Technology Industry Accounting Guide

Other Accounting and Financial Reporting Topics: Leases

March 2023

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Preface

We are pleased to present the inaugural edition of Deloitte's *Technology Industry Accounting Guide* (the "Guide").

The technology industry ecosystem encompasses a wide array of entities, from enterprise software and software-as-a-service (SaaS) providers to hardware and semiconductor manufacturers. The technology industry has also experienced convergence with other types of businesses, creating subsectors such as fintech, health tech, energy tech, education tech, and auto tech, to name a few. Many entities have fueled the significant growth of the technology industry by embracing emerging technologies such as artificial intelligence (AI) and machine learning, everything as a service (XaaS) powered by the cloud, robotics, the Internet of Things (IoT), blockchain, and edge computing. Continuous innovation by technology entities produces novel business models while introducing potentially complex accounting and financial reporting matters.

Finance and accounting professionals in the technology industry face complex issues and must exercise significant judgment in applying existing rules to matters such as revenue recognition, software-related costs, acquisitions and divestitures, consolidation, stock-based compensation, leases, financial instruments, income taxes, digital assets, initial public offerings (IPOs), and disclosures of non-GAAP measures and metrics. To help technology entities work through some of the more difficult accounting and financial reporting issues related to these and other relevant topics, this Guide includes interpretive guidance, illustrative examples, and discussion of recent standard-setting developments (through February 28, 2023).

Appendix A lists the titles of standards and other literature we cited, and Appendix B defines the abbreviations we used.

We hope this Guide is helpful in navigating the various accounting and reporting challenges that technology entities face. We encourage clients to contact their Deloitte team for additional information and assistance.

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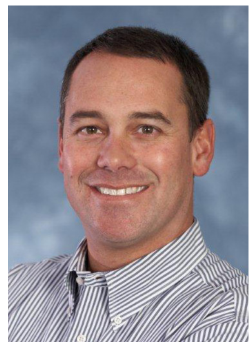

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Chapter 5 — Other Accounting and Financial Reporting Topics

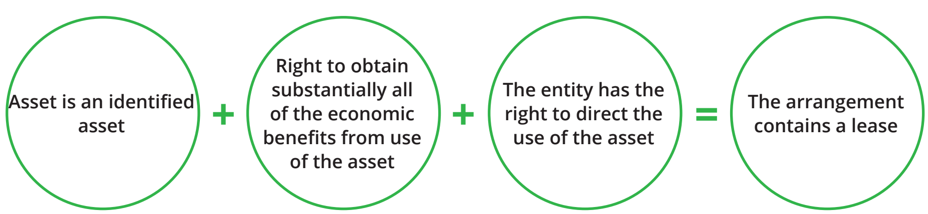
5.5 Leases

While public entities have adopted ASC 842, many nonpublic entities that have not are still grappling with implementation challenges. The most significant change under ASC 842 is its lessee model, which brings most leases onto the balance sheet. Accordingly, except for those leases that qualify for the short-term lease exemption (i.e., certain leases with a lease term of 12 months or less), the standard's lessee model requires lessees to adopt a right-of-use (ROU) asset approach that brings substantially all leases onto the balance sheet. Under this approach, a lessee records an ROU asset representing its right to use the underlying asset during the lease term and a corresponding lease liability in a manner similar to the current approach for capital leases.

For lessors, while much of the accounting in ASC 842 is largely unchanged relative to legacy GAAP (e.g., ASC 842 retains the approach for operating and capital/finance leases), a common misconception is that lessor accounting has not changed much under ASC 842. One key change is to align certain underlying principles of ASC 842 with those of the revenue standard (i.e., ASC 606).

5.5.1 Scope

One of the most significant challenges technology entities encounter in applying the leasing standard is to determine which arrangements contain leases subject to ASC 842, particularly when there are embedded leases in nonlease arrangements. ASC 842 defines a lease as "a contract, or part of a contract, that conveys the right to control the use of identified property, plant, or equipment (an identified asset) for a period of time in exchange for consideration." Identifying whether an arrangement contains a lease requires judgment and often requires an entity to understand the nuances of the contractual provisions and delivery. The graphic below summarizes the three criteria that must be met for a contract to contain a lease.



An entity is required at inception to identify whether a contract is or contains a lease. The entity will reassess whether the contract is or contains a lease only in the event of a modification to the terms and conditions of the contract.

The table below further discusses key concepts related to the definition of a lease.

Concept	Requirement	Observation
Use of an identified asset	An asset is typically considered to be an identified asset if it is explicitly specified in a contract or implicitly specified at the time the asset is made available for use by the customer. However, if the supplier has substantive rights to substitute the asset throughout the period of use **and** would benefit economically from substituting that asset, the asset is not considered "identified," and there is no lease for accounting purposes (see below).	This requirement is similar to the guidance in ASC 840-10-15 (formerly EITF Issue 01-8). An entity does not need to be able to identify the particular asset (e.g., by serial number) but must instead determine whether an identified asset is needed to fulfill the contract. Distinguishing between a lease and a capacity contract requires significant judgment. The standard clarifies that a capacity portion of an asset is an identified asset if it is physically distinct (e.g., a specific floor of a building). On the other hand, a capacity portion of a larger asset that is not physically distinct (e.g., a percentage of a pipeline) is not an identified asset unless that portion represents substantially all of the asset's capacity.
Substantive substitution rights	A supplier's right to substitute an asset is substantive only if both of the following conditions exist: • The supplier has the practical ability to substitute alternative assets throughout the period of use. • The supplier would benefit economically from the exercise of its right to substitute the asset.	The FASB established this requirement because it reasoned that if a supplier has a substantive right to substitute the asset throughout the period of use, the supplier — not the customer — controls the use of the asset. It is often difficult for a customer to determine whether a supplier's substitution right is substantive. A customer should presume that a substitution right is not substantive if it is impractical to prove otherwise.
Right to obtain economic benefits from use of the identified asset	To control the use of an identified asset, a customer must have the right to obtain substantially all of the economic benefits from use of the asset throughout the period of use. The term "substantially all" is generally 90 percent of the economic benefits of the asset.	The economic benefits from use of an asset include the primary output and by-products of the asset as well as other economic benefits from using the asset that could be realized from a commercial transaction with a third party.

(Table continued)

Concept	Requirement	Observation
Right to direct the use of the identified asset	A customer has the right to direct the use of an identified asset throughout the period of use if either of the following conditions exists: • The customer has the right to direct "how and for what purpose" the asset is used throughout the period of use. • The relevant decisions about how and for what purpose the asset is used are predetermined and (1) the customer has the right to operate (or direct others to operate) the asset throughout the period of use and the supplier does not have the right to change the operating instructions or (2) the customer designed the asset in a way that predetermines how and for what purpose the asset will be used.	The relevant rights to be considered are those that affect the economic benefits derived from the use of the asset. Customers' rights to direct the use of the identified asset include the rights to change: • The type of output produced by the asset. • When the output is produced. • Where the output is produced. On the other hand, rights that are limited to maintaining or operating the asset do not grant a right to direct how and for what purpose the asset is used.

Often, the assessment of whether a contract is or contains a lease will be straightforward. However, the evaluation will be more complicated when an arrangement involves both a service component and a leasing component or when both the customer and the supplier make decisions about the use of the underlying asset. An asset typically is identified by being explicitly specified in a contract. However, an asset also can be identified by being implicitly specified at the time the asset is made available for the customer's use.

For more information about identifying a lease, see Chapter 3 of Deloitte's Roadmap *Leases*.

5.5.1.1 Cloud Computing Arrangements

Cloud computing arrangements require the use of certain equipment (e.g., servers). While a benefit of cloud-based technologies is that an entity does not need to own and maintain servers in its facility, saving valuable space and minimizing certain costs, the equipment being used to provide the cloud-based technology could represent a lease to the entity if the lease criteria are met. Under the leasing guidance in ASC 842, if a cloud computing arrangement contains a lease of the equipment used to provide the related service, the lessee would be required to recognize on its balance sheet an asset (related to the right to use the equipment) and a liability (related to the payments owed by the lessee).

The table below provides indicators of whether a cloud computing arrangement contains a lease.

Criteria	Indicators That the Cloud Computing Arrangement Contains a Lease	Indicators That the Cloud Computing Arrangement Does Not Contain a Lease
Equipment is an identified asset	• Because of specific security and encryption requirements, only certain servers or locations can be used by the entity (i.e., the customer). • The server is explicitly specified (e.g., through a serial number) in the contract. • The server is dedicated to the entity. • The supplier does not have the contractual right to substitute the server being used by the entity (other than for maintenance or upgrade purposes).	• The entity shares the server with other customers (i.e., only a portion of server space provided). • The contract states that the entity will receive access to applications in the cloud but does not specify the server being used, and the server is not dedicated to the entity. • The supplier has the practical ability and contractual right to substitute the server being used without the entity's permission, and the supplier would not incur significant costs to switch the entity to a different server.
The entity has the right to obtain substantially all of the economic benefits from use of the equipment	• The server is dedicated to the entity. • Even if the entity does not fully use the server, the supplier does not have the right to store another customer's data on the server.	• The supplier has the right to sell unused server capacity to other customers. • The entity is limited from using all of the server's capacity.
The entity has the right to direct the use of the equipment	• The entity determines what type of data and how much data will be stored on the server as well as when the data will be transferred to and from the server. • The entity is not limited to when it can use the cloud-based technology.	• The supplier specifies what type of data and how much data will be stored on the server (excluding protective rights). • The supplier specifies when the entity can access the cloud-based technology.

The determination of whether a cloud computing arrangement contains a lease and the resulting accounting can significantly affect an entity's balance sheet and target metrics through the recognition of an additional asset and liability. In addition, certain policy elections related to lease costs (e.g., the election of a practical expedient to treat lease and nonlease components as a single component) may cause the nature and extent of the costs to be capitalized as part of the lease asset to vary. Further, the presentation and subsequent accounting and expense profile for the arrangement will vary depending on whether the lease is classified as a finance or operating lease. Because of the size of many cloud implementation projects, an entity's move to the cloud may have impacts on key performance indicators (KPIs) and the financial statements overall; for example, EBITDA, working capital, the debt-to-equity ratio, and the return on assets may be affected by the structure of these arrangements. With these factors in mind, entities should carefully evaluate their cloud computing arrangements to determine whether the equipment being used in the arrangements represents a lease.

For an illustration of cloud computing arrangements and the related financial impacts, see Section 5.5.3.3.

5.5.1.2 Intangible Assets

Technology entities commonly enter into arrangements that convey rights to use intangible assets (e.g., on-premise software licenses). Customer rights to use intangible assets are outside the scope of ASC 842. As specified in ASC 842-10-15-1, entities should consider the guidance in ASC 350 when accounting for such arrangements.

5.5.2 Components of a Contract

A contract can contain both lease and nonlease components. Generally, the nonlease components are services that the supplier is also performing for the customer. For example, a technology entity may decide to (1) lease hardware and (2) sell its subscription service to the same customer. In these situations, the entity's hardware would be subject to the provisions in ASC 842, and consideration would generally be allocated to the separate lease component (i.e., the hardware) and the nonlease component (i.e., the subscription service). However, practical expedients exist for both lessees and lessors if certain conditions are met. For lessee considerations related to lease and nonlease components and lessor considerations related to those components, see Sections 5.5.3.2 and 5.5.4.2, respectively.

The table below highlights the differences between lease components, nonlease components, and "noncomponents" (i.e., activities paid for by the customer that do not transfer a good or service to the customer).

Lease Component	The right to use an underlying asset is considered a separate lease component if (1) a lessee can benefit from the use of the underlying asset either on its own or with other resources that are readily available and (2) the underlying asset is not highly dependent on or highly interrelated with other assets in the arrangement.
Nonlease Component	An activity that transfers a separate good or service to the customer is a nonlease component. For example, maintenance services consumed by the customer and bundled with the lease component in the contract would be a separate nonlease component because the performance of the maintenance transfers a service to the customer that is separate from the right to use the asset.
Noncomponent	Any activity in a contract that does not transfer a separate good or service to the lessee is neither a lease component nor a nonlease component; therefore, consideration in the contract would not be allocated to such an activity. For example, payments made by the customer for property taxes or insurance that covers the supplier's interests would not represent a component in the contract.

For more information about components of a contract, see Chapter 4 of Deloitte's Roadmap *Leases*.

5.5.3 Lessee Considerations

5.5.3.1 Lease Classification

Under ASC 842, at lease commencement, a lease is classified as a finance lease if any of the following criteria are met:

- "The lease transfers ownership of the underlying asset to the lessee by the end of the lease term."
- "The lease grants the lessee an option to purchase the underlying asset that the lessee is reasonably certain to exercise."

- "The lease term is for the major part of the remaining economic life of the underlying asset."
- "The present value of the sum of the lease payments and any residual value guaranteed by the lessee . . . equals or exceeds substantially all of the fair value of the underlying asset."
- "The underlying asset is of such a specialized nature that it is expected to have no alternative use to the lessor at the end of the lease term."

If none of the above criteria are met, the lease will be classified as an operating lease.

Finance leases are accounted for in a manner similar to how entities account for a financed purchase arrangement. The lessee recognizes interest expense and amortization of the ROU asset, which result in a greater expense in the early years of the lease than in the later years of the lease. The single lease cost related to an operating lease is recognized on a straight-line basis over the lease term unless another systematic and rational basis is more representative of the pattern in which benefit is expected to be derived from the right to use the underlying asset. Thus, the amortization of an ROU asset related to an operating lease takes into account the interest on the liability so that the expense amount remains constant. That is, the amortization of the ROU asset will increase or decrease proportionally to the change in interest expense on the liability to maintain a straight-line expense throughout the term of the lease. For both types of leases, the lessee recognizes an ROU asset for its interest in the underlying asset and a corresponding lease liability. For more information about lessee accounting, see Chapter 8 of Deloitte's Roadmap *Leases*.

5.5.3.2 Practical Expedient

ASC 842 affords lessees a practical expedient related to separating (and allocating consideration to) lease and nonlease components. That is, lessees may elect to account for the nonlease components in a contract as part of the single lease component to which they are related. The practical expedient is an accounting policy election that must be made by class of underlying asset. Accordingly, when a lessee elects the practical expedient, any portion of consideration in the contract that would otherwise be allocated to the nonlease components will instead be accounted for as part of the related lease component for classification, recognition, and measurement purposes. In addition, any payments related to noncomponents would be accounted for as part of the related lease component (i.e., the associated payments would not be allocated between the lease and nonlease components).

5.5.3.3 Cloud Computing Arrangements

Differences, even if minor, in how a cloud computing contract is structured can result in differing expense recognition patterns, including:

- Operating expense being recognized immediately as incurred.
- Costs being capitalized and recognized as interest and amortization (e.g., finance lease or internal-use software development).
- Costs being deferred over the life of the contract (e.g., cloud computing service arrangement or operating lease).

The guidance in ASC 350-40 provides for the deferral of certain costs incurred in cloud computing arrangements that are service agreements. Although an entity may find it beneficial to recognize certain costs incurred in the development phase over the life of the contract, such deferred recognition may not achieve its desired effect when all financial measures and budgetary objectives are taken into account.

The example below illustrates some of the considerations related to an entity's cloud adoption efforts and how different paths can result in significantly different financial statement and budgetary outcomes while obtaining effectively the same operational end state.

Example 5-2

Entity X is a large multilocation organization that relies heavily on its on-premise technology. Recently, X determined that it should migrate its data and applications to the cloud to provide (1) the additional flexibility it needs to support its decentralized employee base and (2) the scalability it needs to accommodate its growth.

Entity X now plans to enter into a three-year cloud contract with Vendor Y under which all of its data and applications will be migrated to the cloud. It is looking to acquire access equivalent to 1,000 terabytes of space on Y's servers. To determine the best structure for the arrangement, X considers three scenarios, which are outlined in the table below.

Scenario 1 — Operating Expense Treatment (Service)	Scenario 2 — Capitalization (Finance Lease)	Scenario 3 — Capitalization (Operating Lease)
• Contract provides X with 1,000 terabytes of space. • Space in the cloud is within a domestically located server farm. • Space provided is part of a larger server. Although X's data and applications are segregated from those of other entities through logical partitioning, X cannot specifically identify the server or servers on which its information resides because the license does not specifically identify the server or servers that hold X's information. • Vendor Y has ability to move data to another server and perform upgrades without an explicit request from X to do so. • Autoscaling is included with the contract. • The cloud hosting fee is $720,000 (paid annually in advance).	• Contract provides X with 1,000 terabytes of space. • Space in the cloud is within a domestically located server farm. • Entity X's data and applications are segregated from other entities' data and applications by being part of dedicated servers that are specifically configured to meet X's requirements and can be identified by serial number. • Entity X has direct say in any upgrades to its servers, and Y cannot make changes unless X directly requests them. • Autoscaling is included with the contract. • The cloud hosting fee is $790,000 (paid annually in advance). • The servers' estimated fair market value is $825,000. • The servers' estimated economic life is four years.	• Contract provides X with 1,000 terabytes of space. • Space in the cloud is within a domestically located server farm. • Entity X's data and applications are segregated from other organizations' data and application by being part of dedicated servers that are specifically configured to meet X's requirements and can be identified by serial number. • Entity X has direct say in any upgrades to its servers, and Y cannot make changes unless X directly requests them. • Autoscaling is included with the contract. • The cloud hosting fee is $790,000 (paid annually in advance). • The servers' estimated fair market value is $880,000. • The servers' estimated economic life is five years.

Example 5-2 (continued)

Entity X cannot take possession of the software under any of the scenarios. Up-front configuration costs, data migration costs, and application development costs are the same under each scenario since those costs are not the focus of this example. Service level agreements and all technical aspects are also considered to be comparable. In addition, the technology options explored all provide the necessary level of security. Because the operational benefits, challenges, and risks are consistent across the technology options, the deciding factor for choosing the structure of the arrangement will be the accounting treatment.

On the basis of its analysis, X determines that Scenario 1 falls under the guidance in ASC 350-40 on the implementation costs of a hosting arrangement that is a service contract.

The contract in scenario 2 is a lease (for a specified asset) that should be accounted for under ASC 842. Since (1) that contract is for three years, (2) the servers' estimated economic life is four years, and (3) the servers' estimated fair market value is $825,000, X will be using 75 percent of the useful life of the asset (major part of remaining economic life), and the net present value of payments is more than 90 percent of the fair value (substantially all of the fair value). Therefore, the lease should be classified as a finance lease.

Like the contract in Scenario 2, the contract in Scenario 3 is a lease (for a specified asset) that should be accounted for under ASC 842. However, unlike in Scenario 2, neither the test for the major part of the remaining economic life nor the test for substantially all of the fair value is met because the servers in Scenario 3 have a higher estimated fair market value and a longer estimated economic life than those in Scenario 2. Therefore, the lease is an operating lease.

These differences in the structure of the contract result in significantly different accounting treatments, as shown in the tables below.

	Overview and Financial Metric Impact		
	Scenario 1	**Scenario 2**	**Scenario 3**
Type of arrangement	Service contract	Finance lease	Operating lease
Balance sheet impact	No impact	ROU asset and liability	ROU asset and liability
Type of expense	Operating expense	Amortization expense and interest expense	Operating expense
Impact on EBITDA	EBITDA = net income	EBITDA > net income	EBITDA = net income

	Fiscal Year-End 1		
	Scenario 1	**Scenario 2**	**Scenario 3**
Cash paid	$ 720,000	$ 790,000	$ 790,000
ROU asset	—	1,527,172	1,553,285
Liability	—	1,500,758	1,500,758
Operating expense	720,000	—	790,000
Interest expense	—	52,527	—
Amortization expense	—	$ 763,586	—

Example 5-2 (continued)

	Fiscal Year-End 2		
	Scenario 1	Scenario 2	Scenario 3
Cash paid	$ 720,000	$ 790,000	$ 790,000
ROU asset	—	763,586	790,000
Liability	—	763,285	763,285
Operating expense	720,000	—	790,000
Interest expense	—	26,715	—
Amortization expense	—	$ 763,586	—

	Fiscal Year-End 3		
	Scenario 1	Scenario 2	Scenario 3
Cash paid	$ 720,000	$ 790,000	$ 790,000
ROU asset	—	—	—
Liability	—	—	—
Operating expense	720,000	—	790,000
Interest expense	—	—	—
Amortization expense	—	$ 763,586	—

For contracts that contain leases (i.e., those in Scenarios 2 and 3), X would generally be required to account for nonlease components (e.g., maintenance and other ongoing service costs) separately from the lease components. However, as noted in Section 5.5.3.2, ASC 842 offers lessees a practical expedient under which they may elect to combine lease and nonlease components and account for the combined component as a lease. Entities should carefully consider whether electing this practical expedient would achieve their desired accounting outcomes.

5.5.4 Lessor Considerations

ASC 842's most significant changes to lessor accounting (1) align the profit recognition requirements under the lessor model with those of ASC 606 and (2) amend the lease classification criteria for a lessor to make them consistent with those for a lessee. Accordingly, ASC 842 requires a lessor to use the same classification criteria discussed in Section 5.5.3.1 to classify a lease as a sales-type lease. If none of those criteria are met, the lessor evaluates whether the lease meets the two criteria it must satisfy to be considered a direct financing lease. If neither the sales-type lease criteria nor the direct financing lease criteria are met, the lease is an operating lease.

For more information about lessor accounting, see Chapter 9 of Deloitte's Roadmap *Leases*.

5.5.4.1 Variable Payments

While much of the guidance on lessor accounting is aligned with the revenue guidance in ASC 606, an important distinction between the two may affect lessors in the technology industry. Under ASC 606, variable payments are generally estimated and included in the transaction price subject to a constraint. By contrast, under ASC 842, variable lease payments not linked to an index or rate are generally excluded from the determination of a lessor's lease payments.

For example, a technology entity may sell or lease hardware for which the consideration is based entirely on the usage of the hardware. If a hardware sale is accounted for under ASC 606, the customer's variable payments to the entity may need to be estimated up front and included in the transaction price. However, if the hardware is leased and accounted for under ASC 842, the lessee's variable payments to the entity would not be included in the entity's lease payments.

5.5.4.2 Practical Expedient

Lessors can elect not to separate lease and nonlease components. This election is made by each class of underlying asset and can only be made if certain criteria are met in accordance with ASC 842-10-15-42A through 15-42C, which state the following:

ASC 842-10

15-42A As a practical expedient, a lessor may, as an accounting policy election, by class of underlying asset, choose to not separate nonlease components from lease components and, instead, to account for each separate lease component and the nonlease components associated with that lease component as a single component if the nonlease components otherwise would be accounted for under Topic 606 on revenue from contracts with customers and both of the following are met:

a. The timing and pattern of transfer for the lease component and nonlease components associated with that lease component are the same.
b. The lease component, if accounted for separately, would be classified as an operating lease in accordance with paragraphs 842-10-25-2 through 25-3.

Pending Content (Transition Guidance: ASC 842-10-65-5)

15-42A As a practical expedient, a lessor may, as an accounting policy election, by class of underlying asset, choose to not separate nonlease components from lease components and, instead, to account for each separate lease component and the nonlease components associated with that lease component as a single component if the nonlease components otherwise would be accounted for under Topic 606 on revenue from contracts with customers and both of the following are met:

a. The timing and pattern of transfer for the lease component and nonlease components associated with that lease component are the same.
b. The lease component, if accounted for separately, would be classified as an operating lease in accordance with paragraphs 842-10-25-2 through 25-3A.

ASC 842-10 (continued)

15-42B A lessor that elects the practical expedient in paragraph 842-10-15-42A shall account for the combined component:

a. As a single performance obligation entirely in accordance with Topic 606 if the nonlease component or components are the predominant component(s) of the combined component. In applying Topic 606, the entity shall do both of the following:
   1. Use the same measure of progress as used for applying paragraph 842-10-15-42A(a)
   2. Account for all variable payments related to any good or service, including the lease, that is part of the combined component in accordance with the guidance on variable consideration in Topic 606.

b. Otherwise, as an operating lease entirely in accordance with this Topic. In applying this Topic, the entity shall account for all variable payments related to any good or service that is part of the combined component as variable lease payments.

In determining whether a nonlease component or components are the predominant component(s) of a combined component, a lessor shall consider whether the lessee would be reasonably expected to ascribe more value to the nonlease component(s) than to the lease component.

15-42C A lessor that elects the practical expedient in paragraph 842-10-15-42A shall combine all nonlease components that qualify for the practical expedient with the associated lease component and shall account for the combined component in accordance with paragraph 842-10-15-42B. A lessor shall separately account for nonlease components that do not qualify for the practical expedient. Accordingly, a lessor shall apply paragraphs 842-10-15-38 through 15-42 to account for nonlease components that do not qualify for the practical expedient.

5.5.4.2.1 Lease of Smart Device and Related Subscription Services

Many technology entities offer solutions in which a customer purchases (1) a smart device with an embedded software component (e.g., firmware), (2) maintenance and support (i.e., PCS), and (3) a cloud-based service. In these offerings, the firmware allows the smart device to connect to the cloud-based application, which is physically hosted on the technology entity's systems (or hosted by the entity's cloud-computing vendor) and accessed by the customer over the Internet. Because PCS and a cloud-based service typically are sold together, are coterminous, and have the same pattern of transfer (i.e., ratably over time as stand-ready obligations), they will be referred to collectively as "subscription services."[1]

Instead of selling its smart device, an entity may decide to lease the device and sell its subscription service to the same customer. In these situations, the entity's device would be subject to the provisions in ASC 842,[2] and consideration would generally be allocated to the separate lease component (i.e., the smart device[3]) and the nonlease component (i.e., the subscription service) in accordance with the guidance in ASC 606 on allocating the transaction price to performance obligations. Because the device would be subject to the leasing guidance, the entity would not evaluate whether the leased device represents a distinct promise in accordance with ASC 606.

[1] When control of two or more goods or services is transferred at exactly the same time, or on the same basis over the same period, and if those items do not need to be segregated for presentation or disclosure purposes, it will not be necessary to unbundle each of those concurrently delivered items because the amount and timing of revenue recognized and disclosed would not differ if the items were unbundled. The FASB acknowledges this in paragraph BC116 of ASU 2014-09 and paragraph BC47 of ASU 2016-10.

[2] While it is assumed that the lease of the smart device would be subject to ASC 842, entities should carefully evaluate the scope provisions of the leasing guidance in making that determination.

[3] While the smart device may have embedded software, such software would not need to be treated as a separate nonlease component if it is essential to the functionality of the device. If the software is not essential to the functionality of the device (i.e., it is distinct from the device), the software would not be within the scope of ASC 842.

5.5.4.2.1.1 Practical Expedient Criteria

If the entity elects to use the practical expedient, it may combine the device (i.e., the lease component) and the subscription service (i.e., the nonlease component) if the subscription service would otherwise be accounted for under ASC 606 and both of the conditions in ASC 842-10-15-42A(a) and (b) are met.

As explained in ASU 2018-11, the criterion in ASC 842-10-15-42A(a) focuses on the timing and pattern of transfer (i.e., a "straight-line pattern of transfer . . . to the customer over the same time period") rather than on the timing and pattern of revenue recognition. Therefore, an entity may qualify for the practical expedient if it (1) leases a device that is classified as an operating lease and (2) sells subscription services constituting a stand-ready obligation that has a straight-line pattern of transfer over the same period as the operating lease.

Example 5-3

Entity Z leases a hardware device over a one-year period and sells a cloud-based service for the device over the same period. The cloud-based service would be subject to ASC 606 if accounted for separately from the leased device. The service is a stand-ready obligation that has a straight-line pattern of transfer over the one-year period. In addition, the leased device would be classified as an operating lease under ASC 842 if accounted for separately from the cloud-based service. The leased device similarly has a straight-line pattern of transfer over the one-year period.

Entity Z can elect the practical expedient to account for the leased device and the cloud-based service as a single combined component because (1) the cloud-based service otherwise would be accounted for under ASC 606, (2) the timing and pattern of transfer for the leased device and the cloud-based service are the same, and (3) the leased device, if accounted for separately, would be classified as an operating lease under ASC 842.

Example 5-4

Assume the same facts as in Example 5-3 above, except that the cloud-based service only has a one-month term. The customer has the option to renew the service over the one-year lease term but is not contractually obligated to do so. Therefore, the lease term for the device and the contractual service period for the cloud-based service are not coterminous.

Entity Z can elect the practical expedient to account for the leased device and the cloud-based service as a single combined component if certain conditions are met. We believe that, in some circumstances, the practical expedient can be applied even if the nonlease component is not coterminous with the lease component. Specifically, we think that if the separation of the lease component from the nonlease component would only affect presentation and disclosure (i.e., the pattern and timing of revenue recognition would not differ if the nonlease component were accounted for separately), the lessor can elect the practical expedient to combine the lease component and the nonlease component even if the timing of transfer of the nonlease component is not coterminous with the lease component. This would generally be the case when (1) the lease component and the optional nonlease component are each priced at their stand-alone selling price and an allocation between components would therefore not be necessary (i.e., they are not priced at a significant discount in such a way that a material right within the scope of ASC 606 might need to be identified) and (2) the timing and pattern of transfer of the nonlease component are the same as those of the lease component for the period over which the nonlease component will be transferred to the lessee.

This view is supported by paragraph BC31 of ASU 2018-11, which states, in part, "The Board noted that its objective in providing the practical expedient was to align the accounting by lessors under the new leases standard more closely with the revenue guidance." Further, paragraph BC116 of ASU 2014-09 notes that "Topic 606 would not need to specify the accounting for concurrently delivered distinct goods or services that have the same pattern of transfer. This is because, in those cases, an entity is not precluded from accounting for the goods or services as if they were a single performance obligation, if the outcome is the same as accounting for the goods and services as individual performance obligations."

Example 5-4 (continued)

On the basis of the Board's stated objective, we believe that the practical expedient in ASC 842-10-15-42A can be applied when the only impact is on presentation and disclosure of amounts recognized as part of the arrangement (i.e., the pattern and timing of recognition are the same), provided that the lease component, if accounted for separately, would be classified as an operating lease. Therefore, if the leased device and the cloud-based service are each priced at their stand-alone selling price and renewals of the cloud-based service are not priced at a discount, Z may elect to apply the practice expedient.

The presence of a nonlease component that is ineligible for the practical expedient does not preclude the entity from electing the expedient for the lease and nonlease components that meet the criteria. Rather, the entity would account for the nonlease components that do not qualify for the practical expedient separately from the combined lease and nonlease components that do qualify. For example, if the entity also provides professional services that do not qualify for the practical expedient, it would not necessarily be precluded from electing the practical expedient.

Example 5-5

Assume the same facts as in Example 5-3, except that Entity Z also sells implementation services that are transferred over a three-month period. The implementation services are distinct from the cloud-based service, and Z recognizes revenue for the implementation services over time by using a cost-based measure of progress under ASC 606.

Entity Z can elect the practical expedient to account for the leased device and the cloud-based service as a single combined component for the reasons stated in Example 5-3. However, because Z recognizes revenue for the implementation services by using a cost-based measure of progress over a three-month period, those services do not have the same timing and pattern of transfer as the leased device (which is transferred ratably over a one-year period). Therefore, the implementation services do not qualify for the practical expedient and should be accounted for separately under ASC 606.

This conclusion is supported by the guidance in ASC 842-10-15-42C, which states that those components that qualify for the practical expedient are combined while those components that do not qualify are accounted for separately.

5.5.4.2.1.2 Determining Which Component Is Predominant

If the entity elects to apply the practical expedient to its leased device and cloud-based service, it should determine whether the cloud-based service associated with the leased device is the predominant component of the combined component. If so, the entity is required to account for the combined component in accordance with ASC 606. Otherwise, the entity must account for the combined component as an operating lease in accordance with ASC 842.

As indicated in the Background Information and Basis for Conclusions of ASU 2018-11, the FASB decided not to include a separate definition or threshold for determining whether "the nonlease component is the *predominant* component of the combined component." Rather, the Board noted that a lessor should consider whether the lessee would "ascribe more value to the nonlease component(s) than to the lease component." Further, the Board acknowledged that the term "predominant" is used elsewhere in U.S. GAAP, including ASC 842 and ASC 606.

The Board also explained that it does not expect that an entity will need to perform a detailed quantitative analysis or allocation to determine whether the nonlease component is predominant. Rather, it is sufficient if an entity can reasonably determine, on a qualitative basis, whether to apply ASC 842 or ASC 606. Therefore, entities will need to use judgment in making this determination.

At its March 28, 2018, meeting, the FASB discussed a scenario in which the components were evenly split (e.g., a 50/50 split of value) and suggested that, in such circumstances, the combined component should be accounted for under ASC 842 because the nonlease component is not predominant. That is, the entity would need to demonstrate that the predominant element is the nonlease component; otherwise, the combined unit of account would be accounted for as a lease under ASC 842. We believe that the final language in ASU 2018-11 is intended to indicate that an entity would need to determine whether the lease or nonlease component (or components) is larger (i.e., has more value); only when the nonlease component is larger should the combined component be accounted for under ASC 606.

In discussions with the FASB staff, we confirmed that an entity needs to look at which component has more value, not *significantly* more value. In a quantitative analysis, "more value" would constitute more than 50 percent. For example, when the value of the nonlease component is 51 percent and the value of the lease component is 49 percent, the nonlease component would be the predominant component. However, the FASB staff indicated that it generally expects that entities will be able to make this determination qualitatively. We also confirmed that the language "ascribe more value to the nonlease component(s) than to the lease component" intentionally excludes the wording "ascribe significantly more value to the license" from ASC 606-10-55-65A. Accordingly, we believe that to be predominant, the nonlease component only needs to be larger (not *significantly* larger) than the lease component.

5.5.4.2.1.3 Variable Payments

The accounting for variable payments should be consistent with that for the combined component. That is, when the combined component is accounted for as a lease under ASC 842, there are no longer any nonlease (revenue) variable payments; rather, there are only variable payments related to the combined lease component, and that variability should be accounted for in accordance with ASC 842. Conversely, if the combined component is accounted for as a service under ASC 606, all variable payments related to the combined component should be accounted for in accordance with the guidance in ASC 606 on variable consideration. That is, the entity would be required to estimate the variable consideration and constrain such estimates in accordance with the guidance in ASC 606-10-32-11. The entity would also be required to consider the variable consideration guidance in ASC 606-10-32-40 to determine whether a variable amount should be allocated to a distinct good or service.

For example, if the entity elects the practical expedient and the cloud-based service is the predominant component, the single combined component (consisting of the leased device and the cloud-based service) would be accounted for under ASC 606. If the entity also charges usage-based fees for the cloud-based service, it would need to consider the variable consideration guidance in ASC 606.

5.5.5 Discount Rate

Entities will need to recognize ROU assets and lease obligations by using an appropriate discount rate at transition and on an ongoing basis. Compliance with this requirement may be difficult for entities with a significant number of leases since they will need to identify the appropriate incremental borrowing rate for each lease on the basis of factors associated with the underlying lease terms (e.g., lease tenor, asset type, residual value guarantees). That is, entities would not be permitted to use the same discount rate for all of their leases unless the leased assets and related terms are similar. See Chapter 7 of Deloitte's Roadmap *Leases* for further details on the related guidance and illustrative examples.

5.5.6 Additional Considerations Related to ASC 842

Technology entities may enter into various lease arrangements such as subleases, sale-and-leaseback arrangements, and build-to-suit arrangements. See Chapters 10 through 12 of Deloitte's Roadmap *Leases* for further details on the related guidance and illustrative examples.

In addition, ASC 842 offers a variety of practical expedients (including those discussed in Sections 5.5.3.2 and 5.5.4.2) that may be of relevance to technology entities. See Chapters 15 through 17 of Deloitte's Roadmap *Leases* for further details on the various practical expedients.

5.5.7 SEC Comment Letter Trends

The focus of the SEC staff's comments on leasing transactions has shifted from registrants' accounting under the legacy leasing guidance (codified in ASC 840) to their application of the guidance in ASC 842. Although relatively few SEC staff comments on the application of ASC 842 have been issued thus far, some observations in comments related to its application have emerged. For example, registrants have received comments on (1) how ASC 842 applies or does not apply in certain arrangements and (2) the discount rate used to calculate the amount of the lease liability and corresponding ROU asset. Other topics addressed in SEC staff comments on ASC 842 include, but are not limited to, the nature of expenses treated as initial direct costs; the determination of lease classification; accounting for leasehold improvements, including amortization; and impairment considerations related to ROU assets.

Given the relatively low volume of SEC staff comments related to ASC 842 that have been issued thus far, registrants in the technology industry should continue monitoring staff comments to identify any new comments or trends related to the leasing standard that may emerge in the future.

For more information, see Section 2.14 of Deloitte's Roadmap *SEC Comment Letter Considerations, Including Industry Insights*.

Appendix A — Titles of Standards and Other Literature

AICPA Literature

Accounting and Valuation Guide

Valuation of Privately-Held-Company Equity Securities Issued as Compensation

Audit and Accounting Guide

Revenue Recognition

Practice Aid

Accounting for and Auditing of Digital Assets

FASB Literature

ASC Topics

ASC 205, *Presentation of Financial Statements*

ASC 210, *Balance Sheet*

ASC 235, *Notes to Financial Statements*

ASC 260, *Earnings per Share*

ASC 270, *Interim Reporting*

ASC 275, *Risks and Uncertainties*

ASC 310, *Receivables*

ASC 320, *Investments — Debt Securities*

ASC 321, *Investments — Equity Securities*

ASC 323, *Investments — Equity Method and Joint Ventures*

ASC 325, *Investments — Other*

ASC 326, *Financial Instruments — Credit Losses*

ASC 330, *Inventory*

ASC 340, *Other Assets and Deferred Costs*

ASC 350, *Intangibles — Goodwill and Other*

ASC 360, *Property, Plant, and Equipment*

ASC 405, *Liabilities*

ASC 450, *Contingencies*

ASC 460, *Guarantees*

ASC 470, *Debt*

ASC 480, *Distinguishing Liabilities From Equity*

ASC 505, *Equity*

ASC 605, *Revenue Recognition*

ASC 606, *Revenue From Contracts With Customers*

ASC 610, *Other Income*

ASC 705, *Cost of Sales and Services*

ASC 710, *Compensation — General*

ASC 712, *Compensation — Nonretirement Postemployment Benefits*

ASC 715, *Compensation — Retirement Benefits*

ASC 718, *Compensation — Stock Compensation*

ASC 720, *Other Expenses*

ASC 730, *Research and Development*

ASC 740, *Income Taxes*

ASC 805, *Business Combinations*

ASC 808, *Collaborative Arrangements*

ASC 810, *Consolidation*

ASC 815, *Derivatives and Hedging*

ASC 820, *Fair Value Measurement*

ASC 825, *Financial Instruments*

ASC 840, *Leases*

ASC 842, *Leases*

ASC 845, *Nonmonetary Transactions*

ASC 848, *Reference Rate Reform*

ASC 860, *Transfers and Servicing*

ASC 940, *Financial Services — Brokers and Dealers*

ASC 944, *Financial Services — Insurance*

ASC 946, *Financial Services — Investment Companies*

ASC 985, *Software*

ASUs

ASU 2014-01, *Investments — Equity Method and Joint Ventures (Topic 323): Accounting for Investments in Qualified Affordable Housing Projects* — a consensus of the FASB Emerging Issues Task Force

ASU 2014-09, *Revenue From Contracts With Customers (Topic 606)*

ASU 2016-08, *Revenue From Contracts With Customers (Topic 606): Principal Versus Agent Considerations (Reporting Revenue Gross Versus Net)*

ASU 2016-10, *Revenue From Contracts With Customers (Topic 606): Identifying Performance Obligations and Licensing*

ASU 2016-12, *Revenue From Contracts With Customers (Topic 606): Narrow-Scope Improvements and Practical Expedients*

ASU 2016-13, *Financial Instruments — Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*

ASU 2016-20, *Technical Corrections and Improvements to Topic 606, Revenue From Contracts With Customers*

ASU 2018-07, *Compensation — Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting*

ASU 2018-11, *Leases (Topic 842): Targeted Improvements*

ASU 2018-15, *Intangibles — Goodwill and Other — Internal-Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract* — a consensus of the FASB Emerging Issues Task Force

ASU 2019-08, *Compensation — Stock Compensation (Topic 718) and Revenue From Contracts With Customers (Topic 606): Codification Improvements — Share-Based Consideration Payable to a Customer*

ASU 2020-04, *Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting*

ASU 2020-06, *Debt — Debt With Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging — Contracts in Entity's Own Equity (Subtopic 815-40): Accounting for Convertible Instruments and Contracts in an Entity's Own Equity*

ASU 2021-02, *Franchisors — Revenue From Contracts With Customers (Subtopic 952-606): Practical Expedient*

ASU 2021-04, *Earnings per Share (Topic 260), Debt — Modifications and Extinguishments (Subtopic 470-50), Compensation — Stock Compensation (Topic 718), and Derivatives and Hedging — Contracts in Entity's Own Equity (Subtopic 815-40): Issuer's Accounting for Certain Modifications or Exchanges of Freestanding Equity-Classified Written Call Options* — a consensus of the FASB Emerging Issues Task Force

ASU 2021-08, *Business Combinations (Topic 805): Accounting for Contract Assets and Contract Liabilities From Contracts With Customers*

ASU 2022-06, *Reference Rate Reform (Topic 848): Deferral of the Sunset Date of Topic 848*

Concepts Statements

No. 5, *Recognition and Measurement in Financial Statements of Business Enterprises*

No. 8, *Conceptual Framework for Financial Reporting — Chapter 4,* Elements of Financial Statements

Proposed ASU

No. 2022-ED300, *Business Combinations — Joint Venture Formations (Subtopic 805-60): Recognition and Initial Measurement*

IRC

Section 382, "Limitation on Net Operating Loss Carryforwards and Certain Built-In Losses Following Ownership Change"

Section 409A, "Inclusion in Gross Income of Deferred Compensation Under Nonqualified Deferred Compensation Plans"

IFRS Literature

IFRS 15, *Revenue From Contracts With Customers*

IAS 20, *Accounting for Government Grants and Disclosure of Government Assistance*

SEC Literature

FRM

Topic 7, "Related Party Matters"

Topic 10, "Emerging Growth Companies"

Interpretive Release

No. 33-10751, *Commission Guidance on Management's Discussion and Analysis of Financial Condition and Results of Operations*

Regulation S-K

Item 10(e), "General; Use of Non-GAAP Financial Measures in Commission Filings"

Item 103, "Business; Legal Proceedings"

Item 303, "Management's Discussion and Analysis of Financial Condition and Results of Operations"

Regulation S-X

Rule 3-13, "Filing of Other Financial Statements in Certain Cases"

Rule 5-03, "Statements of Comprehensive Income"

Rule 11-01, "Presentation Requirements"

SAB Topics

No. 1, "Financial Statements"

- No. 1.B, "Allocation of Expenses and Related Disclosure in Financial Statements of Subsidiaries, Divisions or Lesser Business Components of Another Entity"
- No. 1.M, "Materiality"

No. 5.Y, "Miscellaneous Accounting; Accounting and Disclosures Relating to Loss Contingencies"

Securities Exchange Act of 1934

Section 13, "Periodical and Other Reports"

Section 15(d), "Registration and Regulation of Brokers and Dealers; Supplementary and Periodic Information"

Superseded Literature

AICPA Technical Practice Aid

Section 5100.68, "Revenue Recognition: Fair Value of PCS in Perpetual and Multi-Year Time-Based Licenses and Software Revenue Recognition"

EITF Abstract

Issue No. 01-8, *Determining Whether an Arrangement Contains a Lease*

FASB Concepts Statement

No. 6, *Elements of Financial Statements* — a replacement of FASB Concepts Statement No. 3 (incorporating an amendment of FASB Concepts Statement No. 2)

Other Literature

FASB TRG Agenda Papers

TRG Agenda Paper 23, *Incremental Costs of Obtaining a Contract*

TRG Agenda Paper 41, *Measuring Progress When Multiple Goods or Services Are Included in a Single Performance Obligation*

TRG Agenda Paper 44, *July 2015 Meeting — Summary of Issues Discussed and Next Steps*

TRG Agenda Paper 57, *Capitalization and Amortization of Incremental Costs of Obtaining a Contract*

TRG Agenda Paper 59, *Payments to Customers*

TRG Agenda Paper 60, *November 2016 Meeting — Summary of Issues Discussed and Next Steps*

Appendix B — Abbreviations

Abbreviation	Description
AI	artificial intelligence
AICPA	American Institute of Certified Public Accountants
ASC	FASB Accounting Standards Codification
ASR	accelerated share repurchase
ASU	FASB Accounting Standards Update
BC	Basis for Conclusions
BCF	beneficial conversion feature
C&DI	SEC Compliance and Disclosure Interpretation
CAM	critical audit matter
CAQ	Center for Audit Quality
CCF	cash conversion feature
CECL	current expected credit loss
CIMA	Chartered Institute of Management Accountants
CPM	cost per mille
CRM	customer relationship management
DLOM	discount for lack of marketability
DTA	deferred tax asset
DTL	deferred tax liability
EBITDA	earnings before interest, taxes, depreciation, and amortization
EDGAR	SEC's Electronic Data Gathering, Analysis, and Retrieval System
EGC	emerging growth company
EITF	FASB Emerging Issues Task Force
EPS	earnings per share

Abbreviation	Description
ERP	enterprise resource planning
ex-TAC	excluding traffic acquisition costs
Exchange Act	Securities Exchange Act of 1934
FASB	Financial Accounting Standards Board
FAST Act	Fixing America's Surface Transportation Act
FIFO	first in, first out
FinREC	AICPA Financial Reporting Executive Committee
FRM	SEC Financial Reporting Manual
GAAP	generally accepted accounting principles
GAAS	generally accepted auditing standards
IAS	International Accounting Standard
IASB	International Accounting Standards Board
IC	independent contractor
ICFR	internal control over financial reporting
IFRS	International Financial Reporting Standard
IoT	Internet of Things
IP	intellectual property
IPO	initial public offering
IPR&D	in-process research and development
IRC	Internal Revenue Code
IT	information technology

Abbreviation	Description
JOBS Act	Jumpstart Our Business Startups Act
KPI	key performance indicator
LIBOR	London Interbank Offered Rate
LIFO	last in, first out
LLC	limited liability company
M&A	merger and acquisition
MD&A	Management's Discussion and Analysis
NFT	nonfungible token
NOL	net operating loss
OCA	SEC's Office of the Chief Accountant
OEM	original equipment manufacturer
PBE	public business entity
PCAOB	Public Company Accounting Oversight Board
PCS	postcontract customer support
Q&A	question and answer
R&D	research and development
RMN	retail media network
ROU	right-of-use

Abbreviation	Description
S&P 500	Standard & Poor's 500 stock market index
SaaS	software as a service
SAB	SEC Staff Accounting Bulletin
Sarbanes-Oxley	Sarbanes-Oxley Act of 2002
SEC	U.S. Securities and Exchange Commission
Securities Act	Securities Act of 1933
SG&A	selling, general, and administrative
SKU	separate stock-keeping unit
SPAC	special-purpose acquisition company
SRC	smaller reporting company
SSP	stand-alone selling price
TMT	Technology, Media, & Telecommunications
TPA	AICPA Technical Practice Aid
TRG	FASB/IASB transition resource group for revenue recognition
VIE	variable interest entity
XaaS	everything as a service

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