP to conform with agile software development. A frequent suggestion was that costs should be capitalized or expensed based on the nature of the underlying development activity instead of on an antiquated notion of assigning costs to discrete software development phases or stages (which, in general, do not practically exist in agile software development).

- Second, the dividing lines between internal- and external-use software, each subject to widely divergent cost capitalization guidance (in ASC 350-40 and ASC 985-20, respectively), no longer make conceptual or practical sense. The disparate accounting treatment of software licensed to customers, accounted for as external-use software, and software sold only on a hosted basis (e.g. in SaaS and other cloud-based arrangements), accounted for as internal-use software, is especially problematic and counterintuitive.

Some respondents suggested that there should be *no* distinction between internal- and external-use software development cost accounting, often suggesting a single internal- and external-use software accounting model mostly aligned with that in ASC 350-40. Others, however, suggested that the existing distinction between internal- and external-use software should be retained *except that* (1) software licensed to customers *and* (2) software sold only on a hosted basis should be subject to the same cost accounting guidance for software vendors. This latter group mostly suggested retaining the ASC 985-20 cost accounting model for all revenue-generating software.

A few respondents suggested the FASB give entities the option to expense all software development costs as incurred. A similar number of respondents explicitly opposed that idea. There was generally no support among respondents for eliminating software cost capitalization thresholds entirely.

**Actions:** Entities that undertake significant internal- or external-use software development should pay attention to the FASB's actions around changing US GAAP accounting for software development costs in coming months. Entities for whom this is an important issue should stand ready to comment on any FASB proposals, and/or otherwise provide feedback to the FASB.

In addition, in preparation for possible changes to US GAAP, entities may want to consider whether they have the necessary systems and processes in place to, for example (considering possible avenues of change suggested by respondents), (1) capture capitalizable application development costs (under ASC 350-40) of external-use software, (2) assess technological feasibility (under ASC 985-20) for software sold only on a hosted basis, and/or (3) identify capitalizable internal-use software development costs based on the nature of the underlying development activities (without regard to an identified development stage or phase).



## Existing guidance unsuited to agile software development

Sections 3.2.60 and 5.5 of KPMG Handbook, *Software and website costs*, provide guidance on and observations about applying ASC 350-40 and ASC 985-20, respectively, to agile software development projects.

As outlined in *Key Impacts*, ITC respondents highlighted the disconnect between the existing cost capitalization guidance and the agile software development method predominantly used by entities to develop software today. The following are example comments.

“The waterfall methodology software development approach discussed in ASC 350-40 is outdated as many companies have adopted an iterative Agile based development and delivery model for software development and as such, software development projects no longer follow distinct project stages as outlined in the current guidance. The linear phased language creates challenges for companies as they seek to interpret how to map the iterative work that happens throughout an Agile project lifecycle to determine which costs should be expensed versus those that are eligible for capitalization. This may result in inconsistencies in application across companies and challenges for preparers in applying the waterfall methodology-based guidance under ASC 350-40.”

—Public financial services company

“We believe the guidance distinguishing the development of internal use and external use software should be updated for changes in the development process of software.”

—State CPA society

“...the existing guidance related to costs eligible for capitalization for software developed for internal and external purposes no longer reflects the realities of how software development occurs in practice.”

—Private company preparer organization

“It can often be difficult to identify the point when the preliminary project stage ends and the application development stage begins for revenue-generating software products as often, design activities occur simultaneously with development activities under Agile.”

—Public company software vendor

**KPMG ITC comments:** “There is a widely observed and acknowledged disconnect between the ASC 350-40-25 recognition guidance centered on ‘stages’ of software development and current, prevalent models of software development (namely, agile software development)... Additionally, understanding the effects of an agile methodology on the application of Subtopic 985-20, which was not developed in contemplation of agile software development, and accounting for those effects appropriately remains an area of cost and complexity in US GAAP.”

Many respondents did not provide explicit suggestions about how to fix the issues outlined above; however, some did. The following are examples, including from KPMG.

“We believe it would make sense for the FASB to remove the staging criteria in ASC 350-40-55-3 and focus on the types of activities for which costs could be capitalized.”

—Public financial services company

“...the Board could consider whether the stages of computer software development under ASC 350-40 should be revised to better reflect the software development life cycle and when the threshold for capitalization is achieved...the Board could consider adding implementation guidance (to each standard) to provide examples of how to apply the current guidance when the costs are incurred in an iterative or agile development environment. Added examples could also address some of the considerations applicable to the agile development environment.

—Accounting firm

**KPMG ITC comments:** “The amendments to Subtopic 350-40 that we propose would amend ASC 350-40-25 to base the determination about whether costs should be capitalized or expensed as incurred on the nature of the related software development and implementation activities, without consideration as to whether they can be assigned to a distinct (or discrete) software development ‘stage’.”

**KPMG observation:** Because of its current shortcomings, many entities applying ASC 350-40 to agile software development projects already look to the nature of the development and implementation activities – i.e. whether Subtopic 350-40 characterizes them as capitalizable – when deciding whether the related costs should be capitalized or expensed. However, for those that do not, changes to systems and/or processes may be necessary to identify and track costs by type of development or implementation activity should the FASB adopt such an approach.

Additional entities could be impacted if any amendments to ASC 350-40 also affect the guidance that currently requires expensing ‘relatively minor’ upgrade/enhancement development costs if they cannot be separated from software maintenance costs on a reasonably cost-effective basis.<sup>2</sup> Many entities presently reach this conclusion, and therefore do not capitalize costs, for software releases that include maintenance updates and only minor upgrades of or enhancements to the software’s features and functionality.

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<sup>2</sup> FASB ASC paragraph 350-40-25-10



## Divergent internal- and external-use software accounting models

Sections 2.4 and 2.5 of KPMG Handbook, *Software and website costs*, provide guidance on determining whether software is internal-use software subject to ASC 350-40 or external-use software subject to ASC 985-20. Many of the questions and examples therein illustrate issues identified by ITC respondents.

Chapters 3 and 5 of the Handbook explain and illustrate the substantial differences that exist between the internal- and external-use cost capitalization models, while sections 6.2 and 6.4 of the Handbook illustrate the different subsequent measurement (i.e. amortization and impairment) models that apply to each.

To resolve the perceived issue (see *Key Impacts*) with scoping US GAAP around software costs, ITC respondents generally suggested one of the following two approaches.

### Approach 1

Eliminate the accounting distinction between software (1) sold only on a hosted basis (accounted for as internal-use software subject to ASC 350-40), and (2) licensed to customers (external-use software subject to ASC 985-20), while retaining a different accounting model for non-revenue generating internal-use software.

Some respondents explained this 'cut' as distinguishing:

- 'revenue generating' software that is generally the result of significant R&D by the entity; from
- non-revenue generating internal-use software that they believe is typically procured and implemented by the entity (e.g. an ERP or payroll system), instead of resulting from the entity's R&D.

Those supportive of Approach 1 mostly indicated that they would prefer the ASC 985-20 model to apply to all revenue-generating software, while retaining the ASC 350-40 model for 'true' internal-use software.

"With the continuing migration of technology to the cloud, evolution of hybrid models, and agile software development methods, we find the existence of two accounting models that could have a dramatically different impact on results of operations to be confusing and hard to justify. We note that the current capitalization model is likely still appropriate for the software that will be used for internal operations unrelated to customer sales (i.e., not as a foundation to enable hosting and other services to customers). Such software typically does not qualify as a research and development project, and the existing model aligns well with that for other capital assets created or built in-house, such as buildings, complex equipment used for own operations, etc. However, many of the same uncertainties that affect software to be sold would also impact software that will become the foundation for hosting and other services. One potential solution to the issue could be to amend the provisions of ASC 985-20-15-5 through 15-7 to relocate the accounting for the costs of hosted software into Topic 985-20."

— Accounting advisor

"Align the accounting for software development costs to be under one Topic for software that is intended to be revenue-generating (e.g., has research and development activities); we would be in favor of adopting the guidance

under Topic 985-20 for all revenue-generating software development. We would be in support of retaining the guidance in Topic 350-40 for accounting for costs of non-revenue generating software.”

— *Public company software vendor*

**KPMG observation:** Approach 1 appears to have as its principal goal to move software sold only on a hosted basis from the scope of ASC 350-40 into the scope of ASC 985-20 for the software vendor. If enacted, we would generally expect this approach to result in less cost capitalization for this software than under current US GAAP.

If the FASB decides to pursue this approach, it may want to avoid referring to ‘revenue- and non-revenue generating software’ or software that does or does not result from R&D efforts when crafting the amendments to US GAAP.

- We believe some might interpret ‘revenue-generating software’ more broadly than how it appears it was intended by Approach 1 respondents. For example, will a retailer see its e-commerce software, without which it could not make online sales, as revenue-generating? Or will a consulting company think software essential, and exclusively used, to provide its services, but never licensed or accessed remotely by customers is revenue-generating?
- Additionally, we believe, some entities undertake significant R&D efforts to develop or customize internal-use software that some might characterize as non-revenue generating.

Therefore, if the FASB decides to pursue Approach 1, we recommend ‘precisely targeting’ software developed by vendors for sale only on a hosted basis, leveraging well-understood language specific to that software from existing US GAAP to the extent possible.

## Approach 2

Eliminate the accounting distinction between internal- and external-use software *entirely*, without regard to whether the software is ‘revenue-generating’ or not.

“We believe replacing the existing guidance with a single model for software—both internal-use and externally marketed—would reduce the cost and complexity of applying the guidance and improve financial reporting for items with similar economic characteristics. Like other assets of an entity (e.g., PP&E), software—whether used internally only or marketed externally—is used by an entity to generate revenues.

—*Accounting firm*

“The work performed by developers of internal-use and external-use software follow similar processes or concept-based steps in creating their assets, and there is no longer justification for continuing to have two standards. One standard would ensure a principle-based approach is incorporated into the decisioning of software capitalization regardless of whether it is internal- or external-use.”

—*Public financial services company*

**KPMG ITC comments:** “We believe that the existing distinction between...external-use software and internal-use software is no longer relevant. In our view, both external- and internal-use software are productive assets that should follow a capitalization model consistent with that characterization. In a software licensing arrangement, the vendor sells, and the customer obtains, a license to...the software, not the software IP itself. The software IP is an asset controlled by the software vendor that it uses to produce its saleable product (i.e. licenses to that software) in the same productive manner that a...SaaS provider uses its software IP to provide the service of access to its software on a hosted basis.”

Approach 2 supporters often explicitly or implicitly suggested that a single model applied to all software development costs should more closely hew to that in ASC 350-40. Some others suggested an entirely new single model should be developed, but generally did not provide specifics about what that model should be.

“If the Board decides to undertake a project to modernize the accounting for software costs, we encourage the Board to leverage the existing model for internal-use software as its starting point. We believe this model (in contrast to the model in Subtopic 985-20) would better capture the costs incurred to develop software.”

—Accounting firm

“We believe the Board should explore making capitalization rules that are consistent for both internal-use and external-use software by project stage...different models for internal-use software and for software to be sold, leased, or otherwise marketed not only adds unnecessary complexity, but is less relevant now that entities are marketing hybrid products that include both software licenses and software-as-a-service (SaaS). Therefore, we support the alignment of the two models and believe that...use of the internal-use software capitalization model for all software capitalization is more appropriate.”

—Accounting firm

**KPMG ITC comments:** “While the Board could develop an entirely new accounting model that would apply to this combined population of software, we believe it would be reasonable, and considerably less complex, to scope external-use software into Subtopic 350-40. As outlined above, we believe external-use software is, like internal-use software used by a company to provide SaaS, a productive asset that is used by the company to produce the software licenses it sells to customers.”

**KPMG observation:** Approach 2 would likely result in additional cost capitalization by many software vendors related to their external-use software. This is because many software vendors capitalize little to no costs under ASC 985-20, and even for those that do capitalize material costs, it is likely that the ASC 350-40 application development stage will commence earlier than technological feasibility is established under ASC 985-20 for many external-use software projects.



We believe some may view a revised software cost model that expands software cost capitalization as directionally consistent with the FASB's decision a few years ago to expand software cost capitalization by customers in the context of cloud computing arrangements.<sup>3</sup>

## For further information

See KPMG Handbook, [Software and website costs](#), for guidance on applying the existing US GAAP guidance on internal-use software (ASC 350-40), website development (ASC 350-50) and external-use software (ASC 985-20).

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<sup>3</sup> ASU 2018-15, [Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract](#). See section 3.2 in KPMG Handbook, [Software and website costs](#).



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