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Implementing the new revenue guidance in the technology industry

A supplement

Contents

Introduction

Entities in the technology industry are among those experiencing the most significant impact of adopting the new revenue guidance in ASC 606, *Revenue from Contracts with Customers*. Due to the unique and complex arrangements that exist in this industry, particularly in software and software as a service (SaaS) arrangements, industry-specific guidance had developed over the years. ASC 606 supersedes all industry-specific guidance, including ASC 985-605, *Software: Revenue Recognition,* replacing specific rules with a single, principle-based model for recognizing revenue.

The core principle requires an entity to recognize revenue in a manner that depicts the transfer of products and/or services to a customer in an amount that reflects the consideration the entity expects to be entitled to in exchange for those products and/or services. To achieve the core principle, an entity should apply the following five-step model.

The five-step model

> An entity recognizes revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services.

This guide highlights changes in the new guidance from legacy GAAP, as well as specific implementation issues that technology entities face in applying the new guidance. For a comprehensive discussion of the full standard, download our guide, *Revenue from Contracts with Customers: Navigating the guidance in ASC 606 and ASC 340-40*, from grantthornton.com.

1. Key changes and implementation considerations for technology entities

While all industries are impacted by the new revenue standard to some degree, the technology industry is likely to be more affected by the new guidance and to encounter some of the more significant changes. In this section, we outline the key areas where technology entities may see significant changes to their revenue recognition policies and procedures depending on the terms of their contracts.

1.1 Multiple products or services

Many technology entities sell multiple products and services to their customers under a single contract. For example, an entity may license software, perform installation services, and provide unspecified software updates and technical support to a customer, all within the same arrangement. One of the most challenging aspects of the new revenue guidance in these arrangements is applying Step 2 in the new revenue model—identifying separate performance obligations within the contract. Identifying the correct performance obligations is critical to applying the remaining steps under the new revenue recognition model because the performance obligations establish the unit of account for recognizing revenue.

Entities must first identify all of the promised products or services to be provided to the customer in a contract and then must assess whether each promise is a separate performance obligation by determining if the promise is both

- Capable of being distinct
- Distinct within the context of the contract

ASC 606-10-25-19

A good or service that is promised to a customer is distinct if both of the following criteria are met:

a. 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 (that is, the good or service is capable of being distinct).

b. The entity's promise to transfer the good or service to the customer is separately identifiable from other promises in the contract (that is, the promise to transfer the good or service is distinct within the context of the contract).

1.1.1 Capable of being distinct

The first criterion that must be met to determine that a good or service is "distinct" is that the customer can benefit from the product or service either on its own or together with other resources that are "readily available." A customer can benefit from a product or service on its own if it can be used, consumed, sold for an amount greater than scrap value, or otherwise held in a way that generates economic benefits. Sometimes, a customer can benefit from a product or service only with other readily available resources.

A “readily available” resource is a product or service that is sold separately by the vendor or by another entity, or one that the customer has already obtained from the entity or from another transaction.

At the crossroads: Evaluating whether promises are capable of being distinct

Under ASC 606, evaluating whether promises are capable of being distinct is similar to, but not the same as, performing the stand-alone value assessment under legacy GAAP. Under legacy GAAP, in order for deliverables to be considered separate units of account, the delivered item or items had to have value to the customer on a stand-alone basis, meaning that they were sold separately by another vendor or the customer could resell the delivered item(s) on a stand-alone basis. Whether the product or service is sold separately or could be resold for more than scrap value are still factors to consider in evaluating whether a promise is capable of being distinct. However, entities also need to consider other factors under ASC 606, including the stand-alone *utility* of the product or service. In other words, under legacy GAAP, the product generally had to be sold on a stand-alone basis to be a separate element in a contract, but, under ASC 606, the product or service might be considered “capable of being distinct”, even if it is never sold on a stand-alone basis, as long as the customer can use the product or service on its own, without the other products or services with which it is being sold, it is considered capable of being distinct. However, technology entities still need to assess whether the promises are distinct within the context of the contract (see Section 1.1.2).

Technology entities that have previously identified separate deliverables under legacy guidance will often continue to identify the same promises as performance obligations under ASC 606. Furthermore, an item that was previously combined with undelivered elements within an arrangement under legacy guidance may be considered a separate performance obligation under ASC 606. Under legacy GAAP, the order of delivery had a significant impact on revenue recognition for software entities. The legacy guidance allowed software entities to account for a delivered item (for example, the software license delivered upfront) as a separate element only if the entity had vendor-specific objective evidence of fair value (VSOE) for the undelivered elements in the arrangement. Under ASC 606, the order of delivery and availability of VSOE for undelivered items does not affect whether promises qualify as separate performance obligations. For example, under legacy GAAP, in an arrangement with a software license and post-contract customer support (PCS), if VSOE did not exist for PCS, the software entity combined the software with the PCS and recognized revenue ratably over the PCS term. Under ASC 606 if the software and PCS meet the distinct criteria, the lack of VSOE for the PCS does not result in the combination of the software and PCS. Instead, entities should estimate the stand-alone selling price for both the software license and the PCS, and should allocate the transaction price between the two performance obligations.

1.1.2 Distinct within the context of the contract

The objective in assessing whether a promise to transfer a product or service to the customer is “distinct within the context of the contract” under ASC 606 is for an entity to determine whether the nature of the promise is to transfer these items individually or to transfer a combined item that includes the promised products or services as inputs. For instance, the promises to collaborate with the customer through weekly meetings when designing a customized software product, to create coding to meet the customer needs, to provide regular status updates in the form of a weekly report, and to test the software prior to delivery might all be inputs into a single promise to develop a software product for the customer. Significant judgment may be required to determine whether promised products or services are distinct within the context of the contract.

Legacy GAAP focused on whether one element is essential to the functionality of another element when determining separate units of account. In contrast, the guidance in ASC 606 requires technology entities to focus on whether the promises are separately identifiable. The new guidance provides three factors that indicate a promise to transfer products or services is not separately identifiable from other products or services in the contract:

- The contract calls for significant integration services.
- One or more of the items must be significantly modified or customized, or is used to modify or customize other products or services in the contract.
- The products or services are highly interdependent or highly interrelated.

ASC 606-10-25-21

In assessing whether an entity's promises to transfer goods or services to the customer are separately identifiable in accordance with paragraph 606-10-25-19(b), the objective is to determine whether the nature of the promise, within the context of the contract, is to transfer each of those goods or services individually or, instead, to transfer a combined item or items to which the promised goods or services are inputs. Factors that indicate that two or more promises to transfer goods or services to a customer are not separately identifiable include, but are not limited to, the following:

a. The entity provides a significant service of integrating 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. In other words, the entity is using the goods or services as inputs to produce or deliver the combined output or outputs specified by the customer. A combined output or outputs might include more than one phase, element, or unit.

b. One or more of the goods or services significantly modifies or customizes, or are significantly modified or customized by, one or more of the other goods or services promised in the contract.

c. 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. For example, in some cases, two or more goods or services are significantly affected by each other because the entity would not be able to fulfill its promise by transferring each of the goods or services independently.

Significant integration service

The first indicator that two or more promises to transfer products or services are not separately identifiable from other products or services in the contract is that the entity provides significant integration services. Stated differently, the entity is using the products or services as inputs to produce the combined output called for in the contract, like when an entity promises to install an internal network server for a customer. In this example, the servers, routers, patch panels, switches, monitors, racks, cables, and fans are all capable of being distinct; however, the entity provides a significant integration service by delivering a fully functional internal network server, as opposed to each individual item.

This factor may be relevant for software development contracts with significant integration services, but it should not be applied broadly to situations in which the risk that the entity assumes in integrating the promised products or services is negligible (for example, simple installation of software that does not require significant modification). As a result, the FASB provided additional clarification for many software-type contracts by including the indicator that two or more promises significantly modify or customize each other.

Significant modification or customization

In the technology industry, the notion of “inseparable risks” can be illustrated by assessing whether one product or service significantly modifies or customizes another product or service in the contract, in which case, the products or services are inputs into a combined output—a customized product. For example, if an entity promises to provide a customer with software and also promises to customize that software so that it will operate within the customer’s existing infrastructure, the risk of providing the software may be inseparable from the customization service, which indicates that the software and customization service are not separately identifiable and therefore are not distinct within the context of the contract.

Highly interdependent or highly interrelated

The third factor that indicates two or more promises to transfer products or services are not separately identifiable from other products or services in the contract is when the products or services are highly interdependent or highly interrelated. For example, the license and the updates for anti-virus software, which are critical to the continued utility of the software, are considered highly interdependent. There is a two-way dependency between the software and the updates because neither product would function effectively without the other. In other words, the updates are integral to maintaining the utility of the software. On the other hand, a license for financial reporting software and related when-and-if available updates would be considered distinct if the updates are not necessary to maintain the utility of the software. In this case, there is no two-way dependency between the two promises.

1.1.3 Professional services

Many technology contracts include professional services, such as installation, integration, training, data migration, or customization. Technology entities need to evaluate these services to determine if they are distinct, which may require significant judgment. Some of the indicators that may be considered when evaluating whether professional services are capable of being distinct are included in the following table.

Figure 1.1: Evaluating whether professional services are capable of being distinct

Indicators that professional services are capable of being distinct	Indicators that professional services are NOT capable of being distinct
Services are not complex	Services are complex
Services can be performed by other providers	Services can only be performed by the vendor
Promised products in the contract have stand-alone functionality	Promised products in the contract do not function without additional integration or customization services

These indicators are not determinative, but may be helpful considerations when assessing whether professional services are capable of being distinct. See Section 2.6 and Section 3.2 to see how professional services may be evaluated in software and SaaS arrangements, respectively.

If the services are capable of being distinct, the entity would then need to evaluate whether they are distinct in the context of the contract. See Section 1.1.2 for the criteria to be considered when evaluating whether goods and services are distinct in the context of the contract.

1.1.4 Hosting arrangements that include a software license

Technology entities may transfer access to a software license, along with hosting services, to customers under the same arrangement. Entities need to evaluate whether a hosting arrangement includes a performance obligation for the software license. Consistent with legacy GAAP, a hosting contract includes a software license under ASC 606 if both of the following criteria in ASC 985-20-15-5 are met:

a. The customer can, under the terms of the contract, take possession of the software at any time during the hosting period without incurring a significant penalty.

b. The customer can feasibly either run the software on its own hardware or contract with another party unrelated to the vendor to host the software.

If both criteria are not met, the contract is considered a hosting service agreement and does not include a software license. If both criteria are met, the software license and hosting are capable of being distinct, but the entity must still evaluate whether the software license and hosting service are distinct within the context of the contract or whether they are a combined promise.

Grant Thornton insights: Shift toward hosted solutions

In recent years, many technology entities have shifted away from a delivered software model to a hosted model. In line with these changes, entities should reevaluate their accounting for these arrangements as they may see a shift from a single performance obligation for the on-premise software license, to either two separate performance obligations (software license and hosting) or a single performance obligation for the combined hosted software service.

Software entities that have typically identified maintenance services as a separate element from software licenses need to reevaluate this conclusion during the shift to a hosting services model. Maintenance of the software would generally not be considered a separate performance obligation in a hosting arrangement if the customer cannot take possession of the software and cannot host the software either internally or with a third party. In a hosting arrangement accounted for as a service, any maintenance updates or modifications made to the software are conducted at the service provider level because the customer does not obtain control of the software. The maintenance services do not transfer control of additional products or services to the customer that are separate from the hosting service and accordingly do not represent a separate performance obligation in the contract.

On-premise software license and SaaS

Some technology entities provide an on-premise software license and SaaS together in the same arrangement. For example, an entity may provide access to hosted software that also operates in “offline” mode. Conversely, an entity may provide on-premise software with certain additional features that are hosted online and only available when connected to the internet.

Under ASC 606, entities need to evaluate whether the on-premise software and SaaS are separate performance obligations. This evaluation generally hinges on whether the on-premise software and SaaS are distinct within the context of the contract. The key is to determine whether integrating the on-premise software and SaaS together either transforms the product into a new and different product or merely adds functionality to an already functional product. If the combination of software and SaaS in the same arrangement is transformative and creates a combined product or service that results in greater functionality or utility than the sum of the functionality of the two promises, the combination is accounted for as one performance obligation. If, on the other hand, combining the on-premise software and SaaS in a single arrangement adds negligible value, the software license and SaaS are considered separate performance obligations. In other words, entities should evaluate whether the combined functionality is simply the sum of the individual functionality of the on-premise software and SaaS, or if the combination of the on-premise software and SaaS creates additional functionality that would not exist independently in each product.

Hybrid arrangement

An entity enters into a contract with a customer to provide music streaming services for a monthly payment of $10. In addition to providing access to the entity's online music library, the entity also provides the customer with a license to download software and content and play the downloaded content using the entity's software, which is installed on the customer's device and can be accessed for as long as the customer continues to pay the monthly fee. The customer obtains possession of the licensed software that allows it to use the downloaded content without being connected to the online library. However, the customer must connect to the online library to obtain new content and access music that has not already been downloaded onto the customer's device.

The entity regularly provides access to the online music library without also providing a license to download the software. Therefore, the customer can benefit from the software license and the SaaS on their own or with other readily available resources and they are considered capable of being distinct. The entity must also evaluate whether the SaaS and the software license are distinct within the context of the contract. When performing this evaluation, the entity must consider whether the customer's ability to play music offline and to access the hosted library of music online create a combined product that is greater (provides an enhanced level of functionality) than the sum of the two individual elements (see Section 1.1.2).

Ancillary software and hosting

In some cases, technology entities provide hosting services and access to more than one software product in a single arrangement. When evaluating whether the software and hosting services are distinct, an entity should consider each software product individually. In some arrangements, there may be a hosted software product that does not meet the criteria to be accounted for as a license (see Section 3.1), but the contract also includes an ancillary software that may be considered a separate license that is capable of being distinct and distinct in the context of the contract.

Ancillary software in a hosted arrangement

SaaS Entity A provides hospitals with access to an electronic health record (EHR) hosted software. SaaS Entity A entered into an arrangement with Customer B, a large hospital. Customer B cannot take possession of the EHR software and lacks the ability to host the software on its own or on third party hardware. As a result, the entity determines that the arrangement does not include a software license for the EHR software and identifies a single performance obligation for the hosted service.

The contract includes a staff scheduling software product. The scheduling software does not significantly modify or transform the functionality of the EHR software. Unlike the EHR software, Customer B can take possession of and host the scheduling software, but chooses to have the entity host the software as a matter of convenience. The scheduling software is therefore considered distinct from the hosting service and qualifies as functional intellectual property (IP).

SaaS Entity A identifies three performance obligations in this arrangement: the hosted EHR software, the software license for the scheduling software, and the hosting services for the scheduling software.

1.1.5 Implied promises

While most promises are explicitly stated in a contract, promises may also be implied by an entity's customary business practices, published policies, or specific statements that, at contract inception, lead the customer to reasonably expect that the entity will transfer a product or service. An entity should asses implied promises to determine whether they are distinct and represent performance obligations under the contract. For example, access to when-and-if-available software upgrades may create an implied promise that is not explicitly stated in the contract if the technology entity has a history of providing upgrades or has specifically indicated that it will provide an upgrade in other communications with the customer.

Grant Thornton insights: Vendor communications create implied promises

Entities may be required to use significant judgment when considering whether their communications create a valid customer expectation to receive a distinct product or service in the future. They should consider the level of specificity in describing the promise in the communication, including, but not limited to, the functionality and timing of the product or service release. For example, if an entity makes a public announcement about the features and functionality of a pending upgrade in its marketing materials, on its website, or in other similar communications, customer contracts near the time of the communications may include an implied promise for the upgrade. The entity should evaluate whether the promised upgrade is distinct and constitutes a separate performance obligation in those contracts.

The following examples illustrate how a technology entity might evaluate potential implied promises.

Identifying implied promises

Scenario A

Company A sells hardware devices and software that runs on the hardware device. At a trade show attended by existing and potential customers, Company A announces plans to launch an updated version of its software within the next month. Company A determines that there are no explicit or implied promises to deliver the upgrade in contracts entered into before the announcement. But for customers that enter into contracts after the trade show, Company A determines that the announcement creates a reasonable expectation that they will receive the updated version when it is available. As a result, Company A must evaluate the implied promise for the updated software version with each new contract for the hardware with the existing software version to determine whether it represents a distinct performance obligation.

Scenario B

Software Company B's standard contract does not include language promising to deliver future upgrades to customers, but the entity's past practices of providing upgrades to customers creates a valid expectation that the entity will provide future upgrades to customers. Software Company B determines that its contract terms include an implied promise of future upgrades that it must evaluate to determine whether that promise represents a distinct performance obligation.

Scenario C

Software Company C licenses software to a reseller. The entity has a practice of providing free technical support and when-and-if available updates to the reseller's end customers. Based on its customary business practice, Software Company C determines that the reseller and the end users reasonably expect that Software Company C will continue to provide these services. Therefore, the reseller contracts include an implied promise of technical support and when-and-if-available updates that must be evaluated to determine whether they represent a distinct performance obligations.

1.2 Series guidance

The new revenue guidance includes guidance that applies when an entity provides the same distinct products or services to the same customer over a period of time, such as when a SaaS provider offers continuous access to its platform for a year or a software entity provides PCS services. In these situations, technology entities should consider if the promised products or services in the contract meet the requirements of the "series guidance" in ASC 606. Under the series guidance, an entity must account for a series of distinct products or services that are substantially the same as a single performance obligation when both of these conditions are met:

- Each distinct product or service in the series meets the criteria to be accounted for as a performance obligation that is satisfied over time.
- The entity would use the same method to measure its progress toward satisfying each distinct product or service in the series.

ASC 606-10-25-15

A series of distinct goods or services has the same pattern of transfer to the customer if both of the following criteria are met:

a. Each distinct good or service in the series that the entity promises to transfer to the customer would meet the criteria in paragraph 606-10-25-27 to be a performance obligation satisfied over time.

b. In accordance with paragraphs 606-10-25-31 through 25-32, the same method would be used to measure the entity's progress toward complete satisfaction of the performance obligation to transfer each distinct good or service in the series to the customer.

When a performance obligation meets the definition of a series and the contract includes variable consideration that relates entirely to the distinct products or services forming the series, the entity may not be required to estimate total variable consideration. Instead, the entity should allocate the variable consideration entirely to the distinct products or services that form the series if both of the following conditions are met:

- The terms of the payment relate specifically to the entity's performance during that time period.
- Allocating the variable amount entirely to that time period is consistent with the overall allocation objective.

ASC 606-10-32-40

An entity shall allocate a variable amount (and subsequent changes to that amount) entirely to a performance obligation or to a distinct good or service that forms part of a single performance obligation in accordance with paragraph 606-10-25-14(b) if both of the following criteria are met:

a. 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 (or to a specific outcome from satisfying the performance obligation or transferring the distinct good or service).

b. Allocating the variable amount of consideration entirely to the performance obligation or the distinct good or service is consistent with the allocation objective in paragraph 606-10-32-28 when considering all of the performance obligations and payment terms in the contract.

ASC 606-10-32-28

The objective when allocating the transaction price is for an entity to allocate the transaction price to each performance obligation (or distinct good or service) in an amount that depicts the amount of consideration to which the entity expects to be entitled in exchange for transferring the promised goods or services to the customer.

The following example illustrates how to apply the series guidance in a SaaS arrangement.

Applying the series guidance

SaaS arrangement with fixed and variable fees

SaaS Provider B enters into a contract with a customer to provide access to its hosted platform for a fixed fee of $12,000 for a one-year period. The customer is also charged $10 for each report it prints from the platform. Historical data indicates that reports are printed relatively evenly throughout the contract period. The entity concludes that there is no software license transferred to the customer.

The entity identifies twelve promises in the contract: monthly access to the hosted platform. After evaluating the Step 2 criteria, the entity identifies one performance obligation: its service of providing continuous access to the platform, which constitutes a series because each month of service is distinct and meets the over-time recognition criteria (the customer simultaneously receives and consumes the benefits of the service as the entity performs) and the entity would use the same method to measure its progress in delivering the service (time elapsed).

In determining the transaction price, the entity notes that it is entitled to fixed consideration ($12,000 for the annual access to the platform) and to variable consideration based on the number of reports the customer prints using the platform. The entity recognizes the $12,000 fixed fee evenly over the year because access to the platform is transferred to the customer evenly over the contract period. The variable consideration associated with printing the reports is allocated entirely to each monthly time increment (a distinct service that forms part of a single performance obligation) because (1) the variable payments relate specifically to the entity's efforts to satisfy the promise to provide service for that monthly time increment, and (2) allocating the variable consideration to each month in which the reports are printed is consistent with the allocation objective. Therefore, the entity does not need to estimate the total variable consideration associated with the report printing.

SaaS arrangement with only variable fees

Assume the same facts as in the preceding example, except that report printing is generally concentrated around the end of each year and there is no fixed fee. Instead, the customer pays $20 every time it prints a report. SaaS Provider B determines that although the reports are generally printed at the end of the year, the usage of the platform is relatively consistent throughout the contract period. Because SaaS Provider B is offering access to the platform throughout the period but only receives payment when the customer prints a report, it cannot assert that the terms of payment relate specifically to the entity's performance of providing continued access to the platform or that allocating the variable amount entirely to the time period in which the fee is payable is consistent with the allocation objective. As a result, the entity must estimate total variable consideration, apply the constraint, and select a measure of progress that depicts the transfer of the service to the customer.

1.3 Pricing and payment terms

Many technology entities use a variety of pricing and payment strategies that must be evaluated under the new revenue recognition model. An entity must consider the impact of payment terms, such as price concessions, contingent revenue, and upfront fees, not only when estimating the transaction price in Step 3, but also when considering collectibility in Step 1, evaluating whether a contract contains an option that represents a material right and therefore, is a performance obligation in Step 2, and determining a measure of progress in Step 5 of the revenue model. Technology entities should also consider whether the payment terms include a financing component when determining the transaction price in Step 3, including when a contract contains extended payment terms (see Section 2.3).

1.3.1 Providing concessions and collectibility

Price concessions are a form of variable consideration that may exist in technology arrangements. When an entity expects to accept less than the contractual amount for transferring products and services to the customer, it should evaluate all relevant facts and circumstances, which may require significant judgment, to determine whether it has accepted a customer's credit risk or has provided an implicit price concession.

Under the new revenue guidance, an entity must determine at contract inception whether it is probable that it will collect substantially all of the consideration it is entitled to under the contract in exchange for transferring products or services to the customer. When an entity determines at contract inception that it is likely to grant a price concession to the customer, it must consider whether it is probable that it will collect the reduced amount of consideration after factoring in the expected price concession. It can sometimes be difficult for entities to distinguish between a price concession and a collectibility issue. However, it is important to make that distinction because a collectibility issue might lead an entity to conclude that a contract does not pass Step 1 (see Section 1.3.2), while a price concession for a contract that meets the collectibility criterion results in variable consideration that should be considered in estimating the transaction price in Step 3 of the revenue model.

When evaluating collectibility, an entity bases its assessment on whether the customer has the ability and intention to pay the promised consideration in exchange for the products or services that *will be transferred* under the contract, rather than assessing the collectibility of the consideration for *all* of the products or services promised under a contract. Entities should determine whether the contractual terms and their customary business practices indicate credit risk is mitigated.

For example, some software contracts require payments before any products or services are transferred to the customer. Any consideration received before the entity transfers the products or services are not subject to credit risk. In other cases, such as a SaaS arrangement, the entity may be able to stop transferring services under the contract if a customer fails to pay. In that situation, the entity should consider whether payment is probable for the promised products or services expected to be transferred to the customer before it stops providing the services rather than whether payment is probable for all the promised products or services in the contract.

Example 1—Collectibility of the Consideration

Case B—Credit Risk is Mitigated

ASC 606-10-55-98A

An entity, a service provider, enters into a three-year service contract with a new customer of low credit quality at the beginning of a calendar month.

ASC 606-10-55-98B

The transaction price of the contract is $720, and $20 is due at the end of each month. The standalone selling price of the monthly service is $20. Both parties are subject to termination penalties if the contract is cancelled.

ASC 606-10-55-98C

The entity's history with this class of customer indicates that while the entity cannot conclude it is probable the customer will pay the transaction price of $720, the customer is expected to make the payments required under the contract for at least 9 months. If, during the contract term, the customer stops making the required payments, the entity's customary business practice is to limit its credit risk by not transferring further services to the customer and to pursue collection for the unpaid services.

ASC 606-10-55-98D

In assessing whether the contract meets the criteria in paragraph 606-10-25-1, the entity assesses whether it is probable that the entity will collect substantially all of the consideration to which it will be entitled in exchange for the services that will be transferred to the customer. This includes assessing the entity's history with this class of customer in accordance with paragraph 606-10-55-3B and its business practice of stopping service in response to customer nonpayment in accordance with paragraph 606-10-55-3C. Consequently, as part of this analysis, the entity does not consider the likelihood of payment for services that would not be provided in the event of the customer's nonpayment because the entity is not exposed to credit risk for those services.

ASC 606-10-55-98E

It is not probable that the entity will collect the entire transaction price ($720) because of the customer's low credit rating. However, the entity's exposure to credit risk is mitigated because the entity has the ability and intention (as evidenced by its customary business practice) to stop providing services if the customer does not pay the promised consideration for services provided when it is due. Therefore, the entity concludes that the contract meets the criterion in paragraph 606-10-25-1(e) because it is probable that the customer will pay substantially all of the consideration to which the entity is entitled for the services the entity will transfer to the customer (that is, for the services the entity will provide for as long as the customer continues to pay for the services provided). Consequently, assuming the criteria in paragraph 606-10-25-1(a) through (d) are met, the entity would apply the remaining guidance in this Topic to recognize revenue and only reassess the criteria in paragraph 606-10-25-1 if there is an indication of a significant change in facts or circumstances such as the customer not making its required payments.

Grant Thornton insights: Price concession versus collectibility issue

ASC 606-10-32-7 provides guidance on factors an entity may consider to determine whether an entity has offered a price concession. It states, in part, that

> … The customer has a valid expectation arising from an entity's customary business practices, published policies, or specific statements that the entity will accept an amount of consideration that is less than the price stated in the contract. That is, it is expected that the entity will offer a price concession. …

Other possible indicators that suggest an entity is offering a price concession include

- A business practice of not performing a credit assessment prior to transferring promised products or services
- A customer's valid expectation that the entity will accept less than the contractually stated amount
- A business practice of continuing to perform despite historical experience suggesting that collection is not probable

Factors that may indicate a customer or pool of customers presents collectibility issues include

- The customer's financial condition has deteriorated.
- The entity has a pool (portfolio) of homogeneous customers with similar credit profiles, and while it expects that most will pay amounts when due, it expects that some will not.

There may be other relevant indicators, depending on the facts and circumstances.

If the entity expects to collect less than the stated amount in the contract due to a price concession rather than the customer's inability to pay, the contract passes Step 1 of the revenue model, and the transaction price is considered variable. When a contract includes a variable amount, the entity must estimate the transaction price under ASC 606. To estimate the variable consideration in a contract, an entity determines either the expected value or the most likely amount of consideration it will receive, depending on which method better predicts the amount the entity is entitled to collect.

ASC 606-10-32-5

If the consideration promised in a contract includes a variable amount, an entity shall estimate the amount of consideration to which the entity will be entitled in exchange for transferring the promised goods or services to a customer.

ASC 606-10-32-7

The variability relating to the consideration promised by a customer may be explicitly stated in the contract. In addition to the terms of the contract, the promised consideration is variable if either of the following circumstances exists:

a. The customer has a valid expectation arising from an entity's customary business practices, published policies, or specific statements that the entity will accept an amount of consideration that is less than the price stated in the contract. That is, it is expected that the entity will offer a price concession. Depending on the jurisdiction, industry, or customer this offer may be referred to as a discount, rebate, refund, or credit.

b. Other facts and circumstances indicate that the entity's intention, when entering into the contract with the customer, is to offer a price concession to the customer.

ASC 606-10-32-8

An entity shall estimate an amount of variable consideration by using either of the following methods, depending on which method the entity expects to better predict the amount of consideration to which it will be entitled:

a. The expected value—The expected value is the sum of probability-weighted amounts in a range of possible consideration amounts. An expected value may be an appropriate estimate of the amount of variable consideration if an entity has a large number of contracts with similar characteristics.

b. The most likely amount—The most likely amount is the single most likely amount in a range of possible consideration amounts (that is, the single most likely outcome of the contract). The most likely amount may be an appropriate estimate of the amount of variable consideration if the contract has only two possible outcomes (for example, an entity either achieves a performance bonus or does not).

After determining variable consideration, the entity must evaluate whether to constrain the amount of estimated variable consideration. The objective of the constraint required under ASC 606-10-32-11 is for an entity to include in the transaction price an amount that would not result in a significant reversal in subsequent reporting periods.

ASC 606-10-32-11

An entity shall include in the transaction price some or all of an amount of variable consideration estimated in accordance with paragraph 606-10-32-8 only to the extent that it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is subsequently resolved.

When an entity has a history of providing price concessions, it should factor that history into its estimation of the transaction price at contract inception, as demonstrated by the following example.

Assessing collectibility when a price concession is expected

A software vendor enters into an arrangement with a customer to license its software for a five-year term. The contract price is $500, with $100 paid each year. The vendor has a history of providing price concessions to customers for similar contracts. Taking the anticipated price concession into account, the vendor expects to collect $400 for the contract. At contract inception, the vendor determines that it is probable that it will collect the $400 and that the contract therefore passes Step 1, assuming all other criteria for the existence of a contract are met. The entity then considers whether it is probable that a significant reversal of revenue will not occur if it recognizes the $400 estimated transaction price as revenue.

If an entity subsequently grants a concession that was not anticipated at contract inception, it would apply the contract modification guidance in ASC 606-10-25-10 through 25-13 when accounting for the concession (see Section 1.7).

1.3.2 Contracts that do not 'pass' Step 1

If an entity determines at an arrangement's inception that an accounting contract, for purposes of applying ASC 606, does not exist, the entity should continue to reassess whether the five criteria for a contract are subsequently met.

A contract may not pass Step 1, but the entity may still transfer goods or services to the customer and receive nonrefundable consideration in exchange for those products or services. In this circumstance, the entity cannot recognize revenue for the nonrefundable consideration received until either the Step 1 criteria are subsequently met or one of the events outlined in ASC 606-10-25-7 has occurred, as discussed below.

ASC 606-10-25-7

When a contract with a customer does not meet the criteria in paragraph 606-10-25-1 and an entity receives consideration from the customer, the entity shall recognize the consideration received as revenue only when one or more of the following events have occurred:

a. The entity has no remaining obligations to transfer goods or services to the customer, and all, or substantially all, of the consideration promised by the customer has been received by the entity and is nonrefundable.

b. The contract has been terminated, and the consideration received from the customer is nonrefundable.

c. The entity has transferred control of the goods or services to which the consideration that has been received relates, the entity has stopped transferring goods or services to the customer (if applicable) and has no obligation under the contract to transfer additional goods or services, and the consideration received from the customer is nonrefundable.

Until the contract passes Step 1 or one of the above criteria is met, an entity should recognize the consideration received from a customer as a deposit liability.

Within the technology industry, the collection of amounts due from contracts where consideration is not deemed collectible at inception may be more likely if an entity has a less robust process for assessing collectibility because, for instance, it incurs little to no incremental cost to fulfill certain performance obligations or it has a practice of stopping a service in the event of customer nonpayment.

The following example indicates how a software vendor might apply the guidance when collectability is not probable and cash is received.

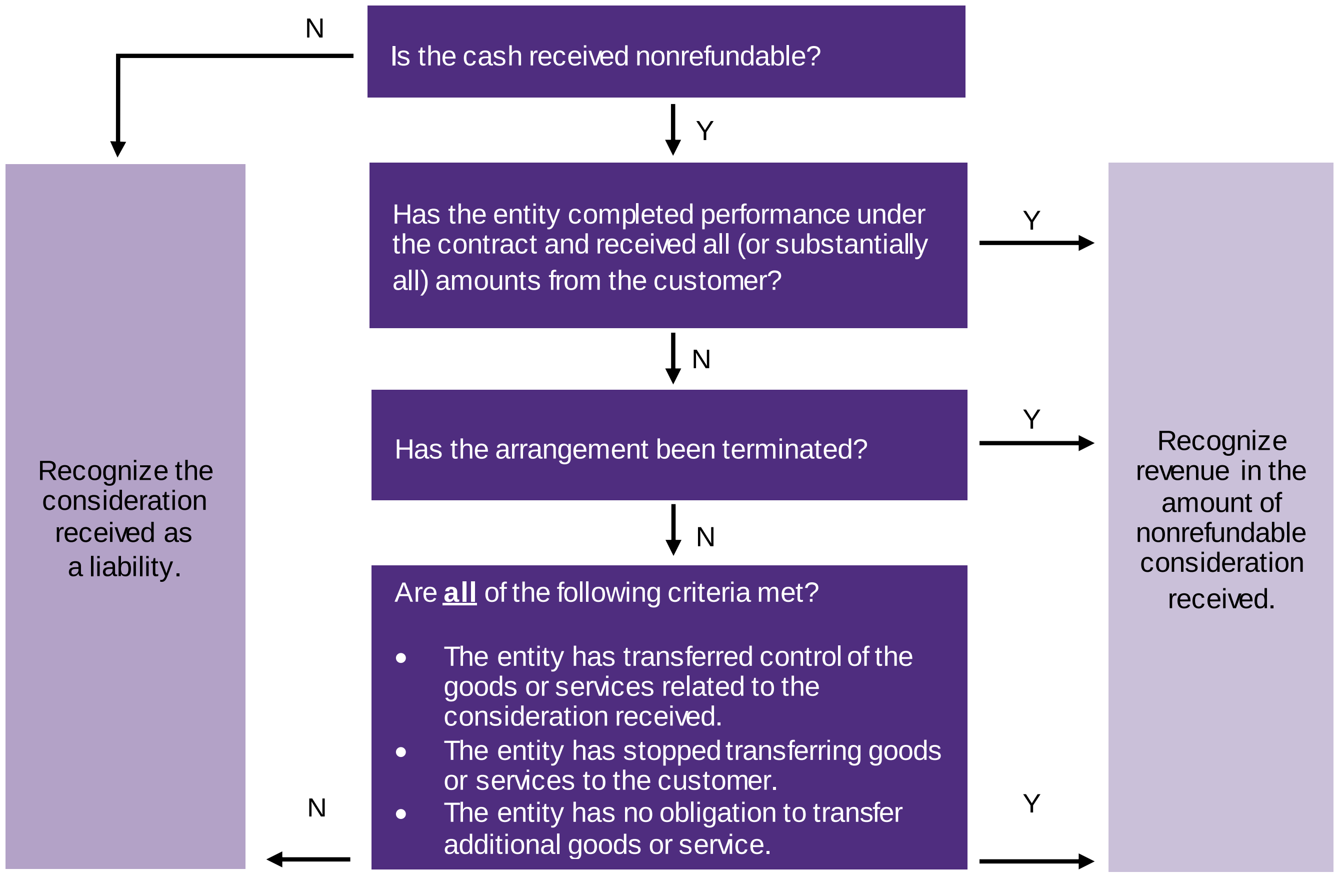
When collectibility is not probable and cash is received

A software vendor enters into an arrangement with a customer to provide a license to use its software for five years, and to provide maintenance services throughout the five-year term. The contract price is $200 per year or $1,000 in total. Because the vendor has a history of providing price concessions, it expects to be entitled to $900. The vendor determines that it is not probable it will collect the full $900 and therefore the contract does not pass Step 1 of the revenue model. The vendor continues to provide maintenance services and intends to pursue payment. At the end of year one, the customer makes a partial payment of $100, and the vendor still believes that collecting the remaining consideration is not probable.

The software vendor cannot recognize revenue of $100 because (1) it has concluded that it is not probable that it will collect substantially all of the consideration to which it is entitled under the contract, and (2) none of the events in ASC 606-10-25-7 has occurred. The vendor therefore recognizes a deposit liability of $100 for the consideration received until one of the events in ASC 606-10-25-7 occurs or the criteria in ASC 606-10-25-1 have been met.

The criteria to consider when accounting for cash received for a contract that does not pass Step 1 are outlined below in Figure 1.2.

Figure 1.2: When cash is received for a contract that does not pass Step 1



1.3.3 Contingent revenue

When a contract contains contingent revenue clauses (for example, an entity must provide future services to be entitled to payment for services already rendered), technology entities should first consider whether the contingency indicates that the customer has not committed to the contract, in which case, the contract would not pass Step 1 of the revenue model. If the customer is committed and the arrangement passes Step 1, then the technology entity should determine the total transaction price, including an estimate of the contingent amount, and recognize the transaction price when it transfers control of the products or services to the customer, whether at a point in time or over the period of service, using an appropriate measure of progress, as demonstrated in the following example.

Free service period

SaaS Provider C enters into a contract with a customer to provide one year of service: six months of free service and an additional six months of service for $100 per month. SaaS Provider C concludes that the contract includes a substantive early termination penalty. As a result, at contract inception, the entity determines that both parties are committed to the arrangement and that a one-year contract exists for the purposes of applying ASC 606 as of the beginning of the service period. SaaS Provider C estimates that the total transaction price is $600 and determines that a time-based measure of progress is most appropriate for recognizing revenue. SaaS Provider B therefore recognizes $50 of service revenue each month over the one-year period.

At the crossroads: No 'contingent revenue cap'

Under legacy GAAP, revenue was restricted to amounts that were fixed and determinable and not contingent on future performance. For example, if revenue or payment for current services was contingent upon a service that was not yet performed, only the portion of revenue that was not contingent on the future service would have been recognized. Under legacy GAAP, if a SaaS provider entered into a noncancellable contract for 12 months of service and provided the first six months of service for free, the entity was unable to recognize any revenue until the seventh month, as all revenue up to that point was contingent upon the SaaS provider providing services in months 7-12. In contrast, there is no "contingent revenue cap" under ASC 606, meaning there is no prohibition on allocating revenue contingent on future services to a delivered item, which could result in earlier revenue recognition under these arrangements.

1.3.4 Free trial periods

Some technology entities offer free trial periods to prospective customers to entice future business. These trial periods must be carefully evaluated to determine if evidence exists to support that the customer has approved the contract and is committed to perform, as shown in the example below.

Evaluating trial periods

A sports data technology entity provides up-to-date statistics on professional athletic teams. Customers may purchase an annual subscription to the online data service for $240 ($20 per month). The entity is offering a promotional trial period to prospective customers starting January 1, 20X8. Under the terms of the promotion, the entity offers new customers a free two-month trial period. If participants wish to sign up for a one-year subscription, they must notify the entity before the trial period lapses (February 28, 20X8). Subscribers will receive an invoice for the 12-month membership period, which ends February 28, 20X9.

Until the customer notifies the entity, either in writing or orally, that it has accepted the one-year offer, the entity may not conclude that the customer has approved the contract and is committed to pay for the yearlong services.

1.3.5 Nonrefundable upfront fees

Many technology entities require customers to pay a nonrefundable fee at or near contract inception. Under ASC 606, entities must consider whether that fee indicates the existence of a separate performance obligation for products or services to be transferred upfront (Step 2).

If the fee does not relate to a product or service transferred to the customer, then the fee is considered an advance payment for future services, and the entity recognizes the fee when or as it provides those services. For example, a customer may be required to pay a “setup” fee at the beginning of an arrangement. Often these fees cover administrative tasks involved in setting up a customer’s account, but do not relate to the transfer of a product or service. In such cases, there is no performance obligation for the setup activities and the fees are considered an advance payment for future products and services. The fee is included in the overall transaction price and recognized when, or as, the future products and services are provided. The revenue recognition period for these future products and services might extend beyond the initial term of the contract if the technology entity offers the customer renewal options that provide the customer with a material right, which is common in SaaS arrangements (see Section 3.3).

In arrangements with multiple performance obligations, the nonrefundable upfront fee should not be allocated to an individual performance obligation. The fees are included in the overall transaction price and the total price is allocated among the identified performance obligations in accordance with ASC 606-10-32-28 to 32-41.

ASC 606-10-25-17

Promised goods or services do not include activities that an entity must undertake to fulfill a contract unless those activities transfer a good or service to a customer. For example, a services provider may need to perform various administrative tasks to set up a contract. The performance of those tasks does not transfer a service to the customer as the tasks are performed. Therefore, those setup activities are not promised goods or services in the contract with the customer.

ASC 606-10-55-50

In some contracts, an entity charges a customer a nonrefundable upfront fee at or near contract inception. Examples include joining fees in health club membership contracts, activation fees in telecommunication contracts, setup fees in some services contracts, and initial fees in some supply contracts.

ASC 606-10-55-51

To identify performance obligations in such contracts, an entity should assess whether the fee relates to the transfer of a promised good or service. In many cases, even though a nonrefundable upfront fee relates to an activity that the entity is required to undertake at or near contract inception to fulfill the contract, that activity does not result in the transfer of a promised good or service to the customer (see paragraph 606-10-25-17). Instead, the upfront fee is an advance payment for future goods or services and, therefore, would be recognized as revenue when those future goods or services are provided. The revenue recognition period would extend beyond the initial contractual period if the entity grants the customer the option to renew the contract and that option provides the customer with a material right as described in paragraph 606-10-55-42.

ASC 606-10-55-52

If the nonrefundable upfront fee relates to a good or service, the entity should evaluate whether to account for the good or service as a separate performance obligation in accordance with paragraphs 606-10-25-14 through 25-22.

ASC 606-10-55-53

An entity may charge a nonrefundable fee in part as compensation for costs incurred in setting up a contract (or other administrative tasks as described in paragraph 606-10-25-17). If those setup activities do not satisfy a performance obligation, the entity should disregard those activities (and related costs) when measuring progress in accordance with paragraph 606-10-55-21. That is because the costs of setup activities do not depict the transfer of services to the customer. The entity should assess whether costs incurred in setting up a contract have resulted in an asset that should be recognized in accordance with paragraph 340-40-25-5.

1.4 The 'right to invoice' practical expedient

The "right to invoice" practical expedient simplifies certain aspects of Steps 3, 4, and 5 when applying the five-step revenue model. Under the expedient, an entity may recognize revenue equal to the invoice amount if it has a contractual right to bill the customer an amount equal to the value provided to the customer for the entity's performance completed to date.

ASC 606-10-55-18

As a practical expedient, if an entity has a right to consideration from a customer in an amount that corresponds directly with the value to the customer of the entity's performance completed to date (for example, a service contract in which an entity bills a fixed amount for each hour of service provided), the entity may recognize revenue in the amount to which the entity has a right to invoice.

Upfront fees might preclude an entity from applying the "right to invoice" practical expedient. If a customer makes a significant upfront or backend payment that does not correspond with the transfer of products or services, or if the entity provides a significant adjustment (such as a volume rebate) that impacts the consideration the entity is entitled to under the contract, an entity might struggle to conclude that the amount invoiced corresponds directly with the value provided to the customer for the products or services transferred. Judgment is required to determine if the practical expedient may be applied in contracts with these types of provisions. An entity should also assess the significance of these fees relative to the overall consideration in the arrangement when evaluating whether the practical expedient applies.

Considering an upfront payment and the 'right to invoice' practical expedient

SaaS Provider C enters into a two-year SaaS contract with a customer to provide access to its expense management system. The entity charges nonrefundable fees of $3,000 at contract inception for setup activities, and a monthly fee of $50 to use the system. The entity determines that its promise to provide access to the expense management system represents a series of distinct services consisting of monthly time increments and is therefore a single performance obligation. The entity concludes that the $3,000 setup fee does not relate to the transfer of a promised product or service.

Because the upfront fee is a significant amount compared to the overall consideration in the contract, the entity concludes that the contract is ineligible for the right to invoice practical expedient since it cannot demonstrate that the amounts that will be invoiced correspond directly to the value provided to the customer for products transferred to date. Further, if the contract includes a renewal option, the entity will need to evaluate whether the nonrefundable upfront fee creates a material right (see Section 1.5).

The FASB/IASB Joint Transition Resource Group for Revenue Recognition (TRG) addressed stakeholder questions about how to evaluate whether an entity's right to consideration from a customer corresponds directly with the "value to the customer" for performance completed to date. Specifically, stakeholders asked whether an entity would be precluded from using the right to invoice practical expedient if

- Billing rates change throughout the life of the contract.
- The contract includes a minimum payment.
- The contract includes upfront or back-end payments.

After discussing each of these considerations, the TRG generally agreed that a fixed price is not always required for the duration of the contract to apply the right to invoice practical expedient. However, a price increase or decrease must be based on the value of the units subsequently transferred to the customer.

Determining whether a price change during the contract term is consistent with the value transferred to the customer often requires the use of judgment. Highlights of the TRG's discussions on this issue are summarized below.

TRG area of general agreement: Can an entity use the 'right to invoice' practical expedient for a contract that includes changing rates, minimum guarantees, or upfront or back-end payments?

Rate changes

Sometimes the billing rates change throughout the life of the contract, which does not necessarily mean that an entity is prohibited from using the right to invoice practical expedient for the contract. The entity must be able to demonstrate that the changing rate reflects the value received by its customer for its performance to date.

Market prices or stand-alone selling prices might reflect the value to the customer for the entity's performance to date, but entities are not required to assess these prices to demonstrate that the amount invoiced reflects the value transferred to the customer.[1] Rather, the phrase "value to customer" is meant to imply that judgment is required to determine whether the practical expedient is applicable. An entity may determine that another means demonstrates that the amount invoiced to the customer corresponds directly to the value received by the customer for the entity's performance to date. Any

[1] TRG Paper 40, *Practical Expedient for Measuring Progress toward Complete Satisfaction of a Performance Obligation.*

price increase or price decrease must be based on the value of subsequent units transferred to the customer.

The TRG considered the following example to illustrate the concept at the July 2015 meeting[2]:

> *Power Seller and Power Buyer execute a contract for the purchase and sale of electricity over a six-year term. Power Buyer is obligated to purchase 10 megawatts (MW) of electricity per hour for each hour during the contract term (87,600 MWh per annual period) at prices that contemplate the forward market price of electricity at contract inception. The contract prices are as follows:*
>
> *Years 1-2: $50 per MWh*
>
> *Years 3-4: $55 per MWh*
>
> *Years 5-6: $60 per MWh*
>
> *The transaction price, which represents the amount of consideration to which Power Seller expects to be entitled in exchange for transferring electricity to Power Buyer, is $28.908 million (annual contract prices per MWh multiplied by annual contract quantities). Power Seller concludes that the promise to sell electricity represents one performance obligation that will be satisfied over time.*

The TRG generally agreed that Power Seller qualifies to use the right to invoice practical expedient because the amount that it will bill Power Buyer corresponds directly with the value that Power Buyer receives from its performance completed to date. The amount that will be billed is based on both

- Units of power transferred
- A rate per unit of power that is priced by referring to one or more market indicators (for example, the observable forward commodity price curve)

While the rate per unit of power is not the same for the duration of the contract, the rates per unit reflect the value to the customer because they are based on one or more market indicators.

Contract minimums

The TRG also generally agreed that the existence of a contractual minimum payment would not impact an entity's ability to use the right to invoice practical expedient, as long as the minimum payment is not expected to be "substantive," meaning the customer is expected to exceed the minimum payment.

Upfront or back-end payments

When a customer makes a significant upfront or back-end payment or an entity provides a significant back-end adjustment, the entity may struggle to conclude that the amount invoiced corresponds directly with the value provided to the customer for the goods or services. Judgment is required to determine if the right to invoice practical expedient may be applied in contracts with these types of fees. The TRG generally agreed that an entity would need to assess the significance of these fees relative to the overall consideration in the arrangement.

[2] TRG Paper 40, *Practical Expedient for Measuring Progress toward Complete Satisfaction of a Performance Obligation.*

1.5 Renewal options

Under ASC 606, an entity must identify a renewal option as a separate performance obligation if the option represents a “material right” that the customer would not have received without entering into that contract. If the option does not provide the customer with a material right, the option is considered a marketing offer.

ASC 606 does not specify what constitutes a “material right,” but does provide an example in ASC 606-10-55-42.

ASC 606-10-55-41

Customer options to acquire additional goods or services for free or at a discount come in many forms, including sales incentives, customer award credits (or points), contract renewal options, or other discounts on future goods or services.

ASC 606-10-55-42

If, in a contract, an entity grants a customer the option to acquire additional goods or services, that option gives rise to a performance obligation in the contract only if the option provides a material right to the customer that it would not receive without entering into that contract (for example, a discount that is incremental to the range of discounts typically given for those goods or services to that class of customer in that geographical area or market). If the option provides a material right to the customer, the customer in effect pays the entity in advance for future goods or services, and the entity recognizes revenue when those future goods or services are transferred or when the option expires.

Technology entities often do not require customers to pay a nonrefundable upfront fee when renewing a contract since the entity incurs no additional setup costs. Factors that could indicate a contract provides the customer a material right include when a nonrefundable upfront fee is required only for the initial contract, or when the price of renewal is less than either the fee paid for the initial contract or the stand-alone selling price of the renewal.

If a renewal option without an additional upfront fee provides a material right to the customer, the entity should recognize the material right over the period that the customer is expected to benefit from having already paid the initial upfront fee. Conversely, if the upfront fee does not provide the customer with a material right, the fee is, in effect, an advance payment for the contracted services, and the entity should include the fee in the total transaction price that is allocated to the identified performance obligations.

When considering whether the upfront fee coupled with the option to renew provides the customer with a material right, the entity should consider both quantitative and qualitative factors, including

- Whether the renewal price is the price a new customer would pay for the same service
- The availability and pricing of service alternatives (for example, whether the customer can obtain substantially equivalent services from another provider without paying an upfront fee)
- The average customer lifespan (for example, if the average customer lifespan extends well beyond the contractual period, this may indicate that the upfront fee is significant enough to give customers an incentive to continue services)

If an entity determines that the upfront fee creates a material right, it must then determine the stand-alone selling price of the material right, defer the corresponding amount of revenue associated with the right, and recognize that revenue only when the renewal option is exercised or expires.

The following example illustrates how to determine whether a renewal option creates a material right.

Evaluating a renewal option

Software Company D is running a promotion for new customers, granting them an option to renew their license at a discount for up to two years when they sign a one-year contract for $5,000. The stand-alone selling price of a one-year term license is $5,000. During the promotion period, customers can renew their contract for $4,000 each year for the second and third years.

In evaluating whether the discount provides a material right, the entity compares the discount offered to a customer that enters the initial service contract during the promotional period ($1,000 off the second- and third-year renewals) with the discount typically offered to a similar customer that does not purchase the license during the promotional period.

The entity concludes that the renewal option provides a material right to the customer because the discount of $1,000 for the second and third years would not be available to that customer without entering into the arrangement.

1.5.1 Estimating the stand-alone selling price of an option

If a customer option constitutes a material right that should be recognized as a separate performance obligation, the entity must then determine a stand-alone selling price for that option for purposes of allocating a portion of the transaction price to that performance obligation. If the stand-alone selling price is not directly observable, which is often the case for an option, it must be estimated. The estimate should reflect the discount the customer will obtain when exercising the option, adjusted for any discount that the customer might receive without exercising the option as well as the likelihood that the customer will exercise the option.

ASC 606-10-55-44

Paragraph 606-10-32-29 requires an entity to allocate the transaction price to performance obligations on a relative standalone selling price basis. If the standalone selling price for a customer’s option to acquire additional goods or services is not directly observable, an entity should estimate it. That estimate should reflect the discount that the customer would obtain when exercising the option, adjusted for both of the following:

a. Any discount that the customer could receive without exercising the option

b. The likelihood that the option will be exercised.

Allocating stand-alone selling price to a renewal option

SaaS Company D is running a promotion for new customers, offering an option to renew their annual service agreement at a discount for up to two years when they sign a one-year contract for $5,000. Customers who sign a contract during the promotion period can renew their contract for $4,000 each year for the second and third years. SaaS Company D generally sells annual service contracts for $5,000 per year and does not offer discounts on renewals outside the promotion period. During the promotion period, 20 new customers entered into service arrangements. After the initial service period, Company D expects renewals to be 50 percent in year two and to decline by another 50 percent in year three.

SaaS Company D concludes that the renewal option provides a material right to the customer and that there is no directly observable stand-alone selling price for the option. To estimate the stand-alone selling price of the option and allocate the transaction price, SaaS Company D performs the following analysis:

Performance obligation	Stand-alone selling price	Description/Calculation
One-year SaaS service	$ 100,000	20 new customers entered into a service arrangement during promotion (stand-alone selling price of $5,000)
Option for a $1,000 discount on renewal	15,000	Expect 50 percent of initial 20 customers to renew each year (10 + 5) = 15 annual renewals x $1,000 discount per annual period
Total	$ 115,000	

As a result, the entity allocates $86,957 to the one-year service period and $13,043 to the renewal option.

Performance obligation	Allocated transaction price	Calculation
SaaS service	$ 86,957	($100,000 ÷ 115,000) x $100,000
Renewal option	13,043	($15,000 ÷ 115,000) x $100,000
Total	$100,000	

End of year-two facts

Suppose that in year two, eight customers (40 percent of the new customers) renew their contracts, and the entity expects that four of those customers (50 percent) will renew for a third year. The entity would perform the following analysis at the end of year two:

Performance obligation	Allocated transaction price	Description/ Calculation	
SaaS service	$ 41,565	Cash received: $4,000 (renewal price) x 8	$ 32,000
		Revenue recognized for options exercised: $869.50 ($13,043 ÷ 15 originally expected renewal years) x 8 (number of renewals)	6,956
		Revenue recognized for options no longer expected to be exercised: $869.50 x 3 (2 from year two + 1 from year three)	2,609
			$ 41,565
Renewal option	$ 3,478	Remaining balance in contract liability ($869.50 x 4) OR ($13,043 – 6,956 – 2,609)	$ 3,478

As a result, the entity recognizes revenue of $41,565 in year two and retains a liability for the option of $3,478 to be recognized either in year three as the service is provided or when the option to renew expires.

1.5.2 Practical alternative to estimating the stand-alone selling price of an option

ASC 606 provides a practical alternative that may be used when a customer has a material right under the terms in the original contract to acquire future goods and services that are similar to the original goods or services in the contract. This guidance generally applies to customer rights to renew a contract on pre-agreed terms. The practical alternative permits an entity to bypass estimating the stand-alone selling price of the option and instead to allocate the transaction price based on the total goods or services that it expects to provide and the total related consideration the customer is expected to pay.

ASC 606-10-55-45

If a customer has a material right to acquire future goods or services and those goods or services are similar to the original goods or services in the contract and are provided in accordance with the terms of the original contract, then an entity may, as a practical alternative to estimating the standalone selling price of the option, allocate the transaction price to the optional goods or services by reference to the goods or services expected to be provided and the corresponding expected consideration. Typically, those types of options are for contract renewals.

Evaluating a renewal option using the practical alternative

Assume the same facts as in the previous example about the promotional SaaS service. SaaS Company E concludes that the discounted option to renew provides a material right to the customer and that there is no directly observable stand-alone selling price for the option at inception and in year one. The entity uses the practical alternative to estimate the stand-alone selling price of the option, as shown in the following table. A similar updated calculation will be made at the end of each period.

Description	Amount	Calculation
Total expected consideration	$160,000	(20 customers x $5,000) + (10 customers x $4,000) + (5 customers x $4,000)
Allocated to each service period	$ 4,571	$160,000 ÷ 35 service periods (20 + 10 + 5)
Revenue in year one	$ 91,420	$4,571 x 20 service periods
Liability for option to renew in year one	$ 8,580	$100,000 consideration received – $91,420 revenue recognized

The following example illustrates how to apply the practical alternative when estimating the stand-alone selling price of an option if an upfront fee gives rise to a material right.

Valuing an option when a nonrefundable fee gives rise to a material right

SaaS Company F provides its customer access to a software platform. The entity charges nonrefundable fees of $20,000 at contract inception for setup activities and an ongoing $1,000 monthly usage fee. The initial contract term is three years. The customer has the option to renew the contract for an additional three years for $1,000 per month, without repaying the $20,000 setup fee. The entity expects the customer to exercise its renewal option.

The entity determines that its promise to host the software platform represents a series of distinct services (consisting of monthly time increments) in accordance with ASC 606-10-25-14(b) and is therefore a single performance obligation. The entity concludes that the setup activities do not relate to the transfer of a promised good or service.

SaaS Company F next considers if the payment of the setup fee provides the customer with a material right in relation to the renewal option. In making this determination, the entity considers the following:

- The renewal price ($1,000 per month x 12 months x 3 years = $36,000) is much lower than the price a new customer would pay for the same service ($1,000 per month x 12 months x 3 years + $20,000 setup fee = $56,000).
- There are no similar service alternatives available to the customer (for example, the customer cannot obtain substantially equivalent services from another provider without paying an activation fee).
- The average customer life is six years (an indication that the setup fee gives the customers an incentive to continue the service).

Because the customer does not have to pay the setup fee again when it renews the contract and the fee provides the customer with an incremental discount that it would not otherwise receive without entering into the initial contract, SaaS Company F concludes that the setup fee provides the customer with a material right related to the renewal option, which is accounted for as a separate performance obligation.

The entity next estimates the stand-alone selling price of the option using the practical alternative, as shown in the following table.

Description		Amount	Calculation
Upfront fee	$	20,000	
First three years of service fees		36,000	$1,000 per month x 36 months
Second three years of service fees (renewal period)		36,000	
Total	$	92,000	
Total consideration per month	$	1,278	$92,000 ÷ 72 months (six years)

Therefore, the entity would allocate total consideration of $56,000 received for the first three years of service as shown in the following table.

Performance obligation	Allocation	Calculation
Hosting service (initial contract term)	$46,000	$1,278 per month x 36 months
Option	$10,000	$56,000 received less amount allocated to initial contract term

During the first three years, SaaS Company F recognizes monthly revenue of $1,278 as it performs the hosting services and defers $10,000 allocated to the renewal option, since that amount is essentially a prepayment for services to be provided during the renewal period.

During the second three-year term of the contract (the renewal period), the entity recognizes $1,278 in revenue per month: $36,000 that it receives from the customer ($1,000 per month x 36 months) plus $10,000 related to the option ÷ 36 months.

Taking a step back, the entity concludes that the accounting reflects the nature of its promise to transfer a series of the same services over the entire six-year period. As a result, recognizing the same amount of revenue for each month of service is in line with the core principle of the revenue guidance.

1.5.3 Accounting for service provided while negotiating a renewal

Another common practice, particularly for SaaS entities or software entities providing PCS, is to continue providing services while negotiating a renewal after the initial contract expires. In these cases, the entity should evaluate whether a contract exists for the renewal period. If the entity is unable to ascertain whether the customer has committed to a renewal or whether collectibility is probable, it might conclude that a contract for the renewal does not exist.

In some cases, the entity might determine that an accounting contract exists because both parties have enforceable rights and obligations. For example, if a SaaS provider has a practice of continuing to provide service under the terms of the original contract and the customer continues to pay under the original contract terms, the entity might determine that both parties have legally enforceable rights and obligations between the end of the original agreement and the signing of the new agreement. In these cases, it would not be appropriate to delay revenue recognition until the renewal is finalized. The entity should also consider the guidance on accounting for modifications in ASC 606-10-25-10 through 25-13 when it executes the new agreement.

If both parties have agreed to extend the services but have not settled on a price the entity should estimate and constrain the transaction price.

1.6 Stand-alone selling price

Another significant area of change under ASC 606 for some technology entities is in estimating the stand-alone selling price for the purpose of allocating the transaction price among the performance obligations.

ASC 606-10-32-32

The standalone selling price is the price at which an entity would sell a promised good or service separately to a customer. The best evidence of a standalone selling price is the observable price of a good or service when the entity sells that good or service separately in similar circumstances and to similar customers. A contractually stated price or a list price for a good or service may be (but shall not be presumed to be) the standalone selling price of that good or service.

In determining the stand-alone selling price, an entity is required to maximize the use of observable inputs. In other words, the best evidence of the stand-alone selling price, if available, is the observable price charged by the entity to similar customers on a stand-alone basis in similar circumstances.

While ASC 606 does not prescribe an estimation method, it does indicate that the following methods are acceptable for estimating the stand-alone selling price when the selling price is not directly observable:

- Adjusted market-assessment approach
- Expected cost-plus-a-margin approach
- Residual approach

ASC 606-10-32-34

Suitable methods for estimating the standalone selling price of a good or service include, but are not limited to, the following:

a. Adjusted market assessment approach—An entity could evaluate the market in which it sells goods or services and estimate the price that a customer in that market would be willing to pay for those goods or services. That approach also might include referring to prices from the entity's competitors for similar goods or services and adjusting those prices as necessary to reflect the entity's costs and margins.

b. Expected cost plus a margin approach—An entity could forecast its expected costs of satisfying a performance obligation and then add an appropriate margin for that good or service.

c. Residual approach—An entity may estimate the standalone selling price by reference to the total transaction price less the sum of the observable standalone selling prices of other goods or services promised in the contract. However, an entity may use a residual approach to estimate, in accordance with paragraph 606-10-32-33, the standalone selling price of a good or service only if one of the following criteria is met:

    1. The entity sells the same good or service to different customers (at or near the same time) for a broad range of amounts (that is, the selling price is highly variable because a representative standalone selling price is not discernible from past transactions or other observable evidence).

    2. The entity has not yet established a price for that good or service, and the good or service has not previously been sold on a standalone basis (that is, the selling price is uncertain).

At the crossroads: Change in approach for estimating stand-alone selling price

Under legacy GAAP, an entity applying the multiple-element revenue recognition guidance would have first determined whether vendor-specific objective evidence of selling price (VSOE) existed. If no VSOE existed, the entity would then have determined whether there was third-party evidence of the selling price and, if not, estimate the stand-alone selling price of a product or service.

In contrast, ASC 606 does not specify a hierarchy of evidence for determining the stand-alone selling price for a product or service. That said, the guidance indicates that the best evidence of the stand-alone selling price is the observable price of a product or service when the entity sells that product or service separately in similar circumstances to similar customers. As a result, entities should first look to the observable evidence for determining the stand-alone selling price for a product or service.

Under legacy software revenue GAAP, an entity with a multiple-element arrangement would have first considered whether VSOE of the undelivered item(s) existed and, if not, would have deferred revenue until all elements for which VSOE did not exist were delivered. Under ASC 606, the lack of VSOE does not result in the deferral of revenue. Rather, the entity should estimate the stand-alone selling price using another method under ASC 606, such as the adjusted market-assessment approach, the expected cost-plus-a-margin approach, or the residual approach. Whichever approach is used to estimate the stand-alone selling price, the guidance requires all entities to maximize the use of observable inputs.

Grant Thornton insights: Methods of estimating the stand-alone selling price

Upon the adoption of ASC 606, technology entities that have previously established VSOE by using stand-alone sales—whether VSOE is a fixed amount, a percentage of the license, or a range of values—will generally be able to continue using VSOE as the stand-alone selling price, assuming that (1) the performance obligations identified under ASC 606 are the same as the deliverables identified under legacy GAAP, and (2) the entity does not change its pricing or sales practices. For example, entities that have used the bell curve to ensure that 80 percent of all sales prices fall within 15 percent of the median price will most likely be able to continue using this approach to estimate stand-alone selling price.

However, when using a range to estimate the stand-alone selling price, entities need to reevaluate their policies on determining the range. The range should be sufficiently narrow such that every price within the range is one that the entity would accept for the product or service if that product or service was sold on a stand-alone basis.

Technology entities that have used other approaches to establish VSOE should also carefully consider whether their historical approach results in the best estimate of the stand-alone selling price. For example, if a software entity previously used the substantive renewal-rate approach to establish VSOE, it should reevaluate whether this approach provides the best evidence of the stand-alone selling price. Being "substantive" doesn't automatically make the renewal rate the best evidence of the stand-alone selling price under ASC 606. We believe that the use of the renewal rate may be an appropriate estimate if the rate is fairly consistent across transactions, but if the stated renewal rate varies significantly, the resulting estimate of the stand-alone selling price may not meet the allocation objective under ASC 606.

1.6.1 Data used to estimate the stand-alone selling price

If an entity does not have sufficient observable sales data to determine stand-alone selling price, it must estimate the stand-alone selling price under ASC 606. The guidance requires entities to use all information that is reasonably available, maximizing the use of observable inputs.

ASC 606-10-32-33

If a standalone selling price is not directly observable, an entity shall estimate the standalone selling price at an amount that would result in the allocation of the transaction price meeting the allocation objective in paragraph 606-10-32-28. When estimating a standalone selling price, an entity shall consider all information (including market conditions, entity-specific factors, and information about the customer or class of customer) that is reasonably available to the entity. In doing so, an entity shall maximize the use of observable inputs and apply estimation methods consistently in similar circumstances.

The type of information used in the estimation process will vary significantly by entity and may even vary by product or service within the same entity. Technology entities may be willing to sell the same product or service at different prices to different types of customers (that is, commercial versus government customers or large versus small customers) or within different locations (Northeast region versus Midwest region or country-by-country). ASC 606 requires that an entity consider the price at which it would sell the product or service separately in similar circumstances to similar customers when estimating stand-alone selling price. As a result, technology entities may need to stratify their contracts by type, customer class, or geography, and to determine a stand-alone selling price for each stratified group of contracts.

Grant Thornton insights: Information used when estimating stand-alone selling price

When estimating stand-alone selling prices, technology entities may consider numerous factors, including those listed below. This list is not comprehensive, and a technology entity might identify other relevant data for use in the estimation process. Furthermore, within the available information, certain data may be more relevant than other information and an entity may need to weight certain data more heavily when calculating an estimate. We believe that the following information may be useful when estimating stand-along selling price:

- Historical selling prices – Even when an entity has only limited stand-alone sales, such that it cannot use observable sales alone to determine stand-alone selling price, historical selling prices may still be a relevant data point when estimating stand-alone selling price. For example, stand-alone maintenance renewals may be useful when estimating the stand-alone selling price of maintenance bundled with a software product. However, an entity should consider its particular facts and circumstances, including any recent changes in its pricing strategy, when assessing the relevance of historical pricing when determining a current stand-alone selling price.

- Competitor pricing for a similar product – If the entity has direct competitors selling similar products and targeting the same customers, competitor pricing can be a useful data point.

- Published price lists – Published list prices may be an indicator of what the entity or its customers believe to be the stand-alone selling price of a product or service. However, an entity should not presume that the list price is the best estimate of the stand-alone selling price. If an entity regularly provides discounts on its list prices, the published price may be significantly less relevant than available third-party or industry data.
- Entity's pricing for similar products – If the entity has stand-alone sales for similar products, it may be able to use that pricing as a starting point when estimating stand-alone selling price. The entity would then adjust that price for differences in the product's features or functionality.
- Valuation technique – Using a valuation technique, like considering expected future cash flows, may be an effective way of estimating stand-alone selling price in certain situations. For example, the value of intellectual property could be estimated based on a reasonable royalty rate for the use of that intellectual property.
- Class of customer – The class of customer may impact the estimation of stand-alone selling price. For example, the size of the deal, the characteristics and geography of the customer, and the attractiveness of the market where the customer resides could all factor in to the pricing of a product or service.

Technology entities should establish policies and procedures for estimating stand-alone selling prices and apply those policies and procedures consistently to similar performance obligations. As a best practice, an entity should document its evaluation of the market conditions and entity-specific factors considered in estimating the stand-alone selling price for each performance obligation, including factors that it considers to be irrelevant and the reasons why.

1.6.2 Using a range for stand-alone selling price

When applying legacy GAAP, technology entities often established a range of prices as the stand-alone selling price of a deliverable. ASC 606 does not address using a range of estimated stand-alone selling prices. But, we believe that using a range may be consistent with the objective of Step 4—to allocate the transaction price to each performance obligation in an amount that depicts the consideration the entity expects to be entitled to in exchange for transferring the promised products or services—as long as the range maximizes the use of observable inputs and is sufficiently narrow. If an entity believes a range represents its best estimate of the stand-alone selling price, the range should be sufficiently narrow so that any price within the range represents a price that the entity would accept if the product or service were sold regularly on a stand-alone basis. We do not believe that it is appropriate for an entity to establish a point estimate and then calculate the stand-alone selling price as a narrow range of prices on either side of the point estimate.

If a contract's prices for the performance obligations are within the applicable ranges established, then the contract prices are deemed to approximate the stand-alone selling price. If the arrangement contains performance obligations with contractually stated prices that are not within the range of estimated stand-alone selling prices, then the entity should not use the stated contract price as the stand-alone selling price, and should instead allocate the transaction price using a price within the range. Additionally, if a contract includes an option to purchase additional products or services at a rate that falls below the established range, the entity should evaluate whether the contract includes a material right related to that option.

The wider the range of prices, the less relevant that range is for estimating a stand-alone selling price. Management should develop a policy for determining the volume of transactions and how narrow a range should be in order to develop a stand-alone selling price based on observable data, and should apply that policy consistently. If a wider range exists, an entity may want to stratify its transactions for purposes of developing a stand-alone selling price. For example, the entity may need to stratify the population by type of customer or geographic region when pricing varies by customer profile or geographic location.

Entities should avoid simply expanding the range to encompass a higher percentage of historical transactions, as that reduces the relevancy of the range and the entity's ability to establish a stand-alone selling price, as demonstrated in the following example.

Establishing a range of stand-alone selling prices

Software Company E sells software and installation services to customers in a variety of industries. The software is sold on a stand-alone basis or bundled with the installation services.

Software Company E's list price for the software is $1,000. The entity determines that 60 percent of its stand-alone software sales fall within a range of $600 to $700. If the range were expanded $300 to $900, the entity determines that 95 percent of its stand-alone sales would fall within the range.

In this example, it would be inappropriate for an entity to establish a range of 30 to 90 percent of the list price based solely on the fact that 95 percent of its transactions would fall within the range. Expanding a range to an inappropriate extent is not an acceptable method of establishing a stand-alone selling price. The range must be sufficiently narrow to comply with the allocation objective in ASC 606.

Grant Thornton insights: Utilizing a range for estimated stand-alone selling prices

In our view, if an entity has a practice of utilizing a range of estimated stand-alone selling prices, it must establish a policy for identifying a stand-alone selling price when contract amounts fall outside that range. For example, the entity can use the endpoint of the range nearest the stated contract price, the midpoint of the range, or another reasonable method to select a stand-alone selling price within the range. We believe that the entity should clearly state its policy for selecting an individual price to use for allocating the transaction price when contract prices fall outside the stand-alone selling price range, and consistently apply that policy in each case it uses a range to estimate the stand-alone selling price for a product or service.

1.7 Modifications

Accounting for contract modifications, such as up-sells and additional seats among other changes to the scope and/or price of a contract, may be an area of change for many technology entities under ASC 606. Legacy GAAP did not include an overall framework for accounting for contract modifications, but ASC 606 now provides prescriptive guidance. A technology entity that provides a price concession that was not anticipated and estimated when the contract was entered into (see Section 1.3.1) is now required to account for the change in price as a modification to the contract. Because of the guidance in ASC 606, an entity may need to develop a robust system, including processes and controls, to identify, track, and account for contract modifications.

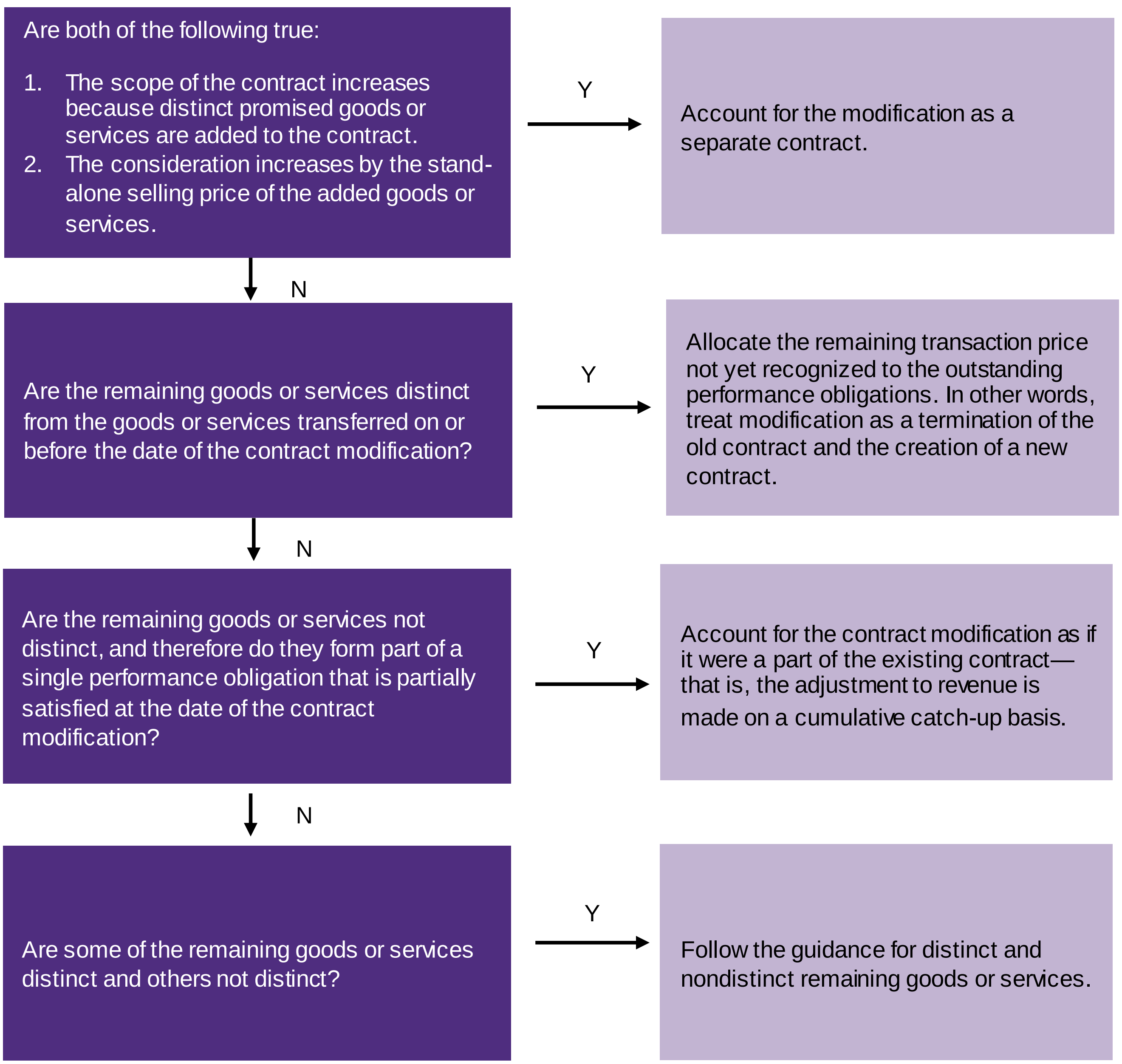
A contract modification exists under ASC 606 if three conditions are met:

- There is a change in the scope or the price, or in both the scope and price, in a contract.

- That change is approved by both the entity and the customer.
- The change is enforceable.

The following table summarizes the general decision process when determining how to consider contract changes that fall within the scope of the modification guidance under ASC 606.

Figure 1.3: Accounting for a contract modification



The modification of a series of distinct products or services, which are accounted for as a single performance obligation that does not meet the criteria to be recognized as a separate contract, should be accounted for as a termination of the old contract and the creation of a new contract.

1.8 Sales to distributors

In the technology industry, it is common for entities to enter into contracts with resellers or distributors. In some cases, the reseller is clearly an agent, but sometimes it is less clear who is acting as the principal and who is acting as the agent. A technology entity may also offer maintenance services to end customers who purchase their product through the reseller, or it might adjust the price paid by the reseller for the maintenance services, depending on the price the reseller uses to sell those services to the final customer. ASC 606 requires technology entities to assess who their customer is (the reseller or the end customer), estimate the total expected consideration to be received and determine when control of the promised goods or services transfers to the customer in order to properly present arrangements with resellers and distributors, which might result in changes compared to the accounting under legacy GAAP. For example, entities that previously applied the sell-through method to recognize revenue might see a change in the timing of revenue recognition under ASC 606.

At the crossroads: Sell-through method

Under legacy GAAP, some entities concluded that consideration was not fixed or determinable for sales made to a distributor due to the risk of a price concession or discount. Therefore, these entities waited to recognize revenue until the distributor sold the final product to a third-party customer. This method is often referred to as the “sell-through” method under legacy GAAP.

Under ASC 606, entities that have historically used the sell-through method due to a lack of fixed or determinable fees might recognize revenue earlier than under legacy GAAP if they determine that control transfers when the product is shipped to the distributor. In these situations, the entity estimates the transaction price, including any product returns, price concessions, or discounts, and applies the constraint guidance to determine the amount of revenue to recognize when control transfers to the distributor. The entity should update its transaction price, and re-assess whether any amounts are constrained, at each reporting period.

1.8.1 Principal versus agent considerations

ASC 606 requires an entity to determine whether the nature of its promise is to provide the specified products or services to the customer (acting as a principal) or to arrange for another party to provide the products or services to the customer (acting as an agent). To determine whether an entity is acting as a principal or an agent in contracts involving more than one party delivering products or providing services to customers, a technology entity should first identify the specified products or services to be provided to the customer and then assess whether it controls the specified products or services before they are transferred to the customer, in which case, it is acting as a principal.

ASC 606-10-55-37A describes the three instances in which a principal obtains control of a specified product or service before it is transferred to the customer.

ASC 606-10-55-37A

When another party is involved in providing goods or services to a customer, an entity that is a principal obtains control of any one of the following:

a. A good or another asset from the other party that it then transfers to the customer.

b. A right to a service to be performed by the other party, which gives the entity the ability to direct that party to provide the service to the customer on the entity's behalf.

c. A good or service from the other party that it then combines with other goods or services in providing the specified good or service to the customer. For example, if an entity provides a significant service of integrating goods or services (see paragraph 606-10-25-21(a)) provided by another party into the specified good or service for which the customer has contracted, the entity controls the specified good or service before that good or service is transferred to the customer. This is because the entity first obtains control of the inputs to the specified good or service (which include goods or services from other parties) and directs their use to create the combined output that is the specified good or service.

ASC 606 includes indicators that denote when an entity controls the specified product or service before it is transferred to a customer.

ASC 606-10-55-39

Indicators that an entity controls the specified good or service before it is transferred to the customer (and is therefore a principal [see paragraph 606-10-55-37]) include, but are not limited to, the following:

a. The entity is primarily responsible for fulfilling the promise to provide the specified good or service. This typically includes responsibility for the acceptability of the specified good or service (for example, primary responsibility for the good or service meeting customer specifications). If the entity is primarily responsible for fulfilling the promise to provide the specified good or service, this may indicate that the other party involved in providing the specified good or service is acting on the entity's behalf.

b. 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 (for example, if the customer has a right of return). For example, if the entity obtains, or commits to obtain, the specified good or service before obtaining a contract with a customer, that may indicate that the entity has the ability to direct the use of, and obtain substantially all of the remaining benefits from, the good or service before it is transferred to the customer.

c. The entity has discretion in establishing the price for the specified good or service. Establishing the price that the customer pays for the specified good or service may indicate that the entity has the ability to direct the use of that good or service and obtain substantially all of the remaining benefits. However, an agent can have discretion in establishing prices in some cases. For example, an agent may have some flexibility in setting prices in order to generate additional revenue from its service of arranging for goods or services to be provided by other parties to customers.

ASC 606-10-55-39A

The indicators in paragraph 606-10-55-39 may be more or less relevant to the assessment of control depending on the nature of the specified good or service and the terms and conditions of the contract. In addition, different indicators may provide more persuasive evidence in different contracts.

As noted in ASC 606-10-55-39, indicators that an entity controls the specified product or service before it is transferred to a customer include, but are not limited to, the following:

- The entity is primarily responsible for fulfilling the promise to provide the specified product or service.
- The entity has inventory risk.
- The entity has discretion in establishing the price for the specified product or service.

These indicators, which are not all-inclusive, may be more or less relevant to the assessment of control depending on the facts and circumstances in each situation. While inventory risk may be more relevant when considering a tangible product, it may also be considered when transferring a license or service, for example, when an entity commits to obtain a specified service from a third party prior to entering into a contract with an end customer. An entity may determine that other indicators are more persuasive evidence based on the terms of the contract and the facts and circumstances in a particular situation.

The indicators above also help support an entity to assess whether it controls the specified product or service before it is transferred or provided to the customer. The indicators

- Do not override the assessment of control.
- Do not constitute a separate or additional evaluation.
- Are not a checklist of criteria to be met in all situations.

At the crossroads: Risks-and-rewards model versus control model

If an arrangement to provide products and services to a customer includes more than one party, the entity needs to perform an analysis under ASC 606 to determine whether it is acting as a principal or an agent and it might reach a different conclusion than under legacy GAAP. ASC 606 focuses on the transfer of control, while legacy GAAP relied on a risks-and-rewards model, to determine how and when an entity is acting as a principal or an agent.

Legacy GAAP also provided a detailed list of weighted indicators to help an entity evaluate whether it is acting as a principal or an agent. While the three indicators in ASC 606 appear similar to those in legacy GAAP, they are not weighted like the indicators in legacy GAAP, and no single indicator is determinative when evaluating whether an entity is acting as a principal or is instead an agent. Rather, the indicators in ASC 606 support whether the entity controls the product or service before it is transferred to the customer.

The following examples illustrate these concepts when applied to a SaaS reseller.

Analyzing transfer of control in principal versus agent analysis under ASC 606

Entity is a principal

Reseller A provides customers with an integrated hosted business communication technology bundle, which includes email and calendar services, office space scheduling, file sharing and cloud storage, meeting/webinar hosting, and video conference capabilities. The customers do not have the right or the ability to take possession of the software at any time during the hosting period. The majority of the services use Reseller A's own software and system, but the file sharing and cloud storage services are provided by SaaS Provider F. Reseller A has contracted with SaaS Provider F for a specified level of service based on projected sales. The contract specifies a minimum commitment with variable payment terms based on the level of usage. As it relates to the file sharing and cloud storage services, Reseller A agrees to provide level one technical support to its customers, but will refer its customers to SaaS Provider F for higher level support questions.

Reseller A concludes that it obtains control of the file sharing and cloud storage services from SaaS Provider F and then combines these services with other products and services in providing the specified service to its business technology communication services customers. Reseller A integrates the file sharing and cloud storage services provided by SaaS Provider F into the complete business communication service to be provided to the customer. As part of reaching that conclusion, Reseller A also considers the following indicators of control, which support that Reseller A controls the services before they are provided to the customer:

a. Reseller A is responsible for fulfilling the promise to provide file sharing and cloud storage. The customer does not contract with SaaS Provider F, and Reseller A is responsible for providing basic technical support and negotiating any service credits if service is disrupted.

b. Reseller A has some inventory risk because it has committed to a minimum purchase commitment with SaaS Provider F prior to contracting with its customers.

c. Reseller A has discretion in setting the price for the integrated service, which includes the file sharing and cloud storage services.

As such, Reseller A would recognize revenue for the price charged to the end customer. From SaaS Provider F's perspective, its customer is Reseller A. SaaS Provider F would therefore only record revenue for the selling price received from Reseller A for the services it provides. SaaS Provider F would not record revenue for Reseller A's sales to the end customer.

Grant Thornton insights: Impact of the portfolio approach on the principal versus agent evaluation

It is important to note that the evaluation of whether an entity is acting as a principal or an agent is not a policy election and is generally applied to an individual performance obligation. The portfolio practical expedient in ASC 606-10-10-4 may be applied to multiple performance obligations (or contracts) for the principal versus agent evaluation only if all the performance obligations (or contracts) in the portfolio are sufficiently similar so that the entity reasonably expects that the principal versus agent conclusions would be the same as if the evaluation was completed for each individual performance obligation (or contract).

1.8.2 Maintenance services provided to reseller's end customers

When a technology entity offers maintenance services through a reseller of its software to end customers, the technology entity needs to evaluate whether a promise to provide maintenance to the reseller's end customers exists as of the date when the technology entity enters into a contract with the reseller. The promise to provide maintenance services does not have to be stated in the contract with the reseller, but could be implied by the entity's standard business practice. Either way, if the promise exists, the maintenance services should be evaluated as a performance obligation when the contract with the reseller is signed, and the technology entity should allocate a portion of the transaction price to the stated or implied maintenance services. If a technology entity does not generally provide maintenance and software updates to the reseller's end customers but decides to offer the maintenance and upgrades to an individual reseller after the customer obtains control of the software, it would expense the costs for providing the maintenance services as incurred, and would not defer any revenue from the initial transfer of the software. This practice could, however, create a history of providing maintenance services as well as an implied maintenance performance obligation in future contracts with resellers.

1.9 Contract costs

In addition to ASC 606, the issuance of ASU 2014-09, *Revenue from Contracts with Customers,* added a new Subtopic to the Codification, ASC 340-40, *Other Assets and Deferred Costs: Contracts with Customers*, to address the accounting for costs incurred as part of obtaining or fulfilling a contract with a customer. A technology entity that has historically expensed all costs related to its contracts with customers may experience a significant change under ASC 340-40. In fact, accounting for contract costs might be especially complex for entities with multiple types of contracts and a variety of incentive structures because costs incurred will need to be separately evaluated for each contract type and incentive structure.

Under the new guidance in ASC 340-40, a technology entity generally must capitalize both of the following costs:

- Incremental costs of obtaining a contract with a customer if the entity expects to recover those costs
- Fulfillment costs if the costs relate directly to a contract (or an anticipated contract), generate or enhance the entity's resources, and are expected to be recovered

ASC 340-40-25-1

An entity shall recognize as an asset the incremental costs of obtaining a contract with a customer if the entity expects to recover those costs.

ASC 340-40-25-5

An entity shall recognize an asset from the costs incurred to fulfill a contract only if those costs meet all of the following criteria:

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

b. 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.

c. The costs are expected to be recovered.

A technology entity may not elect whether to capitalize or expense costs under ASC 340-40. If the costs meet the capitalization criteria, they must be capitalized. The only exception is a practical expedient that allows an entity to expense the incremental costs of obtaining a contract if the amortization period is one year or less (see Section 1.9.2).

ASC 340-40-25-4

As a practical expedient, an entity may recognize the incremental costs of obtaining a contract as an expense when incurred if the amortization period of the asset that the entity otherwise would have recognized is one year or less.

Under ASC 340-40, an entity amortizes capitalized contract costs on a systematic basis consistent with the pattern of transferring the products or services to which those costs relate.

Technology entities should recognize an impairment loss in earnings if the carrying amount of an asset exceeds its recoverable amount. Under ASC 340-40, the recoverable amount equals the consideration the entity either expects to receive in the future or has received but has not yet recognized as revenue, minus the costs directly related to providing products or services that have not yet been expensed.

1.9.1 Commissions

A sales commission is a common example of an incremental cost to obtain a contract in the technology industry. While it may be rather straightforward to apply the guidance on incremental costs to obtain a contract for a fixed commission under a contract (say, $100 per new contract obtained) or for a fixed percentage of the new contract's stated value (say, 5 percent of the sale), some entities have less straightforward commission terms. In 2016, the U.S. members of the TRG discussed numerous questions about applying the new cost guidance to various commission structures.

TRG area of general agreement: Evaluating various commission arrangements

At the November 2016 TRG meeting,[3] the U.S. members of the TRG discussed the following examples of evaluating different types of sales commissions in contracts with customers.

Example 1: Timing of the commission payment

> *An entity pays an employee a 4 percent sales commission on all of the employee's signed contracts with customers. For cash flow management, the entity pays the employee half of the commission (2 percent of the total contract value) upon completion of the sale, and the remaining half of the commission (2 percent of the total contract value) six months later. The*

[3] TRG Paper 57, *Capitalization and Amortization of Incremental Costs of Obtaining a Contract.*

employee is entitled to the unpaid commission, even if the employee is no longer employed by the entity when payment is due. An employee makes a sale of $50,000 at the beginning of year one.

The entity capitalizes the entire commission of $2,000 because the commission is an incremental cost that relates specifically to the signed contract and the employee is entitled to the unpaid commission.

The timing of the payment does not impact whether the costs would have been incurred if the contract had not been obtained.

Example 2: Commissions paid to different levels of employees

An entity's salesperson receives a 10 percent sales commission on each contract obtained. In addition, the following employees of the entity receive sales commissions on each signed contract negotiated by the salesperson: 5 percent to the manager and 3 percent to the regional manager.

The entity capitalizes all of the commissions because the costs are incremental and would not have been incurred had the entity not obtained the contract. The new guidance does not differentiate the accounting for commissions based on the function or title of the employee that receives the commission.

Example 3: Commission payments subject to a threshold

An entity has a commission program that increases the amount of commission a sales person receives based on how many contracts the salesperson has obtained during an annual period. The breakdown is as follows:

Contract number	Commission
0-9	0%
10-19	2% of value of contracts 1-19
20+	5% of value of contracts 1-20+

Even though the entity's program is based on a pool of contracts (and not directly attributable to a specific contract), the commissions would not have been incurred if the entity had not obtained the contracts with those customers. Therefore, when an entity recognizes a liability, it should also recognize a corresponding asset for the commissions. The entity should apply guidance other than ASC 606 and ASC 340-40 to determine when a liability for the commission payments should be recognized.

Some entities' compensation structures may condition commission or bonus payments on factors other than just signing a new contract or meeting an overall threshold of new contracts. For example, an entity may retain half of a sales commission related to a new contract and condition the payment of this retained amount on such factors as the sales person's continued employment for a specified period of time. If the conditions impacting whether a commission, or a portion of the commission is paid are substantive, the commission, or a portion of the commission, is not considered an incremental cost of obtaining a contract since the other conditions must be met in order for the commission to be paid.

For example, assume that an individual must be employed by an entity six months after the initial sale in order to earn the second half of the sales commission. Because the second commission payment is conditioned on a substantive service period, the second portion of the commission is not an incremental cost of obtaining the contract. Accordingly, the entity would determine that only the first half of the commission is an incremental cost of obtaining the contract.

Technology entities often pay commissions to employees for new business as well as for contract renewals. Under ASC 340-40, both of these commissions generally qualify as incremental costs of obtaining the contract, but it may be challenging to determine the appropriate amortization period for the original commission if the original and subsequent commissions are not commensurate. For example, say that an entity awards an employee a 5 percent commission for obtaining a one-year contract with a customer, but pays only a 2 percent commission when the contract is renewed. In this situation, the amortization period for the original commission would generally be longer than the initial contract term because the renewal commission is not commensurate with the initial commission. The entity is unable to use the practical expedient in ASC 340-40-25-4 because the amortization period is longer than one year. See Section 1.9.2.

At the crossroads: Impact of the new cost guidance

Legacy GAAP provided little guidance on accounting for costs related to revenue arrangements, with the exception of guidance for separately priced extended warranties, construction contracts, and inventory. As a result, some technology entities have historically capitalized certain costs to obtain a contract by analogizing to guidance that requires capitalization, while other technology entities have elected to expense costs that are direct and incremental, leading to diversity in practice. With the issuance of ASU 2014-09, which creates ASC 340-40, entities now have a consistent framework to account for contract costs.

As technology entities transition to the new requirements, they must reevaluate unamortized costs that have been capitalized by analogy to the guidance in ASC 310-20, *Nonrefundable Fees and Other Costs.* ASC 310-20 provides guidance for fees incurred to solicit and originate new loans and states that direct loan costs may be capitalized and recognized over the loan term. The portion of an employee's compensation and benefits that directly relates to time spent performing activities that would not have been incurred apart from the loan can be capitalized under the guidance in ASC 310-20-25-6. In contrast, under ASC 340-40, only costs that are incurred because the contract is obtained can be capitalized. Therefore, entities that analogized to ASC 310-20 and capitalized a portion of a salesperson's salary that relates to time spent on obtaining a contract must adjust any asset recognized to align with the guidance in ASC 340-40.

On the other hand, entities that elected to expense direct and incremental costs associated with obtaining a revenue contract under legacy GAAP need to capitalize these costs in accordance with ASC 340-40 unless the amortization period is one year or less and the entity elects the practical expedient to expense those costs.

The end result is a significant change in practice for some technology entities, due to the new guidance requiring entities to capitalize most incremental costs incurred in obtaining a contract.

1.9.2 Amortization of contract costs

Under ASC 340-40, an entity amortizes capitalized contract costs on a systematic basis consistent with the pattern of transferring the related goods or services. If an entity identifies a significant change to the expected pattern of transfer, it should update the amortization to reflect that estimated change in accordance with ASC 250, *Accounting Changes and Error Corrections*.

ASC 340-40-35-1

An asset recognized in accordance with paragraph 340-40-25-1 or 340-40-25-5 shall be amortized on a systematic basis that is consistent with the transfer to the customer of the goods or services to which the asset relates. The asset may relate to goods or services to be transferred under a specific anticipated contract (as described in paragraph 340-40-25-5(a)).

ASC 340-40-35-2

An entity shall update the amortization to reflect a significant change in the entity's expected timing of transfer to the customer of the goods or services to which the asset relates. Such a change shall be accounted for as a change in accounting estimate in accordance with Subtopic 250-10 on accounting changes and error corrections.

Estimating the amortization period for capitalized incremental costs is analogous to estimating the amortization or depreciation period for other intangible and tangible assets. Both processes are subjective and require judgment. In some circumstances, the amortization period could be longer than the initial contract term if the costs also relate to an anticipated future contract.

In Paragraph 309 of the Basis for Conclusions (BC309) in ASU 2014-09, the FASB indicated that it is not appropriate to amortize capitalized commissions over a period that is longer than the initial contract term if an entity pays a commission on renewing a contract that is commensurate with the commission paid when obtaining the original contract. The TRG discussed what the FASB meant by "commensurate with" at its November 2016 meeting, which has implications for determining the amortization period and for whether an entity can use the practical expedient discussed.

TRG area of general agreement: Does 'commensurate with' mean level of effort, or is it a quantitative assessment only?

At the November 2016 meeting,[4] the U.S. TRG members generally agreed that capitalized commissions should be amortized over a period that is longer than the initial contract term for contracts that include a renewal option if (1) history supports that the contract will be renewed, and (2) either no commission is paid for the renewal or the renewal commission is not commensurate with the commission paid on the initial contract.

When evaluating whether a commission paid for renewing a contract is "commensurate with" the commission paid for obtaining the original contract, the TRG agreed that the assessment is not based

[4] TRG Paper 57, *Capitalization and Amortization of Incremental Costs of Obtaining a Contract.*

on the level of effort required to obtain the initial contract and to renew it. Rather, an entity should determine if the commission relates only to the initial contract or if it also relates to goods or services that will be provided under future anticipated contracts.

TRG Paper 23, *Incremental costs of obtaining a contract,* indicates that it would be reasonable for an entity to conclude that a renewal commission is "commensurate with" an initial commission if the two commissions are reasonably proportionate to the respective contract value (for example, 5 percent of the contract value is paid for both the initial and the renewal contract). Conversely, it would be reasonable to conclude that a renewal commission is not commensurate with an initial commission if it is disproportionate to the initial commission (for example, 6 percent of the contract value is paid on the initial contract and 2 percent is paid for renewal).

Therefore, if an entity pays a lower commission for contract renewals than it does for an initial contract, the amortization period would exceed one year and the practical expedient would not apply to the contract.

The TRG also discussed what the appropriate amortization period would be if an entity determines that the amortization period for capitalized incremental costs is longer than the initial contract term because the costs also relate to an anticipated future contract.

TRG area of general agreement: Should customer life be the default amortization period for costs to obtain a contract?

In November 2016,[5] the U.S. TRG members agreed that estimating the amortization period for capitalized incremental costs is analogous to estimating the amortization or depreciation period for other intangible and tangible assets, which is a subjective determination that requires judgment. While the particular facts and circumstances of the contract may indicate that an amortization period equal to the average customer life is a reasonable application of the guidance, the TRG agreed that the new guidance does not require using, nor should entities default to using, the average customer life when determining the amortization period for costs to obtain a contract.

Grant Thornton insights: Determining the amortization period

If the commission on a renewal contract is not commensurate with the commission on the initial contract, an entity must evaluate the facts and circumstances and apply judgment to determine the amortization period. As noted above, the TRG generally agreed that the new revenue standard does not require an entity to amortize the asset over the average customer life, but that the entity should instead determine the goods or services related to the asset, which may include the goods or services in both the initial contract as well as in anticipated renewal contracts. In some circumstances, this evaluation might prompt an entity to conclude that the appropriate amortization period is the average customer life. In other cases, the entity needs to consider other factors to determine the appropriate amortization period, for example, if an entity enjoys long-term relationships with its customers such that its average customer life exceeds 15 years.

[5] TRG Paper 57, *Capitalization and Amortization of Incremental Costs of Obtaining a Contract.*

Under ASC 340-40-35-1, an entity should amortize the asset recognized for the costs of obtaining a contract on a systematic basis that is consistent with the transfer to the customer of the goods or services to which the asset relates. In circumstances like the long-term customer relationship mentioned above, the entity might conclude that a commission paid 15 years ago has little or no relationship to the goods or services being provided today. Said another way, one consideration in determining the amortization period is the expected life of the goods or services, which might include, for example, consideration of the product's or service's life cycle. The entity should determine at what point in the future the entity would expect that product or service offerings have fundamentally changed, based on technology or other attributes, so that past commissions no longer reasonably relate to the customer's ongoing purchases, even if the future products or services continue to be of similar benefit to the customer.

The following example highlights factors an entity might consider to determine an amortization period for capitalized contract costs that is consistent with the pattern of transferring the goods or services related to those costs.

Amortization of capitalized sales commission

SaaS Provider G enters into a contract with a customer to provide SaaS services for five years. When the initial contract is executed, the entity pays its employee a 10 percent commission. SaaS Provider G's current commission structure also includes a 5 percent commission upon contract renewal. The entity expects the customer to renew the services and considers that its average customer life exceeds 15 years.

SaaS Provider G operates in an industry that is susceptible to changes in technology and consumer preferences, and anticipates that within the next 5 to 8 years, the original SaaS services will be replaced by SaaS Provider G's next generation offering. In addition, the entity also reviews its commission plans with an external compensation consultant every three years to ensure that its compensation practices are competitive and in line with the market. The next review will be completed in two years.

In determining the appropriate amortization period for the initial commission, SaaS Provider G first considers whether the expected renewal commission is commensurate with the initial commission. While it is possible the renewal commission percentage will change as a result of the next compensation policy review, SaaS Provider G concludes that the best information available when the contract is entered into is the current commission plan.

SaaS Provider G also determines that under the current commission plan, the commission on the renewal contract is not commensurate with the commission on the initial contract because the two commissions are not reasonably proportional to the contract value: The initial 10 percent commission is twice the proportion of the contract value compared to the 5 percent renewal commission. Because the contract is expected to be renewed and the expected renewal commission is not commensurate with the initial commission, the initial commission relates to SaaS services that will be transferred to the customer over a period that is longer than the initial five-year term.

Although SaaS Provider G's average customer life is 15 years, the service related to the commission is expected to have a remaining life of 5 to 8 years. Therefore, selecting an amortization period equal to the average customer life would be inconsistent with the transfer of control of the SaaS service to the customer.

SaaS Provider G selects an amortization period for the initial commission of 7.5 years, which is its best estimate of the period that the customer will benefit from SaaS services.

Entities need to ensure that they have the appropriate processes and controls in place to identify and account for changes in the expected pattern of transfer of the good(s) or service(s) related to the capitalized contract costs. The guidance in ASC 340-40-35-2 indicates that entities should update the amortization method to reflect a significant change in the expected timing of transferring the related goods or services to the customer.

Change in amortization period for capitalized sales commission

Consider the same facts outlined in the previous example.

Two years after SaaS Provider G enters into the initial contract with its customer for SaaS services, it completes the periodic review of its compensation practices and changes the commission on contract renewals so that it equals the 10 percent commission earned on initial contracts, consistent with industry practice.

SaaS Provider G considers whether the increase in the expected renewal commission impacts the amortization period selected for the initial commission asset. Because the expected renewal commission and the initial commission are now both 10 percent of the contract price, SaaS Provider G considers whether the initial and renewal commission are commensurate. Based on this information, SaaS Provider G concludes that the initial and renewal commission are commensurate. SaaS Provider G concludes that the initial contract asset does not relate to periods beyond the initial contract term and it would be inappropriate to continue to amortize the initial capitalized commission over a period that is longer than the initial contract term.

SaaS Provider G follows the guidance in ASC 250 related to changes in accounting estimates to recognize an adjustment in the amortization to date.

The TRG also discussed[6] factors that entities should consider to determine an appropriate method of amortization for an asset that relates to multiple performance obligations that are satisfied at or during different time periods. The following example illustrates the application of the TRG's discussions to a software entity.

Single commission for multiple performance obligations

Software Company G enters into a contract with a customer for a software license and PCS. Software Company G transfers control of the software to the customer on day one of the contract and will perform PCS over the two-year contract period. Software Company G pays its salesperson a $100 commission for obtaining the contract and determines that the commission is an incremental cost under ASC 340-40. The commission relates to both the software and the PCS, which are identified as separate performance obligations.

[6] TRG Paper 23, *Incremental costs of obtaining a contract*

Based on their respective stand-alone selling prices, the software constitutes 75 percent of the overall transaction price and PCS constitutes 25 percent of the overall transaction price.

Software Company G allocates the commission asset to the individual performance obligations based on their respective stand-alone selling prices and recognizes the respective portion of the asset based on the pattern of performance for the related performance obligation. As a result, $75 of the contract asset is allocated to the software ($100 x 75%) and is amortized on the first day of the contract, and $25 of the contract asset is allocated to PCS ($100 x 25%) and is amortized over the two-year term.

In addition to the allocation method described above, the FASB staff also noted that it might be reasonable to amortize a single commission asset using one measure of performance that contemplates all of the performance obligations in the contract when the single measure would yield a result similar to allocating the commission. [7]

[7] TRG Paper 23, *Incremental costs of obtaining a contract*

2. Software

Software entities may face challenges that are specific to the software industry when applying the guidance in ASC 606. In this section, we highlight some of those unique issues.

2.1 Licenses of IP

In addition to the five-step model for recognizing revenue, the new standard provides supplemental implementation guidance for accounting for licenses of intellectual property (IP). IP is inherently different from other goods or services because multiple entities can license and use the same IP technology at the same time. As a result, the FASB believed additional guidance was necessary.

2.1.1 Functional versus symbolic IP

The supplemental guidance creates two categories of IP licenses based on whether the nature of the license is to provide a "right to access" an entity's IP or a "right to use" an entity's IP. ASC 606 distinguishes between "functional" and "symbolic" IP. The distinction between functional and symbolic IP focuses on the "utility" of the IP, meaning whether the IP provides benefits or value to the customer.

ASC 606-10-55-59

To determine whether the entity's promise to provide a right to access its intellectual property or a right to use its intellectual property, the entity should consider the nature of the intellectual property to which the customer will have rights. Intellectual property is either:

a. Functional intellectual property. Intellectual property that has significant standalone functionality (for example, the ability to process a transaction, perform a function or task, or be played or aired). Functional intellectual property derives a substantial portion of its utility (that is, its ability to provide benefit or value) from its significant standalone functionality.

b. Symbolic intellectual property. Intellectual property that is not functional intellectual property (that is, intellectual property that does not have significant standalone functionality). Because symbolic intellectual property does not have significant standalone functionality, substantially all of the utility of symbolic intellectual property is derived from its association with the entity's past or ongoing activities, including its ordinary business activities.

An entity generally recognizes revenue at a point in time for licenses of functional IP and over time for licenses of symbolic IP. One exception to the guidance for functional IP is when the functionality of the IP is expected to change substantively during the license period due to the entity's actions, and the customer must either contractually or practically use the updated IP. For example, an entity continuously updates its antivirus software to combat new viruses, and the customer is practically required to use the updated software or it will lose its functionality. In this case, the entity's promise to grant the customer a license cannot be separated from the promise to support or maintain the IP during the licensing period and the entity has granted a right to access its IP. Therefore, the entity would recognize revenue over the licensing period (that is, over time), similar to symbolic IP.

ASC 606-10-55-62

A license to functional intellectual property grants a right to use the entity's intellectual property as it exists at the point in time at which the license is granted unless both of the following criteria are met:

a. The functionality of the intellectual property to which the customer has rights is expected to substantively change during the license period as a result of activities of the entity that do not transfer a promised good or service to the customer (see paragraphs 606-10-25-16 through 25-18). Additional promised goods or services (for example, intellectual property upgrade rights or rights to use or access additional intellectual property) are not considered in assessing this criterion.

b. The customer is contractually or practically required to use the updated intellectual property resulting from the activities in criterion (a).

If both of those criteria are met, then the license grants a right to access the entity's intellectual property.

At the crossroads: Potential for earlier revenue recognition under ASC 606

Some software entities may recognize software revenue earlier under ASC 606 than under legacy GAAP for several reasons. Under ASC 606, software is generally considered functional IP, generating revenue that is recognized at a point in time regardless of the payment terms in a contract. Under legacy GAAP, if a contract included extended payment terms, revenue was recognized as the fee became fixed and determinable (see Section 2.3 for additional discussion on extended payment terms). What's more, the criteria for identifying performance obligations under ASC 606 are different from the requirements for separating elements under legacy GAAP, particularly, legacy software revenue guidance. As a result, software licenses bundled with other promises as one element under legacy GAAP, which might have been recognized over time as the services were provided (for example, if VSOE for undelivered items such as PCS was not available), are more likely to be identified as separate performance obligations under ASC 606, requiring the software entity to estimate stand-alone selling prices to allocate the transaction price and recognize revenue when control transfers for each of the performance obligations.

2.1.2 Embedded software

The supplemental revenue guidance does not apply to a license that is a component in a tangible product and is essential to the functionality of that product. In these cases, the license is not distinct from the product, and the entity should apply the general five-step revenue model to the tangible product, without regard to the license.

Embedded software

A technology entity enters into a contract to sell computer hardware embedded with Software A, which is integral to the functionality of the product. In addition, the customer has chosen to have Software B installed on the hardware. Because the computer hardware and the embedded Software A function together to deliver the hardware's essential functionality, they are considered a single performance obligation, and are excluded from the scope of the supplemental licensing guidance. The optional Software B is capable of being distinct and is not significantly integrated or highly interrelated with the functionality of the hardware and does not significantly modify the functionality of the original product. It is therefore considered distinct from the hardware and accounted for as a separate performance obligation.

2.2 Options to purchase additional goods or services

An entity that sells software may also provide customers with an option to acquire additional goods or services in the future for free or at a discount, such as additional software products, professional services, or license renewals. Under ASC 606, an entity must identify the option as a separate performance obligation if the option represents a "material right" that the customer would not have received without entering into that contract. If the option does not provide the customer with a material right, the option is considered a marketing offer.

ASC 606 does not specify what constitutes a "material right," but provides as an example "a discount that is incremental to the range of discounts typically given for the goods or services to a particular class of customer in a geographical area or market."

One purpose of the guidance on material rights is to identify and appropriately account for obligations that are embedded in contracts in the form of an option. BC386 of ASU 2014-09 explains that in order to identify material rights, entities will need to distinguish between

- An option that the customer pays for as part of an existing contract (in other words, a customer pays in advance for future goods or services, so the entity identifies the option as a performance obligation and allocates part of the transaction price to that performance obligation)
- A marketing or promotional offer that the customer did not pay for and is not part of the contract (that is, an effort by the entity to obtain future contracts with the customer)

The following example illustrates an option that provides the customer with a material right.

Option for a discount on future purchases (adapted from ASC 606 Example 49)

A software entity enters into a contract to sell Software C for $100. As part of the contract, the software entity gives the customer a 40 percent discount voucher for any future software purchases up to $100 within the next 30 days. The entity intends to offer a 10 percent discount on all sales during the next 30 days as part of a promotion. The 10 percent discount cannot be used in addition to the 40 percent discount voucher.

Because all customers will receive a 10 percent discount on purchases during the next 30 days, the only discount that provides the customer with a material right is the discount that is incremental to the 10 percent discount (that is, the additional 30 percent discount). The entity accounts for the promise to provide the incremental discount as a performance obligation in the contract for the sale of Software C.

Software entities that offer customers an option to renew term licenses at an amount below the initial amount paid in the contract must carefully consider whether the amount offered for the renewal option is equivalent to the license's stand-alone selling price. For example, if the price of a one-year renewal is less than the amount offered to a new customer for an initial one-year contract on a stand-alone basis, the renewal option would generally be considered a material right. See Section 1.5 for additional discussion on the evaluation of renewal options as material rights.

If a customer option constitutes a material right and should therefore be accounted for as a separate performance obligation, the entity must determine a stand-alone selling price for that option for purposes of allocating a portion of the transaction price to that performance obligation. If the stand-alone selling price is not directly observable, which is often the case for an option, it must be estimated. The estimate should reflect the discount the customer will obtain when exercising the option, adjusted for both any discount that the customer might receive without exercising the option and the likelihood that the customer will exercise the option.

If the option only allows the customer to buy additional goods or services at their stand-alone selling prices, the option does not constitute a material right. In this case, the software entity has only made a marketing offer.

ASC 606-10-55-43

If a customer has the option to acquire an additional good or service at a price that would reflect the standalone selling price for that good or service, that option does not provide the customer with a material right even if the option can be exercised only by entering into a previous contract. In those cases, the entity has made a marketing offer that it should account for in accordance with the guidance in this Topic only when the customer exercises the option to purchase the additional goods or services.

The following example illustrates an option that does not provide the customer with a material right.

Option to purchase additional services that is not a material right

A software entity enters into a contract for the sale of Software A for $100. The contract includes an option for the customer to purchase training for $200 per hour. The entity regularly sells training services on a stand-alone basis for $200 per hour.

The entity determines that the option to purchase training does not provide a material right that the customer would not receive without entering into the contract because the prices of the optional services reflect the stand-alone selling prices for those services. Therefore, the entity concludes that the option to purchase the additional training is not a performance obligation in the contract and does not allocate any of the transaction price to the option for training services. The entity will evaluate the training services if and when the customer purchases those services.

2.3 Extended payment terms

A common practice in the software industry is to offer customers extended payment terms. In these arrangements, payment may be spread over a significant portion of the period during which the customer is expected to use the software. Because of rapid changes in the software industry, the software's value may decline over the extended payment period, which could increase the probability of an entity offering a reduction in the transaction price in order to receive payment.

At the crossroads: Change in timing of revenue recognition for arrangements with extended payment terms

Under legacy GAAP, if a software arrangement provided extended payment terms, the software vendor would generally recognize revenue as the payments became due from the customer, because the fee was presumed not to be fixed or determinable as a result of the risk of the vendor providing a price concession. Unlike the requirement under legacy GAAP that payments must be “fixed or determinable” in order to recognize revenue, payments do not need to be fixed under ASC 606. Rather in all contracts with variable consideration, including arrangements with extended payment terms where the software vendor believes it might provide a price concession, a software entity should estimate the total amount of consideration to which it expects to be entitled subject to the constraint guidance and allocate that estimated consideration to the identified performance obligations. The entity would then recognize the amount of revenue allocated to the software at the point in time when control of the software is transferred. Under the guidance on estimating and constraining the transaction price, an entity considers the likelihood that it will grant concessions to the customer as well as its past history of providing concessions in extended payment arrangements. The change to a model requiring an entity to estimate the transaction price, as opposed to waiting for consideration to be fixed and determinable, could result in a change in the timing of revenue recognition for a software entity whose contracts contain extended payment terms.

Entities that offer extended payment terms should also consider whether an arrangement includes a significant financing component. To determine whether a contract contains a significant financing component, an entity considers all relevant facts and circumstances, including, but not limited to, the following:

- The difference, if any, between the promised consideration and the cash price that would be paid if the customer had paid as the goods or services were delivered
- The combined effect of the time between the delivery of the goods or services and the receipt of payment, as well as the prevailing market interest rates

ASC 606-10-32-15

In determining the transaction price, an entity shall adjust the promised amount of consideration for the effects of the time value of money if the timing of payments agreed to by the parties to the contract (either explicitly or implicitly) provides the customer or the entity with a significant benefit of financing the transfer of goods or services to the customer. In those circumstances, the contract contains a significant financing component. A significant financing component may exist regardless of whether the promise of financing is explicitly stated in the contract or implied by the payment terms agreed to by the parties to the contract.

ASC 606-10-32-16

The objective when adjusting the promised amount of consideration for a significant financing component is for an entity to recognize revenue at an amount that reflects the price that a customer would have paid for the promised goods or services if the customer had paid cash for those goods or services when (or as) they transfer to the customer (that is, the cash selling price). An entity shall consider all relevant facts and circumstances in assessing whether a contract contains a financing component and whether that financing component is significant to the contract, including both of the following:

a. The difference, if any, between the amount of promised consideration and the cash selling price of the promised goods or services

b. The combined effect of both of the following:

   1. The expected length of time between when the entity transfers the promised goods or services to the customer and when the customer pays for those goods or services

   2. The prevailing interest rates in the relevant market.

The guidance also clarifies that a contract does not contain a significant financing component if any one of the following three conditions exists:

- The customer makes advance payments and decides when the goods or services will be transferred (for example, a customer that makes advance payments notifies the vendor when it wants access to the software to begin).
- The consideration is mostly variable and payment is based on factors outside the vendor's or customer's control (for example, a usage-based royalty).
- The difference between the promised consideration and the cash price relates to something other than financing, and the difference is proportional to the reason for the difference, such as protecting one of the parties from the other party's nonperformance (for example, a technology manufacturer that offers telephone support and repairs may require a single upfront payment to offset the risk of the customer not renewing the service or using the services more when paying on a monthly basis).

ASC 606-10-32-17

Notwithstanding the assessment in paragraph 606-10-32-16, a contract with a customer would not have a significant financing component if any of the following factors exist:

a. The customer paid for the goods or services in advance, and the timing of the transfer of those goods or services is at the discretion of the customer.

b. A substantial amount of the consideration promised by the customer is variable, and the amount or timing of that consideration varies on the basis of the occurrence or nonoccurrence of a future event that is not substantially within the control of the customer or the entity (for example, if the consideration is a sales-based royalty).

c. The difference between the promised consideration and the cash selling price of the good or service (as described in paragraph 606-10-32-16) arises for reasons other than the provision of finance to either the customer or the entity, and the difference between those amounts is proportional to the reason for the difference. For example, the payment terms might provide the entity or the customer with protection from the other party failing to adequately complete some or all of its obligations under the contract.

2.4 Sales- and usage-based royalties

Some software entities include payment terms in contracts where the entity receives consideration based on a customer's subsequent sales or usage in exchange for an IP license. Examples of sales- and usage-based royalties include when license fees are charged based on how much the customer accesses the software or on a percentage of sales processed using the software, or when a usage fee is charged each time the customer embeds the software into the customer's product or sells a product with the embedded software. In these cases, ASC 606 includes an exception to applying the estimation guidance in Step 3 (determining the transaction price) and the recognition guidance in Step 5 (recognizing revenue), which is known as the "sales-based and usage-based royalty exception." The exception, which applies only to licensing arrangements, requires the entity to recognize royalty revenue when (or as) the later of

- The sale or usage occurs.
- The performance obligation which the royalty has been allocated to has been satisfied.

ASC 606-10-55-65

Notwithstanding the guidance in paragraphs 606-10-32-11 through 32-14, an entity should recognize revenue for a sales-based or usage-based royalty promised in exchange for a license of intellectual property only when (or as) the later of the following events occurs:

a. The subsequent sale or usage occurs.

b. 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).

At the crossroads: Changes for entities reporting royalties on a lag

In a speech before the 35th Annual SEC and Financial Reporting Institute Conference in 2016, Wesley R. Bricker, then Deputy Chief Accountant for the SEC, reminded stakeholders that the FASB did not provide a "lagged reporting exception" for sales-based and usage-based royalties under ASC 606. As a result, entities that currently recognize revenue from sales-based or usage-based royalties on a lag need to estimate the royalties they expect to be entitled to for the current period so that they are recognized in the appropriate period. While the "royalties exception" under ASC 606 allows an entity to avoid estimating royalties using the variable consideration and constraint guidance in Step 3 of the revenue model, the entity still needs to determine its best estimate of the expected royalties for the current reporting period if it is unable to obtain timely data on actual sales- or usage-based royalties.

This "royalties exception" only applies when the IP license is the sole or predominant item to which the royalty payments relate. For a combined performance obligation in which one of the inputs is an IP license, the entity should evaluate whether the license is the predominant item in the arrangement. While "predominant" is not defined, ASC 606 states that the license may be the predominant item "when the customer would ascribe significantly more value to the license than to the other goods or services to which the royalty relates."

Figure 2.1: Scope for the sales-based and usage-based royalties exception

Does the sales-based or usage-based royalty relate solely to a license of IP or is the license of IP the predominant item to which the royalty relates?

Y

Apply the royalties exception guidance in ASC 606-10-55-65 to the entire sales-based or usage-based royalty.

N

Apply the variable consideration guidance in ASC 606-10-32-5 through 32-14 to the entire sales-based or usage-based royalty.

2.4.1 Optional purchase versus usage-based royalty

In some cases, judgment may be required to determine whether additional payments for a software license under an existing contract should be treated as an option for additional software or as a usage-based royalty fee. If the additional fee is for the expansion of the software's capabilities, it is an option for additional software and must be evaluated to determine if it provides the customer with a material right. For example, if an entity sells software that is embedded with features that can only be accessed for an additional fee, the decision to "unlock" the additional features is a purchasing decision on the part of the customer and is considered an option. If the option is priced at less than stand-alone selling price, it may represent a material right and if so, would be accounted for as a separate performance obligation. If, on the other hand, the fee is based on how much the customer uses the software to which it already has the right, it is a usage-based royalty. For example, if the customer obtains a perpetual license to the software but incurs a fee each time it accesses the software, the fee would be considered a usage-based royalty.

Grant Thornton insights: Additional users

The evaluation of whether a contract includes an option or a usage-based royalty may require significant judgment, particularly in contracts that include provisions related to the number of users that can simultaneously use the software product. For instance, if a contract specifies a certain number of users that may utilize software, but a customer can pay an additional fee to add new users exceeding that number, the ability to add users would generally be treated as an option, as it expands the customer's ability to use the licensed software. On the other hand, a contract that allows for unlimited users but charges a fee each time a user operates the software might indicate that the per-user fee is a usage-based royalty.

Optional purchase versus usage-based royalty in a software license

Software Company H enters into a contract with a customer to license software. The contract specifies that the customer is purchasing five licenses at $2,000 per year for five years and allows the customer to add licenses at $1,000 per license per year.

Software Company H determines that additional licenses would expand the customer's abilities to use the licensed software and therefore accounts for the right to additional licenses as an option. Further, the option to purchase additional licenses is offered at a discount to the range of prices typically offered to customers who have not previously entered into a contract and therefore, Software Company H considers the option a material right. As a result, Software Company H must allocate a portion of the transaction price to the option, which is a separate performance obligation.

2.5 Post-contract customer support services

Software entities frequently provide post-contract customer support (PCS) services in conjunction with the sale of software, such as when-and-if available upgrades, telephone support, and error corrections (debugging). When a contract includes these types of services, the entity should determine whether they are promised services under the contract and if so, whether they are separate performance obligations.

At the crossroads: PCS services more likely a separate performance obligation under ASC 606

Legacy GAAP required VSOE to separate elements within a software contract and to allocate revenue. If VSOE existed only for the undelivered elements, an entity would allocate revenue between the delivered and undelivered elements using the residual method for the delivered item that lacked VSOE. If VSOE did not exist for any of the undelivered elements, an entity would defer revenue until all the elements for which VSOE did not exist were delivered. As a result, entities often combined PCS services with software and accounted for both deliverables as a single element.

Under ASC 606, VSOE is no longer required to separate elements and allocate revenue in a software arrangement. Instead, entities are required to consider whether each promise in a contract represents a performance obligation. ASC 606 requires an entity to develop a stand-alone selling price through observable sales or, if there is insufficient evidence of an observable price, to estimate that price for each performance obligation. Consequently, some software entities could identify and allocate revenue to additional performance obligations (including PCS services and software) under the new model.

2.5.1 Stand-ready obligations

In many cases, PCS services are considered to be a stand-ready obligation because the entity is standing ready to provide support services throughout the PCS service period. However, entities should carefully evaluate their own facts and circumstances, particularly when the promise includes upgrades.

A software entity that promises to provide upgrades as part of its PCS services should consider whether the upgrades are specified or unspecified. If the entity has implicitly or explicitly promised the customer a right to a specified upgrade, such as a specific updated version of a program, additional or changed functionality, or other enhancements, the promise to deliver the specified upgrade should be accounted for as a performance obligation to deliver a specified good or service, and would not be considered a stand-ready obligation. For example, if an entity releases an upgrade to its software on June 1 and on December 1 every year, the upgrades may be considered specified upgrades and therefore would be separate performance obligations and not a stand-ready obligation. If that same entity also provides technical support under the same contract, it would also have a separate performance obligation for the stand-ready promise to provide technical support.

2.5.2 Evaluating whether PCS includes multiple distinct services

If an entity promises to provide a variety of different services as part of a contract, it must evaluate whether each promise within the contract is distinct. For example, technical support and unspecified when-and-if available updates may be distinct because the customer can benefit from the technical support and updates with readily available resources (the delivered software). However, because the nature of both the support and the updates is to stand ready to provide these services, the pattern of recognizing revenue for both services is often the same. When revenue for two or more distinct goods or services is recognized using the same measure of progress, the entity may treat them as a combined performance obligation. According to BC116 of ASU 2014-09, ASC 606 does not specify the accounting for concurrently delivered distinct goods or services that have the same pattern of transfer, because an entity is not precluded from accounting for those goods or services as a single performance obligation if the outcome is the same as accounting for the goods and services as individual performance obligations. Therefore, when technical support and when-and-if available updates have the same pattern of transfer, an entity can account for those PCS services as a single performance obligation

Identifying performance obligations in a contract for software with PCS services

A software entity enters into a contract to provide a perpetual software license to a customer along with one year of maintenance services, including telephone support, debugging, and unspecified upgrades.

The customer does not need the software updates to use the software. The entity has a history of providing software updates, but has not established a pattern of delivering updates in regular intervals.

Minor debugging services are provided regularly, but are considered part of a standard assurance-type warranty that guarantees the software will perform as expected and therefore are not considered a separate performance obligation.

Other more significant updates might be distinct if the customer can benefit from the software updates with readily available resources (the delivered software). Because the customer can use the software as intended without future updates, the entity concludes that the significant updates are distinct within the context of the contract.

The entity determines that both the telephone support and the when-and-if available updates are stand-ready obligations that should be recognized evenly over the one-year service period. Because the pattern of recognition is the same for both the phone support and updates, the entity treats these promises as a single performance obligation.

As a result of this analysis, the entity identifies the following performance obligations:

- Perpetual software license
- PCS services (when-and-if available updates and telephone support)

2.5.3 Mandatory PCS services

In some cases, software entities require their customers to renew their PCS contract in order to continue using the software, which has led to questions about whether the PCS services and the software should be treated as a single performance obligation. Under ASC 606, an entity does not consider contractual limitations when determining whether promises are capable of being distinct. As a result, the mandatory nature of the PCS services will not alone determine whether the software and PCS services are separate performance obligations.

Where the mandatory nature of the PCS services does have an impact is in determining the term of the software license. By requiring the customer to renew PCS services, the contract terms effectively turn a perpetual license into a term license, meaning that the customer is licensing the software only for the period during which it has a PCS contract. The nature of the PCS services might also impact how an entity estimates the stand-alone selling price of the software, as the right to use software for a year would likely have a different stand-alone selling price than a perpetual license.

2.6 Professional services

Many software contracts require an entity to provide professional services, including implementation, installation, integration, training, development, customization, and other services. Software entities must evaluate each service promised in a contract to determine whether it is distinct and therefore a separate performance obligation. When performing this evaluation, entities should consider whether they sell the services on a stand-alone basis or the customer could either hire a third party to provide the services or perform the services themselves. Additionally, the entity should consider the complexity and the significance of the services provided to determine if the services are a separate performance obligation.

Grant Thornton insights: Off-the-shelf versus core software

When identifying performance obligations in a contract that includes both software and professional services, the first step under the new revenue guidance is to identify the nature of the software being provided. Some entities create standard software packages that function without any additional customization or integration, which is typically referred to as “off-the-shelf” software. Other entities create a core software product that has limited to no functionality without customization. The nature of the software can be critical when evaluating the performance obligations included in a contract involving professional services.

With off-the-shelf software, it is more likely that installation or other professional services will be identified as performance obligations because the customer can use this software without additional customization.

Core software, on the other hand, is generally not a distinct performance obligation because it lacks stand-alone functionality and generally cannot be used by the customer without additional customization or implementation services. As a result, professional services included in a contract with core software are more likely to be inputs into one combined software solution performance obligation.

2.6.1 Implementation and installation services

One of the first questions to consider when evaluating software implementation or installation services is whether they transfer a good or service to the customer. As discussed in Section 1.3.5, some entities charge an upfront fee, but the related tasks are administrative in nature and do not result in the transfer of a good or service to the customer.

ASC 606-10-25-17

Promised goods or services do not include activities that an entity must undertake to fulfill a contract unless those activities transfer a good or service to a customer. For example, a services provider may need to perform various administrative tasks to set up a contract. The performance of those tasks does not transfer a service to the customer as the tasks are performed. Therefore, those setup activities are not promised goods or services in the contract with the customer.

If the entity is transferring a service to the customer, for example, when a software entity installs software on the customer's premise, the entity needs to evaluate whether the installation is distinct from the software. A third party that can provide the same service to the customer generally indicates that the services are capable of being distinct. The entity would also consider the complexity of the installation and whether it is integral to the product to determine if it is a separate performance obligation.

If the software entity is the only entity that provides the services, the entity would need to consider whether it ever provides the software without the professional services and to factor in the nature of the installation or implementation services when evaluating whether they are a performance obligation. For example, if the entity frequently sells the software on a stand-alone basis and the customer can install it without the entity's services, the installation service would likely be considered distinct and therefore a separate performance obligation. If, on the other hand, the entity never sells software apart from the installation or implementation services due to the complexity involved, the software and professional services generally will be considered one combined performance obligation within the context of the contract.

2.6.2 Customization and integration services

Similar to the evaluation of implementation and installation services, one of the first questions to consider when evaluating customization or integration services is whether another entity could provide the same services. If a customer can hire a third party to integrate the software into the customer's existing system or can customize the software to its own specifications, then the services are capable of being distinct. This scenario is more likely to be the case with off-the-shelf software. With core software, it is less likely that a third party can provide the same services, as the software is generally not functional without some level of service being provided by the software provider.

If the services are capable of being distinct, the entity also considers whether they are distinct in the context of the contract. When making this assessment, the entity may consider the complexity of the services provided. The more complex the integration service, the more likely the service is transformative and creates a new combined product that represents a single performance obligation within the context of the contract (for example, a software entity that sells a service designed to integrate its purchased software with the customer's existing software). Similarly, if the customized software is transformative and essentially creates a new software product with different functionality from the original software, the software and customization would be considered inputs into a single combined performance obligation. If, on the other hand, the integration or customization services are simple and do not significantly change the functionality of the software, the services are more likely to be additive and therefore a distinct service.

Grant Thornton insights: Integration services critical to software functionality

Some entities offer more than one software product in a single arrangement that must be combined to create one functioning product. In such situations, the integration service is a crucial input into the creation of a combined software solution and therefore the various software components and the integration services will generally be considered a single combined performance obligation.

The following example illustrates the application of these concepts.

Core software with professional services

Software Company J enters into a contract with a customer to provide the following:

- A perpetual software license for a core software product
- Professional services, which include customization of the software to meet the customer's needs, installation of the software, integration of the software with the customer's existing system, and overall project management services

No other vendors provide the customization, installation, or integration services for the entity's software, and customers are not able to perform these services themselves. The configuration process is complex and significant changes are required in order to customize the software for the customer's use. The entity delivers the license and performs installation, customization, and integration services on the customer's premises.

Software Company J determines that the software is not distinct within the context of the contract because it requires significant integration and customization services to be fully functional. The software and the professional services are both inputs into the creation of a combined product.

As a result of this analysis, the entity identifies a single performance obligation for the software solution, including installation, integration, and customization services.

In this example, the core software is not functional without the addition of the professional services. The evaluation of a similar contract for an off-the-shelf software that has stand-alone functionality might result in a different conclusion if the customer can use the software license without the professional services or a third party can provide the professional services that are included in the customer's contract.

2.6.3 Additional functionality

Customers sometimes ask software entities to make modifications to their software to create additional functionality. Alternatively, a software entity may announce plans to expand on the functionality of its software in the future. If the entity publicizes expected changes to its software's functionality, it must consider whether there is an implied promise to provide the updated software to its existing customers (see Section 1.1.5). An entity that agrees in a contract with a particular customer to expand the functionality of its software must also consider whether this creates a performance obligation in that contract. As part of this evaluation, the entity should consider its obligations to the customer with respect to the additional functionality, as well as any rights to receive consideration as a result. For example, if a software entity indicates to a customer that it will consider the customer's suggestion of adding a particular function to its software, but has no obligation to do so, the inclusion of that particular function in a future update would generally not be considered a separate performance obligation. However, a software entity that agrees to provide that particular functionality in its next upgrade, which is scheduled to be released on a particular date, would generally consider the additional functionality similarly to a specified upgrade, meaning it would be considered distinct and accounted for as a separate performance obligation in that customer's contract.

At the crossroads: Roadmap of changes no longer prevents revenue recognition

Under legacy GAAP, entities often hesitated to publicly discuss changes they expected to make to software, because a specified roadmap of changes in functionality could result in delaying revenue recognition for sales of the software product. When a software arrangement included a promise to provide future functionality that was considered a separate element in a software arrangement, VSOE generally did not exist for the promised functionality changes. As a result, under legacy guidance revenue was deferred until the promised developments were made and until VSOE of selling price existed for any remaining undelivered elements.

ASC 606 allows for earlier revenue recognition because VSOE for the unsatisfied performance obligation is not required. This change could reduce a software entity's concerns about publicly discussing upgrades that it expects to make in the future. Instead, an entity should consider whether the promised changes are an additional performance obligation in a contract that requires the entity to estimate stand-alone selling price and allocate the transaction price among the identified performance obligations, including the future upgrades.

2.6.4 Training services

In most cases, training services are considered distinct from software and accounted for as a separate performance obligation. Software is generally functional without training so there is no two-way dependency between the software and the training services. Most software entities sell training services separately from the software, and third-party providers frequently offer similar services. An exception might be when a customer purchases a complex software solution that cannot be operated without training from the software provider. If the entity never sells either the software solution or the training on a stand-alone basis and if no other provider can provide similar training, the training and software may be considered a single performance obligation.

2.7 Establishing stand-alone selling price

The type of information used in estimating stand-alone selling price will vary significantly by entity and may vary by product or service within the same entity. A software entity may even have different stand-alone selling prices for the same licenses based on a license's particular attributes and how it is being sold. An entity may use different data points on which to base its estimated stand-alone selling prices for its perpetual licenses compared to its term licenses, exclusive versus nonexclusive licenses, licenses sold to large or small customers, or licenses sold within particular geographies. See Section 1.6 for additional information on estimating stand-alone selling price.

Grant Thornton insights: Using a percentage of the license price as the stand-alone selling price for PCS

We believe that a substantive renewal rate expressed as a consistent percentage of the stated software license fee could be used as the stand-alone selling price of PCS services even if the dollar amounts of the license fees vary for the same software product.

For example, an entity may sell a perpetual software license bundled with one year of PCS and also sell PCS renewals on a stand-alone basis. The entity may conclude that the practice of pricing and selling PCS as a percentage of the net fee for related software licenses indicates the entity has established a value relationship between the software and PCS that supports the use of a set percentage of the original software license fee as the stand-alone selling price for the PCS.

The key is for a vendor to use a consistent percentage in determining the PCS renewal rate.

2.7.1 Establishing stand-alone selling prices for PCS services in term licenses

When estimating stand-alone selling prices, entities must be careful to compare like items. For example, PCS services in a term license may have a different stand-alone selling price compared to PCS services sold with a perpetual license. Entities should consider the expected term over which the customer will benefit from upgrades provided under a PCS arrangement. An update provided in the final year of a three-year term license may have a significantly lower stand-alone selling price than an update provided in year three of a perpetual license for software with an expected life of 15 years. As a result, a software entity may need to establish a different stand-alone selling price for PCS services depending upon the term of the related software license. However, if the expected life of the software in a perpetual license is similar to the length of a term license, the entity may be able to assert that the stand-alone selling price for PCS services under the perpetual license is a close equivalent to the stand-alone selling price of PCS services under a term license.

If an entity has an observable price for PCS services in a perpetual license but does not have similar data for its term licenses, that observable price may be a useful data point in establishing the stand-alone selling price of PCS services in a term license, subject to certain adjustments, as illustrated in the following example.

Estimating stand-alone selling price for PCS in a term license

Software Company K regularly sells both perpetual and term licenses of the same software along with PCS services. The entity has stand-alone observable sales of the PCS services in its perpetual licenses and has determined that the stand-alone selling price for PCS services is 18 percent of the original license agreement. For example, a customer purchasing a perpetual software license and one year of PCS services for $1 million would pay $180,000 for PCS services each subsequent year.

Software Company K determines that the estimated life of the software is five years. The typical term license has a contract life of four years. The entity does not separately sell PCS services related to its term licenses. Software Company K concludes that the stand-alone selling price for PCS services in perpetual license sales is a useful data point for estimating the stand-alone selling price for PCS services in term licenses. The entity considers this, along with other available data, to determine whether that amount should be adjusted when estimating the stand-alone selling price of PCS in a four-year term license contract.

2.7.2 Using the residual approach

Using the residual approach to determine a stand-alone selling price is generally expected to be rare. However, within the software industry, it is common for an entity to lack the necessary observable data to establish a stand-alone selling price for software, since it is frequently bundled in arrangements with PCS services or other products or services rather than sold on a stand-alone basis. For many software entities, their products are unique or cannot be easily compared to competitors' products, especially when competitors also sell software only in bundled arrangements with other products and services. The use of the adjusted-market assessment method to estimate stand-alone selling price is frequently impracticable since the third-party stand-alone sales data generally does not exist or would be difficult to obtain. Additionally, the incremental cost of providing a single software license is generally negligible, meaning that a cost-plus-a-margin approach would not be an appropriate method of estimating a stand-alone selling price. As a result, it might be more common for software entities to apply the residual approach to estimate the stand-alone selling price of software.

Under the residual approach, the entity estimates the stand-alone selling price of a performance obligation by subtracting the sum of the stand-alone selling prices for other goods and services promised under the contract from the total transaction price. This method is permitted only if either one of the following conditions is met:

- The selling price of the good or service is highly variable, which means that the entity sells the same good or service to different customers, at or near the same time, for a wide range of amounts so that a representative stand-alone price is not discernible.
- The selling price of the good or service is uncertain, meaning the entity has not yet established a price for the good or service and the good or service has not been previously sold on a stand-alone basis.

ASC 606-10-32-34(c)

c. Residual approach—An entity may estimate the standalone selling price by reference to the total transaction price less the sum of the observable standalone selling prices of other goods or services promised in the contract. However, an entity may use a residual approach to estimate, in accordance with paragraph 606-10-32-33, the standalone selling price of a good or service only if one of the following criteria is met:

1. The entity sells the same good or service to different customers (at or near the same time) for a broad range of amounts (that is, the selling price is highly variable because a representative standalone selling price is not discernible from past transactions or other observable evidence).
2. The entity has not yet established a price for that good or service, and the good or service has not previously been sold on a standalone basis (that is, the selling price is uncertain).

At the crossroads: Using the residual approach

The "residual approach" under ASC 606 differs from the "residual method" used in legacy GAAP. In ASC 606, the residual approach is used to determine the stand-alone selling price of a distinct good or service. A distinct good or service cannot have a stand-alone selling price of zero because, by definition, a good or service that is distinct has value on a stand-alone basis. In contrast, a good or service was sometimes assigned a value of zero under legacy GAAP, because the residual method was used to allocate the transaction price to elements in the contract that lacked a stand-alone selling price. Under ASC 606, if an entity allocates little to no consideration, or an amount that is not within a reasonable range of prices, to a single good or service or to a bundle of goods or services as a result of applying the residual approach, it should consider whether the estimate is appropriate. If the entity determines that the estimate does not fall within a reasonable range of the observable selling prices of the goods or services, it would need to estimate a stand-alone selling price for the software performance obligation and would be prohibited from using the residual method.

2.8 Considerations when measuring progress over time

Software entities may recognize revenue over time for professional services, PCS services, or customized software products. A software entity determines at contract inception whether each separate performance obligation will be satisfied (that is, control will be transferred) over time or at a specific point in time.

Under ASC 606, control is transferred over time if any one of following criteria is met:

- The customer simultaneously receives and consumes the benefits of the asset as the entity performs its obligation.
- The entity's performance creates or enhances an asset (for example, work in process) that the customer controls.
- The entity's performance does not create or enhance an asset that has an alternative use to the entity, and the entity has the right to payment for work completed to date.

ASC 606-10-25-27

An entity transfers control of a good or service over time and, therefore, satisfies a performance obligation and recognizes revenue over time, if one of the following criteria is met:

a. The customer simultaneously receives and consumes the benefits provided by the entity's performance as the entity performs (see paragraphs 606-10-55-5 through 55-6).

b. The entity's performance creates or enhances an asset (for example, work in process) that the customer controls as the asset is created or enhanced (see paragraph 606-10-55-7).

c. The entity's performance does not create an asset with an alternative use to the entity (see paragraph 606-10-25-28), and the entity has an enforceable right to payment for performance completed to date (see paragraph 606-10-25-29).

An entity recognizes revenue from a performance obligation that is satisfied over time by measuring its progress toward the completion of that performance obligation. The guidance in ASC 606 does not require or prescribe a particular method to measure progress toward completion, but does include a measurement objective: to align revenue recognition with the entity's performance in transferring control of the related goods or services in the contract. The selection of a method is not a free choice; rather, an entity should select the method that best depicts its performance under the contract.

ASC 606-10-25-31

For each performance obligation satisfied over time in accordance with paragraphs 606-10-25-27 through 25-29, an entity shall recognize revenue over time by measuring the progress toward complete satisfaction of that performance obligation. The objective when measuring progress is to depict an entity's performance in transferring control of goods or services promised to a customer (that is, the satisfaction of an entity's performance obligation).

2.8.1 Selecting a single measure of progress

Once an entity determines that a performance obligation is satisfied over time, it must select a measure of progress that best depicts the transfer of control to the customer. The guidance in ASC 606 requires a software entity to apply a single method of measuring its progress toward satisfying each performance obligation. The FASB explained that utilizing more than one method to measure performance for a single performance obligation would effectively bypass the guidance on identifying performance obligations. Identifying just one measure of progress may be challenging if a single performance obligation contains multiple promised goods and services that are not distinct and are therefore combined into a distinct bundle of goods and services. The identification of a single combined performance obligation may be more common for software entities that provide a software license with other related services, such as installation or implementation services. If a software entity finds it is struggling to identify a single measure of progress, it may want to revisit the Step 2 analysis to verify that it has appropriately identified the performance obligations in the contract. Significant difficulty in identifying a single measure of progress may be an indication that the entity incorrectly combined two distinct promises that are more appropriately separate performance obligations.

ASC 606-10-25-32

An entity shall apply a single method of measuring progress for each performance obligation satisfied over time, and the entity shall apply that method consistently to similar performance obligations and in similar circumstances. At the end of each reporting period, an entity shall remeasure its progress toward complete satisfaction of a performance obligation satisfied over time.

The TRG discussed whether an entity can use multiple measures of progress for a single performance obligation, as well as how to determine the single best measure of progress when a performance obligation contains multiple goods or services and the underlying goods or services are not distinct.

TRG area of general agreement: Considerations for selecting a measure of progress when a combined performance obligation contains multiple goods or services

At its July 2015 meeting,[8] the TRG generally agreed that using multiple methods of measuring progress for the same performance obligation would not be appropriate, because their use would ignore the unit of account prescribed in the guidance, and revenue would be recognized in a manner that overrides the separation and allocation guidance in Steps 2 and 4 of the revenue model.

The TRG generally agreed that an entity should consider the nature of both its overall promise to deliver the combined performance obligation and the performance required to completely satisfy that obligation. To make that assessment, the entity should consider the reasons why it decided that the goods or services are not distinct and have been bundled into a combined performance obligation. If an entity concludes that the result of a single measure of progress for a combined performance obligation does not faithfully depict the economics of the arrangement, it is possible that the entity did not correctly identify the performance obligations (meaning that there could be more than one performance obligation). Still, some situations require significant judgment in selecting a measure of progress for a combined performance obligation, even though the performance obligations have been appropriately identified.

The TRG considered the following example to illustrate this point:

> *An entity promises to provide a software license and installation services that will substantially customize the software to add significant new functionality that enables the software to interface with other customized applications used by the customer.*
>
> *The entity concludes that the software and services are not separately identifiable from the customized installation service; therefore, the software and installation are combined into a single performance obligation. The entity concludes that the performance obligation is satisfied over time. If the license was distinct, it would be considered a point-in-time license.*
>
> *Because the customized software solution is the promise that is being performed over time, the measure of progress should be based on a method that reflects the entity's progress toward the completion of that service and therefore complete satisfaction of the combined performance obligation. Under this view, all of the revenue would be recognized over the period during which the customization services are provided.*

The TRG believes that an output method based on estimated value for each good or service delivered would not be appropriate in this case because this method effectively accounts for the license and services as two separate performance obligations, which ignores the unit of account (that is, the single performance obligation) and overrides the separation and allocation guidance in ASC 606. Further, the TRG believes it would be inappropriate for the entity to recognize revenue when the software is delivered on the basis that the software is the predominant item in the combined performance obligation. The entity could not conclude that the software is the primary or dominant component of the combined performance obligation due to the nature of its promise, which is to provide a customized software solution. In this situation, the base software license is not the dominant feature, as the customization services are also likely to be significant to the customer.

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[8] TRG Paper 41, *Measuring progress when multiple goods or services are included in a single performance obligation.*

2.8.2 Customized software

Revenue from customized software is generally recognized over time based on the criterion in ASC 606-10-25-27(c), meaning it meets both of the following conditions:

- The entity's performance does not create an asset with an alternative use.
- The entity has an enforceable right to payment for performance completed to date.

The FASB developed this two-part criterion to help entities assess the transfer of control for services that are specific to a customer and for certain tangible or intangible products, such as customized software.

The logic behind this two-part criterion is that if an entity creates an asset with no alternative use, it is effectively creating an asset at the customer's discretion and would likely want to be economically protected in the event the customer terminates the contract. Obligating a customer to pay for performance completed to date suggests that the customer obtains the benefits as the entity produces the good or performs the service. Therefore, when both conditions are met, it is appropriate to recognize revenue over time.

ASC 606-10-25-28

An asset created by an entity's performance does not have an alternative use to an entity if the entity is either restricted contractually from readily directing the asset for another use during the creation or enhancement of that asset or limited practically from readily directing the asset in its completed state for another use. The assessment of whether an asset has an alternative use to the entity is made at contract inception. After contract inception, an entity shall not update the assessment of the alternative use of an asset unless the parties to the contract approve a contract modification that substantively changes the performance obligation. Paragraphs 606-10-55-8 through 55-10 provide guidance for assessing whether an asset has an alternative use to an entity.

ASC 606-10-25-29

An entity shall consider the terms of the contract, as well as any laws that apply to the contract, when evaluating whether it has an enforceable right to payment for performance completed to date in accordance with paragraph 606-10-25-27(c). The right to payment for performance completed to date does not need to be for a fixed amount. However, at all times throughout the duration of the contract, the entity must be entitled to an amount that at least compensates the entity for performance completed to date if the contract is terminated by the customer or another party for reasons other than the entity's failure to perform as promised. Paragraphs 606-10-55-11 through 55-15 provide guidance for assessing the existence and enforceability of a right to payment and whether an entity's right to payment would entitle the entity to be paid for its performance completed to date.

At the crossroads: Changing criteria for over-time revenue recognition

Entities that have previously recognized revenue for customized software using the percentage-of-completion method under legacy GAAP should carefully evaluate their contracts to determine whether they meet the criteria for over-time recognition under ASC 606. Under legacy GAAP, entities with contracts to deliver software that required significant production, modification, or customization generally applied the percentage-of-completion method to recognize revenue, regardless of payment terms. ASC 606, on the other hand, requires that the customized software must have no alternative use to the entity, and that the entity must have an enforceable right to payment for any work completed to date beginning at the point of customization, for over-time recognition. This change in criteria might cause some entities that have previously recognized revenue for customized software over time to defer recognizing revenue until control of the customized software transfers to the customer, for example, when the entity has no alternative use for the customized software but there is no enforceable right to payment for performance completed to date.

ASC 606 discusses two categories of methods that are appropriate for measuring an entity's progress toward satisfying a performance obligation: output methods and input methods. In determining the best method for measuring progress, an entity must consider the nature of the good or service that it promises to transfer to the customer.

Figure 2.3 provides descriptions, examples, and disadvantages associated with using input and output methods for measuring progress toward satisfying a performance obligation.

Figure 2.3: Acceptable methods of measuring progress

Method	Description	Examples	Disadvantages
Output method	Recognize revenue by directly measuring the value of the goods and services transferred to date to the customer relative to the remaining goods or services yet to be delivered or performed.	Time elapsed, units produced or units delivered, transactions processed, product usage metrics	The outputs might not be directly observable, and the information required to apply an output method might not be readily available.
Input method	Recognize revenue based on the extent of efforts or inputs expended toward satisfying a performance obligation compared to the expected total efforts or inputs.	Resources consumed, labor hours expended, costs incurred, time elapsed, or machine hours used	There might not be a direct relationship between an entity's inputs and the transfer of control of the goods/services to the customer.

At the crossroads: Measuring progress to satisfy promises for customized software

Under legacy GAAP, entities with contracts to deliver customized software applied the percentage-of-completion method to recognize revenue. In contrast, the guidance in ASC 606 requires selecting a measure of progress that best aligns with the entity's performance in transferring control of the related goods or services in the contract to the customer. While the result under the ASC 606 criteria might be similar to the result using the percentage-of-completion method under legacy GAAP, software entities should carefully consider whether their current measure of progress is the best method for depicting the transfer of control.

3. Software as a Service

Like software entities, SaaS entities may also face challenges that are specific to their industry. In this section, we highlight some of the unique implementation issues that a SaaS provider might encounter when applying the new revenue guidance.

3.1 Hosting arrangements that include a software license

In some SaaS arrangements, a contract for hosting services also provides the customer with a license to the underlying software as part of the arrangement. When a SaaS arrangement includes a software license component, the software should be accounted for under the supplemental licensing guidance in ASC 606-10-55-54 through 55-58C (see Section 2.1). However, it is important to note that according to ASC 606-10-55-54, software licenses within SaaS and other hosting arrangements are within the scope of the licensing guidance in ASC 606 only if both of the following criteria are met:

a. The customer has the contractual right to take possession of the software at any time during the hosting period without incurring a significant penalty.

b. The customer can feasibly run the software on its own hardware or engage a third-party unrelated to the vendor to host the software.

If these two criteria are not met, the arrangement includes only a hosting service. The entity should account for this service using the general five-step revenue model in ASC 606 and would not apply the supplemental license guidance.

3.2 Professional services

SaaS entities often enter into arrangements that include professional services, which could include setup, implementation, consulting, data migration, and/or training services. When a hosting contract includes these types of services, the entity's first step is to identify whether the services are a promise to transfer a good or service to the customer or whether they are administrative in nature.

Many SaaS entities specify in the contract the implementation and setup activities that they will perform in order to provide hosting services. These entities may even charge a fee for these upfront services. But, in most cases, the upfront fees charged are only for administrative tasks performed by the entity and do not transfer goods or services to the customer. If the customer does not receive any benefits from these services separate from the hosting service and the fee is only for administrative tasks, that fee is part of the overall transaction price, as no goods or services are transferred to the customer. An upfront fee that is accompanied by contract options, such as renewal rights, may indicate that the customer receives a material right, and if so, the entity will need to estimate the stand-alone selling price of the material right and allocate a portion of the transaction price to that performance obligation, as discussed in Section 1.5.

ASC 606-10-25-17

Promised goods or services do not include activities that an entity must undertake to fulfill a contract unless those activities transfer a good or service to a customer. For example, a services provider may need to perform various administrative tasks to set up a contract. The performance of those tasks does not transfer a service to the customer as the tasks are performed. Therefore, those setup activities are not promised goods or services in the contract with the customer.

Other professional services promised in a hosting contract may qualify as promises, but may not be "distinct" from the overall promise of providing access to the SaaS platform, as demonstrated in the following example.

Data security, backups, and penetration scanning

A SaaS provider promises in its contracts to maintain data security and to perform regular backups and penetration scanning. These services are capable of being distinct in that the SaaS solution is functional without performing these services. However, the utility of the hosted solution declines significantly if it is not secure and current, and the security services cannot be performed apart from the software solution. As a result, there is a two-way interdependency between the promises, and the services are not distinct from the hosted platform within the context of the contract. As a result, the SaaS provider would account for the SaaS solution, data security, backups, and penetration scanning as a single performance obligation.

There are some services that may meet the criteria to be distinct in SaaS arrangements. For example, services that can be performed by a third party, such as training or data migration, generally meet the "distinct" criteria. They are capable of being distinct, as indicated by the fact that they can be performed by a third party, and they are distinct within the context of the contract because the entity generally does not significantly integrate training and data migration with the SaaS service, the training and data migration do not significantly modify or customize the service and are not highly interdependent or highly interrelated with the service.

Grant Thornton insights: Considerations when evaluating whether services are distinct

When evaluating whether services are distinct within a SaaS arrangement, entities must consider all the facts and circumstances to determine if the services are both capable of being distinct and distinct within the context of the contract. In making this evaluation, SaaS providers should consider whether they sell the SaaS platform or the services on a stand-alone basis, which is a clear indicator that the services are capable of being distinct. This might be the case with optional data migration or training services.

One of the other key factors to consider in this evaluation is whether another entity could be engaged to provide the same service. For example, a SaaS provider may provide its customers with the option to purchase additional training on how to maximize the use of the hosting platform. A third party that has developed the expertise needed to offer the same type of training to users of the SaaS provider's software platform would indicate that the training is capable of being distinct.

If the professional services are capable of being distinct, the entity should then consider whether they are distinct within the context of the contract. The entity should consider all the facts and circumstances to determine whether the services are transformative and create a new combined product that represents a single performance obligation within the context of the contract or are additive, meaning they do not significantly change the functionality of the software. In most cases, training and data management services are additive and would be considered distinct in the context of the contract and would therefore qualify as a separate performance obligation.

Services that are never sold on a stand-alone basis might be considered distinct if the services do not significantly modify the standard SaaS platform, even if the services cannot be offered by other providers. If the hosting platform is sold on a stand-alone basis without the professional services, a two-way dependency might not exist between the SaaS services and the professional services. In other words, if access to the SaaS platform is sold without the professional services, the SaaS platform becomes a readily available resource, and the professional services are capable of being distinct since the customer can benefit from the modification with other readily available resources (see Section 1.1.1). The entity would then need to evaluate whether the access to the SaaS platform and the professional services are distinct within the context of the contract (see Section 1.1.2).

At the crossroads: Professional services more likely to be a performance obligation

The identification of professional services as a separate performance obligation is more likely to occur under ASC 606 than under legacy GAAP. Under legacy GAAP, professional services were only separable if an entity could demonstrate the stand-alone value for the professional services, which is rare in a SaaS environment because these services are often unavailable from third-party providers. Under ASC 606, SaaS providers that sell SaaS services on a stand-alone basis and offer optional professional services should carefully consider whether the professional services and standard SaaS platform are highly interdependent or significantly modify or customize each other, or if the entity provides a significant integration service. If the promises meet the criteria to be considered distinct within the context of the contract, the professional services and access to the SaaS platform would be treated as separate performance obligations, which for many entities is a significant change from legacy GAAP. In this scenario, a SaaS entity might be required to estimate the stand-alone selling price of both the professional services and the access to the SaaS platform, and to allocate the transaction price between the two performance obligations.

3.3 Upfront fees and consideration of material rights in contract renewals

SaaS arrangements often require a customer to pay an upfront nonrefundable fee at or near contract inception. Because the fees generally relate to administrative activities related to setup and do not transfer additional services to the customer, these fees are generally included in the overall transaction price, and the total price is allocated among the identified performance obligations based on their relative stand-alone selling prices.

Further, SaaS entities frequently allow customers to renew a contract without paying an upfront fee. This practice may result in an entity identifying a material right and deferring the corresponding amount of revenue associated with the right until the renewal option is either exercised or expires. In evaluating whether an upfront fee provides the customer with a material right on renewals, entities need to consider the significance of the fee, whether service alternatives are available, and whether the fee incentivizes customers to renew, as shown in the following example.

Evaluating the impact of upfront fees on renewal option

SaaS Provider H hosts a software platform for its customer, charging a nonrefundable fee of $50,000 at contract inception and an ongoing $1,000 monthly fee. The initial contract term is three years. The customer has the option to renew the contract for an additional three years for $1,000 per month.

Given the significance of the upfront fee, there is a high probability that the customer will exercise the renewal option. The $50,000 upfront fee covers the initial cost of setting up the SaaS services and is therefore a one-time fee that is not charged on renewals. SaaS Provider H concludes the set up activities are not a promise, but an administrative activity, since they do not transfer a good or service to the customer apart from the software platform. Charging an upfront fee is standard in the industry, and the amount is relatively consistent among competitors. SaaS Provider H determines its average customer life is six years.

SaaS Provider H determines that its promise to host the software platform represents a series of distinct services consisting of monthly time increments, under the guidance in ASC 606-10-25-14(b), and is therefore a single performance obligation.

SaaS Provider H next considers whether the prepayment of the setup fee provides the customer with a material right in relation to the renewal option. In making this determination, it considers the following factors:

- The renewal price ($1,000 per month x 12 months x 3 years = $36,000) is much lower than the price a new customer would pay for the same service ($1,000 per month x 12 months x 3 years + $50,000 setup fee = $86,000).
- There are no similar service alternatives available to the customer (that is, the customer cannot obtain substantially equivalent services from another provider without paying an activation fee).
- The average customer life is six years, which indicates that the setup fee offers the customer an incentive to continue paying for the services.

Based on these factors, SaaS Provider H concludes that the initial upfront fee, combined with the renewal option, provides the customer with a material right, and accounts for the option as a separate performance obligation. The entity must therefore determine the stand-alone selling price of the material right, defer the corresponding amount of revenue associated with that right, and recognize revenue only as the service is provided or when the option expires (see Section 1.5).

3.4 Determining the stand-alone selling price

When an entity identifies multiple performance obligations in a SaaS contract, it must determine the stand-alone selling price of the goods or services underlying each performance obligation at contract inception. As discussed in Section 1.6, ASC 606 defines the “stand-alone selling price” as the price at which an entity would sell a promised good or service separately to a customer.

If the stand-alone selling price is not observable because, for example, the entity does not sell the good or service separately, an entity should estimate the stand-alone selling price using all information that is reasonably available to the entity, maximizing the use of observable inputs.

ASC 606-10-32-33

If a standalone selling price is not directly observable, an entity shall estimate the standalone selling price at an amount that would result in the allocation of the transaction price meeting the allocation objective in paragraph 606-10-32-28. When estimating a standalone selling price, an entity shall consider all information (including market conditions, entity-specific factors, and information about the customer or class of customer) that is reasonably available to the entity. In doing so, an entity shall maximize the use of observable inputs and apply estimation methods consistently in similar circumstances.

Information that is reasonably available to the entity may include,[9] but is not limited to, the following items:

- Reasonably available data points, such as the stand-alone selling price of the good or service, costs incurred to manufacture or provide the goods or services, related profit margins, published price listings, third-party or industry pricing, and the pricing of other goods or services in the same contract
- Market conditions, such as supply and demand for the goods or services in the market, competition, restrictions, and trends
- Entity-specific factors, such as business pricing strategy and practices
- Information about the customer or class of customer, such as type of customer, geographical region, and distribution channel

Evaluating the evidence when estimating the stand-alone selling price of goods or services may require significant judgment.

At the crossroads: The selling price 'hierarchy'

The legacy guidance in ASC 605-25 specified the following hierarchy for determining the stand-alone selling price of each deliverable:

1. Vendor-specific objective evidence (VSOE) of the selling price
2. Third-party evidence of the selling price
3. The best estimate of the selling price

Under ASC 605-25, if an entity lacked VSOE for a deliverable, it would determine whether there is third-party evidence of the selling price before estimating the stand-alone selling price of the goods or services.

In contrast, ASC 606 does not specify a hierarchy of evidence to determine the stand-alone selling price for goods or services. That said, the guidance in ASC 606-10-32-32 states that the best evidence of a stand-alone selling price is the "observable price of a good or service when the entity sells that good or service separately in similar circumstances to similar customers." Further, if an entity needs to

[9] BC269, ASU 2014-09.

estimate the stand-alone selling price, the guidance requires the entity to use all information that is "reasonably available," maximizing the use of observable inputs.

While the resulting stand-alone selling price determined under legacy GAAP and under ASC 606 may not be significantly different, the process to arrive at these amounts might differ greatly.

3.4.1 Estimating the stand-alone selling price of an option

If a customer option constitutes a material right and is therefore accounted for as a separate performance obligation, the entity must determine a stand-alone selling price for that option for purposes of allocating a portion of the transaction price to that performance obligation. If the stand-alone selling price is not directly observable, which is often the case for an option, it must be estimated. The estimate should reflect the discount the customer obtains when exercising the option, adjusted for both any discount that the customer might receive without exercising the option and the likelihood that the customer will exercise the option.

ASC 606-10-55-44

Paragraph 606-10-32-29 requires an entity to allocate the transaction price to performance obligations on a relative standalone selling price basis. If the standalone selling price for a customer's option to acquire additional goods or services is not directly observable, an entity should estimate it. That estimate should reflect the discount that the customer would obtain when exercising the option, adjusted for both of the following:

a. Any discount that the customer could receive without exercising the option

b. The likelihood that the option will be exercised.

Allocating stand-alone selling price to a renewal option

Continuing the example in Section 3.3, assume that the SaaS Provider H estimates a 75 percent likelihood that the customer will renew the contract for a second three-year period.

To estimate the stand-alone selling price of the option, the entity performs the analysis in the following table.

Performance obligation	Stand-alone selling price	Description/calculation
Upfront fee	$ 20,000	
First three years of service fees	36,000	$1,000 per month x 36 months
Renewal option	27,000	$36,000 for renewal-period service fees x 75% probability of exercise
Total	$ 83,000	

Therefore, total consideration of $56,000 received for the first three years of service would be allocated as shown in the following table.

Performance obligation	Stand-alone selling price	Calculation
First three years of service	$37,783	($56,000 ÷ 83,000) x $56,000
Renewal option	18,217	($27,000 ÷ 83,000) x $56,000
Total	$56,000	

As a result, SaaS Provider H allocates $37,783 to the initial three-year period and $18,217 to the renewal option. SaaS Provider H recognizes revenue of $37,783 over time throughout the first three years and records $18,217 as a liability for the option, which will be recognized over the second three-year period or when the option to renew expires.

3.4.2 Practical alternative to estimating the stand-alone selling price of an option

ASC 606 provides a practical alternative that may be used when a customer has a material right under the terms in the original contract to acquire future goods and services that are similar to the original goods or services in the contract. This guidance generally applies to a customer's right to renew a contract on pre-agreed terms. The practical alternative in ASC 606-10-55-45 permits an entity to allocate the transaction price to the optional goods or services by referring to the goods or services expected to be provided and the corresponding expected consideration.

ASC 606-10-55-45

If a customer has a material right to acquire future goods or services and those goods or services are similar to the original goods or services in the contract and are provided in accordance with the terms of the original contract, then an entity may, as a practical alternative to estimating the standalone selling price of the option, allocate the transaction price to the optional goods or services by reference to the goods or services expected to be provided and the corresponding expected consideration. Typically, those types of options are for contract renewals.

Valuing an option when a nonrefundable fee gives rise to a material right

Assume the same facts in the example in Section 3.4.1, except that SaaS Provider H estimates the stand-alone selling price of the renewal option using the practical alternative in ASC 606.

Description	Amount	Calculation
Upfront fee	$ 20,000	
First three years of service fees	36,000	$1,000 per month x 36 months
Second three years of service fees (renewal period)	36,000	
Total	$ 92,000	
Total consideration per month	$ 1,278	$92,000 ÷ 72 months (six years)

Therefore, total consideration of $56,000 received for the first three years of service would be allocated as shown in the following table.

Performance obligation	Allocation		Calculation
Hosting service (initial contract term)	$	46,000	$1,278 per month x 36 months
Option	$	10,000	$56,000 received less amount allocated to initial contract term

During the first three years, SaaS Provider H recognizes monthly revenue of $1,278 as it performs the hosting services and defers the $10,000 allocated to the option, since that amount is essentially a prepayment for services to be provided during the renewal period.

During the second three-year term of the contract (the renewal period), it recognizes $1,278 in revenue per month. That is, $36,000 that it receives from the customer ($1,000 per month x 36 months) plus the $10,000 related to the option ÷ 36 months.

Taking a step back, SaaS Provider H concludes that the accounting reflects the nature of its promise to transfer a series of the same services over the entire six-year period. As a result, recognizing the same amount of revenue for each month of service is in line with the core principle of the revenue guidance under ASC 606.

3.5 Additional seats/users/IP addresses

SaaS providers frequently allow customers to add users to an existing contract. If the original contract allows more users to access the hosted services, the service provider must consider whether the additional users are either an option that expands the rights and obligations in the original agreement or merely an attribute of that agreement. If adding users is a contractual customer option, it must be evaluated to determine if it is a material right. If the option to add users is not included in the original agreement, the SaaS provider must apply the modification guidance in ASC 606-10-25-10 through 25-13 when the customer decides to add users (see Section 1.7).

3.5.1 Modification of a contract to add users

If a customer requests to add users to a hosted service contract but the option was not part of the original agreement, the scope of the original agreement has been changed, and the SaaS provider must apply the modification guidance in ASC 606 (see Section 1.7). Because the additional users are generally distinct from the users and services included in the original contract, the key to determining how to account for the additional users is to determine whether the price that the customer pays for the change in scope is equivalent to the stand-alone selling price of the service being provided for the additional users. If the price of the additional users is the same as the price per user in the original contract (that is, the option is at stand-alone selling price), the entity should account for the new users as a new contract. If the price is not the same as the stand-alone selling price, the entity should account for the modification as the termination of the old contract and the creation of a new contract.

Modification of SaaS contract to add users

An online training provider enters into a contract with a customer for a limited, nonexclusive license to access video and computer-based online training programs via the provider's website. The customer is allowed to use the programs during the term of the agreement only for training its employees. The programs remain the sole property of the training provider. The term of the agreement is 36 months and the contract includes a substantive termination penalty for early cancellation.

The pricing is $4,000 per month for up to 1,000 users, plus $4 per user per month for users 1,001 through 2,000.

After one year, the customer has reached 2,000 users, and the contract is modified to allow additional users at a reduced fee of $2 per user for users in excess of 2,000.

The training provider considers whether the modification should be accounted for as a separate contract. Although the scope of the contract has increased, it determines that the increase in consideration is not equivalent to the stand-alone selling price for the added services because the stand-alone selling price for this customer tier would be $4 per user.

Because the remaining services and additional users are distinct from the services transferred before the contract was modified, the training provider would account for the modification as the termination of an old contract and the creation of a new contract.

3.5.2 Additional users included in the original contract

SaaS contracts often include fees based on the number of seats, users, or IP addresses that access the hosted system. In these types of arrangements, it may be challenging to determine whether the additional fees result from optional purchases or are instead variable consideration. If the addition of seats, users, or IP addresses expands the services being provided, the contract contains an option and must be evaluated to determine if the option provides the customer with a material right. For example, if a contract specifies the total number of users that may access the software at a particular time but allows a customer to pay an additional fee to add users exceeding that number, the right to increase the total number of users might be considered an option, as it expands the customer's rights under the contract. If, on the other hand, the fee is based on usage of the hosted service to which the entity is already entitled under the original contract, the fee paid to add users exceeding the number stipulated in the contract would be treated as variable consideration. For example, if the customer pays a fee for each minute a user accesses the hosted service, the additional fees for usage are considered variable consideration. See Section 3.6 for additional information on distinguishing between options and variable consideration in a SaaS environment.

The evaluation of fees per user in a SaaS arrangement is similar to the evaluation performed in a software arrangement, except that the sales- and usage-based royalties exception does not generally apply unless the SaaS arrangement includes a software license that is within the scope of the supplemental licensing guidance. SaaS and other hosting arrangements are within the scope of the licensing guidance only if the customer (1) has a contractual right to take possession of the software at any time during the hosting period without incurring a significant penalty, and (2) can feasibly run the software on its own hardware or contract with an unrelated party to host the software. If the SaaS arrangement doesn't meet these two criteria, it is outside the scope of the licensing guidance and an entity cannot apply the sales- and usage-based royalties exception. As a result, per-user fees may qualify as variable consideration that require estimation. However, SaaS entities may arrive at similar accounting, regardless of whether the arrangement is within the scope of the sales -and usage-based royalty exception, if the services performed meet the "series guidance" in ASC 606-10-25-15 and if allocating the variable amount of consideration entirely to the distinct service within the series is consistent with the allocation objective in ASC 606-10-32-28. See Section 1.2 for additional information on the series guidance and how to allocate variable consideration in a series.

3.6 Distinguishing optional goods or services from variable consideration

Entities might find it challenging to distinguish between a contract that contains an option to purchase additional goods and services and a contract that includes variable consideration based on variable quantities, such as usage-based fees. But, this distinction is important due to the different accounting and disclosure requirements for options and variable consideration.

If a contract option does not provide a material right to the customer, the entity should determine the transaction price excluding the additional goods or services provided under the option until it is exercised. Additionally, because the option is a performance obligation the SaaS entity would need to include all of the required disclosures for performance obligations

In contrast, when a contract includes variable consideration due to unknown quantities, discounts, performance bonuses, penalties, refunds, or other items, the entity will generally need to estimate the amount of consideration to which it expects to be entitled in exchange for transferring the promised goods or services to the customer. The exception to this would be if the contract qualifies for the right to invoice expedient (see Section 1.4) or, for example, in the case of usage-based fees, if allocating the variable amount of consideration entirely to the distinct good or service within the series is consistent with the allocation objective in ASC 606-10-32-28 (see Section 1.2). Once total variable consideration is estimated, the entity should apply the constraint guidance in ASC 606-10-32-11 and include the estimated variable consideration within the transaction price only to the extent that it is probable a significant revenue reversal in the amount of cumulative revenue recognized will not occur when the uncertainty causing the variability is resolved. In addition to the disclosures about the judgments used in determining the transaction price, the entity should also disclose the methods, inputs, and assumptions used in estimating variable consideration, in assessing whether the estimate of variable consideration is constrained, and in allocating variable consideration to a specific part of the contract (if applicable).

The TRG discussed how an entity may distinguish between optional purchases and variable consideration.

TRG area of general agreement: How can an entity distinguish between an optional purchase and variable consideration?

At the November 2015 meeting,[10] the TRG reached general agreement that an entity must apply judgment to distinguish between contracts that contain an option to purchase additional goods or services and contracts that contain variable consideration.

The TRG also generally agreed that this evaluation depends on the nature of the promise and on the enforceable rights and obligations under the existing contract. An indication that a contract contains variable consideration is when the existing contract obligates the vendor to transfer the promised

[10] TRG Paper 48, *Customer options for additional goods and services.*

goods or services, and the customer to pay for those goods or services, and future customer actions or events that result in additional consideration occur as or after control of the promised goods or services is transferred. In this case, the customer's actions do not obligate the entity to transfer additional distinct goods or services.

Alternatively, an indication that a contract contains an option for additional goods and services is when a customer has a present contractual right to choose the amount of additional distinct goods or services that it will purchase (that is, it is a separate purchasing decision). Before the customer exercises that right, the vendor is not obligated to provide those goods or services; rather, the customer's action in an optional purchase results in a new obligation for the vendor to transfer additional distinct goods or services.

TRG Paper 48 includes the following example to assist in distinguishing between variable consideration and an option to purchase additional goods or services.

Example of variable consideration

> *A transaction processor enters into a 10-year agreement with a customer to provide continuous access to its system and to process all transactions on behalf of its customer. The customer is obligated to use the transaction processor's system to process all of its transactions and is charged on a per transaction basis; however, the ultimate quantity of transactions is not known and remains outside the control of both the transaction processor and the customer. The customer simultaneously receives and consumes the benefit of the system and, therefore, the entity recognizes revenue over time.*

The TRG generally agreed that the customer does not control the number of transactions processed and that the nature of the promise is to provide the customer with continuous access to the processing platform. Because the transaction processor is already obligated to provide continuous access to the platform, the events that trigger additional payments do not create an obligation to transfer additional goods or services, which indicates that the contract includes variable consideration instead of a customer option.

TRG Paper 48 cautions that not all transaction processing activities should be accounted for as outlined in this examples. The determination of whether a contract contains variable consideration or an optional purchase depends upon the nature of the promise and the specific facts and circumstances of each situation.

The following example illustrates how an entity might distinguish between optional purchases and variable consideration within the same contract.

Optional purchases and variable consideration in a hosted software environment

SaaS Provider J enters into a contract with a customer to provide access to its hosted software. The contract specifies that the customer is purchasing five "licenses" at $2,000 per year for five years, but allows the customer to add licenses at $2,000 per license per year. The system allows for the creation of unlimited user IDs to access the system, but under the initial contract only five users may be active simultaneously—one for each active hosted license. The contract also specifies that the customer must pay a fee of $.50 for each minute the system is used. The customer does not have the contractual right to take possession of the software at any time during the hosting period; therefore, SaaS Provider J determines that the arrangement does not include a software license and it is accounted for as a service arrangement.

SaaS Provider J concludes that the additional licenses expand the customer's utility of the software by permitting more users to access the hosted software simultaneously. It considers the additional licenses, which are similar to additional seats, to be an option rather than variable consideration. The option to purchase additional licenses is provided at the stand-alone selling price for customers who have not previously entered into a contract, and is not considered a material right.

What's more, SaaS Provider J determines that the fee for each minute of usage does not expand the customer's utility of the hosted software, but that it is a charge for use of a hosted platform, which the customer already has the right to access. As a result, the fee is considered to be variable consideration and SaaS Provider J concludes that the contract is for a single performance obligation that is a series of distinct monthly increments. SaaS Provider J allocates the variable consideration for use of the hosted service entirely to each monthly time increment because the terms of the variable payment relate specifically to the transfer of service to the customer during each month and allocating the variable payment to each month is consistent with the allocation objective in ASC 606-10-32-28. Therefore, SaaS Provider J does not need to estimate the total variable consideration associated with the usage of the hosted software.

3.7 Hosted software updates and upgrades

SaaS providers frequently make updates, adjustments, and upgrades to their software. If the SaaS provider promises to provide these updates to their existing customers, whether explicitly stated in the contract or implied by business practice, the entity will need to determine whether the updates are additional promises in a contract. When making this determination, a SaaS provider should consider the nature of the modification or upgrade to see if it is an additional promised service that is satisfied when the upgrade is released or if it is part of the overall promise to provide access to the core software.

3.7.1 Modifications or upgrades that are part of overall promise

Some software modifications and upgrades are part of the overall promise to provide access to a software platform. These modifications or upgrades are typically made to the core software and do not have stand-alone value. For example, updating the graphics in an existing software or making changes to the software coding to improve the search function would improve the existing hosting service, but would not be considered an additional service in a specific customer contract. These types of upgrades are generally not considered separate performance obligations because they do not transfer control of an additional good or service to the customer. The customer in a SaaS arrangement does not typically have control of the underlying software, which remains in the possession of the SaaS entity. As a result, any updates or modifications made to the software are also owned by the SaaS entity and are generally part of the promise to provide continuous access to the hosted software.

However, in certain situations, these types of modifications would qualify as separate performance obligations. The analysis of whether a modification is a separate performance obligation could differ significantly in a multi-tenant versus a single-tenant arrangement.

Multi-tenant arrangement

In a multi-tenant arrangement, where numerous customers access the same hosted software, the promise to all customers who access that software is to provide access to the most current available version of the software. The software is not customized or tailored to each particular customer; instead, all customers "plug in" to or access the same software. As a result, modifications, adjustments, and upgrades made to the core software benefit all customers who access the platform and the costs associated with those changes are generally accounted for as fulfillment costs. An exception is when an individual customer contracts for a particular upgrade or modification to be made within a specified timeframe. In this situation, the additional upgrade or modification for that particular customer may be a separate performance obligation. All other tenants can access and benefit from the upgrade or modification, but the SaaS provider would not identify a separate performance obligation for the other tenants accessing the modified platform because in those contracts the modification would be part of the overall performance obligation to provide customers with access to the most current version of the software.

Single-tenant arrangement

In a single tenant arrangement, there is only one customer who can access a particular version of the hosted software. As a result, modifications, updates, or upgrades to the hosted software requested by the customer are more likely to be considered separate performance obligations. If the customer's ability to request changes to the software is provided for in the original contract, the SaaS entity should consider the significance of the updates requested and whether they are capable of being both distinct and distinct within the context of the contract. Updates or changes to the software may be considered capable of being distinct if they are sold separately or if the platform is sold without these modifications. They may also be distinct within the context of the contract if the following three criteria are met: (1) the entity doesn't provide a significant service of integrating the changes or updates with the hosted platform, (2) the modifications or customizations aren't significant and do not create a two-way dependency between the changes or updates and the platform, and (3) the changes or updates are not highly interdependent or interrelated with the hosted services platform. Significant changes or updates are less likely to meet these criteria.

Changes or updates to hosted software in a single-tenant arrangement that are considered to be significant and are provided for under the original agreement may be considered part of the original performance obligation. In other words, if the updates or changes significantly customize or modify the SaaS platform, the promise is likely to provide a significantly different service than the SaaS platform could without the modifications. For example, if a customer contracts for access to a SaaS platform, but requires first modifying the software to interface with its existing system, the contract would likely include a single performance obligation for a system-compatible SaaS platform. In other cases, updates may be required so that the SaaS platform remains useful, which indicates that the updates and original platform are highly interdependent and interrelated and therefore are not distinct within the context of the contract. For example, a contract that allows a customer to access an online database of court decisions may also provide for updates to the database reflecting recent court decisions. Because the utility of the database depends on constantly updating the database with the most up-to-date information, the entity may identify a single performance obligation for providing access to current court decisions.

If the changes or updates are negotiated after the original contract, the arrangement would be accounted for as a modification of an existing contract. If the updates or changes significantly modify the SaaS platform, they would likely result in a significantly different service being provided in the new SaaS platform compared to the original platform. In other words, the remaining SaaS services to be provided are distinct from the services already provided under the original contract, but they are not distinct from the changes and updates. Therefore, the modification would generally be treated as a termination of the old contract and the creation of a new contract because the remaining services are distinct from the services transferred before the modification, as illustrated in the following example.

Significant changes negotiated after the initial contract

SaaS Provider K enters into a contract with a customer to provide access to a hosted software for three years at a rate of $60,000 per year. At the end of year two, the customer identifies significant changes it wants SaaS Provider K to make to the underlying software. The customer agrees to pay an additional $10,000 for these modifications and extends the contract for an additional year. The customer continues to access the software during the customization process.

SaaS Provider K determines that there has been a change in the scope and the price under the original contract and applies the modification guidance in ASC 606-10-25-10 through 25-13. It further determines that the customization and the SaaS services are not distinct within the context of the contract, but that the services previously transferred are distinct from the SaaS services to be transferred after the modification.

SaaS Provider K concludes that the modification should be accounted for as a termination of the old contract and the creation of a new contract, with a transaction price of $130,000 ($60,000 x 2 years + $10,000) allocated over the remaining two years of service because the customer continues to access services during the customization process.

3.7.2 Modifications or upgrades that result in an additional promised service

Certain modifications and upgrades to SaaS contracts that transfer an additional promised service may qualify as a separate performance obligation. For example, a SaaS provider adds a new software module to an existing core software product, which creates additional features and functionalities but does not change the functionality of the original core software. The additional features and functionalities may be considered a separate performance obligation as there may not be a two-way dependency between the core SaaS services and the new module because the customer could continue to benefit from the core service without using the features in the added module.

When evaluating whether modifications or upgrades are performance obligations, SaaS providers should evaluate the specific facts and circumstances to determine whether the modifications create an additional promised service. One clear indicator that an upgrade is an additional promised service is when a SaaS provider intends to sell the new feature or functionality on a stand-alone basis or bundled with an entirely different core software.

However, even if the SaaS provider only intends to provide access to the new features as part of the original software suite, the modifications could still be considered distinct. If the added features provide discrete capabilities that provide value to the customer apart from the functionalities of the original software, the modifications or upgrades might be considered distinct performance obligations.

When communicating planned upgrades, features, or functionality enhancements to customers and in marketing materials, SaaS providers should carefully consider whether these communications create an implied promise to provide new or existing customers with these modifications. See Section 1.1.5.

The following example illustrates a situation in which a new feature is considered an additional promised service.

Significant new functionality

SaaS Provider L provides customers with access to an online platform that can be accessed from any computer. SaaS Provider L enters into a contract with a customer that also requires SaaS Provider L to develop a mobile application that will allow customers to access the platform from a mobile device.

SaaS Provider L determines that the customer could benefit from the online platform without the mobile application and that there is no two-way dependency between the desktop version and the mobile version of the platform. SaaS Provider L therefore identifies two separate performance obligations: the desk-top version and the mobile application. SaaS Provider L allocates the transaction price between the two performance obligations based on their estimated stand-alone selling prices and recognizes revenue for the desktop version beginning when the customer obtains access to the platform. Revenue recognition for the mobile application will begin when the feature is made available and will be recognized over time as access to the mobile application transfers to the customer.