CHAPTER 1

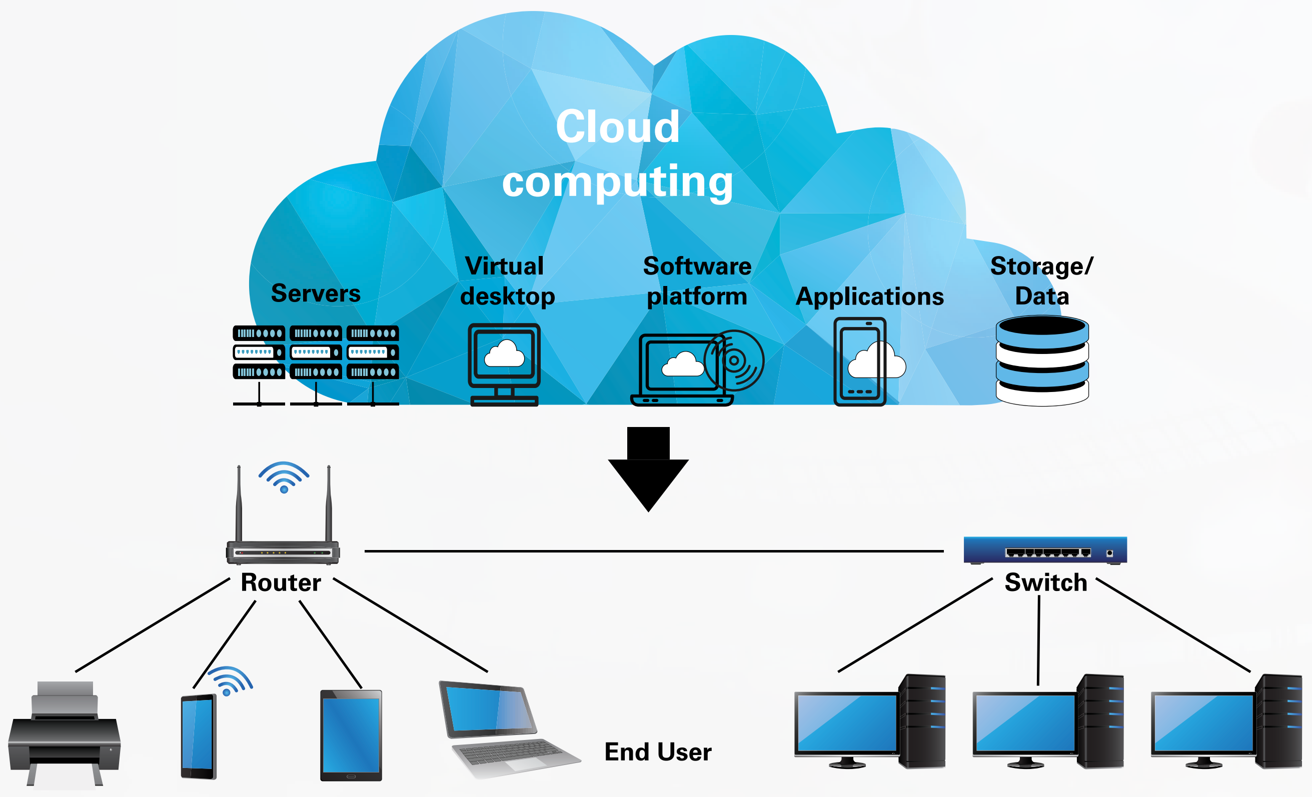
Gross versus net accounting - Cloud computing arrangements

This article aims to:

Highlight the challenges faced in evaluating principal versus agent considerations for accounting of revenue transactions in cloud computing arrangements with the help of examples.

A cloud computing arrangement

Cloud computing is the delivery of computing services including servers, storage, databases, networking, software, analytics, and intelligence over the internet (the cloud) to offer faster innovation, flexible resources, and economies of scale.



Cloud computing layout diagram

Cloud computing is a radical shift from the traditional way businesses think about Information Technology (IT) resources since it eliminates capital expense of buying hardware, software and setting up and running on-site data-centers, along with high speed ability with global reach and reliability.

These arrangements vary based on the types of services provided by Cloud Service Providers (CSP) to their customers, and the accounting for such arrangements will depend on the terms of the arrangement and specific complexities involved. Generally, there may be three types of cloud computing arrangements:

(i) **Infrastructure as a service (IaaS)** – Providing infrastructure support to customers eliminating maintenance of on-premises data centre, hardware costs, etc.

(ii) **Platform as a service (PaaS)** – Providing platform to companies without setting up/ managing underlying infrastructure, storage, network and databases.

(iii) **Software as a service (SaaS)** – Providing software application services to end users.

Cloud computing arrangements have been evolving and witnessing significant changes in technology, and exploring new markets. Although these developments present exciting new opportunities, they also pose new challenges with respect to accounting considerations, including those related to revenue recognition.

Revenue recognition

Under Ind AS, revenue recognition is based on the principles given in Ind AS 115, *Revenue from Contracts with Customers*. In certain cloud computing arrangements, an entity may involve two or more unrelated parties that contribute to providing a specified good or service to a customer or involve entities re-selling a product.

When another party is involved in providing goods or services to a customer, an entity would need to evaluate the nature of its promise to the customer i.e. is it the principal or an agent to this arrangement.

This determination often requires judgement, and evaluation of all facts and circumstances is likely to impact the amount and timing of revenue recognition.

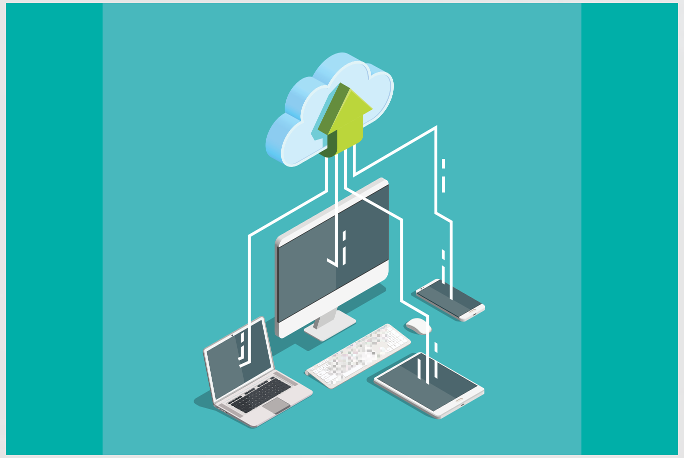
In order to recognise revenue a cloud computing service provider should first understand the relationships and contractual arrangements among the various parties. This includes identifying the specified good or service being provided to the customer and determining whether the company controls that good or service before it is transferred to the customer.

If an entity obtains control of another party's goods or services before transferring control to the customer, then the entity's promise is to provide the goods or services itself. Therefore, the entity is acting as a principal.

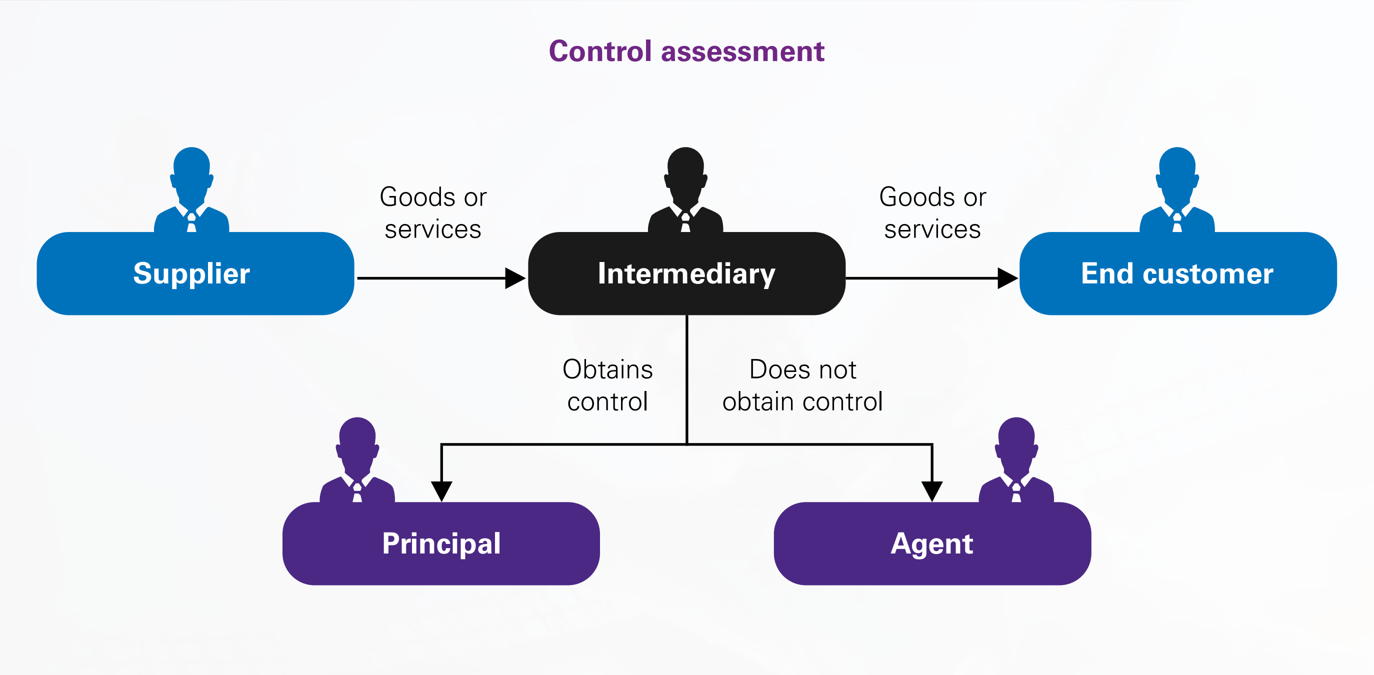
However, if the entity does not control the good or service before it is transferred to the customer, then the entity is acting as an agent and arranges for that good or service to be provided by another entity.

When an entity is the principal to an arrangement then it would recognise revenue on a gross basis. Conversely, if it is an agent and should recognise revenue on a net basis.

The principal versus agent assessment is performed at the performance obligation level, not at the contract level. An entity should evaluate whether it is principal or agent for each performance obligation, it is possible an entity may act as a principal with respect to certain performance obligations and an agent with respect to others in the contract with multiple performance obligations.



Control assessment for revenue recognition



(Source: KPMG IFRG Limited's Publication Revenue - 1FRS 15 handbook published in June 2019)

An entity to provide the specified good or service, it must first control that good or service as it would appear difficult to provide the specified good or service to a customer if the entity does not first have (and control) that good or service to be provided. **Hence, control before transfer would be the determining factor when assessing whether an entity is a principal or an agent in an arrangement.** To determine if it controls a specified good or service before it is transferred to the customer, the entity acting as an intermediary applies the general guidance on transfer of control.

If the assessment based on the general guidance on transfer of control is not conclusive, then an entity considers the specific indicators of whether it acts as a principal. These indicators include, but are not limited to, the following:

(i) The entity is primarily responsible for providing specified goods or services

(ii) The entity has inventory risk

(iii) The entity has discretion in establishing prices for specified goods or services

There is no specific hierarchy for the indicators and an entity considers all of the indicators in making the assessment. The assessment of whether the entity controls the specified good or service before it is transferred to the customer does not depend on whether one or more of the above indicators are met or on a majority evaluation of the indicators. For instance, meeting two of the above three indicators, or not meeting two of the three indicators, is not alone persuasive to the control evaluation.

The indicators are intended to inform the control evaluation and, depending on the facts and circumstances, provide more or less relevant (i.e. persuasive) evidence to that evaluation. Therefore, meeting one (or more) of the indicators cannot override the other, more relevant/persuasive, evidence – whether provided by meeting or not meeting one or more of the other indicators or another source of evidence – as to whether the entity controls the specified good or service before it is transferred to the customer.

Few common scenarios in cloud computing arrangements and impact of principal versus agent considerations

Example 1: Cloud service arrangement with specified service as an input into a combined output

ABC Ltd. partners with third parties who own and operate web-based platforms. ABC creates IT environments for its customers on these platforms, secures the platform processing capacity for its customers and provides software to monitor and manage the cloud consumption on the platforms. ABC is an authorised reseller of three different cloud platforms and provides customer support on each cloud platform to ensure customer applications have maximum up-time (i.e. are always available on the cloud).

ABC enters into a contract with a customer to provide professional services required to implement a cloud-based solution and provide cloud capacity management. These services include identification and procurement of cloud computing capacity, a software interface (the ABC Software) to help customers monitor their cloud computing usage, as well as customer support and maintenance. The customer selects platform provider's product to be used in the services. However, the customer and platform provider do not enter into a contractual relationship and ABC accepts responsibility for the cloud platform.

ABC sets the price charged to the customer for the services, and platform provider is not involved in the negotiations and does not have visibility into the contract. However, given market competition for the cloud platform and rates at which platform provider sells separately, ABC is practically limited in the amount it can charge customer for the platform.

ABC's separate contract with platform provider requires it to pay platform provider even if customer does not pay ABC for the services.

Analysis

ABC concludes that it is providing a single specified service to customer because it is performing a significant service of integrating the platform, software, support and maintenance into a single performance obligation.

The specified cloud services are a single, integrated offering and ABC provides significant service to the customer by integrating all the items, including the third party cloud platform, into the combined output (i.e. the integrated cloud services) for which the customer has contracted.

ABC controls the right to access the cloud platform and then directs the use of that right by integrating that access with the other goods and services in providing a package of cloud services to the customer.

Hence, ABC concludes that it controls the package of cloud services before it is transferred to the customer.

The third-party web platform is merely one input into ABC's integrated cloud offering, which ABC controls and makes use of in fulfilling the specified service.

Although the customer has selected which platform provider's product to be used, it has not entered into any contractual relationship with such platform provider.

The customer has a contractual agreement with ABC for providing cloud services. Hence, ABC remains primarily responsible for providing the cloud services to the customer.

ABC has set the price charged to the customer for the cloud services. The platform provider is not involved in the negotiations and does not have visibility into the contract. Hence, ABC concludes that it has discretion in establishing price for the output of services.

Based on the facts of the example, the services provided by the platform provider creates an asset that ABC controls. ABC directs the use of this asset by integrating it with other promised goods or services to satisfy its performance obligation to the customer.

Hence, ABC is acting as a principal in the given arrangement and should record the gross amount charged to the customer as its revenue from operations.

Example 2: Cloud service arrangement with reserve capacity

ABC Ltd. (ABC) is a IT Service provider providing bouquet of web-hosting services such as hosting third party software on cloud or providing only cloud capacity or integration of both. ABC procures the cloud capacity from Cloud Ltd. Since, ABC has multiple customers, they therefore reserve cloud capacity with Cloud Ltd. by providing minimum commitment at the beginning of the year.

XYZ Ltd. (XYZ) owns multiple IT applications for its employees and end customers which are managed by its in-house IT team and wants cloud space for hosting its application. Since ABC is an established vendor with direct business relations with Cloud Ltd, XYZ approaches ABC for cloud capacity services to avail cost related benefits on account of scale of operations of ABC.

Analysis

In this example, ABC needs to assess whether it controls the specified service before it transfers the cloud capacity service to XYZ. In this case, ABC reserves cloud capacity from Cloud Ltd. and commits minimum capacity of cloud platform per year. Subsequently, ABC provides cloud services out of such reserved capacity to its customers.

ABC has the ability to direct the use of such reserved cloud capacity services before it is transferred to its customers as right to decide the allocation of reserved cloud capacity to its customers and the decision over customer selection resides with ABC.

Hence, ABC controls the specified cloud service before it transfers the cloud service to XYZ acting as a **'principal'** and therefore accounts for its revenue on gross basis.

Example 3: Cloud service arrangement with direct arrangement between Cloud Service Provider (CSP) and end customer

Company A is an IT service provider providing complex IT solutions for its customers. Customer B approaches A for transition from on premise data center server and storage to cloud. Apart from migration services, A will also provide post deployment services such as monitoring and managing the cloud consumption, deploying security controls, optimisation of cloud, etc. In a nut-shell, A will be securing cloud capacity for B, create an IT environment on an online platform, host the applications of B on the platform and provide all post deployment service stated above.

Company Z is a Cloud Service Provider (CSP) which provides various cloud related services. As a part of Z's business strategy, it appoints re-sellers for its services and insists on entering into a direct arrangement with the end customer of re-seller. Further, in case the end customer enters into a direct arrangement, Z gives an additional discount to the end customer, in contrast to an arrangement with an intermediary such as A or any other re-seller. Company A is a re-seller of company Z.

Company A generally provides these services as a combined integrated package using cloud capacity as input to the overall services. In this case customer B opted for a direct contract with Z, which helped in reducing the cost of the overall offering. Some of the other facts of the case are as follows:

— Customer B would also give a minimum revenue commitment to company Z whether or not the stipulated minimum cloud space is utilised.

— Company A and Company Z will enter into an arrangement mirroring that between B and Z whereby A would offer its services to customer B on cloud space of company Z. All the agreements will be entered simultaneously.

— With respect to administrative activities such as invoicing and collection, Z agrees with A and B, that invoicing for Cloud services will be done by Z to A and then A will invoice to B without markup. Z will pay to A, commission at the rate of one per cent of the invoice amount for recommending and implementing cloud services on its client.

Basis the above, it is evident that company A will be integrating cloud capacity availed from company Z and provide cloud migration, cloud capacity management and post deployment services as a package.

Analysis

In this example, company A as part of the overall service arrangement, arranges the cloud space for the customer from company Z and provides various related cloud services to customer B. There are two elements of this arrangement 1) commission income from company Z and 2) revenue from cloud migration, cloud capacity management and post deployment services by company A to customer B.

Company Z has entered into a direct contract with customer B, whereby B has also given a minimum revenue commitment to Z and Z will offer discount to B. This implies that if the minimum usage is not achieved, B would still pay the differential amount to Z. However, company A has no commitment to make good for this differential and only customer B has the commitment to pay for a certain quantum of cloud space provided by Z. This is also evidence of a direct nexus between B and Z without A being involved in this aspect.

Further, as per the agreement between company Z and company A, the cloud capacity services provided by Z can only be used for providing services to customer B, this highlights that company A doesn't have the right to direct the use of cloud capacity services, as there is a restriction on company A.

The responsibility of company A is basically managing transition of the on-premises data center server and storage of customer B to company Z's cloud space in an effective manner. It is also responsible for related post deployment services. In other words, the role of A is to provide combined service obligations with respect to cloud space being provided by Z and consumed by B.

The consideration given by customer B would be for:

— using the cloud space from Z

— receiving other related cloud services being performed by company A.

Company A receives a commission from company Z for recommending and implementing Z's cloud space to B. This is the first element of company A's income from the arrangement. Company A would invoice customer B for the provision by company Z for the relevant cloud space. Though the cloud services are being integrated to provide combined services, company A doesn't have control over the inputs i.e. cloud capacity services. Company A is working on behalf of customer B and is using the cloud from company Z on instructions of customer B. Hence, company A does not control the cloud space of Z before providing the overall cloud service to B. Therefore, while company A is invoicing for cloud services to customer B, however this is an administrative activity and it should recognise revenue on net basis for cloud capacity services.

As company A has the performance obligation for other cloud services, it would be considered as the principal for those services. Therefore, company A will charge a fee for services relating to migration, management and post deployment services on the aforesaid cloud space.

Conclusion

Cloud service arrangements often involve entities re-selling cloud services either separately or by integrating the cloud services into a combined output. For such arrangements, service providers should determine whether they are acting as a principal or as an agent

Evaluation of each specified good or service to be transferred to the customer is crucial for detailed understanding of the economic substance and would require use of judgement in determining the presentation of revenue as gross or net basis after considering the control-based principal-agent model. An entity may be a principal for some goods or services and an agent for other in a contract to transfer multiple goods or services.