Moving to the cloud? Business considerations for the new cloud computing accounting standard

February 2019
The benefits of cloud computing are considerable, and recent accounting changes have made cloud solutions even more attractive to many businesses. On August 29, 2018, the FASB issued new guidance on a customer's accounting for implementation, set-up, and other upfront costs incurred in a cloud computing arrangement (CCA) hosted by the vendor, that is, a service contract. Under the new guidance, a customer will apply the same criteria for capitalizing implementation costs of a CCA as it would for an on-premises software license.

Moving data, applications, and platforms to the cloud may create substantial business benefits because companies may be able to reduce capital expense outlays while maintaining a more flexible IT environment. However, companies should consider the financial reporting implications as well as broader tax and IT considerations as a result of the new accounting guidance.

Cloud computing arrangements (CCAs), at a glance

**Right to use software or hardware**

**Remote access:** Computing resources reside on the vendor’s or a third party’s hardware

**Key accounting considerations**


- **Capitalization requirements** for CCA implementation costs aligned with ASC 350-40 internal-use software guidance.

- **Capitalize implementation costs** (coding, testing, etc…) and amortize over the term of hosting arrangement.

**Types of arrangements**

- **Software as a service (SaaS)** includes a wide range of arrangements providing web-based delivery of applications managed by a third-party vendor.

- **Platform as a service (PaaS)** involves a third party providing a framework for a team of software developers to create and manage customized applications.

- **Infrastructure as a service (IaaS)** involves a third party providing on-demand, self-service access to highly scalable and automated computing resources, including monitoring, networking, storage, and other services.
How traditional IT differs from cloud computing

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<thead>
<tr>
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<th>Traditional IT</th>
<th>Cloud</th>
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<tbody>
<tr>
<td>Capital outlays for hardware &amp; applications</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Flexible IT infrastructure</td>
<td>No</td>
<td>Yes</td>
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<tr>
<td>Built-in scalability</td>
<td>No</td>
<td>Yes</td>
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<tr>
<td>Customer’s costs categorization</td>
<td>Capital–No impact to EBITDA(^1)</td>
<td>Operating–Reduces EBITDA</td>
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\(^1\) Earnings before interest, tax, depreciation, and amortization

Changes to accounting for cloud computing costs

Here’s a quick comparison of what has changed, comparing the previous standard to the new guidance:

**Previous standard\(^2\)**
- Helped entities evaluate the accounting for fees paid by a customer in a CCA by distinguishing between arrangements that include a software license and arrangements that are solely a hosted CCA service but did not address how to account for implementation costs.

**New guidance**
- Provides balance sheet, income statement, and cash flow classification of the capitalized implementation costs and related amortization expense.
- Aims to clarify the existing standard by addressing the accounting for implementation costs related to a service contract.
- Requires additional quantitative and qualitative disclosures.

\(^2\) Accounting Standards Update (ASU) 2015-05, Customer’s Accounting for Fees Paid in a Cloud Computing Arrangement
How the new accounting works

1. If the CCA includes a software license, under the old guidance, the license is within the scope of the internal-use software guidance. This addresses which costs should be capitalized, including the cost to acquire the license and the related implementation costs.

2. If the CCA does not include a software license, the arrangement is a service contract, and the fees for the CCA are recorded in the same way as other SaaS expenses, generally as operating expense. The previous guidance does not specifically address the accounting for implementation costs related to a service contract.

3. The new guidance clarifies that implementation costs, including CCAs that do not transfer a software license, may qualify for capitalization based on the phase and nature of the costs.

CCA costs: What can be capitalized?

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<th>Potentially capitalizable</th>
<th>Generally not capitalizable</th>
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<tbody>
<tr>
<td>External direct costs of materials</td>
<td>Costs for data conversion activities</td>
</tr>
<tr>
<td>Third-party service fees to develop the software</td>
<td>Costs for training activities</td>
</tr>
<tr>
<td>Cost to obtain software from third parties</td>
<td>Software maintenance costs</td>
</tr>
<tr>
<td>Coding &amp; testing fees directly related to software product</td>
<td></td>
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</tbody>
</table>

Also see PwC’s “In depth” guidance — [Cloud computing arrangements: Customer accounting for implementation costs](#).

Capitalizing costs from CCA implementation:

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- CCA operational details
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- Costs from other GAAP changes
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- Tax impact
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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, compared to today’s environment.

Current technology and software development processes now largely follow an agile development life cycle. With agile software development, requirements and solutions—including many involving CCA arrangements—evolve through collaboration among self-organizing, cross-functional teams. These methods have many advantages.

However, 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 new accounting cost 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.
CCA operational details: determining capitalization

Determining which operational aspects of CCA software implementation 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. Addressing the operational challenges that could influence which implementation activities are eligible for capitalization may involve:

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<th>Process &amp; control challenges</th>
<th>Actions to consider</th>
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<tr>
<td>Determining which activities qualify for capitalization versus expense treatment.</td>
<td>• Assess the nature of the costs incurred (e.g., implementation costs versus training costs or re-engineering costs).&lt;br&gt;• Identify direct labor, incentive compensation, engineering costs, and meals &amp; entertainment costs.&lt;br&gt;• Segregate costs for a solution that has multiple components, such as on-premises equipment, cloud solutions, hardware, software, third-party vendors.</td>
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<td>Addressing operational complexities that may arise from agile software development.</td>
<td>• Consider challenges for a sprint vs storyboarding approach and the respective governance approach for each.&lt;br&gt;• Design a process to identify, evaluate and account for unsuccessful sprints.</td>
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<td>Assessing the accounting for implementation costs for CCAs with multiple modules or components.</td>
<td>• Determine the value of multiple instances of the same hosted CCA service used for different business units or geographies (which could be in different stages of implementation).&lt;br&gt;• Determine when amortization should begin for each module or component of the hosted CCA service.</td>
</tr>
<tr>
<td>Evaluating CCA service provider arrangements to determine which fees represent implementation costs.</td>
<td>• Estimate and value the portion of the fee that relates to the implementation services to apply the new guidance to these costs. The CCA service provider may not always separate the fees for implementation services from the fees for the hosted CCA service; instead, there may be a single monthly payment stream for all services.</td>
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<td>Assessing cross-functional arrangements.</td>
<td>• Account for data migration and integration into other systems.&lt;br&gt;• Develop approaches/methods for educating developers/engineers on accounting considerations (i.e. framework).</td>
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To assist in addressing these challenges, companies can use this as an opportunity to leverage technology through process automation. Visualization tools can be used to simplify and track the end-to-end process of CCA for data already captured today, or tracked specifically for 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—many of which have also recently changed. In these situations, companies need to consider whether costs, which would otherwise have been within the scope of the updated cloud computing standard, are 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 new cloud computing standard.
Accounting for CCAs when optimizing for other GAAP changes

Many companies have also been implementing the new revenue recognition and lease accounting standards. As part of this journey, many are exploring technology solutions including CCA to automate and optimize. A CCA can facilitate implementation of accounting changes and create significant efficiencies.

It’s important to understand that the new cloud computing standard could significantly impact the recognition of costs for the implementation. Additionally, incorporating new automation systems requires a front-loaded investment to select new systems and get them up and running.

To the extent that companies are implementing a CCA as part of other accounting change initiatives, they should also ensure they have the right processes and governance to address the new CCA standard.

Tax impact of CCA costs under the new standard

The new cloud computing guidance creates an opportunity to enhance tax processes and increase tax positions around these costs. As the nature of the CCA costs incurred will dictate treatment for both tax and book purposes, the new standard can also be an opportunity to create synergies related to data gathering around such positions. Key tax areas of analysis include:

- **Section 174**: The ability to currently deduct or amortize software development and research and experimentation expenses (prior to tax year 2022) related to the implementation of systems, solutions, applications, and middleware related to cloud computing should be evaluated. From 2022 onward, all Section 174 expenses are capitalized irrespective of the nature of the costs incurred.

- **Section 41 Research & Development Tax Credit**: Software development efforts related to cloud computing applications, solutions, and middleware, as well as the implementation of the cloud computing standard into the customer’s financial systems, should be analyzed for eligibility for the Research & Development Tax Credit, which could result in permanent tax savings.

- **Capitalization**: As a result of tax reform, if costs are capitalizable for tax purposes and qualified for 100% bonus depreciation, customers can immediately expense these costs. If certain CCA costs are associated with a lease, this would also have tax implications.
How PwC can help

PwC has deep expertise in implementing financial reporting changes. Our teams can assist with financial reporting questions, as well as the broader business implications. The assistance we can provide includes:

- Accounting analysis regarding capitalization and disclosures.
- Help with data, controls, and processes during both implementation and go-live.
- Analysis of the tax impacts of recent accounting changes and how to improve tax positions.
- Implementing cloud platforms & solutions and related performance management mechanisms.

Contact one of our professionals to have a deeper conversation about your organization’s challenges with recent accounting changes and how we can be of assistance.

Contact us

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