





Reducing your risk and TCO with cloud

As a simple example, consider the price of an airline ticket. Which is less expensive: a £1,000 fully refundable fare or a £500 non-refundable ticket? The answer depends on the likelihood of a change in plans. This is not trivial; airlines make considerable revenue related to change fees. That same risk is generally ignored in TCO studies.

Professionals familiar with the IT capital acquisition process know the importance of conducting a TCO evaluation. TCO, or Total Cost of Ownership, is a methodology that provides an estimated financial analysis of the asset in question.

Unfortunately, this venerable tool can be highly misleading when used to evaluate cloud services. Cloud-delivered services are disrupting many assumptions and practices, and the TCO methodology is one of them. The problem with most TCO studies is they don't factor risk.

The TCO output is a best-effort forecast. Its accuracy is as good as the quality of the assumptions that go into it. In the past, these assumptions were applied equally to all options. A material change in assumptions would not only change the TCO calculations but could easily change the preferred solution as well. For example, a growth rate of 10 percent vs. 20 percent could have significant implications for a TCO study.

Although the TCO analysis may not show it, one key benefit of cloud-delivered services is an improved ability to adapt to changes. Cloud services eliminate the risk of outgrowing hardware. They can adapt to location changes associated with new or closed office locations. Further, cloud services reduce the adoption risk of new features by eliminating their upfront costs. Organisations can adjust services and change providers with far greater flexibility than traditional premises-based models allowed – effectively transferring the capital and human risks to the provider.



Why TCO?

When the TCO concept was popularised in the 1980s, computing choices had become so diverse that initial pricing was no longer indicative of overall costs. PCs were displacing mainframes with lower initial costs, but higher administrative costs.

The TCO methodology attempted to normalise total costs over a given period for a more accurate comparison. The goal was to understand the expected (estimated) financial ramifications of each alternative under consideration.

To determine TCO, multiple elements of a given solution are estimated and compared. To ensure fairness, a set of assumptions are applied to all alternatives under evaluation. These factors vary, but typically include costs associated with acquisition, implementation, administration, training, maintenance, and disposal. These assumptions determine a system's size and configuration, which in turn build the financial framework. The assumptions are applied to each of the alternatives to determine an estimated TCO for each alternative.

Realistically, these assumptions are usually wrong. Predicting the future is a hard thing to do. Most companies plan to grow, yet many do not. Economic changes, leadership changes, technology advancements, execution factors, natural disasters, and many other factors ruin the best laid plans. TCO exercises, therefore, are inherently a best-effort estimated guess.

Method of TCO Madness

TCO methods are applied most critically to long-term decisions, yet the formula consistently ignores that change increases over time. Forecasts become less reliable as they age. By year two, for example, the original predictions and forecasts will likely be obsolete, yet the technical decisions derived from them live on.

With cloud-delivered services, decisions are more easily updated; key assumptions can be recast. As an organisation's needs and requirements change, it can adjust its subscriptions.

While some restrictions exist, most providers offer broad capabilities to adjust features, quantities, locations, devices, etc. over the term of the subscription. The pay-as-you-go model means organisations pay for actual, not planned, usage. Among the higher risk assumptions are adoption factors – will employees reduce travel and use video conferencing? Will employees embrace mobile clients? Guessing how employees will change behaviour is very difficult. In traditional capital models, the customer organisation accepts all the risk by purchasing the solution upfront. Many of these risks are transferred from customer to provider with subscription-based models. The provider must cover the initial infrastructure and training costs.

The problem with non-cloud solutions

Ignoring risk is a very risky business. Technology is changing quickly. The way we worked just 20 years ago is practically unrecognisable today. Back then, Kodak ruled photography, fax machines were booming, and one of the most effective forms of advertising was the Yellow Pages. Apple had fired its co-founder, Steve Jobs, and was on the verge of bankruptcy.

The rates of technology and change continue to increase, yet our decision-making tools and methods have not adapted. TCO studies are primarily used to compare capital purchase alternatives. The traditional five-year depreciation schedule was built for fixtures and furniture. A desk depreciates over time, but services don't.

The 2016 list of the top 20 internet companies in terms of market capitalisation includes only two firms (Apple and Amazon) that existed before 1995.

Simultaneously, communication features and capabilities have exploded. With the old appliance model, the manufacturer designed dedicated end-to-end solutions. Capacity planning meant tracking processors, slots, and ports. Endpoints were manufactured by the same communications manufacturer and connected over a dedicated network.





Decreasing your daily burdens

A better alternative has now appeared and it's called the cloud

As systems have become software-based, multivendor, and delivered over shared infrastructure, the customer's technical burden has steadily increased. Engineering, compatibility testing, and many more responsibilities have shifted from manufacturers to customers. Modern IT solutions involve multiple components, each requiring its own set of administration, upgrades, and design. This has complicated not only day-to-day operations, but also disaster recovery planning, resource planning, hiring, training, and ongoing skills development. It is a fair amount of burden, but that's the cost of premises-based longterm decision-making.

Fortunately, cloud-delivered services offer an alternative. The UCaaS, or Unified Communications as a Service model, represents a shift of risk and burden away from the customer toward the provider. This shift includes not just the upfront costs, but the technology bets and infrastructure, as well as hiring/training the staff.

The risk is generally associated with price. For example, higher-risk loans charge higher interest rates. However, the odd thing about UCaaS is there doesn't appear to be a penalty by the provider. That is, most studies suggest that the financial costs of UCaaS vs. premises-based alternatives are about equal. The reality is that the cloud is actually far less expensive because it carries far less risk.

TCO studies rely on a core set of assumptions that are rarely accurate and become less reliable over time. The model has always been inherently flawed, but it has remained a best practice for lack of a better alternative. The better alternative has now appeared, and it is called the cloud.

Unfortunately, many miss this opportunity because they incorrectly apply the same flawed methodology and fail to realise the cloud's ability to adapt. Cloud-delivered solutions reduce the burden of risk and simultaneously increase agility. The cloud pushes significant portions of risk, particularly long-term commitments, and planning, to the provider. As a result, organisations gain the ability to adapt more quickly to unforeseen shifts. TCO alone, without factoring risk and flexibility, is misleading.



Less OpEx, greater agility

OpEx, or operating expenditure, is one of the most commonly cited benefits of cloud-delivered solutions. While the benefit of reduced OpEx can be desirable in comparison with capital expenditures, that is only a financing matter. Cloud-delivered services offer benefits far beyond financing, particularly with regard to offloading risk.

Reduced commitment

The traditional capital purchase represents a long-term commitment and an upfront investment. The customer not only pays about 70 percent of the four-year projected cost in the first year, but also carries all of the risks associated with realising expected benefits, performance, and employee adoption. Most often, the capital purchase is not just one solution, either, because capital decisions tend to impact other seemingly unrelated decisions based on skills or commitments. Conversely, cloud providers reduce risk and commitment. Customers can experiment or pilot solutions. Services are backed by a service-level agreement (SLA) that guarantees performance. In the worst-case scenario, a customer paying an early termination penalty to walk away still pays pennies on the pound compared to prematurely writing off a capital commitment.

Scalability

Premises-based solutions come in sizes. Most systems can expand and contract to some degree, but at some point, systems become illogical. Most organisations select systems larger than they actually need to accommodate potential expansion. Cloud services simplify the operational, human, and financial aspects of scalability. Many cloud providers allow their customers to scale up and down as seasonal or economic conditions dictate.

Predictable costs

Many believe premises-based solutions offer a more predictable cost structure. This is a fallacy due to upgrades, security updates and turnover. Implementing upgrades and enhancements requires project management, backups, rollbacks, and of course administrator time – usually after hours. There is no way to know how frequently software updates will occur, how much planning will be required, or how urgently these updates must be applied. Additionally, onpremises resources require ongoing investments in training and certification, which can spike unexpectedly due to staffing changes.

Advanced features

Adding new features can involve a significant expansion of infrastructure. This makes some features cost prohibitive. Contact center features are one of many examples. In traditional capital solutions, unlocking new features can be expensive. With UCaaS models, new features can be trialed easily, without significant setup or commitment. Cloud providers are more likely to have the economies of scale to enable services that become available on a per user basis. This allows an organisation greater freedom to try before committing to new solutions.

Conclusion: Cloud-delivered services offer more

The future is hard to predict, but it is likely that agility and flexibility will continue to be the best way to respond to new technologies. Being able to respond to, adapt, or avoid future shifts will be of paramount importance as technical disruptions continue to occur more frequently. If TCO works for an organisation's needs, it can still be a valid model – but for most companies, TCO is becoming a relic of a simpler time as the cloud makes cost and risk projection simpler and nimbler.

Organisations now have a choice in how they consume technology. Cloud-delivered services are an option that deserves careful consideration. Many organisations are gravitating toward the increased flexibility and cost savings associated with cloud-delivered services, but many get confused about TCO.

Traditional tools and methodologies such as TCO can assist with this evaluation; however, they can be misleading. Cloud-delivered services are not just another alternative to consider along with various capitalised options. Cloud-delivered services offer far greater nimbleness and far lower risk than the vast majority of premises-based alternatives. As noted above, because TCO models are generally incapable of capturing or quantifying flexibility and risk, the outputs from these tools undervalue the primary benefit of cloud-delivered services.

It is important to recognise how UCaaS reverses the trend of organisations' accepting higher degrees of risk:

- Each new iteration of technology has increased risk and complexity. Solutions now involve many components, each of which requires acquisition, design, administration and upgrades.
- The rate at which new, disruptive technologies are being introduced into the organisation has never been greater. Emerging trends include WebRTC, IPv6, messaging-based collaboration, and API-driven integration. New technologies are emerging at faster rates.
- UCaaS contributes to agility. As requirements change, organisations need to adapt, and non-depreciated investments often preclude this from occurring. Five-year depreciation schedules can hurt competitiveness.

It's important to assess your communication costs, and cloud-delivered services offer more.





