

# Perspective

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*This is one of a series of articles where experts in assurance, reporting and regulatory matters discuss recent technical and policy developments in these areas*



## The evolution of technology in business and the impact on your bottom line

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Companies are increasingly turning to cloud-based technology solutions as effective and efficient models to meet their business and IT infrastructure needs. Gartner's latest public cloud services forecast predicts Australian organisations will spend approximately AU\$4.6 billion on public cloud services this year, and 2019 spend is predicted to hit almost AU\$5.6 billion.<sup>1</sup> Globally, by 2021, cloud revenues are expected to be \$278 billion. This is spread across software, infrastructure and business processes (SaaS, IaaS and BPaaS).<sup>2</sup> Indeed, this isn't limited just to cloud arrangements as all forms of products are now being offered as subscription models - from Netflix to Microsoft Office 365 to gym memberships.

### ***What does all this mean for a company's bottom line and attractiveness to investors?***

Investors, generally, are attracted to subscription models. As Business Insider notes, "investors love businesses that have a reputation for minting cash" and companies and investors, in chasing long-term revenue streams, have opted to switch to subscription



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<sup>1</sup>Reported in '[Gartner predicts Australian public cloud spend to reach AU\\$7.7b in 2021](#)', ZDNet.com, 12 September 2018 (Accessed 22 October 2018).

<sup>2</sup> As above.

models.<sup>3</sup> So, for a business that might have historically sold hardware and software, evolving the service offering is a must.

For users of the services, however, this trend isn't helpful. EBITDA has historically been a prime measure used to value a company. Purchases of IT equipment, both hardware and software, can be undertaken without distorting the precious EBITDA-based valuation. Subsequent depreciation and amortisation of those purchases doesn't matter. Similarly, government departments have entirely different performance measures relating to capital expenditure (capex) and operating expense (opex) budgets.

So, let's examine some of the key issues that affect a company's bottom line arising from cloud offerings from a vendor and user perspective.

## Revenue recognition - do the rules make sense?

First and foremost, let's think about what's intuitive. Any subscription model would suggest a steady stream of revenue over time, perhaps closely following billing - simple and easily understood by the market. However, AASB 15, the accounting standard addressing revenue recognition, is not quite so straightforward. Core principles include the following:

- Regardless of billing schedules, a fundamental principle of revenue recognition is whether the customer has received something of value on Day 1 separate to the ongoing services.
- Can that 'thing' on Day 1 be used by the customer without the subscription or cloud arrangements?

Let's consider some simple examples to illustrate these principles. A typical scenario might be a migration to a cloud-based platform and service hosted by a third party such as Amazon Web Services (AWS), Netsuite or Xero. Typically, the substantial parts of such a change might cover:

- monthly subscription fees over the contract term allowing access to a new cloud platform or website
- monthly subscription fees for units of storage or server capacity in a data centre
- migration fees to build software that interfaces with the new platform (e.g. middleware to link existing IT infrastructure to the new platform)
- migration fees to transfer data to the new cloud platform, and
- training and other implementation fees.

## *Subscription revenue for the platform or website access*

The general revenue recognition principle for any cloud arrangement is to first try to separate out all of the elements a customer receives. Critically, if the customer receives a functional licence (or piece of hardware) that can operate without the hosting services, then some revenue must be recognised up front. Most commonly, this might represent a contract right for a customer to take the software, be able to run it themselves and terminate the hosting component. If the hosting cannot be separated from the software - that is, the customer never has a right to the code, or the hardware is useless on its own - then revenue would be spread over the contract term. Under a true aaS model, unlike a sale of IT with minor and unspecified upgrades, the customer would never be allowed to retain anything after terminating the contract.

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<sup>3</sup> ['How tech investors came to love the software-as-a-service model'](#), Business Insider, 30 November 2017 (Accessed 22 October 2018).

## ***Units of server capacity or storage***

Similar to access rights for websites, access to server capacity is judgemental. Typically, upfront revenue might arise if there's a specific asset or the customer otherwise accepts asset risk. For IaaS arrangements, this is unlikely to be the case. Take AWS, for example. While a customer might buy units of capacity, AWS may choose to deliver those units from any of its data centres. The customer simply does not see where the physical server resides or if it is changed midway through the arrangement. As such, revenue recognition is spread over the service term as AWS must stand ready to deliver each month on what it has promised. All the customer receives on Day 1 is a contract for AWS to do something each month in the future in exchange for that month's fee.

## ***Migration fees to build code***

This can be an area of complexity, particularly where vendors may have to build bespoke code to allow their platform to interface with a customer's systems. They may even need to build whole new modules at a customer's request for which significant fees are received on Day 1. The revenue recognition rules, unfortunately, can force deferral of such fees if the vendor does not give the customer any IP or rights to the new platform. This is even though work is completed up front and the customer pays up front. The associated costs of development would also be capitalised and spread over the term of the contract. Only if the customer can retain the code - for example, if the customer's own systems are modified - would revenue be recognised up front. This can be an area of frustration where vendors develop bespoke platforms that are then operated for customers and for which the majority of fees are received for the build.

## ***Migration, training and other services***

For a vendor, such costs fall into two buckets: unique services that no other provider could undertake; or generic services. If generic - that is, where alternative providers exist - fees may be recognised up front as the revenue recognition guidance considers them to be potentially separate to the underlying service contract. If they are unique - for example, configuration activities that only the cloud vendor can undertake - vendors should expect to have them deferred over the life of the contract.

The above represents only a general overview and every circumstance will be somewhat different. Nevertheless, in modelling the profile of subscription or cloud revenue arrangements, thought should be given to the specifics of an arrangement, particularly when bespoke activities are undertaken. That said, the very nature of cloud offerings where the customer does not receive any rights apart from the right to access the platform lends itself to stable streams of revenue that are spread over the contract term.

## **So what should a buyer of cloud services make of all of this?**

For a buyer, the transition to a cloud-based ecosystem will fundamentally be a commercial imperative. Cost savings, flexibility and scalability will drive decision-making. However, as part of that, it is worth reflecting on how to account for spending on cloud architecture.

In dealing with the accounting for a cloud purchase, two issues arise:

- Is the arrangement capex or opex, which might be important for budget approvals? and
- Where in the profit and loss statement is any expense recognised?

## ***Hardware: to be or not to be a lease, that is the question***

Historically, companies buying IT equipment with payments over time have turned to lease finance. This gives rise to the following outcomes

- operating leases - treated as opex and recognised within EBITDA, or
- finance leases - treated as capex, recognised within EBITDA as if a purchase with an associated lease financing liability.

Cloud arrangements change all that. These arrangements are fundamentally different in that they represent a service contract. What, then, differentiates a cloud arrangement from historical leasing models? In short, it's the specificity of the assets involved. As discussed, from a vendor perspective the essence of cloud arrangements is the ability of the vendor to offer a service without giving a customer the right to code or licences or specific hardware - even though the contract might be for fixed units of server capacity. To be classified as a lease, if a provider's data centre shut down or its servers fail, the customer would suffer. Leases presume a customer has asset risk. A cloud arrangement, by its very nature, is designed to provide redundancy by removing asset risk from a customer. As such, it's extremely unlikely that cloud arrangements will be treated as a lease in practice.

## ***So what, then, is the accounting for cloud arrangements?***

The accounting standards for capitalisation look to similar principles as the leasing standard: have you acquired a specific asset? If so, it can be capitalised and depreciated outside of EBITDA, whether it be code, licences or hardware.

We can illustrate this by looking at our previous example:

- Monthly subscription costs for access to a program, website or service capacity - capitalise only if there is specificity of assets, asset risk to the customer or the customer has the right and ability to take any code and use it themselves without the hosting element.
- Migration costs to build bespoke or specific code - capitalise only if code belongs to a customer. This might be modifications to existing in-house applications to enable compatibility with a new cloud platform. This modification code wouldn't ever be the property of the cloud vendor as the code relates to customer owned applications. Expense any bespoke code developed by the vendor if there is no licence provided to the customer - this might be spread over the contract term if paid up front.
- Migration costs for data transfer or training - training costs are generally expensed as incurred where they relate to a customer's staff. Data transfer costs are more subjective, potentially expensed up front or spread over the contract term depending on the nature of the expenditure.

## **Some final thoughts**

The decision to move to a cloud ecosystem, whether as a vendor or customer, is commercial: ultimately for accounting, cash in will always be revenue and cash spent will always be an expense, with only the timing and characterisation being debatable. As a vendor of subscription or cloud offerings, be prepared to articulate the nature of your offering to customers as they'll want to understand the relevant characterisation, whether capex, opex or outside EBITDA. As a purchaser of cloud offerings, you need to understand the characterisation of the arrangements. When in doubt, presume it will be an operating expense as in our experience it's rare to see cloud arrangements characterised as anything else.