Technology Industry

A shifting software revenue recognition landscape

Insights on potential impacts of the proposed revenue model on current US GAAP

Volume 2

PricewaterhouseCoopers

Dear Executive,

On June 24th, 2010, the US Financial Accounting Standards Board (FASB) and the International Accounting Standards Board (IASB) jointly issued an exposure draft on revenue recognition. These potential changes, if adopted, would significantly alter the landscape for software accounting worldwide. Software companies, therefore, must explore the implications of this exposure draft. If ratified, these changes would be applicable in the near future.

The economic and technical characteristics of the software industry make revenue recognition not only a complex issue, but one of strategic importance. US GAAP currently has a complex set of rules dedicated to the software industry. The proposed revenue model depicted in the exposure draft eliminates these unique software rules and instead focuses more on principles that will be applied to all types of revenue generating transactions, with limited exceptions. Beyond understanding the key principles of the proposed model, it is necessary to identify and analyze how the key principles will be applied in the absence of detailed rules that exists today, as the application of these principles will require more judgment.

In this paper, the PricewaterhouseCoopers (PwC) US Software practice examines certain situations in which the proposed model may require a reconsideration of revenue recognition policies and practices that were driven by current rules based on US GAAP compliance. This guide does not comprehensively address all issues involved.

PwC is ready to help you further understand the implications of the proposed revenue model. Please contact any of the software industry specialists listed at the end of this publication.

Sincerely,

Dean S. Petracca
Global Software Sector Leader

Introduction

Revenue recognition is a complex issue for software companies. Over the past decade software companies have adapted to a unique revenue model under US GAAP that has very prescriptive requirements for recognizing revenue. Unfortunately, when those requirements are not met, the default accounting often does not match the economics of the underlying transactions. The objective of the FASB/IASB with the proposed model is to have the accounting better portray the economics of the underlying transactions and to have one model that would apply consistently across most industries.

At a high level, the proposed model is simpler in the sense that the detailed rules that cover the various transaction types in the software industry are eliminated and replaced by a general principles-based model. However, with this type of simplification comes more judgment, more disclosure, and a likely change in certain business practices that had developed around the detailed requirements of the current software specific rules.

In this paper we will discuss how companies might begin to apply the proposed model to typical software transactions.

For each issue, we highlight the context, give a brief summary of the current US GAAP approach and provide insights into how the issue would be addressed under the proposed model. Where applicable, we will provide observations on practical implementation issues and insights on which business practices are likely to change.

In general, the current detailed rules will be replaced by more management judgment. The key judgments will relate to how a company interprets the principles of the proposed standard in order to account for the unique aspects of software transactions. Specifically, we will address the following issues:

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Contracts with customers

Context

The software industry engages in a wide range of transaction structures and complexities; from fairly straight-forward one or two-page single product licensing agreements to multiple-element, customer-specific arrangements whose details are described in 50-plus page contracts. Irrespective of the type of arrangement, substantiating the parties' final agreement to the terms and conditions of the arrangement can sometimes be difficult in practice. Prior to current practice, the industry faced a succession of accounting irregularities in which certain companies had been recognizing revenue before final agreement on the terms and conditions had been reached. The question then arose as to whether prescriptive rules were needed to prevent recognition of revenue before an agreement had been finalized.

Brief summary of the current US GAAP approach

Under current US GAAP, no revenue can be recognized unless persuasive evidence of an arrangement exists. What constitutes such evidence may differ, depending on a particular company's customary business practice. The current rules explicitly state that where customary practice is to obtain a signed contract, no revenue may be recognized until a final written contract has been signed by both parties. A letter of intent summarizing the main terms of the contract is generally not sufficient, because the parties have not yet agreed to all the terms and conditions that would be included in a final signed contract. In addition, if, at the balance sheet date, the contract has not been signed by one of the parties, no revenue can be recognized, even if all other revenue recognition criteria have been met and the lack of signature is due solely to administrative formalities extraneous to the negotiations between the parties.

This approach is intended to avoid accounting practices that might result in revenue being recognized prematurely. Also, difficulties in applying the multiple-element model can arise if no signed contract exists, due to the uncertainty of identifying all the deliverables in the arrangement without a signed contract. In many cases, a contract that has not yet been signed is still under negotiation and, hence, may be amended before it is finally signed. Potentially, such amendments will involve the insertion of supplementary clauses extending the vendor's obligations (upgrades, new versions, discounts on future products, add-on services, etc.). If the content of such clauses is unknown, the default under the accounting rules is to suspend all revenue recognition until all contract obligations are known.

In some instances, companies considered carving up the pieces of a complex arrangement to avoid waiting for all the pieces to be in place before recognizing revenue on certain elements that might have already been delivered. However, to further reinforce the importance of evidencing a comprehensive understanding of the complete negotiation, US GAAP provides specific guidance on when a group of contracts or agreements may be so closely related that they are, in effect, parts of a single arrangement. The form of an arrangement is not necessarily the only indicator of the substance of the arrangement. The existence of certain factors may indicate that a group of contracts should be accounted for as a single arrangement.

The approach under the proposed revenue standard

Under the proposed revenue recognition model, the concept of persuasive evidence of an arrangement being limited to the evidence that represents a company's customary business practice is replaced with a non-prescriptive principle. Under this proposed model, the accounting begins when an enforceable contract with a customer exists, irrespective of the form. As proposed, it is conceivable that a company might conclude that a letter agreement is an enforceable contract, even if the final version of a formal contract has yet to be signed by both parties. It is important, therefore, that a company have a complete understanding of all the transaction terms, including explicit and implied obligations. The practices and processes for establishing contracts with customers vary across legal jurisdictions, industries and entities, and they may also vary within an entity. An entity should consider those practices and processes in determining whether a contract exists.

An entity may need to combine two or more contracts or segment one contract into two or more contracts to properly reflect the economics of the underlying transaction. The proposed model focuses on pricing interdependence. Combination or segmentation of contracts will depend on whether the amount of consideration for goods or services in one contract is dependent on the amount of consideration for goods or services in another contract. In other words, combine contracts when prices are interdependent and segment contracts if products or services are priced independently. The factors that indicate multiple contracts have interdependent pricing are:

- Contracts entered into at or near the same time
- Contracts negotiated as a package with a single commercial objective
- Contracts that are performed concurrently or continuously

Key observations

Generally speaking, the changes in the proposed model should eliminate the instances where revenue is not recognized because of an administrative delay in getting non-substantive terms finalized or getting the exact signature timing correct, if from a legal perspective the contract is enforceable without it. In such cases, companies should have an appropriate process in place to ensure such enforceability exists. We expect the move away from a company's customary business practice will have an impact on revenue recognition, but will also allow companies to be more flexible in dealing with their customers' preferred way of contracting. However, companies will still need to make sure they have the processes in place to capture all relevant transaction terms, if they choose to move away from a single form of contracting. Also, contracts signed by both parties tend to be the best way to mitigate the risk related to a customer dispute over the vendor's obligations. We expect companies to consider how much risk mitigation they wish to sacrifice, if any, for the added business benefit of being more flexible in the transacting process.

Performance obligations in software transactions

Context

Once an agreement has been reached, software companies focus on fulfilling the obligations in the arrangement. These activities are the core of what the particular software company does. Of course it's these activities that also drive value to the customer, company and shareholders; and are represented in the financial statements as revenue. However, before a company can record revenue, it needs to determine which activities generate revenue.

Brief summary of the current US GAAP approach

Currently under US GAAP, there is no definition of the revenue-producing activity. Over time, a working definition has been created, and in practice, those activities are generally considered deliverables. The deliverables are items that the seller must deliver (tangible or intangible products) or the activities (services) the seller must perform in order to be paid and keep the consideration. Once a company identifies the deliverables in the arrangement, the detailed rules are applied in determining when and how much to recognize as revenue for each deliverable.

The current software guidance adds some complexity indetermining whether a particular deliverable can be recognized separately. If one deliverable is essential to the functionality of a second deliverable, then the two deliverables are considered a single deliverable for revenue recognition purposes.

The approach under the proposed revenue standard

Under the proposed revenue model, revenue is recognized for each distinct performance obligation. A distinct performance obligation is similar to a deliverable. For example most software contracts have:

- License to use software
- PCS
- Implementation services

These items are considered deliverables under the current accounting model and would be considered performance obligations under the proposed model. However, we believe most contracts today have performance obligations that do not drive revenue. Therefore, the question becomes which performance obligations not previously thought of as deliverables will be considered performance obligations that drive revenue. For example:

- Warranty
- Promise to defend patents
- Promise to provide an annual development plan

Conceivably one could argue that each of the above obligations is a performance obligation, in that each is a bargained-for item in a contract with a customer that requires the company to perform in order to discharge its obligations under the contract. Let's look at each one separately.

Performance obligations in software transactions *(continued)*

Certain warranty obligations are specifically identified as a performance obligation in the exposure draft. Accordingly, under the proposed standard, warranty obligations will drive revenue. This is a big change for tangible-products companies that have been following a cost accrual model for future warranty costs at the time of sale. This is not a significant item for most software companies, since most software companies cover their warranty (bug fix) exposure with deferred revenue for PCS.

Many software companies provide their customers with patent protection. Basically, the company is making a promise to the customer that if a third party claims the software infringes on its existing technology, the company will actively defend such claim at no cost to the customer. Under current GAAP, this type of item is not treated as a deliverable. Consistent with current US GAAP treatment, the proposed standard specifically indicates that patent indemnification is not a performance obligation.

Sometimes software companies are contractually required to provide customers with copies of their annual development plans. Later in this document we will provide insights into the impact of the proposed standard when a company has concluded that the items disclosed on the roadmap are specified upgrades. If a company concludes that the items disclosed on a roadmap are not specified upgrades, the company must still evaluate whether the administrative obligation to provide the roadmap is a performance obligation in and of itself.

Key observations

The activities that are considered deliverables or elements under current US GAAP will most likely be considered performance obligations under the proposed model. The key question is what other obligations will be considered performance obligations. We expect, over time, practice to evolve in this area to keep pace with contracting practices. Initially, companies will likely take the path of grouping their contractual obligations into a few categories, such as true performance obligations, administrative obligations, legal obligations, passive obligations, etc. From there, companies can make determinations for the category as a means to establish an overall policy that fits their facts and circumstances. Should certain non-key or administrative obligations become revenue drivers, companies would need to analyze whether the benefit of maintaining the obligation in future contracts is worth the impact of the effort to establish a separate selling price , and tracking performance against the obligation separately.

The underlying principles of the proposed standard will result in virtually all of the deliverables that are included in most software transactions (license, PCS, services, etc.) to be accounted for separately. The instances where the arrangement consideration related to a multiple-element transaction is deferred and amortized as the last element is delivered will be virtually non-existent.

Uncertain consideration

Context

Many software transactions have some component of uncertain consideration (variable fees). The most common example is a future royalty. Typically, future royalties are included in arrangements with OEMs or resellers. Another common example of uncertain consideration is usage-based fees. Usage-based fees are more commonly seen in end-user licenses.

An issue with these type of contingent fees is when they should be recognized.

Brief summary of the current US GAAP approach

One of the prerequisites for revenue recognition in current US GAAP is whether the vendor's fee is fixed or determinable. A software licensing fee is not considered fixed or determinable if the amount is based on the number of units distributed or copied, or the expected number of users. Contractual minimums (either royalty or usage) that are paid irrespective of the actual level of royalty or usage are considered a component of a fixed fee. License arrangements that include future royalties or usage-based fees are recognized at the point in time where they become fixed or determinable. Generally this occurs when the event that drives the royalty or the usage occurs, which in turn makes the fee due and payable.

Another prerequisite for revenue recognition in current US GAAP is that collectability is probable. Collectability refers to an entity's wherewithal to pay. There is not a lot of detailed guidance related to collectability. In practice, collectability is evaluated through the seller's credit process which generally considers a customer‘s current financial status and its history of making timely payments. As a prerequisite for revenue, the collectability assessment is an on/off switch for revenue recognition. Accordingly, revenue from transactions with customers where enough doubt exists about their ability to pay is generally recognized at the time payment is made.

The approach under the proposed revenue standard

Treatment of uncertain consideration in the new revenue model is one of the more potentially significant changes for software companies. As mentioned previously, one of the overall goals of the proposed model is to align the accounting with the underlying economics of the transaction. The model is based on a principle that revenue should be recognized when a seller's performance obligations are satisfied. That said, having future royalties recognized over time doesn't generally match the seller's performance. In theory, the licensing of the software is the performance act by the seller that drives the seller's right to receive fees. Granted, when royalties and/or usage fees exist, there is a second act or acts that also entitle the seller to receive fees. But those acts (the future resale or usage) are not obligations of the seller; they are actions taken by the customer.

In order for the above principle to be achieved, the proposed model calls for all revenue, both fixed and variable, to be measured at contract inception and recorded as the related performance obligation is satisfied as long as such amounts are reasonably estimable. This means that future royalties or usage-based fees would be estimated at contract inception and recognized as revenue when the related performance obligation is satisfied. If the seller was unable to reasonably estimate the uncertain consideration at contract inception, the initial measurement of the fee would only include the fixed amounts.

Uncertain consideration *(continued)*

For example, let's say a vendor entered into a non-exclusive perpetual license with an OEM for a fixed fee and a future royalty of 1% of its revenue on products that include the licensed software. If the vendor was able to make a reasonable estimate of the future royalty, that amount combined with the fixed fee would be recognized as revenue at the time the software was delivered to the OEM.

Following that same principle, the proposed model does not include an on/off switch for collectability. Instead, collectability is factored into the amount of revenue recognized at the outset. Said differently, the vendor would estimate the amount of consideration it expects to receive using a probability-weighted cash flow analysis, which would include the various probabilities of payment outcomes. That estimated amount would be recorded when the related performance obligation is satisfied. This would maintain the principle that revenue should be recognized when performance obligations are satisfied and respects the notion that receiving consideration is still a cornerstone of revenue recognition.

Additionally, the proposed standard requires companies to consider the time value of money when accounting for arrangements where the timing of payment differs from the timing of its performance obligations. In cases where there is a difference in timing, the company would have to account for the time value of money if material.

Key observations

Uncertain consideration is potentially one of the more significant changes in the proposed revenue model for software companies due to the proliferation of future royalties and usage-based fees in software arrangements. How significant a change will depend on whether the industry and the regulators expect companies to be able to make reasonable estimates.

Whichever judgment a company makes, the key is going to be how the company supports its conclusion. We would expect the following factors to be included in the analysis of whether a reasonable estimate can be made:

- Length of time covered by the royalty or usage
- Past experience with similar products and/or customers
- How predictable is the future event
- What data or assumptions went into pricing the royalty or creating the usage based fee
- How reliable is the data or assumptions that factored into the pricing

As collectability will no longer being an on/off switch for revenue, this is generally viewed as a positive. However, any post-sale changes in consideration (both for collection experience or cash based concessions) would flow through other income/expense and not revenue.

Whenever the concept of time value of money is raised, it is thought of exclusively in the context of discounting long-term receivables, which certainly will have a significant impact on software companies that provide extended payment terms. The proposed standard requires consideration of time value of money not only when an entity is receiving payment after performance (receivable discounts), but when an entity receives payment in advance of performance. Said differently, when payment is received before a performance obligation is satisfied, the proposed standard requires the accounting for time value of money (in the form of interest expense and increased revenue) if material. While the exposure draft does not provide guidance on the determination of materiality, we believe it will be acceptable to do so at the transaction level. We expect this to have a significant impact on software companies since most software companies get paid for PCS services in advance of performance.

Exclusive and non-exclusive licenses

Context

Licensing is the key activity that drives revenue for software companies. While there are instances where software is sold outright, licensing is by far the more predominant practice. There are several different types of licenses that software companies generally enter into, but for the most part the focus of revenue recognition has been on applying the accounting rules to time-based licenses.

Brief summary of the current US GAAP approach

At the time the software accounting rules were written, perpetual licenses were the most common practice. Accordingly, the standard itself is silent with respect to the impact of term on the revenue model. The core model has four criteria for revenue recognition, but the term of the license is not one of them. As practice has evolved and the use of time-based licenses increased, the term of a software license began to be factored into the revenue model. This is because the term of a license became a factor in how a company established Vendor Specific Objective Evidence (VSOE) of Fair Value (FV) of the Post-contract Customer Support (PCS) associated with the time-based license.

The model for both perpetual and time-based licenses requires revenue to be recognized at the time the license is delivered, assuming all the other criteria for revenue recognition are met. Also, since most licenses include PCS, revenue is recognized at the time of delivery only when VSOE of FV of PCS exists. VSOE of FV of PCS is determined by reference to the price paid when it is sold separately (that is the renewal rate), which is fairly straightforward for a perpetual license. However, when it comes to time-based licenses, “substantive” takes on added meaning. In addition to the amount needing to be substantive, the duration must also be substantive.

Said differently, there are circumstances where the duration associated with PCS renewals is too short, either in comparison to the license term or in comparison to the bundled PCS term. This causes the renewal rate not to constitute VSOE of FV of PCS.

For time-based licenses of one year or less that have bundled PCS, VSOE of FV of PCS cannot be established; therefore revenue is recognized ratably over the license period. For time-based licenses greater than one year, the customer must have the ability to renew PCS for a time at least equal to the bundled PCS period, in order to be considered substantive in duration. For example, VSOE of FV of PCS can be established for a three-year license with one year of PCS bundled since the customer can renew for two additional years.

The approach under the proposed revenue standard

The proposed model tries to drive consistency in the accounting for exclusive licenses and the accounting for leases. The theory is that the revenue recognition model related to the right to use an asset, whether that asset is tangible (like a car) or intangible (like software), should be the same. Accordingly, the proposed model differentiates between exclusive licenses and non-exclusive licenses in addition to time-based licenses. The impact of exclusivity will be new to software companies. The following is prescribed for licensing:

- For non-exclusive licenses, revenue should be recognized once the license is delivered or enabled, similar to a sale
- For exclusive licenses with terms equal to the economic life of the underlying asset, revenue should be recognized once the license is delivered or enabled, similar to a sale
- For exclusive licenses with terms shorter than the economic life of the underlying asset, revenue should be recognized over the term of the license, similar to a lease

Key observations

As mentioned earlier, exclusivity as a key determinant for revenue timing is a new concept for software companies. However, we believe most software transactions will not be impacted by it, since the primary business objective for most software companies is to license its software in a non-exclusive manner. Software companies try to maximize their return on their investment by licensing their software to as many customers as possible; accordingly non-exclusive licensing enables a company to achieve that objective. Those non-exclusive licenses will get sales-type treatment. This includes time-based licenses of one year and time-based licenses greater than one year with coterminous PCS where VSOE of PCS could not be established. Under the current model, when VSOE of PCS cannot be proven the license portion is recognized over the term. But under the proposed model, PCS will be separated based on estimated selling price.

However, there will be those circumstances when a company will license its software exclusively. The most common example might be to an OEM that wants an advantage over its competitors and uses key licensed software to gain that advantage. In those circumstances, the license revenue recorded at the time of delivery under current rules would be recognized ratably if the exclusive license term was less than the economic life of the licensed assets.

What has yet to be determined is how to define exclusivity. This will be a judgment that a company will make, and over time, practice will develop regarding the evaluation of exclusivity.

Currently, a common situation leading to deferral of revenue is when multiple products are contracted for but delivered at different times. Since most software vendors do not have VSOE of FV of their software products, revenue is typically deferred until all of the software products are delivered. Under the proposed guidance, the different non-exclusive software licenses would constitute separate performance obligations. Revenue would be allocated using an estimated selling price and recognition of the pro-rata portion of the transaction consideration would occur upon delivery of each license.

Accounting for post-contract customer support (PCS)

Context

Traditionally, maintenance (or PCS) contains two main elements: telephone help desk support to assist customers in resolving technical problems and the promise to provide new versions (fixes and updates) of the software, generally on a when- and if-available basis. The determination of the fair value of PCS has been the subject of extensive debate under US GAAP, leading to various and sometimes highly prescriptive models. The reason for the focus: without VSOE of FV of PCS, license revenue could not be recognized upon delivery.

Brief summary of the current US GAAP approach

In a multiple-element software arrangement that includes a software license and PCS, a requirement for recognizing license revenue upon delivery is to be able to determine VSOE of FV of PCS. Under US GAAP, VSOE of FV of PCS is established by reference to an element's separate selling price, which can, for example, be the renewal rate written into the contract (provided that this renewal rate is substantive). If no renewal rate is specified in the contract, the conclusion usually drawn is that evidence of FV does not exist unless the entity can demonstrate that substantially all actual renewals are made at a similar price or rate. If a company cannot establish VSOE of FV of PCS, all revenue from the arrangement is typically recognized ratably over the period that PCS is provided.

The approach under the proposed revenue standard

Under the proposed revenue model, PCS will be considered a revenue generating performance obligation. However, the proposed model eliminates the requirement to determine VSOE of FV of PCS. Instead, the proposed model is consistent with the recent EITF guidance on revenue. At a minimum it allows for companies to allocate revenue to multiple deliverables using an estimate of selling price when stand-alone sales do not exist. This will eliminate license revenue being recognized ratably over the PCS term. The key question will be determining how companies will make the estimate of selling price.

We expect that if a company had established VSOE of FV of PCS in the current environment, that same evidence would be acceptable evidence of a separate selling price for PCS under the proposed standard. For example, a substantive renewal rate will continue to represent acceptable evidence of a separate selling price. If a company did not have sufficient evidence to determine VSOE of FV of PCS, we would expect the company to consider the following when making an estimate of the selling price for the PCS offering:

- Prices charged for similar services performed on a per-call basis
- Reasonable margin on the service offering
- The percentage increase in functionality of updates and upgrades on an annual basis when compared to the value of the initial license
- Frequency of updates and upgrades

Key observations

Most companies will consider the elimination of the VSOE of FV requirement to be a positive aspect of the proposed revenue model as it will create consistency between the accounting and the transaction economics. Yet it remains to be seen whether the changes will impact customer behavior. As it relates to the accounting rules, the typical software customer is as knowledgeable as the software vendor. For example, customers will be aware that vendors need a substantive contractual renewal rate to establish VSOE of FV of PCS in order to record license revenue at the time of delivery. Under the proposed model, customers will also know that a substantive renewal rate is not required for an entity to recognize license revenue at the time of delivery. Therefore, we expect some customers to increase pressure on vendors to provide PCS renewals at reduced rates or to bundle PCS into the transaction fee for longer periods.

Elimination of the residual method

Context

Given the minimal incremental cost associated with delivering a license, most software companies have a wide range of license pricing for their software products. Also, since most software transactions include both a license to the software as well as PCS, predominant practice in the software industry is to recognize revenue utilizing the residual method.

Brief summary of the current US GAAP approach

One of the basic principles in the current accounting for multiple-element software arrangements is that VSOE of FV must exist for all elements before revenue can be recognized. The absence of VSOE of FV of all elements will require revenue to be recognized when all the elements have been delivered or require ratable recognition over the PCS period. Typically, companies cannot establish VSOE of FV for their licenses because they rarely sell the software separately (without PCS) and because of the wide range of license pricing among transactions. Accordingly, the residual method was created to allow companies to defer a portion of the transaction consideration equal to the VSOE of FV of PCS and record that revenue ratably over the PCS period. The residual is recognized upon delivery of the software. This method is allowable as it does not result in premature revenue recognition since all of the discounting in the arrangement is recognized in the current period.

The approach under the proposed revenue standard

Under the proposed revenue model, the residual method is eliminated. Since the model permits the use of an estimated selling price when better evidence of stand-alone selling prices doesn't exist, a selling price for every product and service will always be available. As such, the model prohibits the use of the residual method and requires companies to use a pro-rata allocation method.

Key observations

While this will result in accounting that will more closely align with the underlying transaction economics, we expect that elimination of the residual method will drive a substantial amount of implementation work for most companies. Generally, the residual method is a fairly simple systematic process of deferring from each transaction fee a PCS renewal percentage that the entity has determined is fair value based on the particular model that it has adopted. The elimination of the residual method will cause companies to go through the process of determining an estimated selling price of every product that the company licenses and of the services they deliver. After that process is complete, the company would then have to apply the pro-rata allocation model. For simple transactions, i.e., those that include only one license and related PCS, the pro-rata allocation model is not overly complex. However, the calculation becomes more complex when a company's transactions include varying mixes of different products and services, delivered at different times along with related PCS.

Roadmaps and specified upgrades

Context

Customers usually want assurances that the software they are buying will not be replaced by something even better that the company will be offering in the near term. Also, they want assurances that the company is going to continue to develop and improve the software over the next several years. Because of the unique nature of the software accounting rules, providing those types of assurances in a current revenue transaction can result in a very uneconomic accounting result. This often puts software vendors in the position of trying to provide enough information to be able to keep customers happy, but not too much information such that their accounting model is negatively impacted. The information is generally captured on a roadmap. How a company uses that roadmap is a key part of the sales and revenue cycle. The issue for the vendor is knowing what type of information crosses the line, thereby providing too much information and changing the accounting result.

Brief summary of the current US GAAP approach

In a multiple-element software arrangement, a requirement for recognizing revenue is to be able to determine VSOE of FV of all the elements in the transaction. With some exceptions, this is required before revenue can be recognized on any element delivered currently. VSOE of FV is generally determined by reference to the price charged to other customers for the same element. Accordingly, it is generally not possible to establish VSOE of FV for specified future upgrades or products that have not yet been developed since they are not yet being sold and prices do not yet exist.

The current guidance does not specifically address roadmaps. The key for a vendor is knowing what causes a roadmap to constitute a promise to deliver a specified upgrade or future product. If a roadmap provided to a customer in the context of a current transaction implies a promise to deliver a specified upgrade, then revenue is generally deferred until the specified upgrade is delivered. To help software companies navigate the fine line of not providing specified upgrades when using roadmaps, a set of “dos” and “don’ts” have been developed.

To avoid creating a specified upgrade promise, vendors should:

- Issue roadmaps in trade-show-type events to a broad audience
- Issue roadmaps that have more general information on future items that might be considered for development
- Include disclaimer language clearly stating that any items in the roadmap are subject to change at the vendor’s sole discretion and the vendor has no obligation to deliver the future items

Vendors generally should not:

- Attach roadmaps as an appendix to or reference the roadmap in a current licensing transaction
- Include certain specific detailed information, such as product names and expected release dates
- Make comments that the items, if developed, would be available to existing users

Of course these are general guidelines. Companies typically have established policies and/or processes and have regular education sessions with sales teams in order to deal with the use of roadmaps.

Roadmaps and specified upgrades *(continued)*

The approach under the proposed revenue standard

As previously described in the PCS section of this document, the proposed model eliminates the requirement to determine VSOE of FV. Instead, the proposed model is consistent with the recent EITF guidance on revenue. At a minimum, it allows for companies to allocate revenue to multiple deliverables using the best estimate of selling price. Since companies are no longer required to determine VSOE of FV of future deliverables in order to recognize revenue on current deliverables, we expect the accounting risk around roadmaps to lessen. Said differently, if a roadmap creates the promise to deliver a specified upgrade in a current licensing transaction, the resultant accounting will no longer be a deferral of all revenue until the specified upgrade is delivered. Instead, companies would need to establish an estimated selling price for the future upgrade. They would allocate a portion of the arrangement consideration to the future specified upgrade based on the relative selling prices of all the obligations in the transaction.

If a company did promise a specified future upgrade, the key judgement would be determining an estimated selling price. We would expect companies to consider the following when determining an estimated selling price for a specified future upgrade:

- Current selling price of current version of the product
- Historical correlation in pricing of prior upgrades compared to then-current products for similar products
- Degree of new functionality in the upgrade
- Pricing/market assumptions in the business plan that supported the development spending

Key observations

Most companies will consider the elimination of the VSOE of FV requirement as a positive aspect of the proposed revenue model as it will lessen the accounting risk of a full revenue deferral. However, it remains to be seen whether the changes will impact customer behavior. As it relates to the accounting rules, the typical software customer is as knowledgeable as the software vendor. Accordingly, specifically as it relates to roadmaps and specified upgrades, customers were aware that vendors could not provide detailed roadmaps or promise specified future upgrades without incurring a severe accounting result. As a result, these promises became infrequent. But under the proposed model, customers will also be aware that these same promises will no longer carry with them severe accounting results. That being the case, we expect some customers to increase the pressure on vendors to provide roadmaps or promise to deliver specified upgrades or functionality in the future using the accounting change as the basis to reinvigorate the discussion.

Accounting for arrangements that include significant production, modifications or customization of software

Context

Software companies often enter into transactions that include some type of development or complex implementation services. Sometimes the arrangement involves creating a customized software solution or modifying existing core software to meet a customer's specific needs. In most cases, while the software vendor is developing a unique application for its customer, the resultant software is licensed to the customer.

Brief summary of the current US GAAP approach

Current US GAAP guidance requires arrangements that include services that are significant production, modification or customization of software to be accounted for on a contract accounting basis. The objective of the current guidance is to prevent companies from recognizing revenue prematurely. The standard setters believed that a software vendor could enter into a transaction that included an up-front license for the software that was yet to be completed in addition to the services to complete the software. In doing so, the software vendor might seek to recognize revenue at the time the license was granted, although the software could not be used as intended by the customer. The vendor would then recognize services revenue separately as the services were being performed.

The guidance essentially analogizes the custom development of software to the construction of tangible products to a customer's specifications. The accounting for this circumstance is long-term contract accounting, most typically on a percentage-of-completion basis.

The approach under the proposed revenue standard

One of the key principles of the proposed model is that revenue is recognized when control related to the underlying good or service is transferred to the customer. Applying this concept becomes a bit tricky for software licensing transactions since ownership of the underlying software code is generally maintained by the software vendor. As described on page 12 of this document, the proposed model provides specific guidance for licensing transactions. Generally, transfer of control for most licensing transactions (except for exclusive licenses with terms shorter than the economic life of the underlying asset) will occur when the vendor has enabled the customer to take possession of a useable copy of the software being licensed.

When an arrangement includes both a license to software and significant production, modification or customization of the software being licensed, the determination of when control transfers becomes more difficult. The difficulty will center around whether or not the nature of the customization effort indicates that the transfer of control happens continuously, or at the end of the customization period.

Two views as to when control transfers in these types of arrangements are emerging. One view is that the customization effort relates to the underlying software asset whose ownership will not transfer to the customer. Accordingly, the customization is essentially the development of the vendor's own software asset. Generally speaking, activities by a company to create its own assets are not performance obligations to customers.

Accounting for arrangements that include significant production, modifications or customization of software *(continued)*

Therefore, under this view, since the only performance obligation is the delivery of a license to customized software, the guidance for licensing outlined in page 9 of this document would be applied. That is, control would transfer and therefore revenue would be recognized when a useable version of the customized software is delivered to the customer (unless the license is an exclusive license for a term shorter than the economic life of the underlying asset).

The other view is that, under the proposed standard, customization is an indicator of a continuous transfer of control. Also, sales type accounting is prescribed for software license transactions (other than for licenses with terms that are shorter than the economic life of the underlying software asset) whereby ownership of the underlying software asset is maintained by the software vendor. Accordingly, under this view, control is being transferred continuously and recognizing revenue over the customization period would be appropriate.

Key observations

We expect the accounting for arrangements that include a license and development, modification or customization services to continue to be refined. A complicating factor is that there are many variations of these types of arrangements. As such, we expect a set of indicators will be developed over time to help guide companies in determining when continuous transfer of control, and therefore revenue recognition over the customization period, might be most appropriate.

While the potential change in revenue recognition timing is significant, the potential impact to period margin is greater, particularly where the revenue is recognized upon delivery of the completed software. If, in a development contract, the revenue is recognized at the end of the contract when the software is complete, the natural question will shift to the timing of when the related costs to develop will be recognized. In theory, if the development effort is not a performance obligation that drives revenue (because it is an activity to produce a company's own asset), then the accounting for those activities will follow the related guidance that covers activities to produce software to be licensed, sold or otherwise marketed. In practice, under that guidance, very little is capitalized and amortized over the revenue life of the software. Accordingly, we would expect most of the effort to develop or customize the software to be expensed as incurred with the related revenue being recognized in a subsequent period.

SaaS — Cloud

Context

Sometimes software companies provide customers use of their software through arrangements other than traditional licensing transactions. The most common non-licensing transaction types are software as a service (SaaS) and software provided in a Cloud offering. As these types of offerings become more common, software vendors should understand the revenue implications of the proposed standard.

Brief summary of the current US GAAP approach

While both SaaS and Cloud offerings give users the right to use software, the software that provides the basic functionality is controlled by the vendor and not the customer. In most software transactions, the vendor maintains the ownership of the intellectual property. What the customer receives is the right to use the intellectual property. Under current US GAAP, the determination of whether a software transaction is accounted for as a sale versus a service depends on whether the customer has or can take physical possession of the software. If the customer can take physical possession of the software, then the accounting follows a sales model. If the customer cannot take physical possession of the software and uses the software without taking possession, the services accounting model applies.

Generally in a SaaS or Cloud offering, the customer does not have the ability to take possession of the software and, accordingly, the revenue model is a services model. Once in a services model, the revenue is generally recognized ratably over the term of the agreement; unless the terms of the agreement indicate that revenue should be recognized in a different pattern. For example, usage-based transactions are generally recognized as the usage occurs, as that is the point when the fee becomes fixed or determinable.

One area of accounting complication for SaaS and Cloud offerings under existing GAAP is when additional services are sold along with the primary or base service (access to/use of the desired software functionality). These additional services typically are set-up services and consulting services. Under the current accounting framework, the existence of these additional services in the arrangement often results in a deferral of revenue. This occurs because revenue cannot be allocated due to the lack of fair value, due to the lack of stand-alone value, or due to SEC guidance that up-front fees should be deferred over the life of the contract or the expected life of the customer relationship, whichever is longer. In these cases, fees for these additional services are recognized concurrently with the base SaaS or Cloud services.

The approach under the proposed revenue standard

Similar to current US GAAP, SaaS and Cloud offerings will generally be accounted for using a services model under the proposed standard. However, there will be a couple key differences. The proposed model requires companies to include an estimate of uncertain consideration when measuring the total arrangement consideration, if a reasonable estimate can be made. For fixed-fee arrangements, measuring the arrangement consideration is easy as it is the fixed fee. For transactions with usage-based fees, measuring the consideration would require an estimate of the expected usage at the contract prices, assuming a reasonable estimate can be made.

Like current US GAAP, the proposed model will require companies to make a determination of whether the service obligation is discharged continuously over the service term or whether the obligation is discharged as the customer uses the service. However, under the new model, contingent consideration will not change the timing of revenue. For example, assume the company concludes that the service obligation is discharged ratably over time and that the company can make a reasonable estimate of usage. The estimated usage payments will be recognized ratably over the term of the agreement irrespective of the eventual actual usage and the timing of the payments.

As noted previously, often additional set-up and consulting services are sold along with the base SaaS or Cloud service. If the company can conclude that the additional services are separate performance obligations under the contract, then the proposed standard will require separation and allocation of the total arrangement consideration to those performance obligations based on estimates of their selling prices.

Key observations

In certain cases, specifically where the revenue pattern is ratable and the payment pattern is based on usage and lags behind the revenue pattern, some companies recognized the lesser of the ratable amount or the amount of usage fees that had been earned, as many companies had a policy of not recognizing contingent fees before the contingency was resolved. The proposed standard does not provide for companies to modify the recognition pattern due to the payment being contingent. Instead the risk of a contingent payment being realized would be addressed when the company measured the arrangement consideration.

Under the proposed standard, where additional services are sold with the base SaaS or Cloud services, separation should be more straightforward. We expect most companies will conclude that consulting services for best use of the SaaS or Cloud functionality will constitute a separate performance obligation. However, the greater judgment will be whether the up-front services for configuration, implementation or just plain activation constitute separate performance obligations of the vendor and thus should be separated from the SaaS or Cloud services. We expect over time a framework to develop in practice as service companies begin to analyze which activities in the context of providing services constitute separate performance obligations and which activities should be combined with other activities to be considered a single performance obligation.

Companies should be mindful of the cost model used for their software that is sold exclusively through SaaS or Cloud offerings. Under current US GAAP, the amount of internally developed software costs capitalized changes depending on how the software is marketed. There is less capitalization for licensed software and greater capitalization for software used to provide a service. The current cost accounting is not expected to change as a result of the proposed revenue standard, but something to be mindful of nevertheless.

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