

Technical Line

FASB – final guidance

How the new revenue standard affects technology entities

What you need to know

- ▶ The standard has changed the timing of revenue recognition for many technology entities. For example, it requires earlier recognition of revenue for most term-based software licenses than legacy guidance.
- ▶ Technology entities have had to perform more analysis and exercise more judgment to identify the promises in a contract, evaluate whether they are separate performance obligations and allocate the transaction price to the identified performance obligations.
- ▶ Many technology entities have had to change their accounting for costs to obtain a contract because the standard requires entities to capitalize the incremental costs of obtaining a contract with a customer that they expect to recover. Under legacy guidance, capitalization of costs that were both direct and incremental was permitted, but not required, and many entities chose not to capitalize these costs.
- ▶ This publication has been updated to reflect emerging implementation issues for technology entities, such as the accounting for contract modifications for licenses of intellectual property and the accounting for virtual goods, among other things.

Overview

The new revenue recognition standard¹ issued by the Financial Accounting Standards Board (FASB or Board) requires entities in the technology industry to make additional judgments and estimates, such as estimating standalone selling prices of the distinct goods or services underlying performance obligations that were not accounted for as separate units of accounting under legacy guidance.

This publication highlights key aspects of applying the FASB's standard to a technology entity's contracts with its customers, addresses significant changes to legacy practice and reflects the latest implementation insights.

As a reminder, the FASB deferred² the effective date to annual periods beginning after 15 December 2019 and interim periods in annual periods beginning after 15 December 2020, for entities that had not yet issued (or made available for issuance) financial statements that reflected the standard as of 3 June 2020 (i.e., certain private and not-for-profit entities). Early adoption is permitted. The deferral is intended to give these entities more time to implement the standard, given the operational and financial reporting challenges of the COVID-19 pandemic. Public entities, as defined by the standard, and some private and not-for-profit entities were already required to adopt the standard.

This publication, which contains a summary of the standard in Appendix A, supplements our Financial reporting developments (FRD) publication, [*Revenue from contracts with customers \(ASC 606\)*](#), and should be read in conjunction with it. The views we express in this publication may continue to evolve as implementation continues and additional issues are identified.

Technology entities should also keep in mind that, when they adopt the new credit impairment standard,³ they will need to estimate full lifetime expected credit losses for their accounts receivable and contract assets. As a reminder, they will need to do this after assessing collectibility under the revenue guidance to determine whether they have a contract with a customer. Refer to our FRD publication, [*Credit impairment for short-term receivables under ASC 326*](#), for more information.

Technology contracts can include software as a service (SaaS), cloud computing, hosted software or other cloud services (collectively referred to as cloud services throughout this publication; see the "[**Cloud services**](#)" section of this publication for more details, including a description of the most common types of cloud services); licenses of software that are run from servers on the customer's premises (often referred to as on-premises software or on-premise software); hardware; networking equipment; or a mix of these goods and services. Technology entities often sell updates to licensed software that are transferred on a when-and-if-available basis, bug fixes and telephone support (collectively referred to as post-contract customer support or PCS). Technology entities also offer professional services ranging from information technology (IT) consulting services to technical support services.

Because the standard provides specific guidance on the recognition of revenue from licenses of intellectual property (IP), it is important for entities to determine whether a contract contains a license of IP. Therefore, this publication starts with a section on evaluating whether a contract contains a license of IP and then addresses the accounting guidance required by the standard for licenses of IP. It is important to note that entities with licenses of IP still follow other aspects of the standard's five-step model for contracts because the licensing guidance does not address all aspects of the model. Therefore, the sections of this publication on identifying performance obligations and additional considerations apply to all technology contracts, including those that contain licenses of IP.

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Determining whether a contract contains a license of IP

The standard provides guidance on the recognition of revenue from licenses of IP that goes beyond the recognition model for other promised goods and services. When applying the guidance on licenses of IP, a technology entity analyzes the facts and circumstances of each contract (or type of contract) and may need to use more judgment than it did under legacy GAAP. The units of accounting and timing of revenue recognition also may change.

To apply the revenue standard, technology entities first need to determine whether a contract includes a promise of a license of IP. This assessment may be straightforward for contracts that include licenses of on-premise software, but entities have to carefully evaluate the contractual rights in contracts that include hosting services.

The criteria for making this assessment in hosted arrangements were carried forward from Accounting Standards Codification (ASC) 985, *Software*. A separate promise of a license exists when (1) the customer has the contractual right to take possession of the software at any time during the hosting period without significant penalty and (2) the customer can run the software on its own hardware or contract with another party unrelated to the vendor to host the software.⁴ (Refer to section I2.4.1 of the EY Accounting Manual for further discussion of the term “significant penalty.”)

If both criteria are met, a separate promise of a license of IP exists in the contract. The FASB emphasized in the Background Information and Basis for Conclusions of Accounting Standards Update (ASU) 2016-10⁵ that a contract must include a license of IP for an entity to apply the licensing guidance in the standard.

Licenses of IP

Determining whether a license is distinct (updated January 2020)

After determining that a contract includes a license of IP, a technology entity must determine whether the license and additional goods and services are distinct. To be distinct, a license must be both (1) capable of being distinct and (2) separately identifiable (i.e., distinct within the context of the contract).

A license is capable of being distinct if a customer can benefit from the license either on its own or together with other resources that are readily available to the customer. If a license is capable of being distinct, it is evaluated to determine whether it is distinct within the context of the contract (i.e., whether the nature of the promise is to transfer the license and the other goods or services individually or to transfer a combined item or items whose inputs are the license and the other promised goods or services).

Consider Example 11, Case A,⁶ in the standard, which describes a contract for a software license that is transferred along with installation services, technical support and software updates. The installation service is routinely performed by other entities and does not significantly modify the software. The software license is delivered before the other goods and services and has utility without the updates and technical support. The customer can benefit from the technical support and updates together with the software license transferred at the outset of the contract. The entity concludes that the customer can benefit from each of the goods and services either on its own or together with other goods or services that are readily available.⁷ That is, each good or service, including the software license, is capable of being distinct under ASC 606-10-25-19(a).

The entity then considers the factors in ASC 606-10-25-21 and determines that the promise to transfer each good and service, including the software license, is distinct within the context of the contract. In reaching this determination, the entity notes that the installation services are

Determining whether a license is distinct may require significant judgment.

routine and can be obtained from other providers, and software updates and technical support aren't necessary for the software to maintain a high level of utility to the customer during the license period. Therefore, the installation services, software updates and technical support do not significantly affect the customer's ability to use and benefit from the software license.

The entity further observes that none of the promised goods or services significantly modify or customize one another, and the entity is not providing a significant service of integrating the software and services into one combined output. Lastly, the software and the services are not deemed to be highly interdependent or highly interrelated because the entity can fulfill its promise to transfer the initial software license independently from its promises to provide the installation service, software updates and technical support. As a result, the entity identifies four performance obligations: the software license, the installation services, the technical support and the software updates.

When a license of IP is not distinct, it is combined with other goods and services as a single performance obligation. Consider Example 10, Case C,⁸ in the standard. In this example, the entity grants a customer a three-year term license to antivirus software and promises to provide the customer with unspecified updates to that software during the license period when and if they become available. The entity frequently provides updates that are critical to the continued utility of the software. Without the updates, the customer's ability to benefit from the software would decline significantly during the three-year contract. The entity concludes that its promises to transfer the software license and to provide the updates, when and if available, are not distinct within the context of the contract in accordance with ASC 606-10-25-19(b) because the license and the updates are, in effect, inputs to a combined item (i.e., antivirus protection) promised to the customer in the contract. The updates significantly modify the functionality of the software (i.e., they permit the software to protect the customer from a significant number of additional viruses that the software did not protect against previously) and are integral to maintaining the utility of the software license to the customer. Consequently, the license and updates fulfill a single promise to the customer in the contract (a promise to provide protection from computer viruses for three years) and are accounted for as a single performance obligation.

Refer to the "[Customized software](#)" section for a discussion of contracts to deliver software or a software system that requires significant production, modification or customization (i.e., where the software license is not distinct from services that customize the software).

How we see it

Many software contracts are not directly analogous to the two examples the standard provides of how to evaluate whether to combine a license and unspecified updates into a single performance obligation. Each software entity needs to evaluate the specific terms of its contracts to determine whether the license should be combined with the unspecified updates or other promises in the contract.

We believe that to reach a conclusion that a license and unspecified updates are not distinct within the context of the contract, an entity generally would need to demonstrate that providing the updates significantly affects the utility of the software license. Many technology entities have concluded that the license and unspecified updates are separate performance obligations because the unspecified updates are not critical to maintain the utility of the license and are not provided frequently enough for them to conclude that the license and unspecified updates are highly interrelated or interdependent.

Determining whether the license in a hybrid-SaaS contract is distinct

Hybrid-SaaS offerings combine on-premise software and SaaS and result in some functionality residing on the customer's servers (i.e., on premises) or on the servers of the customer's third-party provider and some being accessed over the internet through the technology entity's (i.e., the vendor's) servers or through the servers of the technology entity's third-party provider.

Capable of being distinct

When an entity concludes that a hybrid-SaaS contract contains a software license for the on-premise software, the software license and SaaS are often capable of being distinct because the customer can obtain some utility from the software license without the SaaS and can benefit from the SaaS with readily available resources (i.e., the software license that has already been transferred to the customer).

Distinct within the context of the contract (updated January 2020)

Determining whether the software license is distinct within the context of the contract often requires significant judgment. An entity should consider the level of interdependence and interrelationship between the software license and the SaaS promised in the contract.

In some offerings, the licensed software and the SaaS may have limited functionality on their own, but, when used together, the combined solution may contain the critical functionality required by the customer. In these contracts, the technology entity may conclude that the software license and the SaaS are highly interdependent or highly interrelated (i.e., not distinct within the context of the contract) and should be combined into a single performance obligation. For example, an entity may conclude a software license and SaaS are not distinct within the context of the contract if the software license provides limited benefit to the customer without the SaaS. In other contracts, the software license or the SaaS may have significant functionality on its own and likely results in two performance obligations.

The focus of this evaluation is on the functionality that is delivered through the combination of the SaaS and software license. To conclude that there is a single performance obligation, the technology entity needs to establish that transferring the combined software license and SaaS provides significantly more utility than transferring the software license and the SaaS separately. That is, the technology entity needs to demonstrate that there is a significant two-way dependency between the software license and the SaaS to conclude that the two promises are highly interrelated or interdependent.

Often, gaining a sufficient understanding of the utility of the SaaS and software license will require officials in the accounting department to have discussions with software engineers or employees from other departments in order to evaluate the features and functionalities of each product or service. An entity should also consider how its products and services are described in publicly available information (e.g., the entity's website, investor relations reports, financial statement filings) because those descriptions may indicate customer expectations and the functionalities that are critical to the overall offering.

The specific facts and circumstances of each contract have to be carefully considered. Below are some factors that may assist in the evaluation of the interrelationship and interdependency of the software license and SaaS. While the factors may help to support an entity's assessment of whether the software license and SaaS are distinct, they are meant to complement the overall assessment of whether the promises are distinct and are not determinative.

Factors that may suggest the software license and SaaS are distinct within the context of the contract include:

- ▶ The SaaS functionalities are available from other vendors.
- ▶ The software license or SaaS functionalities have utility on their own.
- ▶ The functionalities provided by the SaaS can also be performed using only the software license.

Factors that may suggest the software license and SaaS have a significant two-way dependency and, therefore, are not distinct within the context of the contract include:

- ▶ The customer obtains significant utility from the entity's integration of the software license with the SaaS.
- ▶ There are frequent and significant interactions between the software license and the SaaS (e.g., certain important tasks can only be performed when the software is connected to the SaaS).

How we see it

The evaluation of whether the software license and the SaaS in a hybrid-SaaS contract are distinct within the context of the contract can be challenging for technology entities. Determining that the software license and the SaaS are highly interrelated or highly interdependent requires an entity to demonstrate a significant two-way dependency between the two promises, not simply that one promise depends on the other or that the SaaS complements the software.

Vendor-specific objective evidence of fair value is no longer required (updated January 2020)

Under the standard, technology entities assess whether promised goods or services in a software licensing arrangement are capable of being distinct and are distinct within the context of the contract (i.e., separately identifiable from the other promises in the contract). That is, to separately account for elements in a software licensing contract, these entities no longer need vendor-specific objective evidence (VSOE) of the fair value of the undelivered element(s).

As a result, technology entities that have adopted the standard may recognize revenue earlier than they did under the legacy software guidance, especially for arrangements that involve term-based licenses.

Under the standard, a software vendor that provides a term-based software license bundled with coterminous PCS will conclude that there are two performance obligations if it determines that each promise is distinct. Because the software license has standalone functionality, it is classified as functional IP (see the "[Determining the nature of the entity's promise in software arrangements](#)" section for a discussion of functional IP), and revenue is recognized at the point in time when control transfers (see the "[Recognition of revenue from a license of IP](#)" section below). Under the legacy accounting guidance for term-based licenses, by contrast, entities typically had to combine elements in contracts that included coterminous, term-based software licenses and PCS because they were not able to establish VSOE of the fair value of the PCS. As a result, under legacy guidance, revenue for the combined element was generally recognized as delivery of the last element took place (i.e., as PCS was delivered, which was typically over the license period).

The elimination of the VSOE requirement has not changed the timing of revenue recognition for perpetual software licenses. This is because, under legacy guidance, many entities were able to establish VSOE of fair value for PCS from standalone sales of PCS renewals (since PCS is typically sold in one-year increments), and therefore, they were able to account for a perpetual software license and PCS as separate elements.

Determining the nature of the entity's promise in software arrangements

Entities are required to classify IP as either functional or symbolic as part of their determination of whether to recognize the revenue associated with the license of that IP at a point in time or over time.

Functional IP

Functional IP has significant standalone functionality and a substantial portion of its utility (i.e., the IP's ability to provide benefit or value) relates to its standalone functionality. This type of IP does not require the licensor to continue to support or maintain the IP as part of its promise. Examples of functional IP include software licenses and patents. Revenue from functional IP generally is recognized at a point in time.

A software license is typically considered to be functional IP because the software has standalone functionality. That is, the customer can derive substantial benefit from the software on its own, and its functionality is not expected to change substantively as a result of the licensor's ongoing activities that do not transfer a good or service to the customer. A technology entity may promise to continue to support or maintain the software, with unspecified updates and upgrades, but these activities are generally separate promises in the contract and, therefore, do not significantly affect the functionality of the software promised to the customer. In making this assessment, entities don't consider whether a license is perpetual or for a specified term.

Symbolic IP

Symbolic IP does not have significant standalone functionality because its utility is derived from the licensor's ongoing or past support (e.g., activities that support the value of a brand name). Examples of symbolic IP include brands and trade names. Revenue from symbolic IP is recognized over time.

IFRS

IFRS 15 *Revenue from Contracts with Customers*, which is largely converged with the revenue guidance in US GAAP, does not require entities to classify licenses of IP as either functional or symbolic. Instead, entities that apply IFRS 15 must evaluate whether the contract requires, or the customer reasonably expects, the entity to undertake activities that significantly affect the IP to which the customer has rights. IFRS 15 also specifies that if the IP has significant standalone functionality, the customer derives a substantial portion of the benefit of that IP from that functionality and would not be significantly affected by the entity's activities, unless they change the form or functionality significantly.

The FASB and the International Accounting Standards Board (IASB) agreed that their approaches generally would result in consistent answers, but there could be differences between US GAAP and IFRS when entities license brand names that no longer have any related ongoing activities (e.g., the license to the brand name of a defunct sports team, such as the Brooklyn Dodgers).

Recognition of revenue from a license of IP

The standard doesn't allow entities to recognize revenue for a license of IP before both (1) they provide the IP or make it available to the customer and (2) the beginning of the period during which the customer is able to use and benefit from the license.

Entities have to wait to recognize revenue until the beginning of a license renewal period.

Technology entities may make a copy of the software (functional IP) available to a customer (e.g., enable the customer to electronically download it) upon contract inception but prior to the start of the license period. The standard states that an entity would not recognize revenue before the beginning of the license period, even if the entity provides the IP (or otherwise makes it available) before that date. Assuming that all other criteria have been met, the technology entity recognizes revenue from the software (the IP) at the point in time when the customer is able to use and benefit from the software (i.e., the start of the license period).

Consider a technology entity that enters into a contract with a customer to provide a software license for a three-year term beginning on 1 January 20X8 and then provides a copy of the software to the customer on 29 December 20X7. Although the entity made a copy of the software available to the customer on 29 December 20X7, the customer does not have the right to use the licensed software until the license period begins on 1 January 20X8. Therefore, the entity recognizes revenue related to the software license on 1 January 20X8, assuming the entity has concluded that control of the license has transferred.

Electronic delivery (added January 2020)

Many software vendors deliver licensed software products electronically. When software is delivered electronically, we believe that control of the software transfers when the customer has the reasonable ability to access the licensed software (i.e., the software vendor has made the software available to the customer). This typically occurs when the vendor provides the necessary codes to the customer that allows the customer to commence downloading of the licensed software, the vendor's server is functioning, and the license period has begun.

We note that even if a vendor provides a customer with a key to electronically download the software before the license period begins, the customer does not have the right to use the licensed software until the license period begins. Further, even if the customer is required to request access codes, we believe the customer would generally have the reasonable ability to access the licensed software once it is able to make the request if providing the code is purely administrative.

We generally believe that the download does not have to be completed for control to have transferred. The customer just needs to have the ability to download the software.

Illustration 1 – Electronic delivery

Consider a software vendor that provides its customer with the means to download software electronically. To receive the access code for the electronic download, the customer must email the vendor's customer setup inbox, which automatically generates and provides the customer with an access code within minutes. This gives the customer the flexibility to designate the appropriate employee to receive the access code.

The customer has purchased 100 seats for a three-year term license beginning 31 December 20X0. On 1 January 20X1, the customer submits the request for an access code and receives one shortly thereafter. The customer downloads the software for some users that same day and downloads the software for the remaining users over the next two months.

The vendor determines that control of the software transferred on 31 December 20X0, and revenue related to the software license can be recognized at that time. This is because the vendor made the software available on 31 December 20X0 (since the customer was able to email and obtain the access code beginning that date), and that date was the beginning of the license period. The fact that the customer did not download all copies on that date is irrelevant.

Extension of a term-based license

The guidance on recognizing revenue from a license of IP also applies to renewals or extensions of term-based licenses. That is, revenue related to the renewal of a license of IP may not be recognized before the beginning of the renewal period because that's when the licensee can use and benefit from the renewed license. Consider the following example:

Illustration 2 – Extension of a term-based license

Technology entity X enters into a contract with a customer for the use of a software license (License A) and PCS for a three-year period from 1 January 20X1 through 31 December 20X3 (the initial contract). On 30 June 20X2, Technology entity X and the customer agree to renew the contract for an additional three years from 1 January 20X4 through 31 December 20X6 (the extension period). Assume that the software license and unspecified updates are distinct, and that Technology entity X recognizes revenue from the license (functional IP) at a point in time and from the PCS over time using a time-elapsed method. The customer has a copy of License A before the start of the extension period.

Revenue from an initial license or a license renewal cannot be recognized until the beginning of the license period to which it relates because the customer cannot use and benefit from the software until then. Although the customer has a copy of the software from the initial contract, Technology entity X recognizes revenue for the renewal period on 1 January 20X4, when the customer can use and benefit from the software during the extension period.

IFRS 15 does not require an entity to wait to until the beginning of the license renewal period to recognize revenue relating to a license renewal. Accordingly, the IASB noted in the Basis for Conclusions on IFRS 15 (in its April 2016 amendments) that entities that report under IFRS may recognize revenue for contract renewals or extensions earlier than those that report under US GAAP.

How we see it

The guidance in ASC 606 on license renewals changed practice for technology entities that had followed the legacy software guidance. Under the legacy guidance, technology entities recognized revenue from the extension of an active term-based license when the renewal agreement was executed, assuming all other revenue recognition criteria were met and VSOE of fair value of the undelivered element (e.g., PCS) had been established. This was because the customer already had possession of and the right to use the software to which the extension or renewal applied.

Under the standard, the customer does not have the right to use the software under the renewal agreement until the beginning of the extension period, even though the customer already possesses a copy of the software. Therefore, entities must wait until the beginning of the extension period to recognize revenue for renewals of software licenses under the standard.

Contract modifications of term-based software licenses (added January 2020)



EITF will address issues related to modifications of licenses of IP

The FASB has added a project to the agenda of the Emerging Issues Task Force (EITF) to address diversity in practice related to accounting for contract modifications for licenses of IP under the revenue standard. As part of this project, the EITF will address the accounting for contract modifications that extend a license term but are not solely a renewal of the terms and conditions of the original license.

Stakeholders had said that the guidance isn't clear on when revenue from a license of IP should be recognized if a modification is not solely a renewal of the terms and conditions of the original license (e.g., the modification also adds other goods or services or changes the pricing). As a result, some entities believe that revenue for a license renewal should be recognized when the modification is approved by both the licensor and licensee, while others believe revenue should be recognized at the end of the original license term, which may be later than when the modification was approved. Technology entities should select one approach and apply it consistently to similar transactions until the EITF addresses the issue.

We encourage readers to monitor developments because any new guidance on this topic could affect accounting for such arrangements. Refer to our To the Point, [**The EITF will address revenue recognition related to contract modifications for licenses of IP**](#), for details.

Sales- or usage-based royalties (updated January 2020)

Technology entities may enter into contracts that require the customer to pay a sales- or usage-based royalty in exchange for a software license. For example, a technology entity that licenses transaction processing software may require customers to pay a fee for each transaction processed using the software.

Revenue generated from sales- and usage-based royalties from licenses of IP is recognized at the later of when (1) the sale or usage occurs or (2) the performance obligation to which some or all of the sales- or usage-based royalty has been allocated is satisfied (in whole or in part). That is, an entity recognizes the royalties as revenue when (or as) the customer's sales or usage occurs, unless that recognition pattern accelerates revenue recognition ahead of the entity's satisfaction of the performance obligation to which the royalty solely or partially relates based on an appropriate measure of progress. This guidance is known as the royalty recognition constraint.

Since a software license is functional IP and the performance obligation to provide the software is generally satisfied at the point in time when control of the license transfers to the customer (assuming the software license is not combined with a service, such as hosting or PCS), following the royalty recognition constraint will generally not accelerate revenue recognition ahead of the entity's satisfaction of the performance obligation to which the royalty solely or partially relates.

The FASB explained in the Basis for Conclusions of ASU 2016-10⁹ that the guidance in ASC 606-10-55-65 through 55-65B addresses the recognition of sales- or usage-based royalties received in exchange for a license of IP, rather than when such amounts are included in the transaction price of the contract. As a result, this exception is a recognition constraint, and the constraint on variable consideration does not apply.

In some contracts, a sales- or usage-based royalty may be related to both a license of IP and another good or service that may or may not be distinct. The standard requires an entity to apply the royalty recognition constraint to the overall royalty stream when the sole or predominant item to which the royalty relates is a license of IP. When the sole or predominant item to which the royalty relates is not a license of IP, the general variable consideration guidance applies.

Technology entities need to apply judgment when determining whether to apply the royalty recognition constraint to a software license that is combined with other goods or services. An entity should not split a single royalty and apply the royalty recognition constraint to one portion of the royalty and apply the general constraint on variable consideration to the other portion.

It is important to note that the royalty recognition constraint applies only to licenses of IP for which some or all of the consideration is in the form of a sales- or usage-based royalty. The Board said in the Basis for Conclusions of ASU 2014-09¹⁰ that because the royalty recognition constraint was structured to apply only to a particular type of transaction (i.e., a license of IP), other transactions that may be economically similar would be accounted for differently. That is, entities cannot analogize to the royalty recognition constraint for other situations. For example, it cannot be applied if consideration in a contract is in the form of a sales- or usage-based royalty but there is no license of IP or a license of IP is not the predominant item to which the royalty relates (e.g., sales- or usage-based fee in a SaaS contract that does not contain a software license).

Estimating sales- or usage-based royalty received on a lag (updated January 2020)

An entity that applies the royalty recognition constraint should recognize revenue when the underlying sales or usage has occurred and the performance obligation to which the royalties relate has been satisfied (or partially satisfied). Therefore, licensors that are provided actual sales or usage data from the licensee on a lag may need to estimate the royalties earned in the current reporting period. That is, technology entities are not able to recognize sales- or usage-based royalties on a lag when the data is not received in the period in which the sales or usage occurs.

The former Chief Accountant of the Securities and Exchange Commission (SEC) noted in a speech¹¹ that because the FASB did not provide “a lagged reporting exception” in the standard, the reporting of sales- and usage-based royalties may require estimation when the sales or usage data is received on a lag.

How we see it

Estimating royalties earned in the current reporting period by licensors without actual sales or usage data from the licensee requires significant judgment. Licensors need to have processes and controls to collect data and develop assumptions to make a reasonable estimate. Some technology entities that have adopted the standard have requested more frequent reports from their customers or changes to the timing of reports so that they have actual data for some sales to use in their estimates. For example, an entity may receive sales or usage data monthly rather than quarterly and would, therefore, only need to estimate sales or usage in the last month of the quarter.

Purchase or use additional copies of software

A technology entity may provide the customer with the option to purchase or use additional copies of software in exchange for additional consideration, and the customer may have the ability to replicate the software or download additional copies without further assistance from the technology entity. Questions have been raised about whether this type of option is an option to acquire additional software rights (i.e., an option for additional goods) or whether the extra copies represent additional usage of the software license and, therefore, whether the additional usage gives rise to a sales- or usage-based royalty that likely is subject to the royalty recognition constraint.

The Joint Transition Resource Group for Revenue Recognition (TRG)¹² generally agreed¹³ that the entity has to exercise judgment to determine whether the contract is for a single license or for multiple licenses. In doing so, the entity considers whether the additional copies are distinct goods or services. Additional licenses are typically distinct because the customer can benefit from the additional license on its own, and providing it does not modify, customize or have an interdependency with existing licenses. TRG members also generally agreed that while the customer may be able to replicate the software or download additional copies without the assistance of the technology entity, the entity may still be required to grant additional rights to the customer for the use of the additional copies of software.

An entity has provided a customer with an option if the customer can decide to purchase additional distinct copies of the software, and the entity is required to transfer those additional rights to the customer. Conversely, if the contract requires the customer to pay usage-based fees to compensate the vendor for the rights to use the software that have already been transferred, these fees are treated as variable consideration. When the software license is the sole or predominant item to which the usage-based fees relate, the fees are accounted for as sales- and usage-based royalties rather than general variable consideration (see the “[Sales- or usage-based royalties](#)” section above for details).

Estimating standalone selling prices (updated January 2020)

Software entities commonly sell licenses, both perpetual and term-based, as part of bundled arrangements with PCS services, and these bundles are frequently sold at steep discounts to the list prices. In some cases (e.g., term-based license contracts), the license and PCS are not sold separately by the entities, meaning there isn't a standalone selling price based on observable inputs.

The standard requires an entity to estimate the standalone selling price for each performance obligation and allocate the transaction price to each performance obligation on a relative standalone selling price basis with limited exceptions (i.e., allocation of a discount¹⁴ and allocation of variable consideration¹⁵). The FASB also stated in the Basis for Conclusions of ASU 2014-09¹⁶ that if the good or service is sold at highly variable amounts, the most reliable way to determine the standalone selling price may be to use the residual approach. The standard states¹⁷ that the residual approach can only be applied to contracts with multiple promised goods or services when the selling price of one or more goods or services is unknown (either because the historical selling price is highly variable, as might be the case for software licenses, or because the goods or services have not yet been sold (e.g., specified upgrade rights for software)), and when observable standalone selling prices exist for the other goods and services in the contract (e.g., PCS sold at a constant percentage of the net license fee¹⁸).

Under the residual approach, an entity estimates the standalone selling price by deducting the sum of the observable standalone selling prices of the other performance obligations in the contract from the transaction price. That is, the residual approach is used to estimate the standalone selling price under the standard rather than to allocate consideration, as it was used under legacy guidance.

How we see it

To support use of the residual approach when historical prices are highly variable, entities must perform a thorough assessment of the pricing. As part of the assessment, entities should consider whether data has been sufficiently stratified (e.g., by customer size or by geography) and whether results are consistent with the entity's pricing strategies. Concentrations of historical prices around a specific point (e.g., the midpoint) or range may indicate that prices are not highly variable.

The SEC staff has requested a comprehensive, quantitative discussion of variability to support the use of the residual approach as part of its comment letter process.

Estimating standalone selling prices in perpetual license contracts

For perpetual licenses, the first year of PCS is often included in a bundle with the license, and renewals of PCS are frequently sold on a standalone basis. It is common practice in the software industry to charge a percentage of the net perpetual license fee (e.g., 20% of the net license fee) for renewals of standalone PCS. Entities may be able to use the residual approach to estimate the standalone selling price of the perpetual license if they have sufficient evidence to support

VSOE of fair value is no longer required to account for goods and services separately from each other.

the assertion that the pricing for the perpetual license bundle is highly variable and there is an observable price for the PCS. An observable price for PCS may be established if PCS is priced at a consistent percentage of the net license fee for similar sales (e.g., sales to similar customers by class and geographical market). For example, PCS may be consistently priced at 20% of the net license fee. That is, the entity can demonstrate that the pricing relationship between the software license and the PCS is consistent across sales to similar customers (based on the observable price of the PCS established as a constant percentage of the net license fee).

Other considerations for estimating the standalone selling price of both the perpetual license and the PCS include the entity's internal pricing strategies, sales of similar goods or services by third parties, or other industry pricing. The entity should prioritize the use of observable inputs in its estimates of the standalone selling price.

Although VSOE of the fair value of each element is no longer required, technology entities may find that they are able to use the observable data they used to calculate VSOE of fair value to estimate the standalone selling price for certain performance obligations, such as PCS and professional services.

Estimating standalone selling prices in term-based license contracts (updated January 2020)

Term-based licenses are often sold in a bundled arrangement with PCS for the contract term. In these cases, entities may not have standalone sales of either the term-based license or the PCS. To estimate standalone selling prices for both the license and PCS in a bundled term-based license contract, entities may be able to identify pricing relationships between term-based licenses and perpetual licenses of the same software product and their related PCS.

For example, assume that an entity enters into a contract with a customer to provide a three-year term-based license and PCS for the license term for a total of \$400,000. The entity does not have previous standalone sales for the license or PCS in these types of contracts. Using observable data from contracts for perpetual licenses of the same software product with one year of PCS and two subsequent renewals of PCS, the entity concludes that the PCS represents 20% of the net license fee. The entity considers this relationship in allocating the \$400,000 fee for the term-based license arrangement between the license and PCS in the contract.

This example describes one acceptable method for estimating standalone selling price (i.e., leveraging the relationship between a perpetual license and PCS in similar sales). Entities can use other reasonable methods for estimating standalone selling price for the license and PCS in term-based license contracts. That is, entities also can consider the estimated life of the software, the pricing strategies used to determine the prices for both perpetual and term-based licenses of the same software and third-party prices for similar contracts. Regardless of the method used, entities should prioritize the use of observable data in their estimates and should apply the same approach consistently for similar contracts.

Customized software (added January 2020)

Technology entities may enter into contracts to deliver software or a software system that requires significant production, modification or customization (commonly referred to as customized software). In this situation, an entity may conclude that the software license and professional services related to the production, modification or customization are not separately identifiable and, therefore, represent a single performance obligation based on the factor in ASC 606-10-25-21(b) that says, "one or more of the goods or services significantly modifies or customizes ... one or more of the other goods or services promised in the contract."

To determine whether to account for customized software as a single performance obligation, technology entities should consider whether they are making alterations to the software's source code, and if so, the level of effort required to complete the alterations, as well as

whether the alterations create new features or functionality that are critical to the utility of the software for the customer. This evaluation will be contract-specific (i.e., based on the professional services the entity agrees to provide in the arrangement).

How we see it

Many technology entities have determined that they do not provide customized software because the professional services they provide as part of the arrangement do not significantly modify or customize the underlying software. Professional services related to data migration or integration with the customer's computing environment typically do not indicate that the software is customized. Typically, if customizations are not customer-specific (e.g., if the customizations will be incorporated into a future version of the software and made available to all customers), the software vendor is not providing customized software.

After evaluating the performance obligations in the contract, an entity that concludes that it has a single performance obligation to provide customized software must determine whether the combined performance obligation is satisfied over time or at a point in time. Control transfers over time if one of the criteria described in ASC 606-10-25-27 is met.

We believe the second and third criteria are most relevant for a technology entity to assess for customized software arrangements. That is, the entity must determine (1) whether the customer owns the software code as it is being created and whether the customer can direct its use and obtain substantially all the remaining benefits from the software code, or (2) whether the entity is unable to use the software code related to the customization for other customers and whether the entity is legally entitled to payment for work completed to date. If the entity is unable to demonstrate that control transfers over time, the presumption is that control transfers at a point in time.

Further, entities evaluating these types of contracts need to consider whether the costs of modifying or customizing the software qualify as costs to fulfill a contract that are required to be capitalized in accordance with ASC 340-40.¹⁹

Provision for loss

After adopting the standard, entities will still have to apply the guidance in ASC 985-605 (when contracts are determined to be within its scope) on the accounting for losses in a contract to deliver software or a software system, either alone or together with other products and services, that requires significant production, modification or customization.²⁰

That is, if a loss is probable on an unsatisfied or partially unsatisfied customized software performance obligation (based on the amount of the transaction price allocated to it), the loss should be recognized pursuant to ASC 450, *Contingencies*.²¹

Migrating from on-premise software to SaaS (added January 2020)

Many traditional software entities are making their on-premise software licenses available to customers over the internet as a SaaS offering. As an incentive for customers to migrate to SaaS offerings, entities structure contracts in a variety of ways, such as incorporating conversion options (see the "[Material rights](#)" section below) and remix rights (see the "[Remix rights](#)" section below) into their contracts or providing discounts on future purchases of SaaS.

Under some conversion options, customers cannot continue to use the on-premise software after they move to the SaaS, while in other arrangements there may not be any restrictions on the customers' ability to move back and forth. These contract terms should be carefully evaluated to determine the accounting implications.

**EITF will address issues related to modifications of licenses of IP**

The FASB has added a project to the agenda of the EITF to address diversity that has arisen in accounting for contract modifications of licenses of IP under the revenue standard. As part of this project, the EITF will address the accounting for contract modifications in which rights conveyed by a license of IP are revoked in a migration from on-premise software to SaaS (i.e., the on-premise license is revoked in exchange for SaaS). The standard does not provide guidance on how an entity should account for the revocation of rights to a license of IP.

If an explicit or implicit conversion option (i.e., an option to convert on-premise software to SaaS) is not determined to be a material right, we believe it may be acceptable for an entity to account for the option at contract inception as a right of return or to account for a conversion prospectively when it occurs following the contract modification guidance in ASC 606. Technology entities should select one approach and apply it consistently to similar transactions until the EITF addresses the issue.

We encourage readers to monitor developments because any new guidance on this topic could affect the accounting for these arrangements. Refer to our To the Point, [***The EITF will address revenue recognition related to contract modifications for licenses of IP***](#), for details.

Cloud services (added January 2020)

Cloud services refer to the delivery of numerous types of computing services over the internet. There are various cloud service offerings, including:

- ▶ Cloud applications or SaaS – These services provide customers with access to a wide variety of software applications (e.g., enterprise resource planning, customer relationship management, human capital management, payroll) over the internet.
- ▶ Cloud platforms or platform as a service – These services provide customers with internet access to application development platforms they can use to build or manage cloud applications.
- ▶ Cloud infrastructures or infrastructure as a service – These services provide customers with internet access to computing infrastructure (e.g., storage).
- ▶ Other cloud service offerings – These services provide customers with internet access to other services, such as data as a service (e.g., analytics) or security as a service.

Determining the nature of the entity's promise in cloud service arrangements

As described above (see the "[***Determining whether a contract contains a license of IP***](#)" section), an entity must first evaluate whether its contracts provide a license of IP to determine which accounting guidance to apply.

In our experience, it is uncommon for cloud service customers, especially SaaS customers, to have the contractual right to take possession of software without penalty and run it in-house or through an unrelated vendor. Therefore, cloud service arrangements generally do not provide a license of IP and are not subject to the licensing guidance in the standard. Accordingly, cloud service arrangements, including any fees that may be labeled as "software licensing fees" in the arrangement, are generally accounted for as the transfer of a service (and not a license of IP). Cloud service vendors need to evaluate the terms of their contracts to determine whether a license of IP is provided.

Even if a contract contains a promise to deliver a license of IP to the customer, the contract may also include provisions that allow the customer to convert its on-premise license to a cloud service (most frequently to SaaS). Refer to the “[Migrating from on-premise software to SaaS](#)” section for further discussion.

When entering into contracts to provide cloud services (e.g., private cloud offerings), cloud service vendors should first evaluate whether these contracts include lease components that are in the scope of ASC 842, *Leases* (or ASC 840, *Leases*, for entities that haven't yet adopted ASC 842). The following sections assume that the cloud services do not contain lease components.

Applying the series guidance

Technology entities need to evaluate whether certain arrangements, including those for cloud services, meet the criteria to be accounted for as a series of distinct goods and services. Entities should evaluate whether the distinct goods and services in a contract that represent separate performance obligations are substantially the same and have the same pattern of transfer (i.e., the performance obligation is satisfied over time using the same measure of progress). Goods and services that meet both criteria must be combined into one performance obligation and accounted for as a series of distinct goods or services. That is, accounting for goods or services as a series is required if the specified criteria are met.

The series provision often applies to cloud service contracts. For example, the customer may have access to various SaaS modules (e.g., revenue, inventory, procurement) in an entity's SaaS financial management application. If the entity concludes that the nature of the promise is to provide continuous access to its financial management application, each day of service is likely distinct and substantially the same. However, because SaaS contracts are usually sold with other goods and services (e.g., professional services), judgment may be required. The following illustrates how a technology entity might evaluate performance obligations in a SaaS contract:

Illustration 3 – Identifying performance obligations in a SaaS contract

SaaS provider A enters into a three-year contract with Customer X to provide access to its SaaS basic customer relationship management (CRM) and human resource management (HRM) applications (collectively referred to as SaaS applications) for \$300,000. The contract also includes professional services that will personalize the user's interface based on the user's role. These services are sold separately from the SaaS applications and can be provided by third-party vendors. The customer can benefit from the SaaS applications without the professional services, which do not significantly customize or modify the SaaS applications.

SaaS provider A determines that the CRM and HRM applications and professional services are distinct (i.e., the CRM and HRM applications and the professional services should not be combined into a single performance obligation). The three services are each capable of being distinct because Customer X can benefit from each of the SaaS applications and professional services on its own. The services are distinct within the context of the contract because the services are not highly interdependent or interrelated and each service does not significantly modify or customize the other.

SaaS provider A first determines that the nature of the promise is providing continuous access to its CRM and HRM applications for the three-year period. Although the activities that Customer X may be able to perform using each of the SaaS applications may vary from day to day, the overall promise is to provide continuous access to the CRM and HRM applications to Customer X for a period of three years.

SaaS provider A determines that access to the CRM application represents a series of distinct services that are substantially the same and have the same pattern of transfer to Customer X. Each day of service is capable of being distinct because Customer X benefits each day from access to the CRM application. Each day is distinct within the context of the contract because there are no significant integration services, each day does not modify or customize another day, and each day is not highly interdependent or interrelated.

Each day of service is substantially the same because Customer X derives a consistent benefit from the access to the CRM application and has the same pattern of transfer over the term of the contract. Each distinct service represents a performance obligation that is satisfied over time and has the same measure of progress (e.g., time elapsed). Therefore, the criteria to account for access to the CRM application as a series of distinct services (i.e., a single performance obligation) are met.

SaaS provider A performs a similar analysis for the access to the HRM application, determines that it also represents a series of distinct services and accounts for it as a single performance obligation. Like access to the CRM application, access to the HRM application is substantially the same, has the same pattern of transfer and, therefore, meets the criteria in the series guidance.

Access to the CRM and HRM applications is provided to Customer X concurrently over the term of the contract (i.e., coterminous), and the performance obligations have the same pattern of transfer. SaaS provider A may account for access to the SaaS applications as if they were a single performance obligation if the outcome is the same²² as accounting for the goods and services as individual performance obligations.

SaaS provider A also considers whether the professional services meet the criteria to be accounted for as a series. As part of this assessment, SaaS provider A considers whether each day of the professional services is distinct from the other days or whether the nature of the promise for the professional services is for a combined output from all of the days. SaaS provider A also considers the complexity of the professional services and whether the activities each day build on those of the previous days or whether each day of activity is substantially the same. This analysis requires judgment and is based on the facts and circumstances of the professional services performed.

The series provision may also apply to other services provided by technology entities. The following examples were discussed by the TRG,²³ and TRG members generally agreed that the contracts in these examples should be accounted for under the series provision. Although these examples are not specific to cloud services, they are helpful to illustrate application of the series provision and may be instructive when evaluating cloud service arrangements.

Illustration 4 – Example of IT outsourcing

A vendor and customer execute a 10-year IT outsourcing contract under which the vendor continuously provides server capacity, manages the customer's software portfolio, runs an IT help desk and provides other services. The monthly invoice is calculated based on customer usage for each of the services, which is measured differently for each service (e.g., based on millions of instructions per second of computer power used by the customer for the server capacity services). The vendor concludes that the customer simultaneously receives and consumes the benefits of the services as the vendor performs them (i.e., the services meet the over-time criterion in ASC 606-10-25-27(a)).

The vendor first considers the nature of its promise to the customer. Because the vendor has promised to provide an unspecified volume of services rather than a defined amount of services, the TRG agenda paper noted that the vendor could reasonably conclude that the nature of the promise is to stand ready to provide the integrated outsourcing service each day.

If the nature of the promise is the overall IT outsourcing service, each day of service could be considered distinct because the customer can benefit from each day of service on its own, and each day is distinct within the context of the contract. The TRG agenda paper also noted that the vendor could reasonably conclude that each day of service is substantially the same. That is, even if the individual activities that comprise the performance obligation vary from day to day, the nature of the overall promise is the same from day to day.

Illustration 5 – Example of transaction processing

A vendor enters into a 10-year contract with a customer to provide continuous access to its system that processes transactions on behalf of the customer. The customer is obligated to use the vendor's system, but the quantity of transactions the vendor will process is unknown. The vendor concludes that the customer simultaneously receives and consumes the benefits as it performs.

If the vendor concludes that the nature of its promise is to provide continuous access to its system rather than process a particular number of transactions, it might conclude that there is a single performance obligation to stand ready to process as many transactions as the customer requires. If that is the case, the TRG agenda paper noted that it would be reasonable to conclude that there are multiple distinct time increments of the service. Each day of access to the service provided to the customer could be considered substantially the same since the customer is deriving a consistent benefit from the access each day, even if a different number of transactions are processed each day.

If the vendor concludes that the nature of its promise is to process each transaction, the TRG agenda paper noted that each transaction processed could be considered substantially the same even if there are multiple types of transactions that generate different payments. Further, the TRG agenda paper noted that each transaction processed could be a distinct service because the customer could benefit from each transaction on its own and each transaction could be distinct within the context of the contract.

Entities that apply the series guidance are required to allocate variable consideration to the period in which the services were performed, if certain criteria are met.

Allocating variable consideration under the series guidance

Variable consideration (e.g., a user-based fee) is allocated to one or more (but not all) performance obligations in the contract or one or more (but not all) distinct goods or services in a series of distinct goods or services that make up a single performance obligation if both criteria described in Step 4 in Appendix A are met (i.e., the variable consideration allocation exception). This exception requires an entity to allocate variable consideration to the period that relates to its efforts to satisfy the performance obligation (e.g., a distinct month of services).

The FASB noted in the Basis for Conclusions of ASU 2014-09²⁴ that this exception is necessary because allocating contingent amounts to all performance obligations in a contract may not reflect the economics of a transaction in all cases. Allocating variable consideration entirely to a distinct good or service may be appropriate when the amount allocated to that particular good or service is reasonable relative to all other performance obligations and payment terms in the contract. Subsequent changes in variable consideration should be allocated in a manner that is consistent with the initial allocation.

The TRG discussed²³ the following examples of when an entity would conclude that a contract that is accounted for as a series of distinct goods or services meets the allocation objective and would allocate variable consideration to a distinct period of service, such as day, month or year:

- ▶ Consistent fixed prices – The TRG agenda paper described a contract to process an unknown quantity of transactions for a fixed contractual rate per transaction. The allocation objective could be met if the fees are consistent throughout the contract and the rates are consistent with the entity's standard prices for similar customers.

- ▶ Declining prices – The TRG agenda paper described an IT outsourcing contract in which the events that trigger the variable consideration are the same throughout the contract, but the per-unit price declines over the life of the contract. The allocation objective could be met if the pricing is based on market terms (e.g., if the contract contains a benchmarking clause) or the changes in price are substantive and are linked to changes in the entity's cost to fulfill the obligation or the value provided to the customer.

Refer to the "[Recognition of revenue from cloud service arrangements](#)" section below for a discussion of how the variable consideration allocation exception guidance applies to several types of cloud service arrangements.

How we see it

Applying the variable consideration allocation exception for a series of distinct services may result in a revenue recognition pattern that is similar to the accounting for contingent consideration under legacy guidance.

Recognition of revenue from cloud service arrangements (added January 2020)

How an entity recognizes revenue from cloud service arrangements will depend on the nature of the performance obligation and on how fees are structured (e.g., fees are fixed, fees are based on usage).

Entities need to carefully consider the nature of their performance obligations, particularly when the contracts include user- or usage-based fees. In those cases, recognizing revenue ratably may not be consistent with the standard's objective of measuring progress, which is to depict an entity's performance in transferring control of goods or services promised to a customer. Refer to the "[Allocating variable consideration under the series guidance](#)" section for further information.

Below we discuss some of the most common types of cloud service arrangements and the revenue recognition patterns for each.

Fixed-fee arrangements (added January 2020)

As described in the "[Applying the series guidance](#)" section, the nature of the performance obligation related to a cloud service arrangement is often a series of distinct services to provide access to the service for a period of time. In these cases, the service is typically provided on a consistent basis from period to period (i.e., the performance obligation is satisfied evenly over the period), and it is rare for a cloud service vendor to have a different pattern of performance. Accordingly, we believe revenue for fixed-fee cloud service arrangements (i.e., no variable consideration) should be recognized ratably over the contractual period, commencing on the date the service is made available to the customer, unless the cloud service vendor's performance is not provided consistently from period to period.

When a cloud service vendor satisfies a performance obligation by transferring a promised service, the cloud service vendor has earned a right to consideration from the customer and, therefore, has a contract asset. If a cloud service vendor has an unconditional right to receive consideration from the customer (i.e., nothing other than the passage of time is required before payment of that consideration is due), the contract asset is accounted for as a receivable and is presented separately from other contract assets. That is, the cloud service vendor recognizes a contract asset when revenue recognized exceeds the amount that the cloud service vendor has the contractual right to bill. This may occur when a multi-period cloud service arrangement includes escalating fees (also called ramped pricing), but the performance obligation remains the same in each period of the arrangement (e.g., the price per seat increases in each year of a multiyear contract, but the total number of seats remains constant).

A contract involving multiyear arrangements with escalating fees is illustrated below.

Illustration 6 – Multiyear SaaS with escalating annual payments

A SaaS provider enters into a three-year noncancelable contract with a customer to provide access to its SaaS expense management application. At the beginning of each year, the customer will make the following nonrefundable payments: \$200,000 in the first year, \$250,000 in the second year and \$300,000 in the third year.

The SaaS provider determines that the nature of the promise is to provide a series of distinct services over the three-year contract term. Further, it determines that the performance obligation is satisfied evenly over the contract term.

As such, the SaaS provider determines that the \$750,000 total transaction price should be recognized ratably over the contract term (i.e., \$250,000 recognized each year). Note that because of the escalating fees, the SaaS provider will also recognize a contract asset in the amount of \$50,000 in the first year to reflect the difference between the amount recognized as revenue and the amount the SaaS provider billed to the customer in the first year. The contract asset will reverse in the third year, when the amount billed to the customer in that year exceeds the amount recognized as revenue.

Fixed-fee arrangements with overages (added January 2020)

Cloud service arrangements may have fixed fees (including any minimum amounts guaranteed) but also require the customer to pay overage fees when they exceed certain thresholds based on usage. When the cloud service provider's performance obligation is to stand ready to perform, regardless of customer usage, the overage fee is considered variable consideration that the provider needs to estimate at contract inception, unless the variable consideration allocation exception is met.

For example, consider a three-year contract for access to a SaaS application that allows the customer to process transactions, among other functions. The customer agrees to pay an annual fee of \$100,000, plus overage fees at a rate of \$0.1 per transaction for transactions processed through the application during the year that exceed 1 million (i.e., overage fees are only paid if the customer processes more than 1 million transactions during the year). Assume that the SaaS provider has determined that the nature of its performance obligation is to provide continuous access to the SaaS application, regardless of the number of transactions processed. The SaaS provider determines that the \$100,000 annual fee is fixed consideration, and all additional consideration received as overage fees is variable consideration.

While the fixed component of the consideration will be recognized ratably over the contract term, as described above, the SaaS provider will need to determine whether the variable consideration allocation exception applies to the overage fees.

We believe that for the entity to apply the variable consideration allocation exception by allocating overage fees to a particular day, the entity would have to conclude that the overage fees relate to its performance on that particular day. Therefore, the entity in the example above may conclude that it can't apply the variable consideration allocation exception to the daily reporting periods for the overage fees because those payments do not relate to its efforts to satisfy the performance obligation to provide continuous access to the platform. That is, the nature of the performance obligation is a series of daily stand-ready obligations that are satisfied evenly over time, and the overage fees are additional consideration for satisfying that performance obligation over the course of each year. Because the overage fees are only incurred after the annual minimum is reached, recognizing revenue when the fees are incurred would result in more revenue recognized for the periods after the minimum is reached (i.e., backloading the revenue recognition), which is inconsistent with the allocation

objective of ASC 606. Therefore, the criteria for using the variable consideration allocation exception would not be met, and the entity would not recognize revenue for the overages on the days when the fees are incurred.

If technology entities earn overage fees over a period of time that is less than the contract term (e.g., in a multiyear contract where overage fees are accrued and reset on an annual basis or another period), they should evaluate whether the overages can be allocated to the period in which the overage fees are earned (e.g., to the annual period in which overages accrue).

Consider our example above for the three-year SaaS contract with annual overage fees. The entity evaluates whether it can apply the variable consideration allocation exception to the overage fees earned in each annual period in the three-year contract rather than to the daily periods. The entity may conclude that it can apply the variable consideration allocation exception to the overage fees earned in annual periods, which would require the entity to allocate the annual overage fees to each of the three years (since the overages can be attributed to a single year).

Therefore, the entity would estimate overage fees only for each annual period rather than for the full three-year period at contract inception (which would be required if the variable consideration allocation exception is not met for any period). This would result in recognition of revenue from the overage fees only in the annual period to which the overages relate and not over the entire contract term. In the example above, if the entity estimated that the overage fees for the first year would be \$20,000, it would recognize this amount ratably over the year (i.e., \$5,000 in each quarter).

Variable fee arrangements based on usage (added January 2020)

Consideration for some cloud service arrangements is based entirely on customer usage, and the cloud service provider has a stand-ready obligation to perform, regardless of how often the customer uses the platform. Therefore, the usage-based fees are variable consideration. If the usage-based fees relate solely to the cloud service provider's efforts to satisfy the performance obligation to provide cloud services, the consideration can be allocated to the period in which the usage occurred (assuming that this allocation is consistent with the allocation objective in the standard).

Illustration 7 – Variable fee cloud service arrangement based on usage

Cloud provider C enters into a contract for cloud storage in which a customer agrees to pay daily fees based on the amount of storage space it uses (i.e., a fixed daily rate of \$0.025 per gigabyte of storage is multiplied by the number of gigabytes used). Cloud provider C invoices the customer at the end of each month. Assume that the entity has appropriately concluded that the nature of the entity's performance obligation is to stand ready to provide any amount of storage space the customer needs at any time during the contract term, and the consideration in the contract is variable based on the number of gigabytes of storage used (and, therefore, each gigabyte used is not an optional purchase).

Cloud provider C determines that the service provided to the customer in this contract meets the criteria to be accounted for as a series of distinct goods or services. This is because the performance obligation to stand ready to provide any amount of storage space represents a series of distinct services that are substantially the same and have the same pattern of transfer to the customer.

Each day of service is capable of being distinct because the customer benefits each day from access to the cloud storage. Each day is distinct within the context of the contract because there are no significant integration services, each day does not modify or customize another day and each day is not highly interdependent or interrelated.

Each day of service is substantially the same because the customer derives a consistent benefit from the access to the cloud storage and has the same pattern of transfer over the term of the contract. Each distinct service represents a performance obligation that is satisfied over time and has the same measure of progress (e.g., time elapsed). Therefore, the criteria to account for access to the cloud storage as a series of distinct services (i.e., a single performance obligation) are met.

Cloud provider C then considers whether the variable consideration allocation exception would apply to the daily usage-based fees. The entity would be required to allocate usage-based fees to each day if the entity determines that the payment relates specifically to the entity's efforts to satisfy the performance obligation for each day and that allocating the variable consideration to each distinct day is consistent with the allocation objective.

Cloud provider C determines that it meets the first criterion to allocate the daily variable fee to the distinct service performed that day because the uncertainty related to the consideration is resolved on a daily basis as the entity satisfies its obligation to provide cloud storage. This is because the variable payments specifically relate to transferring the distinct service: access to any amount of cloud storage that the customer chooses to use each day.

Cloud provider C concludes that allocating the variable payments to each day is consistent with the allocation objective because the fixed-rate-per-gigabyte fees reflect the value to the customer based on the amount of storage the customer uses each day. Further, the rates charged are consistent with Cloud provider C's standard pricing practices.

Therefore, Cloud provider C determines that it can apply the variable consideration allocation exception and recognizes each day's fee for the day in which it occurs. That is, if the customer uses 250 gigabytes of storage the first day and 300 gigabytes the second, Cloud provider C will recognize \$6.25 and \$7.50 of revenue for the respective days.

If the usage-based fees do not relate to the cloud service provider's efforts to satisfy the performance obligation, the variable consideration is estimated at contract inception and recognized ratably over the contract term. These estimates of variable consideration must be updated at the end of each reporting period.

User-based arrangements (added January 2020)

In some cloud service arrangements, consideration depends on the number of users with access to the service. Technology entities will need to determine whether such fees represent a usage-based fee as described in the "[Variable fee arrangements based on usage](#)" section or whether they represent optional purchases (see the "[Variable consideration and options for additional goods and services](#)" section for additional details) based on the rights and obligations of each party to the contract.

If the contract includes a customer option, the technology entity is not obligated to provide additional goods and services until the customer makes a separate purchasing decision (i.e., exercises the option). That is, the entity's performance obligation at contract inception is to provide the quantity of goods or services specified in the contract.

Consider a contract with a customer to purchase a two-year subscription to a SaaS finance management application for 50 users for \$100,000. The contract states that the customer can add additional users during the two-year period at a price of \$800 per user per year, prorated for the precise period of access to the service.

The entity determines that its performance obligation is to provide continuous access to the SaaS application for 50 users for the two-year term. The entity concludes that it has provided the customer with an option to purchase subscriptions for additional users because the entity is not obligated to provide access for the additional users until the customer makes a purchasing decision. At contract inception, the entity begins recognizing revenue ratably for the \$100,000 related to the original 50 users over the two-year term. As additional users obtain access, the entity begins recognizing the additional consideration owed over the remaining contract term.

When the addition of new users is considered an optional purchase, providing access to each new user is likely a distinct performance obligation that will be recognized ratably over the related contract term. However, performance obligations that have the same pattern of transfer over the same period can be accounted for as a single performance obligation (e.g., the original 50 users in the example above) since accounting for them together would result in the same treatment as accounting for them as separate performance obligations.²² Therefore, after the customer exercises the option to add new users, an entity can combine the new users into one performance obligation if they all receive access to the SaaS for the same term.

Technology entities that consider the addition of new users an optional purchase will have to evaluate the option to determine whether it represents a performance obligation for a material right to which some of the transaction price should be allocated at contract inception.

Conversely, when the addition of new users is considered variable consideration, a technology entity will have to evaluate whether the variable consideration allocation exception is met or whether it is required to estimate variable consideration at contract inception as part of the total transaction price.

Estimating standalone selling prices in cloud service contracts (added January 2020)

When a cloud service is not the only performance obligation in a contract, a technology entity will need to allocate the transaction price to the performance obligations based on their relative standalone selling prices (with certain exceptions for allocating discounts and variable consideration). Determining the standalone selling price for a cloud service may require significant estimation and judgment because the technology entity may charge different prices in different arrangements.

The best evidence of the standalone selling price of cloud services is the observable price when they are sold separately. If this information is not available, a technology entity must estimate the standalone selling price. When estimating the standalone selling price, a technology entity needs to prioritize the use of observable inputs and consider all information, including both market conditions and entity-specific factors.

Examples of market conditions that cloud service vendors might consider when estimating the standalone selling price for these services include:

- ▶ The extent of competition in the market
- ▶ Competitor pricing for a similar or identical service (e.g., a competing customer relationship management SaaS)
- ▶ Geographic area effects on pricing

Examples of entity-specific factors cloud service vendors should consider when estimating standalone selling prices for these services include:

- ▶ The internal pricing practices, including:
 - ▶ The profit objectives and internal cost structure
 - ▶ Discounts provided when multiple cloud services are bundled together (e.g., human capital management and payroll) or are bundled with other services, such as professional services
 - ▶ Pricing based on the number of users in the arrangement, including seasonal, part-time or full-time users, and cloud services sold on an unlimited basis
- ▶ The size of the contractual agreement (e.g., based on the amount of consideration or the number of users), the term of the contractual agreement and the characteristics of the targeted customer
- ▶ Contractually stated renewal rates included in contracts

We believe it may be appropriate for entities to stratify selling prices to help them estimate standalone selling prices. A cloud service vendor's pricing for a product or service may depend on the type or size of customer, the amount of product or services purchased, geographic location or other factors (e.g., distribution channel). Accordingly, a vendor may choose to stratify its analysis to determine its estimate of the standalone selling price for each class of customer.

Hardware sold with cloud services (added January 2020)

With the rise of the Internet of Things, an increasing number of connected hardware devices are available, ranging from security cameras to home equipment. In contracts where a customer purchases hardware, the hardware may require the installation of an app or the purchase of a cloud service subscription in order to be used, or the hardware may provide additional functionalities when paired with the cloud service.

To identify performance obligations in contracts containing multiple promises (e.g., hardware and cloud services), technology entities must determine whether the hardware and cloud services are each capable of being distinct and whether they are distinct within the context of the contract.

In performing this evaluation, technology entities should consider whether the hardware can be used without the cloud service, how the hardware and cloud service affect each other (e.g., whether the cloud service enables the hardware to “learn” or perform its intended function better over time), whether there are additional functionalities that result from using the hardware with the cloud service, and other details of how the hardware and cloud services function and are sold.

Illustration 8 – Hardware sold with cloud services

Consider a contract to provide a smart home security camera bundled with cloud services, which enable the customer to view live images from the camera in an app on internet-connected devices (e.g., tablets, phones). The entity also provides the cloud services to customers who purchase the camera through secondary markets.

The entity concludes that the customer can benefit from each of the goods and services either on its own or together with other goods or services that are readily available. That is, each good or service is capable of being distinct under ASC 606-10-25-19(a).

The camera is capable of being distinct because the customer can benefit from it together with the cloud services, which are a readily available resource since they can be obtained separately. Further, the customer can benefit from the camera because it can be resold through secondary markets for more than scrap value.

The cloud services are capable of being distinct because the customer can benefit from them together with the camera transferred at the outset of the contract or the customer can purchase the camera separately through the secondary markets and obtain the cloud services from the entity.

The entity then considers the factors in ASC 606-10-25-21 and determines that the promise to transfer each good and service is distinct within the context of the contract. In reaching this conclusion, the entity notes that it does not provide a significant service of integrating the cloud services with the camera into a combined output, and the cloud services and the camera do not significantly modify or customize one another.

The entity also determines that the camera and the cloud services are not highly interdependent or highly interrelated because the entity can fulfill its promise to transfer the cloud services independently from its promise to provide the camera (since customers can purchase the camera in secondary markets). Further, because the cloud services provide only the basic functionality of connecting the camera to a personal device using Wi-Fi instead of a traditional electrical cord, the utility the customer can derive from the camera and the cloud services, when transferred together, is not greater than or substantially different from the utility the customer would receive if the camera and cloud services had been transferred separately. As a result, the entity identifies two performance obligations: the camera and the cloud services.

Technology entities will need to evaluate the specific features and functionality of the cloud services in arrangements that include connected devices. Evaluating whether hardware and cloud services are separate performance obligations in arrangements for connected devices may be complex and require significant judgment when the cloud service has sophisticated features or functionality that the device cannot do independently. In these cases, there may be an interdependency between the hardware and the cloud service.

How we see it

To conclude that hardware and a cloud service are a single performance obligation, technology entities will need to demonstrate that the functionality of both the hardware and the service is significantly elevated when they are used together. Many technology entities have concluded that they have separate performance obligations because the hardware and the cloud service do not significantly affect each other and because the hardware can be sold separately from the cloud service.

We note that, as part of its comment letter process, the SEC staff may request that technology companies provide a comprehensive analysis to support a conclusion that one or more promises should be accounted for as a combined performance obligation.

Identifying other performance obligations commonly found in technology contracts

The following discussion of other promises that are commonly included in technology contracts and considerations for evaluating whether these promises represent performance obligations may be relevant for all technology contracts, including those that contain a software license.

Material rights (updated January 2020)

Under some contracts, a technology entity provides a customer with the option to purchase additional goods or services or renew a contract at a stated price. These options are separate performance obligations only if they provide a material right that the customer would not receive without entering into the contract (e.g., a discount that exceeds the range of discounts the entity typically provides for those goods or services to that class of customer in that geographical area or market).

If an option is determined to be a separate performance obligation, a technology entity allocates a portion of the transaction price to the material right, based on its relative standalone selling price, and recognizes the allocated amount when it transfers those future goods or services or when the option expires. Evaluating whether an option provides a material right may be more complex when the standalone selling price of the good or service is highly variable, as illustrated below.

Illustration 9 – Evaluating a customer option when the standalone selling price is highly variable

Technology entity Y enters into a contract with Customer Z for a perpetual license of software A with one year of PCS. The contract also includes an option to purchase additional licenses of software A at 40% off the list price.

The entity does not sell software A separately, but it sells PCS separately in the form of renewals that are consistently priced at 20% of the net license fee. Assume that Technology entity Y uses the residual method to estimate the standalone selling price of the perpetual license for software A. Also assume that the price Technology entity Y charges for the bundle of the perpetual license with PCS is highly variable. That is because the price Technology entity Y charges ranges from list price to a discount of up to 70% for the bundle to customers in the same class and same market as Customer Z who have not made prior purchases. (Assume that the entity has appropriately stratified its contracts/customers to evaluate the range of discounts and has a sufficient amount of transactions to support that this is the range of discounts it offers.)

Because the 40% discount Technology entity Y offered to Customer Z is within the range of discounts it typically offers to customers in the same class as Customer Z, Technology entity Y concludes that this option does not represent a material right.

A technology entity that provides a customer with cloud services and an option to purchase additional goods or services would perform the same evaluation, and a similar approach may be taken for evaluating whether the option provides a material right in situations with highly variable pricing.

Volume discounts or tiered pricing can make the assessment of whether a customer option to purchase additional goods or services is a material right more complex, as illustrated below.

Illustration 10 – Evaluating a customer option with volume discounts

Semiconductor Entity S sells microchips for use in cell phones. The entity executes a contract with a customer to sell 1 million units of microchip M for \$0.50 each, or \$500,000. The contract provides the right for the customer to purchase an additional 200,000 microchips for \$0.40 each, effectively bringing the price for all 1.2 million microchips to \$0.48 per microchip.

The accounting for options to provide additional goods or services depends on whether the option provides a material right.

The entity concludes that it has provided the customer with an option to purchase the additional microchips since the entity is not obligated to provide the additional goods until the customer makes a purchasing decision. Further, the volume discount is applied prospectively and does not affect the transaction price in the original contract.

Scenario A: For microchip M, Semiconductor Entity S provides volume discounts as part of its standard pricing practices and typically prices the first 1 million microchips at \$0.50 each, the second million at \$0.40 each and any additional amounts at \$0.35 each.

Semiconductor Entity S considers whether the option provides the customer with a material right. To make this evaluation, the entity compares the discount offered in this option with the discount it typically offers to a similar high-volume customer that receives a discount without having had a prior contract. In other words, the entity compares the pricing in this contract to the pricing it typically offers to customers that purchase between 1 million and 2 million units of microchip M without having made any prior purchases.

The entity has sold and continues to sell the same volume of microchip M at the same price to other customers in the same class of customer who have not made prior purchases (i.e., similar customers pay \$0.50 each for the first 1 million microchips and \$0.40 each for the second million). That is, the price offered to the customer in the option exists independently of the existing contract. Therefore, Semiconductor Entity S concludes that it has not provided the customer with a material right.

Scenario B: For microchip M, Semiconductor Entity S provides volume discounts as part of its standard pricing practices and typically prices the first 3 million microchips at \$0.50 each and any additional amounts at \$0.30 each.

Semiconductor Entity S considers whether the option provides the customer with a material right. To make this evaluation, the entity compares the discount offered in this option with the discount it typically offers to a similar high-volume customer that receives a discount without having had a prior contract.

For similar high-volume customers of the same customer class who have not made prior purchases, the entity typically does not provide this pricing (e.g., similar customers would pay \$0.50 per microchip for all 1.2 million microchips). Therefore, the entity concludes that it has provided the customer with a material right.

Careful consideration should be given to whether the discount is offered to the customer independently of the existing contract.²⁵ If the customer is, in effect, paying the entity in advance for future goods or services, the option represents a material right.

An entity that concludes that an option is a separate performance obligation has to determine the standalone selling price of the option. As part of estimating the standalone selling price of an option, the entity should consider the additional discount that is provided by the material right (i.e., adjust for any discount that the customer could receive without exercising the option). Additionally, for goods or services that are both similar to the original goods or services in the contract and are provided in accordance with the terms of the original contract, ASC 606-10-55-45 provides an alternative to estimating the standalone selling price of an option (commonly referred to as the renewal option approach). See section 6.1.5 of our FRD publication, *Revenue from contracts with customers (ASC 606)*, for additional information on the renewal option approach.

How we see it

Significant judgment may be required to determine whether a customer option represents a material right. This determination is important because it affects the accounting and disclosures for the contract at inception and throughout the life of the contract.

While the concept of a material right is similar to the concept of an option that must be accounted for under legacy guidance, the criteria are different. As a result, some entities that have adopted the standard have reached different conclusions from their legacy GAAP accounting about whether to account for an option.

That is, an option is no longer evaluated to determine whether it is significant and incremental to the range of discounts reflected in the pricing of the other elements in the contract. Instead, under the standard, an entity evaluates whether an option provides the customer with a material right (e.g., a discount that exceeds the range of discounts the entity typically gives for those goods or services to a new customer in that class in that geographical area or market).

Nonrefundable up-front fees (updated January 2020)

When a customer pays an up-front fee at contract inception, a technology entity must evaluate whether the nonrefundable up-front fee relates to the transfer of a good or service. The existence of such a fee may indicate that there are promises in the contract, such as the option to renew PCS at a discounted rate or implementation/installation services that may or may not be required for the customer to use and benefit from an outsourcing or cloud service contract. That is, if the customer can renew the agreement without paying an additional up-front fee, the entity would need to determine whether the renewal option is a material right (i.e., another performance obligation in the contract) that effectively gives the customer a discount from the price a similar new customer would have to pay.

In some cases, nonrefundable fees relate to activities that an entity is required to perform at or near contract inception. The entity must consider whether performing these activities transfers promised goods or services that are performance obligations in the contract. Activities that the entity must undertake to fulfill a contract (e.g., certain installation and setup activities) that do not transfer a good or service to the customer are not a promised good or service in the contract. Technology entities should consider the nature of the services being performed when making this assessment.

Illustration 11 – Nonrefundable up-front fee in perpetual software license arrangement is a material right

Technology entity F enters into an arrangement with a customer for a perpetual software license to antivirus software with one year of PCS for \$1,180,000. The contract provides the customer with the ability to renew PCS annually for \$180,000 (or 18% of the net license fee). Technology entity F has determined that the software license and PCS are combined into a single performance obligation for its antivirus software because the updates provided by the PCS significantly modify the functionality of the software and are integral to maintaining the utility of the software license to the customer.

Because the software license and PCS have been combined into a single performance obligation, a one-year renewal of the PCS is effectively a one-year renewal of the software license and PCS (i.e., the combined offering). However, because the contract contains an option to renew the PCS for \$180,000 in subsequent years (rather than the \$1,180,000 paid for the same combined performance obligation in the initial year of the contract), Technology entity F considers whether the renewal option provides the customer with a material right.

Nonrefundable up-front fees may indicate that a contract contains a material right to a discount at renewal that must be accounted for.

Technology entity F typically sells a perpetual license to the antivirus software with one year of PCS (i.e., the one-year combined performance obligation) to similar new customers for prices ranging from \$1,000,000 to \$1,300,000. Therefore, Technology entity F determines that the options to renew the combined performance obligation in subsequent years for \$180,000 represent material rights, and the entity allocates some of the initial transaction price to the material rights.

Based on the number of anticipated renewals and the estimated life of the technology, Technology entity F determines that the estimated performance period for the material rights is four years. Therefore, the consideration allocated to the material rights is recognized over the four-year estimated performance period or when the renewal option expires.

Illustration 12 – Nonrefundable up-front fee in perpetual software license arrangement is not a material right

Technology entity K enters into a contract with a customer for a perpetual license to financial data analytics software and one year of PCS for \$800,000. The contract provides the customer with the ability to renew PCS annually for 20% of the net license fee (or approximately \$330,000). Technology entity K routinely prices PCS at 20% of the net license fee for perpetual license arrangements.

Assume that Technology entity K has determined that the license and PCS are two separate performance obligations because the updates are not critical to the ongoing functionality of the software.

Technology entity K considers whether the nonrefundable up-front fee of \$800,000 paid only in the first year indicates that it has provided the customer with a material right. Unlike the situation in Illustration 11, the customer is only renewing the PCS since it is a separate performance obligation from the software. The nonrefundable up-front fee in this contract relates to the transfer of the software license, which is only provided in the first year. Because the renewal rate of 20% of the net license fee is provided to other customers purchasing only PCS, Technology entity K concludes that it has not provided the customer with a material right.

How we see it

The entity evaluates whether the nonrefundable up-front fee creates a material right. If the entity concludes that the nonrefundable up-front fee does not provide a material right, the fee is part of the consideration allocable to the goods or services in the contract and is recognized as the good or service to which the consideration is allocated is transferred to the customer. If an entity concludes that the nonrefundable up-front fee provides a material right, the amount of the fee allocated to the material right is recognized over the period of benefit of the fee, which may be the estimated customer life.

This contrasts with legacy guidance from SEC Staff Accounting Bulletin Topic 13, where nonrefundable up-front fees not paid in exchange for products delivered or services performed (representing the culmination of the earnings process) were deferred and recognized over the estimated customer relationship period.

Implementation services (updated January 2020)

Technology entities frequently include promises to provide implementation services to customers as part of their software or cloud service contracts (i.e., these implementation activities have been determined to transfer a service to the customer). These services, which can include loading of software, training of customer personnel and data conversion, need to be assessed using the entity's facts and circumstances to determine whether they are separate performance obligations (i.e., they are capable of being distinct and are distinct within the context of a contract).

In assessing whether implementation services are capable of being distinct, an entity first considers whether the customer can benefit from those services on their own. There is strong evidence to suggest that implementation services are capable of being distinct if third party vendors offer (or are capable of offering) implementation services for the entity's software or cloud services, or if the customer could perform these services on its own. This evidence would demonstrate that the implementation services provide benefit to the customer on their own (e.g., apart from the software or cloud services purchased from the technology entity).

If the entity concludes that the customer is not able to benefit from the implementation services on their own, the entity considers whether the customer can benefit from the services together with other readily available resources. Readily available resources include the software or cloud service from the contract if it is sold separately by the entity or if it is transferred to the customer before the implementation services. An entity should disregard any contractual limitations that prevent the customer from obtaining readily available resources from a party other than the entity when making this assessment. That is, contractually restricting a customer from using another vendor to perform the installation services would not preclude a technology entity from determining that the implementation services are capable of being distinct.

In assessing whether the implementation services are distinct within the context of the contract, an entity needs to consider whether the implementation services modify or customize the software or cloud services, whether the entity is providing a significant service of integrating the software or cloud services with the implementation services into one combined output or whether the entity would be able to fulfill its promise to transfer the software or cloud services in the contract independently from its promise to provide the implementation services (i.e., whether the implementation services are highly interdependent or interrelated with the software or cloud services). This evaluation may require judgment and is based on the facts and circumstances of the entity's contracts.

Illustration 13 – Implementation services are not a promised good or service

SaaS vendor A enters into an arrangement with a customer for a two-year SaaS subscription. The contract requires the customer to pay \$125,000 at the beginning of the first year and \$100,000 at the beginning of the second year. The contract indicates that the \$125,000 consideration paid in the first year includes a \$25,000 fee related to implementation and installation services. However, these implementation and installation services just refer to the creation and activation of the customer's account, which SaaS vendor A must do to provide the SaaS.

Based on the nature of these implementation and installation services, SaaS vendor A determines that they are administrative, setup activities and do not transfer control of a good or service to the customer. Therefore, SaaS vendor A determines that the implementation and installation services are not a promise in the contract. SaaS vendor A concludes that the SaaS is the only promised good or service and, therefore, the only performance obligation in the contract.

Assume that SaaS vendor A concludes that the SaaS performance obligation is satisfied over time and that a time-based measure of progress is appropriate. SaaS vendor A recognizes the total consideration of \$225,000 ratably over the two-year term.

Illustration 14 – Implementation services are distinct

Technology entity P enters into an arrangement with a customer to perform implementation services and to provide SaaS for a three-year period. The entity sells the SaaS and implementation services separately. The implementation services include changing the layout of the main dashboard for each type of user (e.g., marketing, finance) and do not alter the source code of the underlying software or add any new functionality. The implementation service is routinely performed by third parties and does not significantly modify or customize the SaaS.

Technology entity P evaluates the promised goods and services to determine which promises should be accounted for as separate performance obligations.

Technology entity P concludes that the implementation services are capable of being distinct because they can be used with the SaaS, a readily available resource, and because they can be purchased from third parties. Further, the implementation services are distinct within the context of the contract because they are routine and do not significantly modify or customize the SaaS, are not integrated with the SaaS into a combined output, and are not highly interdependent or interrelated to the SaaS since the entity can fulfill its promise to transfer the SaaS independently from its promise to provide the implementation services.

Based on this assessment, Technology entity P identifies two performance obligations: the SaaS and the implementation services.

The individual services that comprise PCS may be separate performance obligations.

Illustration 15 – Implementation services are not distinct

Consider the same promised goods or services as in Illustration 14, except that the nature of the implementation services is to set up data feeds and interfaces with third-party applications and to connect the customer's SaaS account to Technology entity P's infrastructure.

Technology entity P does not sell the SaaS without the implementation services and the customer cannot use the SaaS until the implementation services are complete, which may be up to nine months after entering into a contract. The implementation services cannot be provided by other entities as they require access to Technology entity P's systems.

Technology entity P evaluates the promised goods and services to determine which promises should be accounted for as separate performance obligations. The SaaS is capable of being distinct because it can be used together with the implementation services that are provided at the outset of the contract. However, the implementation services are not capable of being distinct because they are not sold separately by the Technology entity P, cannot be provided by a third party and do not provide benefit to the customer without SaaS (which is not a readily available resource).

Based on this assessment, Technology entity P identifies one performance obligation: the implemented SaaS (comprising the SaaS and implementation services). Technology entity P should consider whether any up-front fees provide the customer with a material right with respect to future renewals of the SaaS.

Post-contract customer support or maintenance services (updated January 2020)

Many contracts involving software or cloud services also include promises to provide unspecified upgrades, updates and enhancements (collectively referred to as unspecified upgrades) along with technical customer support and bug fixes after the license period begins (collectively, PCS). Technology entities need to evaluate whether the individual services that comprise PCS are distinct and, therefore, separate performance obligations.

Entities also need to evaluate whether unspecified upgrades are a separate performance obligation from the software license or other services in the contract. Refer to the “[Licenses of IP](#)” section above.

When unspecified upgrades are a separate performance obligation in the contract, the technology entity needs to determine the appropriate measure of progress that best reflects the transfer of control to the customer. In doing so, technology entities need to consider the nature of the promise to the customer, which generally is a stand-ready obligation, as discussed by the TRG.²⁶

Since the nature of the entity’s promise is fundamentally a guarantee to make available to the customer any upgrades it develops during the period on a when-and-if-available basis, the customer benefits evenly throughout the contract period from the assurance that it will have access to these future upgrades. Therefore, a straight-line measure of progress (i.e., ratable revenue recognition) is generally appropriate. The FASB staff also indicated²⁷ that the FASB didn’t intend to change how entities determine what constitutes a specified or unspecified right.

In situations where bug fixes and technical customer support are provided outside of PCS to make sure the product functions as promised, they may be part of the assurance warranty coverage and, therefore, would not be revenue elements. Such warranties are accounted for under ASC 460-10, *Guarantees – Overall*. If the technology entity determines that the bug fixes or customer support (or both) are not part of the assurance warranty, it needs to determine whether they are separate performance obligations and whether the nature of the promise is a stand-ready obligation.

How we see it

Technology entities need to evaluate whether unspecified upgrades and customer support are separate performance obligations. An entity may account for the unspecified upgrades and customer support that are not part of the assurance warranty as a single performance obligation if it concludes that they have the same pattern of revenue recognition over the same period (e.g., both ratable over the contract term) because that would result in the same treatment as accounting for the performance obligations separately.²²

Most technology entities have concluded that it is appropriate to account for unspecified upgrades and customer support that are provided on a when-and-if-available basis as a combined performance obligation and to recognize revenue associated with this performance obligation on a straight-line basis over the contract term. This is because unspecified upgrades and customer support are both stand-ready obligations satisfied evenly over the contract term (i.e., they have the same pattern of revenue recognition over the same period).

Specified upgrades (updated January 2020)

Technology entities may provide customers with the right to specified upgrades or enhancements as part of a software or cloud service contract. Under the standard, technology entities need to evaluate whether the rights to receive specified upgrades or enhancements are promised goods or services and separate performance obligations. If the specified upgrade is a separate performance obligation, a portion of the transaction price is allocated to it, and recognition of that amount of revenue is deferred until the specified upgrade is provided.

Distinguishing between specified and unspecified upgrades (added January 2020)

The TRG indicated²⁶ that technology entities should carefully consider whether a contract includes a promise of one or more specified upgrades, even if the contract only refers to unspecified upgrade rights provided on a when-and-if available basis as part of PCS. Determining when a specified upgrade right has been provided to a customer if a contract does not explicitly include such a right may require judgment.

The key consideration in making this determination is whether the vendor has provided a level of information to its customers regarding the features, functionality and release date of future product enhancements in sufficient detail that the vendor has created a valid expectation by the customer that it will receive a specific upgrade/enhancement. Key factors to consider in making this judgment include:

- ▶ *What level of detail regarding the features, functionality and the anticipated release date of future product enhancements has been provided to the customer?* Generally, the greater the level of detail contained in communications to the customer, and the closer the anticipated release date of the enhancements is to the origination of the arrangement with the customer, the more likely it is that the customer has an expectation about the release of the future product enhancement(s) that has affected its current purchasing decision. Technology entities will need to consider any information provided to customers in roadmaps (i.e., product development plans, press releases, information on a website, marketing collateral, executive presentations or other information made available to customers), including the specificity of descriptions of any future features and functionality and the related release dates, to determine whether the customer has a valid expectation of specified upgrades.
- ▶ *Is the communication of a general nature made available to all customers or to an entire class of customers, or is it specific to one or a few customers?* Although the form of communication will not determine whether a specified upgrade right exists, it is important to understand the form of communication to evaluate the factors discussed above in their proper context. Generally, it is less likely that information broadly communicated to all customers, or an entire class of customers, will create an expectation by any individual customer that it will receive a specific upgrade/enhancement, although customer-wide communications may be designed to create such an expectation (e.g., roadmaps following mergers of entities providing competing products). Conversely, it is more likely that a communication made to one or a few customers would create such an expectation.
- ▶ *Has the vendor used caveats in describing its plans to deliver an upgrade/enhancement that can be judged to have created a reasonable amount of uncertainty in the mind of a customer about whether it will actually receive such an upgrade/enhancement?* Many software entities include caveats in their written arrangements with customers that require the customer that is signing the written arrangement to acknowledge that (1) it has not relied on any information outside the written arrangement or (2) its rights to publicly announced upgrades or other marketed upgrades are expressly limited. Additionally, many vendors include language in marketing collateral, on their websites or in other materials indicating that the determination of when enhancements to its current products will be made available, if ever, remains at the vendor's sole discretion and that the information contained in such communications does not constitute a commitment to deliver an upgrade/enhancement. This kind of language may create a reasonable amount of uncertainty in the customer's mind about whether they will ever receive a specific upgrade/enhancement.
- ▶ *Are there any consequences for the entity if it doesn't provide specific new features or functionalities to the customer?* If the customer has recourse against the entity in the event that those specific new features or functionalities are not provided, that may suggest that a specified upgrade has been promised to the customer.

How we see it

Entities that license software are likely to recognize some revenue from contracts that involve specified upgrades earlier than they did under legacy guidance. Under the standard, if the specified upgrade is determined to be a separate performance obligation, only the revenue allocated to that upgrade is deferred. Under legacy guidance, by contrast, entities that license software were often unable to separate the delivered elements from the specified upgrade because VSOE of fair value was generally unavailable for the specified upgrade.

Applying ASC 606 may not significantly change revenue recognition for cloud service providers that had historically accounted for specified upgrades as separate deliverables by using the best estimate of selling price under the multiple-element arrangement guidance.

Technology entities also may find it challenging to determine the standalone selling price for specified upgrades that are determined to be separate performance obligations. To determine the standalone selling price, technology entities should first consider the price they charge existing customers for the upgrade (if it has previously been offered to customers). If the standalone selling price is not directly observable, technology entities must estimate it.

When developing an estimate of standalone selling price for specified upgrades, entities may consider factors such as the planned list price (including any considerations from internal pricing discussions), the standalone selling price of similar goods or services, the costs to deliver the specified upgrade plus a reasonable margin, or any penalties for failure to provide the specified upgrade. In their evaluation, entities should maximize the use of observable inputs and apply estimation methods consistently in similar circumstances.

Unspecified additional software products (updated January 2020)

As part of a contract with a customer, a technology entity may license software and promise to deliver unspecified additional software products in the future. For example, the technology entity may agree to deliver all new products in a family of products over the next two years. Under the standard, technology entities must determine whether the promise to deliver unspecified additional software products is a separate performance obligation from the license. Technology entities also need to evaluate whether the promise to deliver unspecified additional software products is a stand-ready obligation to provide future products on a when-and-if-available basis or if enough specific detail has been provided to the customer about upcoming products to be released such that the contract contains individual promises to deliver specified future products.

A performance obligation for unspecified additional software products is recognized ratably over the contract term, like unspecified upgrades. If a technology entity determines that it has promised individual specified future software products that are determined to be separate performance obligations, any transaction price allocated to them will likely be recognized at the point in time that the future products are made available to the customer.

How we see it

This guidance changes how a technology entity accounts for unspecified future products and requires more analysis and judgment than legacy practice. Under legacy software guidance, unspecified additional software products were accounted for as subscriptions, and all revenue from the arrangement was recognized ratably over the term of the arrangement beginning with delivery of the first product.

Remix rights (updated January 2020)

A technology entity may provide a customer with the right to choose and change the mix of software licenses and/or cloud services to use over the contract term (i.e., remix rights) in addition to PCS and unspecified additional software products. Some of these contracts, however, include limits, such as a cap on the number of users who can simultaneously use the products.

We believe these remix rights will typically be considered attributes of the underlying software licenses, cloud services or other services in the arrangement. That is, the remix rights are not separate promises because they do not create an obligation to transfer additional rights. However, entities must consider whether each of the underlying software licenses and services that a customer can use because of the remix rights is a separate performance obligation.

To do this, entities must first evaluate whether the promises (e.g., each licensed software product, cloud services, PCS, unspecified additional software products) in the arrangement are separate performance obligations by evaluating whether each of them is capable of being distinct and is distinct within the context of the contract.

If the entity determines that each of these promises is a separate performance obligation, allocating the transaction price to each of the performance obligations may require significant judgment and estimation.

Although the transaction price in arrangements with remix rights is allocated to each of the performance obligations on a relative standalone selling price basis, entities that can reasonably estimate expected customer usage (e.g., when they have reliable data about historical customer usage) may be able to adjust the standalone selling price of each performance obligation based on their estimates and any restrictions on usage included in the contract. However, once the transaction price is allocated to the performance obligations, the allocation is not adjusted for changes to those estimates (e.g., for actual customer usage). Changes in the total transaction price generally are allocated to the separate performance obligations on the same basis as the initial allocation.

For example, the portfolio of products and services provided to a customer as part of a contract with remix rights may include access to a software product that is used by customers less frequently than the other products or services in the portfolio, based on historical customer usage data. In this fact pattern, the entity may conclude it is most appropriate to reflect the expectation that fewer customers will use this software product than the other products or services in the portfolio in the standalone selling price of that software product and, therefore, allocate less of the transaction price to it than the entity would have allocated to it by using the unadjusted standalone selling price.

Technology entities should continue to monitor actual customer usage and periodically revise the estimates they apply to future contracts.

Contracts with remix rights may include performance obligations that transfer at a point in time and performance obligations that transfer over time. Depending on the terms of the contract, control of the performance obligations may transfer (or begin to transfer) to the customer at the outset of the contract or control may transfer at different points in time for each performance obligation. Entities will have to carefully evaluate each performance obligation to determine when control transfers and, therefore, when revenue should be recognized.

Remix rights may take many forms, and accounting for goods or services that a customer has the ability to use may require significant judgment and estimation.

Illustration 16 – License remix rights

Technology entity T enters into a five-year contract with a customer that provides the customer with the right for up to 20 users to use or access any combination of the vendor's on-premise software products A and B and SaaS product C. At the onset of the arrangement, Technology entity T does not know how the customer plans to use the products included in the portfolio. The contract also includes PCS and the right to use any new software or SaaS products released by Technology entity T during the five-year license period (i.e., unspecified additional products and services). The total transaction price for the five-year contract is \$500,000.

Assume that Technology entity T concludes that each of the promises are distinct and estimates the following standalone selling prices for 20 users of each of the performance obligations (because it does not have data to support other usage patterns):

- ▶ Software product A – \$400,000
- ▶ Software product B – \$350,000
- ▶ SaaS product C – \$350,000
- ▶ PCS – \$90,000
- ▶ Unspecified additional products and services – \$25,000^(a)

Since Technology entity T does not have reliable data to estimate how the customer plans to use the products in the portfolio, it assumes usage will be even across all performance obligations and does not make any adjustments to the standalone selling prices. Technology entity T then allocates the \$500,000 transaction price on a relative standalone selling price basis to the performance obligations as follows:

- ▶ Software product A – \$165,000 ($\$400,000 / \$1,215,000 \times \$500,000$)
- ▶ Software product B – \$144,000 ($\$350,000 / \$1,215,000 \times \$500,000$)
- ▶ SaaS product C – \$144,000 ($\$350,000 / \$1,215,000 \times \$500,000$)
- ▶ PCS – \$37,000 ($\$90,000 / \$1,215,000 \times \$500,000$)
- ▶ Unspecified additional products and services – \$10,000 ($\$25,000 / \$1,215,000 \times \$500,000$)

Technology entity T will need to evaluate the timing of revenue recognition for each of the identified performance obligations based on when it transfers control. Specifically, Technology entity T concludes that the consideration allocated to the software licenses will be recognized at the later of the beginning of the license period or when it makes the software licenses available to the customer. The consideration for the related PCS will be recognized ratably over the remaining contract term (once the customer can use and benefit from the software license) and the consideration allocated to the SaaS will be recognized ratably over the remaining term from the time at which it makes the SaaS available to the customer. The unspecified additional products and services will be recognized ratably over the five-year contract term.

^(a) Technology entity T estimated the standalone selling price for the unspecified additional products and services based on its history of new product releases and its internal roadmap for future releases. This evaluation requires significant judgment. Further, while Technology entity T did not have reliable information on customer usage patterns, technology entities that do have this information should consider it as part of the evaluation.

Significant financing component (added January 2020)

To determine whether a significant financing component exists, a technology entity needs to consider all relevant facts and circumstances, including (1) the difference between the cash selling price and the amount of promised consideration for the promised goods or services and (2) the combined effect of the expected length of time between the transfer of the goods or services and the receipt of consideration and the prevailing market interest rates.

The standard describes three factors that indicate that there isn't a significant financing component, including:

- ▶ The customer paid for the goods or services in advance, and the timing of the transfer of those goods or services is at the customer's discretion.
- ▶ A substantial amount of the consideration promised by the customer is variable, and the amount or timing of that consideration varies based on a future event that is not within the control of the customer or the entity (e.g., a sales-based royalty).
- ▶ The difference between the promised consideration and the cash selling price of the good or service arises for reasons other than the provision of financing to either the customer or the entity and the difference between the amounts is proportional to the reason for the difference (e.g., a payment is made in advance in accordance with the typical payment terms of the industry or jurisdiction, payment terms provide the entity or the customer with protection from the other party failing to fulfill its obligations under the contract).

As a practical expedient, a technology entity may decide not to adjust the promised amount of consideration for the effects of a significant financing component if it expects, at contract inception, that the period between the transfer of a promised good or service to a customer and the payment for that good or service will be one year or less.

How we see it

Many technology entities have elected to use the practical expedient and not account for significant financing components when the anticipated period of time between payment and the transfer of the promised goods or services is one year or less.

When the anticipated period of time between payment and transfer of the promised goods or services is greater than one year, a technology entity must evaluate whether there is a significant financing component or whether the billing terms that result in the timing difference are for reasons other than financing. Example 30²⁸ in the standard illustrates an entity's determination that a customer's advance payment does not represent a significant financing component. Reasons other than financing could include business and industry norms to enhance collections, alignment with the nature of the related product or service itself or assurance that either party to the contract will perform.

Technology entities must carefully evaluate whether a significant financing component exists when customers are provided with payment choices that base the amount on the timing of the payment (e.g., up-front rather than annual payments).

Virtual goods (added January 2020)

Many publishers of social-network games, virtual worlds and popular multiplayer online role-playing games offer the games free of charge and give players the opportunity to purchase virtual goods to enhance their game-playing experience. Virtual goods are non-physical items represented in a game by images, animations or three-dimensional objects. Game publishers also sell characteristics that provide a player with additional or enhanced abilities (such as speed, strength or health) within a game.

Online games provided under a free-to-play model are hosted software applications for which players generally do not have the ability or the right to take possession of any software license.

Under the standard, game publishers are required to go through the five-step revenue recognition model to determine the appropriate revenue recognition pattern for their contracts with customers.

Identifying the contract and performance obligations

Game publishers typically have standard terms and conditions that apply to the use of their games, regardless of whether they are purchased or played for free. These terms may vary from publisher to publisher, but they primarily provide the player with a limited license to use the game that is hosted by the game publisher and to also use in-game purchases made in the publisher's game.

The game publisher may conclude that these arrangements do not provide a license of IP (e.g., because the customer does not take possession of the software) or that a license of IP is provided with hosting services as a single performance obligation that is satisfied over time. The discussion in this section assumes that one of these conclusions is reached.

Further, in a free-to-play model, although a player accepts the standard terms and conditions upon initial access to a game, the arrangement likely does not meet the definition of a contract under the standard at the onset of the arrangement. This is because the arrangement lacks commercial substance until an in-game purchase is made, requiring consideration to be paid to the publisher.

Typically, a game publisher has no contractual obligation to continue to make the game available to players and can delete a player's account at any time (regardless of whether the player has paid for the game or in-game purchases). Most game publishers have a practice of making a public announcement about their plans to shut down a game (generally a few months before the shutdown). In addition, a player can delete his or her account at any time. However, publishers have generally established a practice of continuing to make their games available after players make in-game purchases (and publicly announcing when they will be discontinued), which has created players' expectations that the publisher will continue to host the game. Therefore, we believe that publishers often have an implied promise to provide hosting services. Because of the implied promise to provide hosting services, the implicit performance period is generally not affected by the contractual terms permitting termination by either party at any time.

Satisfaction of the performance obligation

The period over which the performance obligation is satisfied will depend on the duration of the implied hosting period for the virtual goods. Based on player behavior and the specific game features, publishers may find that the length of the implied hosting period (i.e., the estimated performance period) depends on whether the virtual good is consumable or durable. These types of goods have the following characteristics:

- ▶ Consumable goods are consumed by a specific action (e.g., using virtual fuel for a virtual vehicle) or are no longer accessible after a specific amount of time passes. After these goods are consumed, they are no longer accessible to the player.
- ▶ Durable goods (e.g., virtual vehicles, virtual furniture) are accessible to players throughout the period that they play the game.

Revenue for virtual goods is likely recognized over the implied hosting period.

For consumable goods, a game publisher may determine that the estimated performance period varies for each type of virtual good sold, based on when a player “consumes” the virtual good. This may be a single point in time, a series of times (e.g., the virtual good provides multiple power-ups) or a period of time. To make these estimates, a publisher may have to retain, collect and analyze data about player behavior, which can require extensive effort. This data may include the dates that consumable virtual goods are purchased and the dates that such items are consumed. Additionally, a publisher has to consider the effect that the features and functionality of the game have on the period of performance and the data available to estimate it.

For durable goods, a game publisher may determine that average paying player life best represents the estimated performance period. One way a publisher may estimate average paying player life could be the average period of time between the date the player first purchases a virtual good or currency and the date the player last logs in to the game. The date of first purchase can be objectively determined, but the last login date may be more difficult to determine. For example, players may stop playing for a period of time and then resume playing the game at a later date. A publisher has to use judgment and should have data to support a conclusion that player inactivity indicates that the player has stopped playing the game. Additional considerations for determining the estimated performance period could include other data about paying players (e.g., total hours played, purchasing patterns) and the average paying player life for similar games published by the entity or competitors, if that information is publicly available.

We believe that, to make these estimates, the publisher isn’t limited to considering only the data available for a particular game. For example, when a game publisher launches a new game, it will not have historical data related to that new game. However, it may determine that it has other games in its portfolio that have sufficiently similar characteristics (e.g., game genre, game mechanics, demographics of players, common paying players, types of virtual goods available) to provide a basis for it to reasonably estimate average player life or expected usage patterns of virtual goods. The publisher should focus on estimating a period of performance that is consistent with the standard’s recognition objective of depicting the satisfaction of the performance obligation.

How we see it

Under legacy guidance, game publishers selected their accounting policy for virtual goods from three revenue recognition models, which reflected different expectations about the delivery period and the data available to support those expectations. If the available data was insufficient to support a particular model a publisher identified as an accounting policy, the publisher usually defaulted to a less precise model until data became available to support the selected model.

Under the standard, publishers are required to recognize revenue over a period that best depicts their satisfaction of the performance obligation in an arrangement. Publishers that don’t have a lot of reliable data still need to estimate the period of performance.

Changes to estimated period of performance

Like any significant estimate, an estimate of the period of performance (e.g., average paying player life) is likely to change. As a result, it is important that the publisher implement a process to continually update the data on which an estimate is based and maintain appropriate documentation. As part of that process, we would expect a publisher to consider how actual results compare with historical estimates in addition to how future results may differ from past results.

Once a change in estimate is identified, the publisher should account for that change in accordance with ASC 250-10-45, which provides guidance on accounting for estimates. That guidance requires the effect of the change in estimate to be accounted for in both the period that the change occurred and in future periods, if the change affects both periods. That is, the change in estimate would apply to transactions with deferred revenue balances (i.e., revenue to be recognized in future periods) and all future transactions.

Additional considerations for technology contracts

The following section outlines some additional considerations for evaluating contracts with customers that may be relevant to technology contracts, including those that contain a software license.

Enforceable rights and obligations (updated January 2020)

A contract in the scope of the standard may be written, oral or implied by an entity's customary business practice, but one of the criteria it must meet is that it must create enforceable rights and obligations.

A technology entity may enter into a master service agreement (MSA) with a customer that stipulates the terms and conditions (e.g., payment terms, use of service or content, confidentiality), but the contract may require separate purchase orders or order forms for specific goods and services before the entity transfers them and is entitled to payment. In these cases, the purchase order generally creates enforceable rights and obligations and should be evaluated together with the MSA. That is, the purchase order commits the parties to perform their respective obligations, which is the transfer of promised goods and services in exchange for the specified consideration.

If an MSA includes an enforceable clause requiring the customer to purchase a minimum quantity of goods or services, the MSA alone may constitute a contract under the standard because enforceable rights and obligations exist for this minimum amount of goods or services.

Termination clauses

Technology contracts may include clauses that allow a customer to terminate a contract without penalty, or the customer may be required to pay a termination penalty that is not substantive. The absence of a substantive termination penalty may affect an entity's determination of the length of the contract, the number of performance obligations, the transaction price, the timing of revenue recognition and the required disclosures.

The standard does not address the effect of termination penalties on the length of the contractual period. However, the TRG generally agreed²⁹ that a substantive termination penalty payable by a customer is evidence of enforceable rights and obligations on the part of both parties throughout the period when the substantive termination penalty applies.

The amount, nature and purpose of the termination penalty are factors to consider when determining whether the termination penalty is substantive. TRG members observed that the determination of whether a termination penalty is substantive, and what the enforceable rights and obligations are under a contract, requires judgment and consideration of the facts and circumstances. If the termination penalty is not substantive, the contract may be shorter than the stated contractual term. The following example demonstrates the effect of the termination penalty on the duration of a contract.

Determining the enforceable rights and obligations under a contract with termination rights may require significant judgment.

Illustration 17 – Determining the duration of the contract

SaaS provider A enters into a four-year SaaS contract with a customer. The customer is required to pay a nonrefundable annual fee of \$100,000, which is the standalone selling price for the service.

To determine the duration of the contract in each of the scenarios below, the entity considers these facts and whether the contract provides cancellation rights and termination penalties.

Scenario A: Assume no cancellation rights are provided to either party. In this case, the enforceable rights and obligations exist for the entire stated contractual term, and the contract duration is four years.

Scenario B: Assume the contract provides the customer with a right to cancel the contract at the end of each year without cause but with a termination penalty. The penalty decreases annually throughout the contract term at the end of each year. The following illustrates the payments under the contract.

	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>
Annual fee (\$)	100,000	100,000	100,000	100,000
Termination penalty (\$)	225,000	150,000	75,000	0

If SaaS provider A determines that the penalty is substantive in each period, enforceable rights and obligations exist for the stated contractual term of four years.

Scenario C: Assume the contract provides the customer with a right to cancel at the end of each year with no termination penalty. In this case, SaaS provider A determines that the contract duration is one year, with options to renew for each of the following three years because the customer can choose whether to receive the service during those years. That is, SaaS provider A determines that enforceable rights and obligations do not exist throughout the entire stated contractual term because there is no substantive termination penalty. The options to renew are not material rights because they are offered at the standalone selling price of \$100,000.

Many professional services contracts, such as a statement of work (SOW), have customer termination provisions with a minimum notification period (e.g., 30 days). For example, a SaaS vendor may sell a three-year SaaS solution and enter into an SOW to provide implementation services priced on a time and materials basis, which the SaaS vendor anticipates will take six months to complete.

The SOW may provide the customer with the ability to terminate the SOW at any time after a 30-day notification period and to pay only for the services received (i.e., there is no substantive termination penalty). Such provisions need to be carefully evaluated because they likely indicate that there are only enforceable rights and obligations in the contract for 30 days of professional services and that any additional days of service are optional purchases. Entities need to evaluate whether a contract, such as an SOW, contains an option to renew the implementation services and whether there are material rights in these situations.

How we see it

Technology entities should carefully evaluate the termination provisions in their contracts. The evaluation of termination clauses is critical because the conclusions on the enforceable rights and obligations in a contract, including contract duration, can affect the determination and allocation of transaction price. Further, termination clauses can affect required disclosures (e.g., the amount of transaction price allocated to remaining unsatisfied performance obligations, often referred to as backlog), as well as the characterization of customer prepayments (e.g., as a contract liability or another type of liability, such as a customer deposit).

Contract modifications (updated January 2020)

Parties to a contract frequently agree to modify the scope or price (or both) of a contract. As illustrated in Example 5, Case B,³⁰ in the standard, a contract modification may include compensation to a customer for performance issues (e.g., poor service by the entity, defects present in transferred goods). An entity may need to account for the compensation to the customer as a change in the transaction price separately from other modifications to the contract.

The standard requires certain modified contracts to be treated as entirely new contracts (either a second, separate contract or the termination of the existing contract and the creation of a new contract) and others to be treated as part of the original contract. The accounting treatment depends on whether the modification results in the addition of distinct goods or services and whether the amount of consideration expected for those goods or services reflects their standalone selling prices.

Consider a SaaS provider that enters into an agreement with a customer to increase the number of users with access to a SaaS subscription. Assume the services provided to the additional users are distinct. If the additional consideration reflects the standalone selling price of the additional service per user, the modification is accounted for as a separate contract. If the additional consideration does not reflect the standalone selling price, the modification is accounted for as the termination of the existing contract and the creation of a new contract. The revenue recognized to date on the original contract is not adjusted, and the remaining portion of the original contract and the modification are accounted for together by allocating the remaining consideration (i.e., the unrecognized transaction price from the existing contract plus the additional transaction price from the modification) to the remaining performance obligations. As part of this assessment, the SaaS provider also considers whether it has identified all the promises in the modified agreement.

If the modification involves a software license, we believe the additional and/or modified software license is likely distinct from the original license because the new and/or modified rights typically differ from those conveyed by the original license. Therefore, the accounting treatment depends on whether the additional consideration reflects the standalone selling price of the software license.



EITF will address contract modifications for licenses of IP

The FASB has added a project to the agenda of the EITF to address diversity in practice related to accounting for contract modifications for licenses of IP under the revenue standard. As part of this project, the EITF will address the accounting for contract modifications that extend a license term but are not solely a renewal of the terms and conditions of the original license.

We encourage readers to monitor developments because any new guidance on this topic could affect accounting for such arrangements. Refer to our To the Point, [**The EITF will address revenue recognition related to contract modifications for licenses of IP**](#), for details.

Entities may make appropriate adjustments to the standalone selling price they use to evaluate contract modifications to reflect the circumstances of the contract. For example, the SaaS provider in the example above may conclude that, when more users are added, the customer qualifies for lower pricing offered based on volume. While the per-user price for the additional users may be lower than the original per-user price, the SaaS provider may determine that the additional transaction consideration reflects the standalone selling price for the volume of users. Other appropriate adjustments to the standalone selling price could include reduced costs to sell to existing customers.

How we see it

Technology entities have to evaluate whether to treat contract modifications as separate contracts or as modifications of existing contracts. This is a change in practice for software or cloud service providers that treated all agreements to add users as separate contracts under legacy guidance. Under the standard, treating a modification as a separate contract is permitted only if the consideration for providing distinct services to more users reflects the standalone selling price.

New contracts with existing customers (added January 2020)

Because technology entities may enter into new contracts with existing customers without amending an existing contract, they may find it difficult to determine when a contract modification has occurred.

A new contract with an existing customer needs to be evaluated as a contract modification if it results in a legally enforceable change to the scope or price of an existing contract. In some cases, the determination of whether a new contract modifies an existing contract will require judgment.

We believe that, to make this determination, an entity should consider the facts and circumstances of the new contract, including the following factors included in the contract combination requirements of the standard:

- ▶ Whether the contracts were negotiated as a package with a single commercial objective, which might be the case if the original contract contemplated future modifications
- ▶ Whether the amount of consideration to be paid in one contract depends on the price or performance of the other contract
- ▶ Whether the goods or services promised in the contracts (or some goods or services promised in each of the contracts) are a single performance obligation

Illustration 18 – Evaluating a new contract with an existing customer

SaaS provider B has several SaaS products designed for the health care industry. On 1 July 20X6, SaaS provider B enters into a three-year SaaS contract with a new customer for a subscription to its electronic medical records application and implementation services, which are expected to take two months. Since the customer is a large hospital network and represents a significant business opportunity for SaaS provider B, SaaS provider B agrees to provide the customer with a discount of 25% off the list price for each service, which is larger than the discount it typically provides to new customers. Further, the sales representative believes that, based on discussions with the customer, the customer is likely to purchase other applications from SaaS provider B in the future if the customer is satisfied with the implementation and function of the electronic medical records application.

On 1 July 20X7, when there are still two years remaining on the original contract, SaaS provider B enters into a second, separate contract with this customer. The new contract is for a two-year subscription to SaaS provider B's appointment management application and does not legally change the scope or price of the original contract.

However, as part of the negotiations, the customer and the sales representative consider the discount that was provided in the original contract and agree to a price for the second contract that represents only a 15% discount off the list price. The sales representative and the customer agree to this price primarily because the implementation services provided as part of the original contract were completed ahead of schedule and because the customer has been impressed with the electronic medical records application so far. Further, the customer was willing to accept a smaller discount in the second contract because it had received a larger discount in the original contract.

SaaS provider B considers whether the second contract should be evaluated as a modification of the original contract. SaaS provider B considers the negotiations that occurred for obtaining both contracts, based on discussions with the sales representatives, and determines that the price of the second contract was not negotiated independently of the original contract. That is, SaaS provider B determines that the contracts were negotiated with a single commercial objective. Therefore, SaaS provider B determines that it should account for the second contract as a modification of the original contract.

Collectibility

Technology entities may not expect to collect the full contract price for transferring goods or services when they enter into contracts with certain customers (i.e., customers in new or emerging markets). For a contract to be in the scope of the standard, it must be probable that the entity will collect substantially all of the consideration to which it expects to be entitled in exchange for the goods or services that will be transferred to the customer (i.e., the transaction price after considering variable consideration, including the constraint).

The amount of consideration that is assessed for collectibility is the amount to which the entity expects to be entitled, which under the standard is the transaction price for the goods or services that will be transferred to the customer rather than the price that is stated in the contract.

For technology entities, differences between the transaction price and the contractual price most often relate to variable consideration (e.g., rebates, discounts, explicit or implicit price concessions) that reduces the amount of consideration stated in the contract. See the "[Variable consideration](#)" section for further discussion of implicit price concessions.

An entity also may consider its ability to manage its exposure to credit risk (e.g., through advance payments, through the right to stop transferring additional goods or services) as part of the collectibility assessment. Consider an IT service provider that enters into a three-year contract to provide data management services and has the right to stop providing services when the customer fails to pay. Based on its history with this class of customer, the IT service provider expects the customer to make the required payments for at least nine months. The IT service provider then evaluates whether it will collect substantially all of the consideration to which it will be entitled for the nine months of service.

When an entity determines that a contract with a customer does not meet the collectibility requirements of a contract under the standard (or any of the criteria to be identified as a contract), the entity should recognize nonrefundable consideration received as revenue only when one of the following events has occurred:³¹

- The entity has fully performed, and substantially all the consideration has been received (i.e., the entity has fully performed on all performance obligations in the contract and has received substantially all cash consideration for the entire contract).
- The contract has been terminated.
- The entity has transferred control of the goods or services and has stopped transferring (and has no obligation under the contract to transfer) additional goods or services to the customer, if applicable.

How we see it

Under the standard, a technology entity needs to assess the customer's ability and intent to pay substantially all of the consideration to which the entity expects to be entitled. This amount may not be the contractual price.

It is no longer acceptable for entities to default to deferring revenue recognition until cash is collected if they have concerns about whether they will collect the contractual amount (i.e., they are unable to conclude that collectibility is reasonably assured).

Technology entities need to carefully evaluate whether to recognize gross revenue or net revenue when third parties are involved in the sale of goods or services.

Principal versus agent (updated January 2020)

A technology entity may publish advertising content from a third party on its website or mobile application. A technology entity also may provide a platform to sell virtual or digital goods on behalf of a third party. When another party is involved in providing goods or services to the technology entity's customer, the technology entity must determine whether its performance obligation is to provide the good or service itself (i.e., the technology entity is a principal) or to arrange for the other party to provide the good or service (i.e., the technology entity is an agent).

An entity is a principal if it controls a promised good or service before it transfers the good or service to a customer. The Board noted in the Basis for Conclusions of ASU 2016-08³² that control is the determining factor in the assessment of whether an entity is a principal or an agent.

To apply the principal versus agent guidance, an entity must first properly identify the specified good or service (or unit of accounting for the principal versus agent evaluation) to be transferred to the customer. A specified good or service is defined as each distinct good or service or distinct bundle of goods or services promised to the customer. That is, the specified good or service is what the customer is ultimately purchasing, regardless of which entity is responsible for providing that good or service.

This assessment may be straightforward in transactions where a consumer product is being purchased from an online retailer, such as a song or a book (physical or electronic). The online retailer would often conclude that the consumer product is the specified good or service. The evaluation may be more complex when there are several goods or services purchased by the customer, particularly when the goods or services are sourced from different entities. For example, an entity may sell its hardware to customers, which may include software sourced from third parties. An entity would have to determine whether there are one or two specified goods or services in this transaction (i.e., hardware with embedded software or hardware and software separately) based on an evaluation of whether the separate promises are distinct from each other.

Determining whether an entity controls a good or service before it is transferred to the customer can be challenging if the good or service is intangible, such as digital content. As part of this evaluation, the standard requires the entity to consider the definition of control in ASC 606-10-25-25, which states that control is “the ability to direct the use of, and obtain substantially all of the remaining benefits from, the asset.” An entity also should consider how the benefits from an asset can be obtained, including by selling or exchanging the asset. When evaluating control, an entity also should look to its contractual relationship with any third party involved in the contract to help the entity determine whether it has control of the good or service before that good or service is transferred to the customer.

Because it still may not be clear whether an entity controls the specified good or service, the standard provides three indicators (i.e., principal indicators) of when an entity controls the specified good or service (see Step 2 of the model in Appendix A). Generally, the inventory risk indicator won’t apply to intangible goods or services, so technology entities need to consider the other indicators (i.e., responsibility for fulfilling the promise to provide the specified good or service and discretion in establishing the price of the specified good or service) to determine whether they control intangible goods or services.

The FASB noted in the Basis for Conclusions of ASU 2016-08³³ that while the indicators can help to support an entity’s assessment of control, they cannot replace the assessment. Further, the FASB explained that the indicators should not be viewed in isolation and are not a checklist of criteria that must be met in all cases. However, an entity’s conclusions about control and the principal indicators should align. An entity that reaches different conclusions when it applies the standard’s definition of control and when it considers the principal indicators should reevaluate its analysis, considering the facts and circumstances of the contract.

The illustration below, which is similar to Example 45³⁴ in the standard, demonstrates the control assessment for an entity that concludes that it is an agent:

Illustration 19 – Entity is an agent

An entity operates a website that provides a marketplace for customers to purchase goods from a variety of suppliers, who deliver the goods directly to the customers. The entity’s website facilitates customer payments to the suppliers at prices that are set by the suppliers. The entity requires payment from customers before orders are processed (i.e., provided to the supplier for fulfillment), and all orders are nonrefundable. The entity has no further obligations to the customers after arranging for the supplier to provide the products to the customers; the entity is not responsible for the acceptability of goods provided to customers.

First, the entity evaluates the specified goods and concludes that there are no other goods or services promised to the customer except those provided directly by the suppliers. Next, the entity considers whether it controls the specified goods before they are transferred to the customers. Since the entity does not at any time have the ability to direct the use of the goods transferred to the customers, the entity concludes that it does not control the specified goods before they are transferred. As part of this assessment, the entity also considers the three indicators of control in the standard and makes the following determinations that support its overall control evaluation:

- ▶ The suppliers are responsible for fulfilling the promise to the customer, and the entity does not take responsibility for the acceptability of the goods.
- ▶ The entity does not have inventory risk because it does not obtain the goods at any time.
- ▶ The entity does not have discretion to establish prices because these are set by the suppliers.

The entity concludes that it is an agent for the goods sold through its website because the nature of its performance obligation is to arrange for suppliers to provide goods to the customers.

By contrast, consider the following example of an entity that concludes it is acting as a principal:

Illustration 20 – Entity is a principal

An entity operates a website that provides a marketplace for customers to purchase digital content. The entity has entered into contracts with suppliers that provide the entity with the right to sell the digital content during a noncancelable period of time in exchange for a fixed fee per unit of content. The entity can set the price for the content to be sold to customers on its website. The entity is contractually required to pay the supplier a fixed price or rate for any digital content it sells to its customers that is unaffected by the price paid by the end customers. The entity is also responsible for assisting customers if they encounter issues downloading the content or other issues, and customers do not interact with the suppliers.

The entity first evaluates the specified goods and concludes that the digital content is the only specified good or service. Next, the entity considers whether it controls the digital content before it is transferred to the customer. The entity concludes that it controls the specified goods before they are transferred because it has entered into a noncancelable distribution agreement that permits it to sell the digital content to its customers. This differs from the entity's conclusion in Illustration 19 because the entity in that illustration provided a platform to connect suppliers to customers and did not have the ability to sell the goods.

As part of its assessment, the entity in this illustration also considers the three indicators of control in the standard and makes the following determinations that support its overall control evaluation:

- ▶ The entity is responsible for fulfilling the promise to the customer, and the entity takes responsibility for the acceptability of the goods.
- ▶ There is no inventory risk associated with digital content.
- ▶ The entity has discretion in establishing prices.

The entity concludes that it is a principal for the digital content sold through its website because it controls the content before it is transferred to the customer.

Entities need to evaluate the nature of their own transactions, including specific contractual terms, to determine whether they are agents or principals.

If a contract with a customer includes more than one specified good or service, the standard says that an entity may be a principal for some specified goods or services and an agent for others.

Illustration 21 – Entity is both a principal and an agent

A software reseller sells software licenses bundled with PCS to end users and other IT solutions. The reseller has entered into contracts with several software manufacturers that provide the reseller with the right to sell licenses to the software with PCS to end users during noncancelable periods of time in exchange for fixed fees per license sold. The reseller can set the prices it charges end users but is contractually required to pay the software manufacturer the fixed fee, regardless of the price paid by end users. The software reseller does not have a commitment to make a minimum number of purchases from the software manufacturer and does not make purchases in advance.

The software reseller is responsible for identifying which software will address the customer's needs (including the feasibility of integrating it with the customer's existing technology environment), ordering the software from the manufacturer, assisting customers if they encounter issues downloading the software (all software is provided electronically) and with other basic technical support. The software manufacturer provides the higher levels of technical support and provides PCS directly to the customer.

As part of its principal versus agent evaluation for these contracts, the software reseller determines that the software license and PCS are separate specified goods or services.

When assessing control for the software license, the reseller concludes that it controls the software license before the license is provided to the end user. This is because the reseller has the right to direct the software manufacturer to provide the software to the end user on the reseller's behalf. As part of this assessment, the software reseller also considers the three indicators of control in the standard and makes the following determinations that support its overall control evaluation:

- ▶ The software reseller is responsible for fulfilling the promise to the customer, and the entity takes responsibility for much of the purchasing process as described above.
- ▶ There is no inventory risk associated with the software provided electronically.
- ▶ The software reseller has discretion to establish prices.

Conversely, the reseller concludes that it does not control the PCS before it is provided to the end user because the software manufacturer creates the updates that it delivers electronically to end users of the software directly through the internet and because all but the most basic level of technical support will be provided by the software manufacturer. As part of this assessment, the software reseller also considers the three indicators of control in the standard and makes the following determinations that support its overall control evaluation:

- ▶ The software manufacturer is responsible for fulfilling the promise to the customer because it provides the updates directly to the end users.
- ▶ There is no inventory risk associated with the PCS provided electronically.
- ▶ The software reseller has discretion to establish prices.

The software reseller believes that the first of the indicators is the most relevant to consider in this assessment and that it supports its overall control assessment. Therefore, the software reseller concludes that it is the principal for the software license but is an agent for the PCS because it does not control the PCS before it is transferred to the end user.

The facts and circumstances of each reseller arrangement must be evaluated because differences in the structure of these arrangements (e.g., how the software license or cloud service is delivered to the end user) could result in different conclusions about whether the reseller is a principal or an agent.

***Determining gross revenue as a principal when selling through an intermediary
(added January 2020)***

Questions have arisen regarding gross revenue recognition for entities that are the supplier of goods or services (e.g., SaaS vendors, hardware manufacturers) that are sold through an intermediary (i.e., a reseller or distributor). While the supplier of the goods or services is the principal in these arrangements, it may be difficult to determine whether the intermediary or the end customer is the customer. This determination is important because the amount of gross transaction price, and, therefore, the amount of revenue recognized, depends, in part, upon the consideration paid by the customer.

The standard defines a customer as "a party that has contracted with an entity to obtain goods or services that are an output of the entity's ordinary activities in exchange for consideration." When it is not clear, based on the definition, who the supplier's customer is, the supplier should also consider who its contractual arrangement is with and to which party it transfers control of the goods or services (i.e., who is obtaining the output of the supplier's ordinary activities).

If identifying the party to which control transfers is difficult, it may also be helpful to consider the standard's indicators that the entity is the principal (i.e., it has responsibility for fulfilling the promise to the customer, inventory risk, discretion in establishing pricing). In some fact patterns, the supplier may conclude that both the end customer and the intermediary are its customers.

Often the reseller or distributor will be the customer in these arrangements. However, if the supplier determines that the end customer is its customer, but it does not know (and expects not to know) the price the intermediary charges the end customer for its goods and services, it should not estimate its gross transaction price. Instead, it would only consider the transaction price remitted by the intermediary. The Board stated in the Basis for Conclusions of ASU 2016-08³⁵ that if uncertainty related to the transaction price is not ultimately expected to be resolved, that amount would not meet the definition of variable consideration and, therefore, should not be included in the transaction price.

Consider the following illustration:

Illustration 22 – Entity sells through a distributor

Hardware entity H manufactures computer hardware, including Hardware X, that is sold through a distributor that operates an e-commerce site. Based on careful evaluation of the facts and circumstances of the arrangement with this distributor, Hardware entity H has determined that its customer is the end customer rather than the distributor.

The distributor sells Hardware X to end customers for \$125, which is due when the order is placed on the website. As each purchase is made, the distributor places a purchase order with Hardware entity H for the product and must pay \$100, due within 30 days.

The diagram below illustrates the flow of consideration and Hardware X between the various parties in the arrangements:



Scenario A: Hardware entity H is contractually entitled to receive a monthly report from the distributor indicating the month's sales, including prices. Because Hardware entity H knows that the distributor charges customers \$125 for Hardware X, it records revenue at the gross amount of \$125 and records the \$25 retained by the distributor as the cost of sales.

Scenario B: Hardware entity H does not have insight (and does not expect to have insight in the future) into the price charged by the distributor to end customers for sales of Hardware X. Although Hardware entity H is the principal in the arrangement and records revenue at the gross amount, it should not estimate the price charged to the end customer. Therefore, revenue recorded by Hardware entity H is \$100, the consideration received from the distributor.

Further, we believe that if an entity is not contractually entitled to know the transaction price an intermediary charges the end customers (e.g., the arrangement with the intermediary indicates that the entity does not have a right to that information), but it nevertheless obtains the information, the entity should not recognize revenue at the gross amount.

For example, assume that a distributor is required to provide the supplier (who has determined that the end customer is its customer) with a monthly listing of the transactions that occurred during the period. Based on the distribution agreement, the supplier is not contractually entitled to know the prices charged to the end customers by the distributor.

However, despite this contractual term, the monthly report that the distributor provides includes certain prices charged to the end customer for each transaction (e.g., some of the prices were redacted, while others were not). We believe that, even though the supplier has the pricing data based on the reports received from the distributor, the supplier should not record revenue at the gross amount because it is not contractually entitled to that information and it has no expectation that it will regularly receive the information.

How we see it

While the guidance on principal versus agent considerations is similar to legacy GAAP, the key difference is that the new guidance focuses on control of the specified goods and services as the overarching principle for entities to consider in determining whether they are acting as a principal or an agent. Entities must perform a robust assessment of control and should avoid focusing solely on the control indicators. This could result in entities reaching different conclusions from those they reached under legacy GAAP.

Variable consideration

Implied price concessions (updated January 2020)

Technology entities may be aware of potential collectibility issues at the outset of a contract but may still be willing to enter into the contract with a customer. When the entity is aware of such a risk and still chooses to transact with the customer, the contract may include an implied price concession. Under the standard, any implied price concessions create variable consideration, and an entity must estimate these amounts at contract inception.

Consider a technology entity that has a history of accepting consideration that is 60% of the contract price in a specific region in exchange for its software and PCS. When determining the transaction price for a contract in that region, the entity might determine that 60% of the contract price is the transaction price, and there is an implied price concession for the remaining 40% based on the entity's history.

Technology entities may find it challenging to distinguish between implied price concessions (i.e., reductions of revenue) and customer credit risk (i.e., bad debt) for collectibility issues that were known at contract inception. Entities need to carefully evaluate all facts and circumstances that were available at contract inception, as well as any subsequent events that may have affected the customer's ability to pay.

Technology entities should consider whether they have a history of accepting prices that are lower than the contractual prices. If a technology entity has established such a business practice, it must include an estimate of variable consideration for implied price concessions in the transaction price. Other factors that technology entities may consider in determining whether the contract includes an implied price concession include the customer's payment history and financial condition, the entity's policies for credit checks and processes for collections on outstanding balances, and market conditions in the region. Significant judgment is required when making this determination, and entities should retain contemporaneous documentation to support their judgments.

How we see it

Accounting for variable consideration resulting from implied price concessions significantly changed practice for technology entities that recognized revenue on a cash basis in these situations under legacy guidance. Under the standard, a technology entity must estimate variable consideration and include any amounts that are not constrained (refer to Step 3 in Appendix A) in the transaction price, rather than default to deferring all revenue until the contingency is resolved. Entities are also required to update the estimated transaction price at each reporting date and potentially adjust revenue recognized.

Implied price concessions create variable consideration that must be estimated at contract inception.

Extended payment terms

Under the standard, an entity needs to consider whether any extended payment terms provided to the customer create variability in the transaction price (i.e., are a form of variable consideration) and whether a significant financing component exists.

An entity needs to carefully evaluate contracts that include extended payment terms to determine whether it has the intent or a reasonable expectation to provide a price concession. For example, a technology entity may routinely provide price concessions in contracts that include extended payment terms in order to negotiate contract renewals with customers. Entities are required to estimate the price concession at contract inception and reduce the transaction price for that amount.

How we see it

The treatment of extended payment terms under the standard has accelerated the recognition of revenue for some technology entities. Under legacy guidance,³⁶ many entities that license software could not overcome the presumption in ASC 985-605 that extended payment terms (i.e., payment terms greater than one year) resulted in a transaction price that was not fixed or determinable because there was an increased risk of the entity granting future price concessions to its customer. As a result, most technology entities had been unable to recognize revenue for contracts that included extended payment terms until the amounts were due because they were unable to demonstrate a history of successfully collecting without making concessions to the customer.

Reseller and distributor contracts

The standard likely changes practice for many technology entities that sell their products through distributors or resellers if the only uncertainty in the contract with the distributor or reseller is the variability in the transaction price (e.g., a semiconductor chip manufacturer may provide a distributor with volume discounts, rights of return and price protection rights). This is because the standard requires an entity to estimate the variable consideration (i.e., the end sales price) based on the information available, taking into consideration the effect of the constraint on variable consideration, and recognize revenue when control of the good or service is transferred to the reseller or distributor.

How we see it

Recognizing revenue (subject to the constraint on variable consideration) when products are delivered to a reseller is similar to the treatment under the "sell-in" method in legacy guidance. Entities can no longer apply the "sell-through" method and wait until the product is sold to the end customer to recognize revenue if the sales price is the only uncertainty in the contract with the distributor or reseller.

Variable consideration and options for additional goods and services

Technology entities need to exercise judgment to distinguish between contracts that contain an option to purchase additional goods or services (e.g., option to renew cloud services or PCS) and contracts that include variable consideration (e.g., rebates, credits, volume discounts). The TRG generally agreed³⁰ that entities should first determine the nature of the promises in the contract and the rights and obligations of the parties. Determining the nature of an entity's promise is critical to differentiating between optional purchases and variable consideration and may require significant judgment.

If the contract includes a customer option, the technology entity is not obligated to provide additional goods and services until the customer makes a separate purchasing decision (i.e., exercises the option). That is, the entity's performance obligation at contract inception is to provide the quantity of goods or services specified in the contract. In contrast, if the entity is obligated to transfer the goods and services and the customer is obligated to pay for those promised goods and services, even if the consideration owed to the entity is not known at contract inception, the contract includes variable consideration.

The determination of whether the contract contains a customer option or variable consideration is important because it affects the accounting for the contract at inception and throughout the life of the contract and the disclosures an entity has to make. Entities need to make certain that their conclusions regarding the determination of the nature of the promise are consistent with conclusions regarding whether additional consideration that will be potentially received from the customer is related to variable consideration or optional purchases for additional distinct goods or services.

Technology contracts for products such as microprocessors, computer hardware or networking equipment may provide volume discounts or rebates that are based on the number of units sold. The pricing adjustments provided by a volume discount or rebate determine whether it is accounted for as an option to purchase additional goods or services or variable consideration. Generally, a volume discount or rebate that is retrospectively applied is accounted for as variable consideration. This is because the final price of each good or service sold is dependent upon the customer's total purchases subject to the discount or rebate. That is, the consideration is contingent upon the occurrence or nonoccurrence of future events. This view is consistent with Example 24³⁷ in the standard.

Conversely, if a volume discount or rebate is prospectively applied (see Illustration 10 for an example), the discount or rebate may not be accounted for as variable consideration. This is because the consideration for the goods or services in the contract is not contingent on or affected by any future purchases. Rather, the discounts available from the rebate program affect the pricing on future purchases. However, technology entities need to evaluate whether the option to purchase goods or services in the future at a discount represents a material right and, therefore, should be accounted for as a performance obligation. If the entity determines that the option is a material right, the entity is required to allocate a portion of the transaction price to the material right at contract inception and recognize revenue when the option is exercised or the option expires.

How we see it

Significant judgment may be required to distinguish between a customer option and variable consideration, and identifying the nature of the entity's performance obligation is critical to making the distinction. This determination is important because it affects the accounting for the contract at inception and throughout the life of the contract.

Recognition of revenue

Measuring progress in a combined performance obligation

A single performance obligation may contain multiple goods or services that aren't distinct (i.e., a combined performance obligation). For example, hardware, software and professional services may be combined into a single performance obligation because the professional services significantly customize and integrate the hardware and software, and the hardware, software and professional services are inputs to a combined output.

The standard requires that a single method of measuring progress be used for each performance obligation satisfied over time. In the case of a combined performance obligation that is satisfied over time, the entity has to select a single measure of progress that faithfully depicts the entity's performance in transferring the goods or services. Such a determination requires significant judgment, but TRG members generally agreed³⁸ that the measure of progress selected should be consistent with the standard's objective and that entities should consider the nature of the overall promise for the combined performance obligation. For example, the technology entity should not default to a "final deliverable" methodology or select a measure of progress that treats each promise as if it were a separate performance obligation.

In the example of the hardware, software and professional services that are combined into a single performance obligation (because one or more of the goods or services significantly modifies or customizes the other goods or services promised in the contract), the entity should consider a measure of progress that depicts the performance of the professional services. This is because the customer has not purchased each of the individual goods and services, but rather a customized solution for which each of the individual goods and services is an input (i.e., the entity concluded that the customizations are significant enough that the promises are not distinct within the context of the contract) and because the creation of the customized solution is performed over time (i.e., over the period during which the professional services are provided).

Similarly, an entity may conclude that a measure of progress that aligns with the SaaS may be appropriate for a hybrid-SaaS contract if the on-premise software and SaaS are a single performance obligation. This is because the entity has determined that it is providing a combined output over the period.

Entities may need to capitalize costs they would have expensed under legacy guidance.

Contract costs

Costs to obtain a contract

Identifying costs to obtain a contract that are required to be capitalized

The guidance in ASC 340-40 requires entities to capitalize the incremental costs of obtaining a contract with a customer if the entity expects to recover those costs. An entity can expect to directly recover contract acquisition costs (i.e., receive reimbursement under the contract) or indirectly recover them (i.e., through the margin inherent in the contract). Incremental costs are costs an entity would not have incurred if the contract had not been obtained. Entities should first refer to the applicable liability standard to determine when they are required to accrue for certain costs. Entities would then use the guidance in ASC 340-40 to determine whether the related costs need to be capitalized.

For technology entities, the most common example of an incremental cost of obtaining a contract is a sales commission. Commissions paid to an account executive for signing a new customer or for the sale of additional goods or services (often called "land and expand") qualify as incremental costs of obtaining a contract if they are paid only as a result of signing the contract. Determining whether other types of commissions qualify for capitalization requires judgment. Commissions paid for renewals, commissions paid to supervisors and commissions not directly linked to any single or specific contract (e.g., commissions based on reaching an aggregate value of contracts booked during the year, meeting individual sales targets or accelerators) require careful consideration.

ASC 340-40 does not address considerations for different types of commission programs. However, the TRG indicated³⁹ that, to determine whether a cost is incremental and, therefore, capitalizable, an entity should consider whether it would still incur the cost if the customer (or entity) decided not to enter into the contract just as parties were about to sign. If the costs would have been incurred even if the contract had not been executed, the costs are not incremental to obtaining that contract.

It is important to note that ASC 340-40 does not require costs to be direct in order to be capitalized. That's why the TRG members generally agreed³⁹ that an employee's title or level in the organization, or how directly involved the employee is in the sales process, should not affect the determination of whether a sales commission is incremental.

Entities also need to carefully evaluate all compensation plans, not just sales commission plans, to determine whether any plans result in incremental costs that should be capitalized. For example, "bonus" payments that are tied solely to obtaining contracts would be capitalized if they are incremental costs of obtaining a contract, regardless of the title of the plan or the title of the employee paid.

However, some entities pay compensation in increments or delay payments and require that an individual remain employed to collect a commission when it is due. In these cases, an entity needs to carefully evaluate whether the requirement to remain employed in order to receive the commission (i.e., the service vesting condition) is substantive (i.e., whether the time period is substantive).

The TRG indicated⁴⁰ that fringe benefits should also be capitalized as part of the incremental cost of obtaining a contract if the additional costs are based on the amount of commissions paid and the commissions qualify as costs to obtain a contract. However, if the costs of fringe benefits would have been incurred regardless of whether the contract had been obtained (e.g., health insurance premiums), the fringe benefits should not be capitalized. That is, an entity cannot allocate to the commission and, therefore, capitalize a portion of the costs of benefits it would provide regardless of whether the commission was paid.

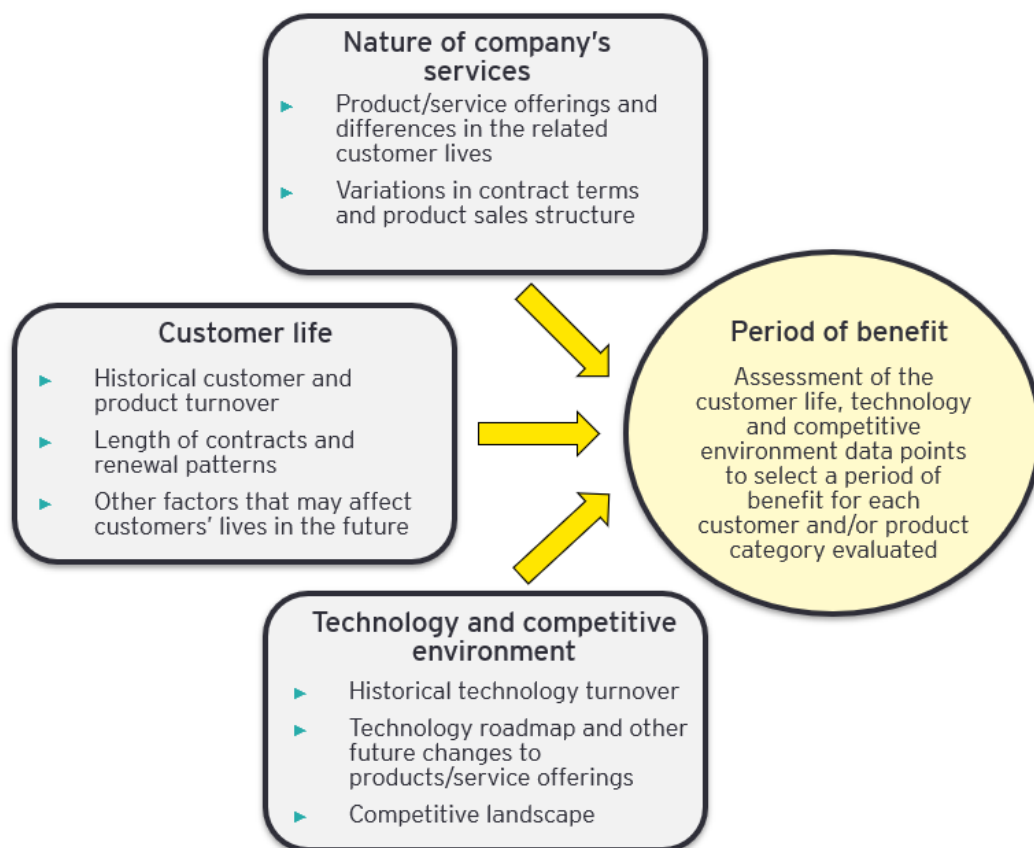
Amortization of capitalized costs to obtain a contract (updated January 2020)

When evaluating the period over which a sales commission should be amortized, entities should assess whether the amortization period for a sales commission extends beyond the initial contract period because the capitalized contract costs relate to goods or services that are transferred under multiple contracts or to a specific anticipated contract (e.g., certain contract renewals). For example, the expected period of benefit of the sales commission could extend beyond the first contract, such as when the entity expects the customer to renew PCS or cloud services.

When determining whether the amortization period for a sales commission extends beyond the contract period, an entity should also evaluate whether an additional commission is paid for subsequent renewals. In the Basis for Conclusions of ASU 2014-09,⁴¹ the FASB explained that amortizing the asset over a longer period than the initial contract would not be appropriate if an entity pays a commission on a contract renewal that is commensurate with the commission paid on the initial contract. In that case, the costs of obtaining the initial contract do not relate to the subsequent contract. Judgment is required to determine whether a renewal commission is commensurate with the commission paid on the initial contract. For example, a 6% commission on an initial contract and a 2% commission on a renewal would not be commensurate even if the declining commission rate corresponds to the level of effort required to obtain the contracts. Further, before including estimated renewals in the period of benefit, the entity should evaluate its history with renewals to conclude that such an estimate is supportable.

The TRG generally agreed³⁹ that ASC 340-40 does not require an entity to amortize the asset over the average customer life. Instead, TRG members said entities would make similar judgments to those used to estimate the amortization period for intangible assets (e.g., a customer relationship intangible acquired in a business combination) and could consider factors such as customer "stickiness" and how quickly their products and services change. Capitalized contract costs should be amortized over a period that is consistent with the transfer to the customer of the goods or services to which the asset relates.

The following graphic lists some factors (but not all) that should be considered in the evaluation of the period of benefit:



Consider a technology entity that capitalizes a commission earned on the sale of software, which the entity estimates it will maintain and support for only the next five years, and the estimated customer life is seven years. In evaluating the period of benefit, the entity may reasonably conclude that the capitalized commission should be amortized over the five-year life of the software to which the commission relates. Entities may need to apply judgment when determining the amortization period.

In a TRG agenda paper,⁴⁰ the FASB staff discussed two acceptable methods for amortizing capitalized contract costs related both to the original contract and to renewals in cases in which the renewal commission is not commensurate with the initial commission:

- ▶ The initial capitalized amount is amortized over the period of benefit that includes expected renewals, while amounts capitalized related to renewals are amortized over the renewal period.
- ▶ The portion of the initial capitalized amount that is commensurate is amortized over the original contract term and the additional amount that is not commensurate is amortized over the period of benefit that includes expected renewals. Capitalized amounts related to renewals are amortized over the renewal period.

While both methods are acceptable because they each meet the objective of amortizing the costs on a systematic basis that is consistent with the transfer to the customer of the goods or services to which the asset relates, an entity should make a policy election to select one method and apply it consistently for similar circumstances. Other amortization methods may also be acceptable if they are consistent with the pattern of transfer to the customer of the goods or services to which the asset relates.

The following example illustrates the two methods described in the TRG agenda paper:

Illustration 23 – Methods for amortizing capitalized contract costs

A SaaS vendor has a commission plan that pays a 6% commission to a sales representative each time the sales representative obtains a new contract with a customer and a 2% commission each time that customer renews. Based on the SaaS vendor's assessment of the guidance in ASC 340-40, it has concluded that the commissions earned as part of this commission plan are incremental costs to obtain a contract that are required to be capitalized. Further, the SaaS vendor has determined that the 2% commission paid for renewals is not commensurate with the 6% commission paid for initial contracts and, therefore, the period of benefit for capitalized commissions extends beyond the initial contract term.

The SaaS vendor performs an assessment of customer life, technology turnover (i.e., how quickly the technology changes due to upgrades and changes to underlying software code) and competitive factors and concludes that the period of benefit for capitalized commissions is five years.

The SaaS vendor executes a three-year service contract with a customer for \$600,000 and pays a 6% commission to the sales representative. At the end of the three-year term, the customer renews the contract for two years for \$400,000, and the SaaS vendor pays a 2% commission to the sales representative.

The following are two acceptable methods for amortizing the capitalized contract costs related to the \$36,000 commission paid on the initial contract and the \$8,000 commission paid on the renewal:

Method 1

The \$36,000 commission that was capitalized related to the initial contract is amortized over the five-year period of benefit. When the contract is renewed, the \$8,000 commission that was capitalized related to the renewal is amortized over the two-year renewal period. The commission would be amortized as follows:

	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>
Initial commission (\$)	7,200	7,200	7,200	7,200	7,200
Renewal commission (\$)	—	—	—	4,000	4,000
Total amortization expense (\$)	7,200	7,200	7,200	11,200	11,200

Method 2

The \$36,000 commission that was capitalized related to the initial contract is separated into two components: \$12,000 that is commensurate with the commission paid on renewal (i.e., the amount of commission that the \$600,000 initial contract earns at the commensurate rate of 2%) and \$24,000 that is not commensurate. The SaaS vendor amortizes the \$12,000 component over the three-year initial contract term and the \$24,000 component over the five-year period of benefit. When the contract is renewed, the \$8,000 commission that was capitalized related to the renewal is amortized over the two-year renewal period. The commission would be amortized as follows:

	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>
Initial commission (not commensurate) (\$)	4,800	4,800	4,800	4,800	4,800
Initial commission (commensurate) (\$)	4,000	4,000	4,000	—	—
Renewal commission (\$)	—	—	—	4,000	4,000
Total amortization expense (\$)	8,800	8,800	8,800	8,800	8,800

Allocating capitalized costs to obtain a contract to individual performance obligations

An entity can attribute the capitalized contract costs to the individual performance obligations in the contract to determine the appropriate amortization period, but it is not required to do so. An entity may meet the amortization objective in ASC 340-40-35-1 by allocating the capitalized contract costs to performance obligations on a relative basis (i.e., in proportion to the transaction price allocated to each performance obligation) to determine the period of amortization.

For example, an entity executes a contract for \$600,000 for a perpetual software license and one year of PCS. Based on the standalone selling prices, the entity allocates \$500,000 (83%) of the total transaction price to the license and \$100,000 (17%) to the PCS. The entity pays a 4% commission to the sales representative and determines that the commission is required to be capitalized under ASC 340-40 because it is an incremental cost of obtaining the contract. The entity concludes that the \$24,000 sales commission should be allocated between the license and the PCS and amortized over the expected period of benefit associated with each of those performance obligations. The entity allocates \$20,000 (83%) to the license and \$4,000 (17%) to the PCS, consistent with the relative value of the performance obligations to the transaction price.

Other methods for allocating capitalized contract costs may be appropriate. Entities should consistently apply any methods used for allocating capitalized contract costs to performance obligations.

Impairment of capitalized costs to obtain a contract (updated January 2020)

Because costs that give rise to an asset must continue to be recoverable throughout the contract period (or period of benefit, if longer) to meet the criteria for capitalization, any asset recorded by the entity is subject to an impairment assessment at the end of each reporting period based on the hierarchy described in ASC 340-40-35-5.

This guidance indicates that before recognizing an impairment loss on capitalized contract costs incurred to obtain a contract, an entity needs to consider impairment losses recognized in accordance with another topic (e.g., ASC 330, *Inventory*; ASC 985-20, *Software – Costs of Software to Be Sold, Leased, or Marketed*). After applying the impairment test to the capitalized contract costs in the scope of other topics and those in the scope of ASC 340-40, an entity includes the resulting carrying amounts in the carrying amount of the asset group or reporting unit for purposes of applying the guidance in ASC 360, *Property, Plant, and Equipment*, or ASC 350, *Intangibles – Goodwill and Other*.

Entities that record capitalized contract costs on a contract-by-contract basis have to monitor and record impairment as customers terminate or allow services to lapse (i.e., in line with customer attrition). Therefore, entities may find a portfolio approach easier to operationalize than accounting for contract costs individually.

How we see it

Technology entities may capitalize more types of commission costs under the standard than they did under legacy guidance.

It is important for entities to document the judgments they made when determining the appropriate period of benefit for amortization of capitalized contract costs and disclose the same in their financial statements. The standard's disclosure requirements include judgments made in determining the amounts of costs that are capitalized, the amortization method chosen and other quantitative disclosures.

Costs to fulfill a contract (updated January 2020)

Technology entities incur costs to fulfill a contract, such as when they install semiconductor processing equipment or implement cloud services for a customer. These entities need to first determine whether the installation or implementation activity is eligible for capitalization under other US GAAP (e.g., property, plant and equipment; intangibles). If it is not eligible for capitalization under other US GAAP, technology entities need to determine whether the installation or implementation service meets the definition of a separate performance obligation, and if it does, expense the costs associated with that performance obligation as incurred.

If the installation or implementation is not a separate performance obligation (see discussion in the "**Implementation services**" section above), a technology entity needs to evaluate whether it is required to capitalize the costs to fulfill the contract. Costs incurred to fulfill a contract are required to be capitalized only if those costs meet all of the following criteria:

- ▶ The costs relate directly to a contract or to an anticipated contract that the entity can specifically identify (e.g., costs relating to services to be provided under renewal of an existing contract, costs of designing an asset to be transferred under a specific contract that has not yet been approved).
- ▶ 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.
- ▶ The costs are expected to be recovered.

The illustrations below contrast an example of SaaS implementation services that are determined to be a separate performance obligation (and, therefore, are not capitalized as costs to fulfill a contract) with an example of SaaS implementation services that meet the criteria for capitalization as costs to fulfill a contract.

Illustration 24 – Implementation services for SaaS are not costs to fulfill

Technology entity M enters into a three-year SaaS contract with a customer for \$4,000,000 for a subscription to an inventory management application beginning 1 June 20X3. The contract includes implementation services that will be performed at the beginning of the contract, starting on 1 June 20X3. The implementation services include data migration, creation of objects for the customer's products that will be inventoried and customization of the application's layout with the customer's logo and color scheme. Several third-party service providers also sell implementation services for Technology entity M's application. Under the contract, the customer receives access to the fully functional SaaS on 1 June 20X3.

Technology entity M considers the implementation services and SaaS and determines that they are separate performance obligations. This is because the implementation services and SaaS can be purchased separately. The implementation services, which can be purchased from third parties, can be used with the SaaS, which is fully functional without the implementation services and is provided at the outset of the contract.

Further, Technology entity M determines that it does not provide a service of integrating the SaaS and implementation services and that the implementation services do not significantly modify or customize the SaaS. Finally, Technology entity M determines that it is able to fulfill its promise to transfer the SaaS independently from its promise to provide the implementation services, indicating that the two are not highly interdependent or interrelated.

Technology entity M determines that the costs incurred related to implementation services, which are a separate performance obligation, do not meet the criteria for capitalization because they do not relate to the entity's satisfaction of performance obligations in the future (i.e., the costs are incurred as the performance obligation for implementation services is satisfied).

Illustration 25 – Implementation services for SaaS are costs to fulfill

Technology entity N enters into a contract with a customer for \$2,000,000 for a one-year SaaS subscription to an enterprise software application beginning when the customer obtains access to the SaaS. The contract includes implementation services that will be performed at the beginning of the contract, starting on 1 January 20X5. The implementation services, which will take approximately two months to complete, must be performed in order for the customer to access the SaaS because the services involve the creation of customer-specific interfaces. Technology entity N does not sell the SaaS without these implementation services, and no other vendors are able to perform the implementation services because they require the creation of code that will reside on Technology entity N's servers. Further, Technology entity N anticipates that the customer will renew the contract annually at least three times.

Technology entity N determines that the implementation services are not capable of being distinct. This is because they cannot be purchased separately or provided by a third party and because the services do not provide benefit on their own or with other readily available resources (since the SaaS has not yet been provided and also cannot be sold separately).

Technology entity N considers the guidance related to performance obligations satisfied over time and concludes that the combined performance obligation meets the requirements for recognition over time. It determines that revenue will be recognized over the contract term, beginning when the customer obtains access to the SaaS.

Next, Technology entity N considers whether the costs incurred related to the implementation services that will be provided at the outset of the contract (i.e., before the customer obtains access to the SaaS) meet the criteria to be capitalized as a cost to fulfill the contract as follows:

- ▶ The costs relate specifically to the SaaS contract with this customer and the three anticipated renewals.
- ▶ The costs generate a resource (the interfaces) that will be used to provide the SaaS, the future performance obligation, to the customer.
- ▶ The costs are expected to be recovered based on the margin included in the contract.

As such, Technology entity N determines that the costs should be capitalized as a cost to fulfill as the implementation services are performed. The costs will then be amortized over the estimated period of benefit beginning when the customer gains access to the SaaS.

The standard requires entities to expense costs that relate to satisfied (or portions of satisfied) performance obligations in the contract when they are incurred. This is true even if the associated revenue has not yet been recognized (e.g., the contract consideration is variable and has been fully or partially constrained). Once an entity has begun satisfying a performance obligation that is satisfied over time, it should only capitalize costs that relate to future performance. Accordingly, it may be challenging for an entity to capitalize costs related to a performance obligation that the entity has already started to satisfy. If an entity is unable to determine whether certain costs relate to past or future performance, and the costs are not eligible for capitalization under other US GAAP guidance, the costs are expensed as incurred.

In addition to direct labor and material costs, examples of costs the standard requires to be capitalized if certain criteria are met include management and supervision, insurance and depreciation of the tools and equipment used to fulfill the contract. Technology entities therefore have to exercise significant judgment to identify all the costs that should be capitalized.

The standard significantly increases the volume of required revenue disclosures.

How we see it

A technology entity may incur costs that are required to be capitalized when it performs implementation services for SaaS or software that are not distinct or when it performs IT outsourcing services. Determining whether the costs associated with implementation services for SaaS or software are required to be capitalized may require judgment.

A technology entity first must determine whether the implementation services are a separate performance obligation. If these services are determined to be a separate performance obligation, the related costs are expensed as incurred.

If a technology entity determines that implementation services are not a separate performance obligation, it needs to evaluate whether the related costs meet the three criteria in the standard to be capitalized. As part of this assessment, an entity needs to evaluate whether the costs generate or enhance resources of the entity that will be used in satisfying performance obligations in the future, including whether the implementation services are required for the customer to use the SaaS or software. This evaluation may be challenging.

Disclosure requirements (updated January 2020)

The standard significantly increases the volume of interim and annual disclosures. For public entities, these disclosures include disaggregated revenues, qualitative and quantitative information about contracts with customers, significant judgments made in applying the standard, and costs to obtain or fulfill a contract. Nonpublic entities can choose to provide the same or streamlined disclosures.

Some of the specific disclosure requirements that may affect technology entities include:

- ▶ Entities must provide a description of their performance obligations, including an explanation of when the performance obligations are typically satisfied, significant payment terms and the nature of the goods or services that the entity has promised to transfer.
- ▶ Entities must disaggregate revenue (e.g., by product or service, geographical region) into categories that depict how the nature, amount, timing and uncertainty of revenue and cash flows are affected by economic factors. Entities also have to reconcile any differences between this disclosure and their segment disclosures. When determining the categories to use to disaggregate revenue, entities should consider how information about revenue has been presented for other purposes, including disclosures presented outside the financial statements and information the chief operating decision maker reviews to evaluate the performance of operating segments.
- ▶ Entities must disclose the aggregate amount of the transaction price that is allocated to performance obligations that are unsatisfied (or partially unsatisfied) as of the end of the reporting period. For example, if an entity estimates a total transaction price of \$5 million for a contract and has recognized \$3 million to date, it discloses that \$2 million of the transaction price is yet to be recognized, along with either quantitative or qualitative information on when the remaining transaction price is expected to be recognized.
- ▶ Entities must disclose significant accounting estimates and judgments made in determining the transaction price, allocating the transaction price to performance obligations and determining when performance obligations are satisfied. This requirement includes information about the methods, inputs and assumptions used for allocating the transaction price, including estimating standalone selling prices of promised goods and services.

Entities can elect to use an optional exemption that allows an entity not to make quantitative disclosures about remaining performance obligations in certain situations, including when contracts have an original expected duration of less than one year and when an estimate of the transaction price is made solely for disclosure purposes. These situations also include (1) when an entity applies the “right to invoice” practical expedient in ASC 606-10-55-18, (2) when an entity recognizes revenue for licenses of IP following the sales- and usage-based royalty recognition constraint and (3) when variable consideration is allocated entirely to a wholly unsatisfied performance obligation or to a wholly unsatisfied promise to transfer a distinct good or service that forms part of a single performance obligation (i.e., a series of distinct goods or services) when certain criteria are met.

Entities that elect to use any of the standard’s optional exemptions that allow them not to disclose the aggregate transaction price allocated to the remaining performance obligations must disclose which optional exemption(s) they are applying, the nature of the performance obligations, the remaining duration of the contract and a description of the variable consideration that has been excluded from the disclosure (e.g., the nature of the variability and how that variability will be resolved).

How we see it

Preparing the required interim and annual disclosures may require significant effort. Entities need to make sure that they have appropriate policies and procedures, systems and internal controls in place to collect and disclose the required information.

Endnotes:

- ¹ Accounting Standards Codification (ASC) 606, *Revenue from Contracts with Customers*, as amended, was created by Accounting Standards Update (ASU) 2014-09, *Revenue from Contracts with Customers*, and various amendments.
- ² ASU 2020-05, *Revenue from Contracts with Customers (Topic 606) and Leases (Topic 842): Effective Dates for Certain Entities*.
- ³ ASU 2016-13, *Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*.
- ⁴ ASC 985-20-15-5.
- ⁵ Paragraph BC37 of ASU 2016-10, *Identifying Performance Obligations and Licensing*.
- ⁶ ASC 606-10-55-141 through 55-145.
- ⁷ Although the standard does not describe this evaluation in detail, it indicates that the technical support and updates are capable of being distinct. While the technical support and updates do not provide any benefit to the customer without the software license, they are capable of being distinct because they can each provide benefit to the customer together with the software license, which is considered a readily available resource. The software license is considered readily available given that it is a resource that is already transferred to the customer under the contract.
- ⁸ ASC 606-10-55-140D through 55-140F.
- ⁹ Paragraph BC71 of ASU 2016-10.
- ¹⁰ Paragraph BC416 of ASU 2014-09.
- ¹¹ Speech by the SEC’s former chief accountant, 9 June 2016. Refer to SEC website at <https://www.sec.gov/news/speech/bricker-remarks-35th-financial-reporting-institute-conference.html>.
- ¹² The FASB and the International Accounting Standards Board (IASB) created the TRG to help them determine whether more guidance is needed on their new revenue standards (ASC 606 and the IASB’s standard, IFRS 15 *Revenue from Contracts with Customers*) and to educate constituents. While the group met jointly in 2014 and 2015, only FASB TRG members participated in meetings in 2016.
- ¹³ 9 November 2015 TRG meeting; agenda paper no. 45.
- ¹⁴ ASC 606-10-32-36 through 32-38.
- ¹⁵ ASC 606-10-32-39 through 32-41.
- ¹⁶ Paragraph BC271 of ASU 2014-09.
- ¹⁷ ASC 606-10-32-34(c).
- ¹⁸ The portion of a bundled price for a software license and PCS that relates only to the software license.
- ¹⁹ ASC 340-40, *Other Assets and Deferred Costs – Contracts with Customers*, was created by ASU 2014-09.
- ²⁰ ASC 985-605-05-1.
- ²¹ ASC 985-605-25-7.

- ²² Paragraph BC116 of ASU 2014-09.
- ²³ 13 July 2015 TRG meeting; agenda paper no. 39.
- ²⁴ Paragraph BC284 of ASU 2014-09.
- ²⁵ 18 April 2016 TRG meeting; agenda paper no. 54.
- ²⁶ 26 January 2015 TRG meeting; agenda paper no. 16.
- ²⁷ 26 January 2015 TRG meeting; agenda paper no. 25.
- ²⁸ ASC 606-10-55-244 through 55-246.
- ²⁹ 9 November 2015 TRG meeting; agenda paper no. 48.
- ³⁰ ASC 606-10-55-114 through 55-116.
- ³¹ This accounting treatment is also achieved when an arrangement does not meet any of the other criteria in ASC 606-10-25-1 to be accounted for as a contract with a customer.
- ³² Paragraph BC31 of ASU 2016-08, *Revenue from Contracts with Customers (Topic 606): Principal versus Agent Considerations*.
- ³³ Paragraph BC16 of ASU 2016-08.
- ³⁴ ASC 606-10-55-317 through 55-319.
- ³⁵ Paragraph BC38 of ASU 2016-08.
- ³⁶ SEC Staff Accounting Bulletin Topic 13 notes entities should consider the guidance on extended payment terms in ASC 985-605 even if the arrangement is not subject to the scope of that standard.
- ³⁷ ASC 606-10-55-216 through 55-220.
- ³⁸ 13 July 2015 TRG meeting; agenda paper no. 41.
- ³⁹ 7 November 2016 TRG meeting; agenda paper no. 57.
- ⁴⁰ 26 January 2015 TRG meeting; agenda paper no. 23.
- ⁴¹ Paragraph BC309 of ASU 2014-09.

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Appendix A: The five-step revenue model and contract costs

The standard's core principle is that an entity recognizes revenue at an amount that reflects the consideration to which the entity expects to be entitled in exchange for transferring goods or services to a customer. That principle is applied using five steps that require entities to exercise judgment when considering the terms of their contract(s) and all relevant facts and circumstances. Entities have to apply the requirements of the standard consistently to contracts with similar characteristics and in similar circumstances. This table summarizes the new revenue model and the guidance for contract costs.

Step 1: Identify the contract(s) with the customer
<p><i>Definition of a contract</i></p> <p>An entity must first identify the contract, or contracts, to provide goods and services to customers. A contract must create enforceable rights and obligations to fall within the scope of the model in the standard. Such contracts may be written, oral or implied by an entity's customary business practices but must meet the following criteria:</p> <ul style="list-style-type: none"> ▶ The parties to the contract have approved the contract (in writing, orally or based on their customary business practices) and are committed to perform their respective obligations ▶ The entity can identify each party's rights regarding the goods or services to be transferred ▶ The entity can identify the payment terms for the goods or services to be transferred ▶ The contract has commercial substance (i.e., the risk, timing or amount of the entity's future cash flows is expected to change as a result of the contract) ▶ It is probable that the entity will collect substantially all of the consideration to which it will be entitled in exchange for the goods or services that will be transferred to the customer <p>If these criteria are not met, an entity would not account for the arrangement using the model in the standard and would recognize any nonrefundable consideration received as revenue only when certain events have occurred.</p> <p><i>Contract combination</i></p> <p>The standard requires entities to combine contracts entered into at or near the same time with the same customer (or related parties of the customer) if they meet any of the following criteria:</p> <ul style="list-style-type: none"> ▶ The contracts are negotiated as a package with a single commercial objective ▶ The amount of consideration to be paid in one contract depends on the price or performance of another contract ▶ The goods or services promised in the contracts (or some goods or services promised in each of the contracts) are a single performance obligation <p><i>Contract modifications</i></p> <p>A contract modification is a change in the scope and/or price of a contract. A contract modification is accounted for as a new contract separate from the original contract if the modification adds distinct goods or services at a price that reflects the standalone selling prices of those goods or services. Contract modifications that are not accounted for as separate contracts are considered changes to the original contract and are accounted for as follows:</p> <ul style="list-style-type: none"> ▶ If the goods and services to be transferred after the contract modification are distinct from the goods or services transferred on or before the contract modification, the entity should account for the modification as if it were the termination of the old contract and the creation of a new contract ▶ If the goods and services to be transferred after the contract modification are not distinct from the goods and services already provided and, therefore, form part of a single performance obligation that is partially satisfied at the date of modification, the entity should account for the contract modification as if it were part of the original contract ▶ A combination of the two approaches above: a modification of the existing contract for the partially satisfied performance obligations and the creation of a new contract for the distinct goods and services

Step 2: Identify the performance obligation(s) in the contract

An entity must identify the promised goods and services within the contract and determine which of those goods and services (or bundles of goods and services) are separate performance obligations (i.e., the unit of accounting for purposes of applying the standard). An entity is not required to assess whether promised goods or services are performance obligations if they are immaterial in the context of the contract.

A promised good or service represents a performance obligation if (1) the good or service is distinct (by itself or as part of a bundle of goods or services) or (2) the good or service is part of a series of distinct goods or services that are substantially the same and have the same pattern of transfer to the customer.

A good or service (or bundle of goods or services) is distinct if both of the following criteria are met:

- ▶ The customer can benefit from the good or service either on its own or together with other resources that are readily available to the customer (i.e., the good or service is capable of being distinct)
- ▶ The entity's promise to transfer the good or service to the customer is separately identifiable from other promises in the contract (i.e., the promise to transfer the good or service is distinct within the context of the contract)

In assessing whether an entity's promise to transfer a good or service is separately identifiable from other promises in the contract, entities need to consider whether the nature of the promise is to transfer each of those goods or services individually or to transfer a combined item or items to which the promised goods or services are inputs. Factors that indicate two or more promises to transfer goods or services are not separately identifiable include, but are not limited to, the following:

- ▶ The entity provides a significant service of integrating the goods or services with other goods or services promised in the contract into a bundle of goods or services that represent the combined output or outputs for which the customer has contracted
- ▶ One or more of the goods or services significantly modify or customize, or are significantly modified or customized by, one or more of the other goods or services promised in the contract
- ▶ The goods or services are highly interdependent or highly interrelated. In other words, each of the goods or services is significantly affected by one or more of the other goods or services in the contract

If a promised good or service is not distinct, an entity is required to combine that good or service with other promised goods or services until it identifies a bundle of goods or services that is distinct.

Series guidance

Goods or services that are part of a series of distinct goods or services that are substantially the same and have the same pattern of transfer to the customer must be combined into one performance obligation. To meet the same pattern of transfer criterion, each distinct good or service in the series must represent a performance obligation that would be satisfied over time and would have the same measure of progress toward satisfaction of the performance obligation (both discussed in Step 5), if accounted for separately.

Customer options for additional goods or services

A customer's option to acquire additional goods or services (e.g., an option for free or discounted goods or services) is accounted for as a separate performance obligation if it provides a material right to the customer that the customer would not receive without entering into the contract (e.g., a discount that exceeds the range of discounts typically given for those goods or services to that class of customer in that geographical area or market).

Principal versus agent considerations

When more than one party is involved in providing goods or services to a customer, an entity must determine whether it is a principal or an agent in these transactions by evaluating the nature of its promise to the customer. An entity is a principal and therefore records revenue on a gross basis if it controls the specified good or service before transferring that good or service to the customer. An entity is an agent and records as revenue the net amount it retains for its agency services if its

role is to arrange for another entity to provide the specified goods or services. Because it is not always clear whether an entity controls a specified good or service in some contracts (e.g., those involving intangible goods and/or services), the standard also provides indicators of when an entity may control the specified good or service as follows:

- ▶ The entity is primarily responsible for fulfilling the promise to provide the specified good or service
- ▶ The entity has inventory risk before the specified good or service has been transferred to a customer or after transfer of control to the customer (e.g., if the customer has a right of return)
- ▶ The entity has discretion in establishing the price for the specified good or service

Step 3: Determine the transaction price

The transaction price is the amount of consideration to which an entity expects to be entitled in exchange for transferring promised goods or services to a customer. When determining the transaction price, entities need to consider the effects of all of the following:

Variable consideration

An entity needs to estimate any variable consideration (e.g., amounts that vary due to discounts, rebates, refunds, price concessions, bonuses) using either the expected value method (i.e., a probability-weighted amount method) or the most likely amount method (i.e., a method to choose the single most likely amount in a range of possible amounts). An entity's method selection is not a "free choice" and must be based on which method better predicts the amount of consideration to which the entity will be entitled. To include variable consideration in the estimated transaction price, the entity has to conclude that it is probable that a significant revenue reversal will not occur in future periods. This "constraint" on variable consideration is based on the probability of a reversal of an amount that is significant relative to cumulative revenue recognized for the contract. The standard provides factors that increase the likelihood or magnitude of a revenue reversal, including the following: the amount of consideration is highly susceptible to factors outside the entity's influence, the entity's experience with similar types of contracts is limited or that experience has limited predictive value, or the contract has a large number and broad range of possible outcomes. The standard requires an entity to estimate variable consideration, including the application of the constraint, at contract inception and update that estimate at each reporting date.

Significant financing component

An entity needs to adjust the transaction price for the effects of the time value of money if the timing of payments agreed to by the parties to the contract provides the customer or the entity with a significant financing benefit. As a practical expedient, an entity can elect not to adjust the transaction price for the effects of a significant financing component if the entity expects at contract inception that the period between payment and performance will be one year or less.

Noncash consideration

When an entity receives, or expects to receive, noncash consideration (e.g., property, plant or equipment, a financial instrument), the fair value of the noncash consideration at contract inception is included in the transaction price.

Consideration paid or payable to the customer

Consideration payable to the customer includes cash amounts that an entity pays, or expects to pay, to the customer, credits or other items (vouchers or coupons) that can be applied against amounts owed to the entity or equity instruments granted in conjunction with selling goods or services. An entity should account for consideration paid or payable to the customer as a reduction of the transaction price and, therefore, of revenue unless the payment to the customer is in exchange for a distinct good or service. However, if the payment to the customer exceeds the fair value of the distinct good or service received, the entity should account for the excess amount as a reduction of the transaction price.

Step 4: Allocate the transaction price to the performance obligations in the contract

For contracts that have multiple performance obligations, the standard generally requires an entity to allocate the transaction price to the performance obligations in proportion to their standalone selling prices (i.e., on a relative standalone selling price basis). When allocating on a relative standalone selling price basis, any discount within the contract generally is allocated proportionately to all of the performance obligations in the contract. However, there are two exceptions.

One exception requires variable consideration to be allocated entirely to a specific part of a contract, such as one or more (but not all) performance obligations or one or more (but not all) distinct goods or services promised in a series of distinct goods or services that forms part of a single performance obligation, if both of the following criteria are met:

- ▶ The terms of a variable payment relate specifically to the entity's efforts to satisfy the performance obligation or transfer the distinct good or service
- ▶ Allocating the variable consideration entirely to the performance obligation or the distinct good or service is consistent with the objective of allocating consideration in an amount that depicts the consideration to which the entity expects to be entitled in exchange for transferring the promised goods or services to the customer

The other exception requires an entity to allocate a contract's entire discount to only those goods or services to which it relates if certain criteria are met.

To allocate the transaction price on a relative standalone selling price basis, an entity must first determine the standalone selling price of the distinct good or service underlying each performance obligation. The standalone selling price is the price at which an entity would sell a good or service on a standalone (or separate) basis at contract inception. Under the model, the observable price of a good or service sold separately in similar circumstances to similar customers provides the best evidence of standalone selling price. However, in many situations, standalone selling prices will not be readily observable. In those cases, the entity must estimate the standalone selling price by considering all information that is reasonably available to it, maximizing the use of observable inputs and applying estimation methods consistently in similar circumstances. The standard states that suitable estimation methods include, but are not limited to, an adjusted market assessment approach, an expected cost plus a margin approach or a residual approach (if certain conditions are met).

Step 5: Recognize revenue when (or as) the entity satisfies a performance obligation

An entity recognizes revenue only when (or as) it satisfies a performance obligation by transferring control of the promised good(s) or service(s) to a customer. The transfer of control can occur over time or at a point in time.

A performance obligation is satisfied at a point in time unless it meets one of the following criteria, in which case it is satisfied over time:

- ▶ The customer simultaneously receives and consumes the benefits provided by the entity's performance as the entity performs
- ▶ The entity's performance creates or enhances an asset that the customer controls as the asset is created or enhanced
- ▶ The entity's performance does not create an asset with an alternative use to the entity, and the entity has an enforceable right to payment for performance completed to date

The transaction price allocated to performance obligations satisfied at a point in time is recognized as revenue when control of the goods or services transfers to the customer. If the performance obligation is satisfied over time, the transaction price allocated to that performance obligation is recognized as revenue as the performance obligation is satisfied. To do this, the standard requires an entity to select a single revenue recognition method (i.e., measure of progress) that faithfully depicts the pattern of the transfer of control over time (i.e., an input method or an output method).

Licenses of intellectual property

The standard provides guidance on the recognition of revenue for licenses of IP that differs from the model for other promised goods and services. The nature of the promise in granting a license of IP to a customer is either:

- ▶ A right to access the entity's IP throughout the license period (a right to access)
- ▶ A right to use the entity's IP as it exists at the point in time in which the license is granted (a right to use)

To determine whether the entity's promise is to provide a right to access its IP or a right to use its IP, the entity should consider the nature of the IP to which the customer will have rights. The standard requires entities to classify IP in one of two categories:

- ▶ **Functional:** This IP has significant standalone functionality (e.g., many types of software, completed media content such as films, television shows and music). Licenses of functional IP generally grant a right to use the entity's IP, and revenue for these licenses generally is recognized at the point in time when the IP is made available for the customer's use and benefit. This is the case if the functionality is not expected to change substantially as a result of the licensor's ongoing activities that do not transfer an additional promised good or service to the customer. If the functionality of the IP is expected to substantively change because of activities of the licensor that do not transfer additional promised goods or services, and the customer is contractually or practically required to use the latest version of the IP, revenue for the license is recognized over time. However, we expect licenses of functional IP to meet the criteria to be recognized over time infrequently, if at all.
- ▶ **Symbolic:** This IP does not have significant standalone functionality (e.g., brands, team and trade names, character images). The utility (i.e., the ability to provide benefit or value) of symbolic IP is largely derived from the licensor's ongoing or past activities (e.g., activities that support the value of character images). Licenses of symbolic IP grant a right to access an entity's IP, and revenue from these licenses is recognized over time as the performance obligation is satisfied (e.g., over the license period).

Revenue cannot be recognized from a license of IP before both (1) an entity provides (or otherwise makes available) a copy of the IP to the customer and (2) the beginning of the period during which the customer is able to use and benefit from its right to access or its right to use the IP.

The standard specifies that sales and usage-based royalties on licenses of IP are recognized when the later of the following events occurs: (1) the subsequent sales or usage occurs or (2) the performance obligation to which some or all of the sales-based or usage-based royalty has been allocated has been satisfied (or partially satisfied). This guidance must be applied to the overall royalty stream when the sole or predominant item to which the royalty relates is a license of IP (i.e., these types of arrangements are either entirely in the scope of this guidance or entirely in the scope of the general variable consideration constraint guidance).

Contract costs

ASC 340-40 specifies the accounting for costs an entity incurs to obtain and fulfill a contract to provide goods and services to customers. The incremental costs of obtaining a contract (i.e., costs that would not have been incurred if the contract had not been obtained) are recognized as an asset if the entity expects to recover them. ASC 340-40 cites commissions as a type of incremental costs that may require capitalization. The standard provides a practical expedient that permits an entity to immediately expense contract acquisition costs when the asset that would have resulted from capitalizing these costs would have been amortized in one year or less.

An entity accounts for costs incurred to fulfill a contract with a customer that are within the scope of other authoritative guidance (e.g., inventory, property, plant and equipment, internal-use software) in accordance with that guidance. If the costs are not in the scope of other accounting guidance, an entity recognizes an asset from the costs incurred to fulfill a contract only if those costs meet all of the following criteria:

- ▶ The costs relate directly to a contract or to an anticipated contract that the entity can specifically identify
- ▶ 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
- ▶ The costs are expected to be recovered

Any capitalized contract costs are amortized, with the expense recognized as an entity transfers the related goods or services to the customer. Any asset recorded by the entity is subject to an impairment assessment.

Appendix B: Additional topics

Technology entities also may need to consider the issues addressed in the following sections of our FRD publication, ***Revenue from contracts with customers (ASC 606)***:

- ▶ Noncash consideration – section 5.6
- ▶ Consideration paid or payable to a customer – section 5.7
- ▶ Customer acceptance – section 7.2.1
- ▶ Warranties – section 9.1