ROI and TCO: Acronyms CEOs and CFOs understand

Although there is agreement that the cloud is the future of business process automation, inside most companies there is far less consensus on when the future is due to arrive. Information technology types are well aware of the cloud's promise and can't wait to try the next big thing in software and deliver world-class support for a wide range of business operations.

CEOs and CFOs, on the other hand, tend to be cautious about any change that will affect a mission-critical part of the company. Many have seen technology rollouts that did not pay off as advertised, which often tempers their views on the strategic value of technology.

A 2013 research report from Forrester, for example, found that 60 percent of business leaders did not have software defined networking on their radar and nearly 40 percent were unaware of IPv6, which is a key building block for business process automation and the associated productivity gains.

So it should not be surprising when top management approaches the cloud with healthy skepticism.

Basic Concepts

The surest route to validating the strategic importance of cloud services is to talk less about the nuts and bolts and more about the financial and business benefits. The Total Cost of Ownership and Return on Investment are two key metrics that CFOs and CEOs understand and take very seriously.

Just as important – and somewhat more intuitive – are examples of cloud services that give CFOs more effective financial control. In many corporations that have not transitioned to the cloud, data...
is stored in departmental silos. By its very nature, the cloud integrates a corporation’s business data. Cloud applications mine this data for answers to questions such as:

> How do I make sure that my employees aren’t spinning up cloud services on their own or adding resources to existing cloud environments without cost approval? Cloud is typically billed on a consumption basis in arrears. This can cause issues unless there are controls and an internal approval process around cloud services. The ability to view usage on a daily basis gives the financial control to manage this. There are tools and platforms (like ArrowSphere) that provide this view into the cloud consumption. There are also tools that will assess existing cloud usage across an enterprise.

> How do I make sure that my cloud provider bills aren’t exploding because of ingress/egress charges and other “hidden charges” associated with most clouds? It is important to understand the cloud contract and how the cloud provider will bill for their charges.

**CapEx to OpEx**

Migrating the cloud services entails a basic business model shift for a strategically important and mission-critical department. In a pre-cloud environment, IT and its ancillary operations operate on a Capital Expense model. But moving to the cloud migrates data management and analysis to an Operating Expense model. This shift has major implications for ROI and TCO — some of which are not obvious.

The ROI and TCO benefits of the cloud are familiar but worth restating: Savings in costs of maintenance, upgrades, cooling, power, security, rental space and IT staff. There is another important advantage — more difficult to quantify — of freeing the company personnel to concentrate on the core business.

On the cost side, implementation charges can be considerable. These can — but need not — include due diligence when choosing vendors, account setup, data migration, third-party process consultation, management of multiple SLAs and training. Ongoing charges can be by the seat, by the minute, by the gigabyte for storage or by CPU cycles, depending on the nature of the application.

**Financial Analysis: Getting Started**

Because CapEx and OpEx are radically different models, making valid financial comparisons is a complex task with many elements to be considered. To give just one example of a financial factor that might be overlooked by someone not in the finance department, consider the financial value the CapEx model provides in the form of depreciation write-offs for tax purposes. Depreciation may not change the result of a TCO analysis, but it must be included for a more accurate assessment.

An accurate financial analysis must adopt a comprehensive view of the company’s entire infrastructure and all services it provides or runs on it. Embedded costs include all expenses associated with servers, operating system, the network, electric power, real estate and personnel — to name a few prominent examples. When a company moves one or more applications to the cloud, each embedded cost should be considered.

It is important to avoid common mistakes. A few years ago, McKinsey and Company estimated that the total cost of a large cloud vendor’s service would be more than a conventional data center per unit of computing output per month. McKinsey’s calculations were correct. The problem was that the companies surveyed had not divested themselves of their IT equipment and were, in effect, using both the CapEx and OpEx models.

Eliminating ongoing operational costs associated with the CapEx model fundamentally means retiring capital assets and their associated services. Capital assets are easy to identify. Accurately assessing the “associated services” costs is the tricky part and requires analysis using the Information Lifecycle Management. Therefore, ILM considers:

> Hardware/software purchases
> Professional services from third parties
> Software maintenance and upgrades
> Contract negotiations/new licenses

The most significant component of the TCO, in particular, is Information Lifecycle Management (ILM). Infrastructure support, license fees maintenance and software upgrades are a permanent part of the CapEx model. With the OpEx cloud model, the vendor typically assumes these responsibilities while offering the benefits of scalability, compute-on-demand, disaster recovery and IT security.

**Conclusion**

When considering a cloud migration, CEOs and CFOs are convinced by a rigorous financial analysis of ROI and TCO. The analysis is complicated and should include multiple stakeholders, consultations with internal and external resources, and a clear vision for where the organization is going. Instead of jumping on a technological bandwagon and perhaps simply choosing one of the biggest names in the business, organizations should take the time and understand where a given technology fits in with their business strategy.