A SPECIAL REPORT FROM THE BDO TECHNOLOGY & LIFE SCIENCES PRACTICE

BDO KNOWS: SAAS

SIMPLIFYING SAAS – AN ACCOUNTING PRIMER

OVERVIEW

The SaaS business model continues to gain broad acceptance. Existing companies that historically sold software products are increasingly rolling out SaaS offerings, and many new SaaS companies are emerging. There are now more than 20 publicly traded SaaS companies in the United States with annual revenues in excess of $1 billion.[1]

Trends making SaaS a much more common and frequently preferred software delivery model include:

User demand for affordable solutions. Businesses and other users are looking for software that can be implemented quickly without large upfront costs, and can also achieve lower total cost of ownership due to reduced ongoing costs for system maintenance.

Availability of world-class platform-as-a-service ("PaaS") or cloud computing resources. With a plethora of low-cost PaaS providers, startup SaaS companies can focus on innovation, releasing service offerings to the market very quickly with minimal infrastructure investment and capital outlays. These resources are also making solutions much more **scalable**.

A shift in perception regarding security. Historically, SaaS may have been regarded as a less secure model, since SaaS applications run outside of a user's firewall. Opinions have recently shifted, though, with the SaaS model now recognized as being quite secure due to access to state of the art technology and security measures.

SOFTWARE LICENSING VERSUS SAAS

The revenue and cost recognition rules that SaaS companies are required to follow are different than the accounting rules that software licensing companies employ.

Software licensing is generally treated for accounting purposes as a sale or licensing of a product. SaaS is viewed as the sale of a service that is provided over a period of time. As a result, it is important to determine whether software company sales arrangements are considered product licensing or SaaS arrangements.

- Generally, in a software licensing arrangement, the customer obtains rights to use the software on its own computers.
- In a SaaS arrangement, the customer is buying access to a hosted service based on proprietary software but does not get a copy of the software to use on its own.

The determination of whether customer arrangements should be treated as licensing or SaaS arrangements is important since it also determines which accounting rules apply for both revenue and cost recognition.

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In many cases, **software licensing companies** can recognize a significant portion of the arrangement fee as revenue when the software license is delivered to the customer.

- Software licensing arrangements typically include multiple elements, including delivery of the license itself as well as future, undelivered services such as telephone support or rights to when-and-if available upgrades (PCS) and installation services (PS).

- As long as certain criteria are met, software licensing companies can recognize a large portion of the total arrangement fee upon delivery of the software license. The criteria include establishing the fair value of undelivered elements in the arrangement.

  - Fair value is determined based on vendor specific objective evidence or "VSOE". VSOE represents the prices that the company charges when selling the services on a standalone basis. To establish VSOE, the standalone sales prices must be within a sufficiently narrow and consistent price range. Therefore, software licensing companies often track their separate sales prices for purposes of assessing whether VSOE has been established.

  - If VSOE is established for the future deliverables and all other necessary criteria are met, a software licensing company will typically employ a residual value method to allocate consideration to the software license. Under this method, the full fair value, as indicated by VSOE, of the *undelivered products* and services is deferred. The difference between the total contract value and the amounts deferred (i.e., the residual) is allocated to the delivered software and recognized as revenue immediately upon delivery of the software license.

- If VSOE cannot be established for all future products or services in an arrangement, then the entire arrangement fee is either deferred until the future products and services have been delivered, or if the only remaining deliverable is post-contract support, recognized ratably over the term of the agreement. Detailed accounting guidance for software licensing companies is provided in ASC 985-605.

On the other hand, SaaS companies often must recognize a large portion – if not all – of the arrangement fee ratably over the contract term. In addition, sometimes SaaS providers must defer upfront fees and amortize them to revenue over the estimated life that a customer is expected to use the hosted service (i.e., considering renewals).

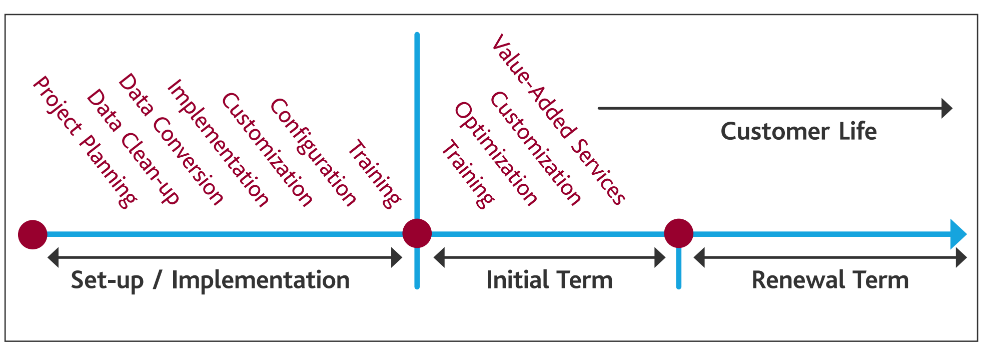
The remainder of this publication describes in more detail the accounting rules applicable to SaaS providers and some of the key judgments involved in applying these rules.

THE SAAS LIFECYCLE

In order to better understand the revenue recognition issues common to SaaS companies, it is useful to consider the lifecycle of a typical SaaS customer as illustrated in the diagram below.

Usually the SaaS arrangement comprises an initial term, such as one year, and successive renewal periods until the customer ceases to use the service or migrates to a different version of the service.

As shown below, SaaS arrangements also can include a number of types of **professional services** during the set-up and implementation period, as well as after commencement of the initial service. Accordingly, most SaaS transactions are multiple element arrangements. The main accounting consideration is whether the various deliverables should be treated as separate accounting units under ASC 605-25-25.



Finer Points

At times, a SaaS customer will sign a software license agreement, and install interface software on its own computers. However, when the primary purpose of this interface software is to facilitate use of the hosted software services, this would still be considered as a SaaS arrangement.

In other transactions, a customer may receive a copy of the complete underlying software and license rights to use the software on its own computers in addition to using the hosted version of the software.

If the following two requirements[2] are met, a software element is deemed to be present in the arrangement:

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

2. It is feasible for the customer to either run the software on its own hardware or contract with another party unrelated to the vendor to host the software.

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PROFESSIONAL SERVICES AND STANDALONE VALUE

In a SaaS solution, normally the hosting, access to software functionality (often referred to as a subscription or a license), upgrades and support are all considered a single unit of accounting as they do not constitute separate deliverables. Other professional services often are included in that single unit of accounting as they do not have standalone value. (See discussion below.)

Determining how revenues from other professional services should be recognized depends on whether those services have standalone value to the customer apart from the hosted software services. If the professional services have standalone value, they typically can be separated from the main SaaS arrangement, with revenue recognized as those services are performed. If, however, the professional services do not have standalone value, then they would generally be treated as set-up fees, and recognized over the longer of the initial contract period or the period the customer is expected to benefit from payment of the upfront fees.[3,4]

Specifically, ASC 605-25-25-5 states that delivered items should be considered a separate unit of accounting if both of the following criteria are met:

- The delivered item or items have value to the customer on a standalone basis.
- If the arrangement includes a general right of return relative to the delivered item, delivery or performance of the undelivered item or items is considered probable and substantially in the control of the vendor.

Since most SaaS arrangements do not contain a general right of return, only the first of the above conditions is often required to be evaluated.

Standalone value exists if (a) the deliverable is sold separately by ***any*** vendor; or (b) the customer could resell the delivered item on a standalone basis. Most professional services included in SaaS agreements – such as implementation, training, data conversion,

What Public Companies Are Saying About Standalone Value

BDO analyzed the latest Form 10-K filings from approximately thirty SaaS providers.

Most of the companies surveyed determined that there is standalone value for at least some of their professional services offerings.

In reaching that conclusion, these companies considered a number of factors, including:

- The nature of the professional services.
- Whether the professional services were required in order for the customer to use the subscription services.
- The timing of when services contracts were signed versus the subscription start date.
- The contractual dependence of the subscription with customer's satisfaction with services.

However, the most critical factor – cited by nearly all companies surveyed – focused on whether the professional services were performed by other third-party firms. SaaS companies that used alliance partners, or were aware of third-party consultants that performed the exact same professional services as those being evaluated, concluded that there was standalone value for those services.

Note that:

- Often SaaS companies initially do not have third parties who provide professional services for their platform, as the third-party consulting firms only invest resources in training their consultants to implement a specific platform, if they believe the market opportunity is worthwhile. As a result, most earlier stage SaaS companies have difficulty establishing standalone value for their professional services. This is often not considered to be a bad outcome for these earlier stage companies, as treating the subscription and professional services as separate units of accounting can be highly complex and time consuming (see discussion below).
- As SaaS companies mature, they often reduce their focus on providing professional services which typically have lower margins and lower valuation multiples. Simultaneously, those maturing SaaS companies are more likely to get the attention of third party consulting firms to provide services for their solutions. Therefore, as SaaS companies mature, they are often able to support standalone value for their professional services.
- A key factor that we often see in evaluating whether the professional services have standalone value is whether the services are occurring behind the SaaS company's firewall- or behind the customer's firewall. It is unlikely that a SaaS company would allow a third party consulting firm to provide services behind the SaaS company's own firewall.
- We believe that the analysis should be performed on a platform by platform basis. To demonstrate, assume that a cloud services provider offers implementation services on both of its two product offerings – one geared for an inside sales force and the other targeted for outside collaboration. If third party firms provide the implementation services for the first platform but not for the second, the cloud provider might only be able to demonstrate standalone value for the services associated with the inside sales offering.
- Services provided subsequent to the go-live date may not have standalone value if the customer only benefits from these services from the continued use of the hosted software.

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configuration, and optimization services – are not the sort of things that the customer could resell. Hence, SaaS providers typically evaluate whether a delivered professional service is be sold separately by ***any*** vendor to determine whether that service has standalone value.

Making this determination involves judgment and careful analysis. Factors to consider include the nature of the professional services and whether there are other third parties that provide similar professional services in the marketplace (see the sidebar "What Public Companies Are Saying About Standalone Value").

The following examples demonstrate these requirements:

Example #1:
Standalone Value Exists

Smart System Solutions ("SSS") provides companies in the healthcare industry the ability to upload clinical data onto its cloud-based database, and perform various types of data analysis and custom report writing. SSS also typically provides data conversion services prior to the official start date of the arrangement.

SSS believes that it has standalone value for both deliverables in the arrangement based on the following analysis:

- The data conversion services can be performed by other vendors. There are other third party vendors that regularly provide these professional services to customers that subscribe to SSS's database.
- Some customers choose to subscribe to SSS's database without purchasing the other services.

Accordingly, SSS would recognize revenues from the data conversion services when delivered, and revenues from the subscription over the license term.

Example #2:
Standalone Value Does Not Exist

Intelligent Interactions Inc. provides data virtualization services to a variety of customers. The company also provides set-up and implementation services prior to the start of the license term and charges an hourly billing rate for these professional services.

Intelligent does not believe that it has standalone value for the professional services in the arrangement because no other vendors provide those services. Simply, Intelligent's systems are so proprietary that only its own engineers can perform the set-up and implementation services.

In addition, the provision of these services is linked to the customer subscribing to the company's hosted software solution.

Accordingly, Intelligent would defer the arrangement consideration attributable to the set-up and implementation services, and recognize that amount as revenues ratably over the longer of the initial contract period or the period the customer is expected to benefit from payment of the upfront fees.

When professional services are treated as set-up activities for accounting purposes, companies should use all available information in estimating the expected period of benefit over which revenues are recognized.

SaaS companies often closely monitor customer attrition or churn rates, and based on historical results, project future expected rates for forecasting purposes. The historic rates and projections would often serve as a starting point for assessing the expected period of customer benefit. Some SaaS companies have a high churn rate or might have technology that is subject to obsolescence, in which case the expected period of benefit might be shorter. Other SaaS companies have relatively sticky customers and technology that is not expected to change significantly, in which case the expected period of benefit might be longer.

ALLOCATING THE ARRANGEMENT CONSIDERATION

When the multiple goods and services provided under a SaaS arrangement qualify for separation as discussed above, U.S. GAAP requires that the total arrangement consideration be allocated to each deliverable based on a relative standalone selling price approach. This is different than how the allocation typically works in a software licensing arrangement, which as described earlier in this publication is often performed using a residual approach.

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	Standalone Price*	% of Value	Allocated Amounts
Professional Services	$ 300,000	25% (300,000 / 1,200,000)	$ 250,000
Hosted Software License	900,000	75% (900,000 / 1,200,000)	750,000
	$1,200,000		$1,000,000

* Assumed for purposes of this example

The following example demonstrates the application of the relative standalone selling price approach:

Example #3:
Relative Standalone Selling Price Approach

Clear Cloud Computers ("CCC") offers a one-year license to its hosted software platform, as well as implementation services under a bundled arrangement with a customer. CCC charged $400,000 for the implementation services and $600,000 for the hosting services. After analyzing the criteria discussed earlier in this publication, CCC concludes that a software element is not present in the arrangement.

Assuming the elements in the arrangement are separable (i.e., because there is standalone value for the professional services), CCC would allocate the arrangement consideration as shown in the table above.

When applying the relative standalone selling price approach, the standalone selling price for each deliverable should be determined using VSOE, if it exists. If not, then a SaaS provider can use third party data to determine standalone selling prices. For practical purposes, though, SaaS companies rarely have access to third party selling price data for products and services that are sufficiently similar to their own products and services.

If neither VSOE nor third-party evidence of selling price exists for a deliverable, a SaaS provider should make its best estimate of the selling price (BESP) for that deliverable when sold on a standalone basis. Estimating selling price in this manner involves judgment and careful analysis, and can be highly technical and time consuming, as existing revenue software solutions generally do not provide turnkey BESP solutions. Early stage SaaS companies, in particular, often find it difficult to perform BESP studies internally, but it is a critical metric to determine. The best estimate should take into account all available information (including data from other transactions where similar services and the hosted service have been sold separately) and would likely change over time.

U.S. accounting rules contain a cap on the amount allocable to a delivered unit or units of accounting. Specifically, the amount of arrangement consideration allocable to delivered items is limited to the amount that is not contingent upon the delivery of additional items or meeting other specified performance conditions (the "noncontingent" amount). The following example demonstrates this concept:

Example #4:
Allocated Arrangement Consideration Limited to Noncontingent Portion

Recall the earlier example, in which Clear Cloud Computers ("CCC") offers a one-year license to its hosted software platform, as well as implementation services under a bundled arrangement with a customer. CCC charged $400,000 for the implementation services and $600,000 for the hosting services.

Based on the best estimate of standalone selling prices, CCC allocated $250,000 of the arrangement consideration to the implementation services and $750,000 to the hosting services.

Let's change the facts to assume that CCC is only permitted to invoice $100,000 prior to commencement of the hosting services. The hosting services will be invoiced monthly at $75,000 per month and is contingent on the hosting services being provided to the customer.

In this revised fact pattern, CCC would only initially allocate $100,000 to the implementation services, as the remaining billings are contingent on delivery of future hosting services.

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FUTURE RELEASE ROADMAPS

It is not uncommon for customers of SaaS and software licensing companies to request access to roadmaps of upcoming future upgrade and product releases, including rights to receive specified future upgrades and new products when released.

For companies that sell software licenses, rights to specified upgrades and new products typically result in deferral of all revenue under the license arrangement until the specified upgrades or products are delivered. As discussed previously in this publication, software licensors can only unbundle multiple element arrangements if there is VSOE of the fair value of future deliverables. Typically, it is difficult if not impossible to establish VSOE of fair value of future upgrade or product rights.

This same accounting outcome does not usually occur for SaaS companies. Presuming the existing hosting service has standalone value (e.g., the company sells the "as is" hosting services without the future upgrade), a SaaS company will use its best estimate of selling prices of the upgrades or new products to allocate revenue between the existing hosted service and future upgrade rights or new products. These cloud services providers can then start recognizing the portion of revenue allocated to the existing hosted service as soon as the customer begins using that service.

USAGE FEES

Sometimes, cloud providers will charge a fixed annual fee, as well as additional usage fees if the customer exceeds a certain level of bandwidth, data storage, uses, or other thresholds.

SaaS companies should not recognize any additional fees as revenues until earned, based on SAB Topic 13, Revenue Recognition, which precludes recognition of revenues when the amounts are not fixed or determinable and the guidance in ASC 605-25-30-1 for SaaS arrangements with multiple deliverables.

COSTS

There are two main types of costs incurred by companies that license software or provide cloud services.

- Costs to develop and maintain the underlying software used to provide the service; and
- Direct contract costs related to specific customers.

Some development costs can be capitalized and amortized over the expected life of the software. Other development costs and all maintenance costs are required to be expensed as incurred. Exactly which costs can be capitalized depends on whether the underlying software being developed is expected to be licensed for use on a customer's own computers, or solely used internally to provide hosted services to customers. As a result, software licensing companies are required to follow one set of accounting rules[5] when determining whether to capitalize software development costs, and SaaS companies are often subject to different accounting rules[6] if they do not have plans to separately license the software.

Direct customer costs incurred at the beginning of an arrangement, such as set-up costs or sales commissions, can either be expensed as incurred, or deferred and recognized as the related revenue is recognized based on an accounting policy election. Once this policy is established, it should be consistently followed.

SaaS companies that elect to defer these costs and recognize them over the period that the revenue is being recognized can have challenges with recordkeeping. For example, when providing professional services during the set-up period, costs that relate to services with standalone value should be recognized as those services are performed. Costs related to set-up services that don't have standalone value may be deferred and recognized ratably over the expected period of customer use of the hosted service.

CONCLUSION

Obtaining a strong understanding of accounting rules that apply to SaaS companies will help to optimize customer arrangements for maximum value and ensure the reliability of financial information reported to outside investors and other stakeholders.

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How Might the New Revenue Rules Affect SaaS Companies

The FASB has issued new revenue recognition guidelines that are expected to become effective[7] for fiscal years beginning after:

- December 15, 2017 for public entities (i.e., January 1, 2018 for calendar year companies)
- December 15, 2018 for all other companies

Companies are permitted to early adopt the new rules, but not before annual periods beginning after December 15, 2016.

The new guidelines will certainly affect companies that license software. Please refer to our Revenue From Contracts With Customers – Software Industry Alert for additional details.

The new revenue recognition rules may also change the way SaaS companies report revenue and costs from software hosting arrangements and related professional services. For example:

- **Upfront fees.** For arrangements where (a) the SaaS company receives an upfront fee and (b) all goods and services are combined into a single accounting unit (i.e., there is no standalone value for the various deliverables), current GAAP requires the fee to be amortized over the longer of the initial contract period or the period the customer is expected to benefit from payment of the upfront fees. Under the new rules, similar upfront fees would also be amortized over the expected benefit period if the arrangement provides the customer with a material right – such as being able to renew the hosted software arrangement without having to repay the upfront fee. Otherwise, the upfront fee would be amortized over the initial contract period only.
- **Contingent fees.** Under today's GAAP, contingent fees are not recognized as revenues until earned and realized. Under the new revenue rules, SaaS companies might be required to make an estimate of "variable consideration" – including any contingent usage fees or royalties. Further discussion on this topic at the FASB/IASB's Joint Transition Resource Group may be forthcoming.
- **Distinct performance obligations.** The new revenue guidelines provide a different set of criteria for determining the accounting units within a customer contract. Therefore, for a given contract, it's possible that fewer (or more) distinct/separable performance obligations may be identified under the new rules versus today's GAAP.
- **Costs of fulfilling a SaaS contract.** Today, SaaS companies can make an election on how to treat set-up and similar costs under a customer contract. The new guidelines will require that costs to fulfill a customer contract – that are not addressed by other standards – must be capitalized and amortized in a manner consistent with how revenues under the related contract are being recognized.

SaaS companies should stay tuned for further information, and monitor the activities of the joint FASB/IASB Transition Resource Group for possible interpretative guidelines. See the FASB's website for more details.

1 Source: Calcbench survey of SEC registrants filing under the Standard Industrial Code 7372. Data as of June 30, 2015.
2 Accounting Standards codification (ASC) 985-605-55, *Software Revenue Recognition*, paragraphs 121 to 125.
3 SEC Staff Accounting Bulletin 104, footnote 39 states: "The revenue recognition period should extend beyond the initial contractual period if the relationship with the customer is expected to extend beyond the initial term and the customer continues to benefit from the payment of the up-front fee (e.g., if subsequent renewals are priced at a bargain to the initial up-front fee)."
4 A conclusion that the benefit of these services is limited to the contractual period is often scrutinized by the SEC, so companies should be prepared to defend that conclusion.
5 ASC 985-20, *Costs of Software to be Sold, Leased or Marketed*
6 ASC 350-40, *Internal Use Software*
7 See FASB proposed Accounting Standards Update 2015-240 issued April 29, 2015 and tentative Board Decisions from the July 9, 2015 Board Meeting on the FASB's website.

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