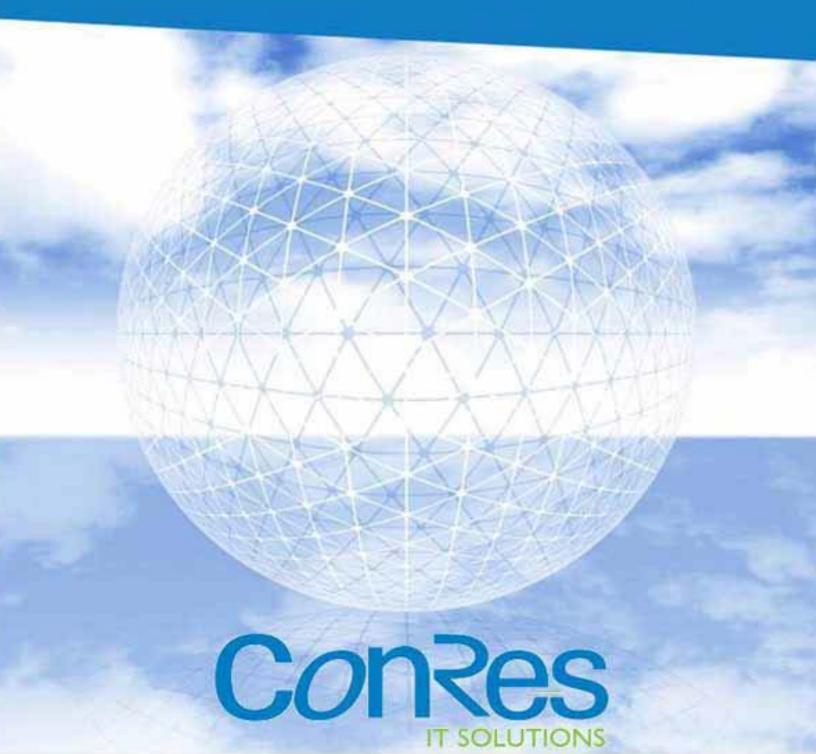
# Turning to The Cloud Deliver on Your IT Objectives

By Ken Simon



## Turning to the Cloud: How to Deliver on Your IT Objectives

## Introduction

Today, CIOs faced with the challenge of providing better quality services, rapid delivery times, and a more agile working environment turn to the cloud. Cloud computing has proved successful in solving these issues—and more.

If you're like most of your peers, you're dealing with:

- Reduced budget and staff. According to a survey of more than 200 IT executives in early 2010,
  - Only 45% of organizations were increasing their IT operational budgets.
  - Perhaps more significantly, 42% of organizations were cutting their IT operational spending.
  - Some 42% of IT organizations were reducing headcount in 2010, while only 28% planned to increase it.
  - Just 48% of IT executives felt their budgets were "adequate" or "more than adequate" to meet the needs of their businesses.<sup>1</sup>
- A constant demand for better services. Even in a tough economic climate, management continues to ask IT for faster return on investment. They want more flexible infrastructure services, greater resource productivity, and enhanced reliability and resiliency. In many cases, managers and employees are pushing for new functionality such as support for a wide range of mobile devices.
- **Multiple corporate systems running on dedicated servers.** Many business software vendors require that companies install their applications on a dedicated server. This policy is designed to ensure optimal performance from the application—but it can place a significant burden on the IT departments of companies that are running several large business applications.
- **Rising storage costs.** Today's company databases are best measured in terabytes—or even petabytes—and their growth shows no signs of slowing down. As if that weren't enough, companies often make copies of the entire Production database for testing and development. If the Production database is 500 GB, copies of that database will very quickly add up to tens of TB. Regardless of how far the price of hardware has fallen, data growth like this will lead to an increase in data storage costs.
- An imbalance in IT staffing. The IT department is supposed to add value by deploying technology in innovative ways to make the business run more smoothly. Instead, the typical IT staff is more focused on supporting the IT infrastructure than on improving service to end users. According to a recent Wall Street Journal article, companies typically spend more on IT services than they do on the hardware itself.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> Computer Economics. "IT Spending & Staffing Benchmarks 2010/2011." Study.

<sup>&</sup>lt;sup>2</sup> Wall Street Journal. "Where the Money Goes: A breakdown of IT spending." Online article. April 25, 2011. <u>http://online.wsj.com/article/SB10001424052748704004004576271183764128222.html</u>

- An imbalance in server workloads. The typical company server room or data center consists of some servers that only ever use a fraction of their computing power—and others that frequently crash from overuse. Because there has traditionally been no way to divide application workloads among multiple servers, most companies have simply accepted this imbalance as a sad fact of life.
- **Problems and delays in provisioning new equipment.** How long does it take your company to provision a new server? Companies routinely report provisioning times of at least one business day, and deployment times of up to several weeks. This tells us one thing: current provisioning practices aren't moving at the speed of business.
- Security. In a recent Wall Street Journal interview, three featured CIOs all mentioned security as a top concern. "We have certainly paid an incredible amount of attention to security over the years, and the amount of time and energy we put into it really doesn't ever go down," one interviewee remarked. "The adversaries we face aren't hackers or kids in the basement. We're dealing with organized-crime syndicates that operate in different parts of the world."<sup>3</sup>

## Imagine

Imagine a better, more efficient way of running IT.

Imagine using computing resources the same way you use a public utility—using as much or as little as you need, and paying only for what you used.

With IT services available on demand, you would be able to meet business needs more quickly. Eliminate bottlenecks. Reduce storage costs. Minimize the need to buy new hardware. And make the most of dwindling IT budgets.

You would also be able to transition your IT organization from technologists with just enough business knowledge, to businesspeople who have a background in technology. Your IT professionals, then, could become a business asset that helps your company save money:

"I've seen a significant change in the role that an IT professional can and must play in the business," says Filippo Passerini, Procter & Gamble's CIO. "It's the need to be businesspeople with a background, an interest, in technology rather than the other way around. The focus on business has become extremely important. An IT professional can transform the way business is done. This is very, very different from the profile of the people we would hire five or more years ago."<sup>4</sup>

#### But is this vision really possible? Yes-with cloud computing.

<sup>&</sup>lt;sup>3</sup> Wall Street Journal. "What Keeps CIOs Up at Night." Online article. April 25, 2011. <u>http://online.wsj.com/article/SB10001424052748703551304576261201934060330.html</u>

<sup>&</sup>lt;sup>4</sup> Wall Street Journal. "The View From the CIO's Office." Online article. April 25, 2011.

http://online.wsj.com/article/SB10001424052748703551304576261140563647266.html?KEYWORDS=Chief+Information+Officers

## **Inside Cloud Computing**

Although cloud computing is one of the most popular buzzwords in IT, there's substance to go with the hype. Nevertheless, cloud computing can be difficult to define. Here's one perspective:

"Cloud computing is both a user experience and a business model. It is an emerging style of computing in which applications, data and IT resources are provided to users as services delivered over the network. It enables self-service, economies of scale and flexible sourcing options."<sup>5</sup>

There are two more terms you'll hear frequently when the IT industry discusses cloud computing: **public cloud** and **private cloud**.

A public, or "external," cloud provides services over the internet. The public cloud is like a utility, such as water supply, waste removal, or gas pipeline. It offers customers a place to host applications that can be run in a public environment. In a public cloud scenario, a third party performs all the setup and maintenance of the technology that supports the cloud. Any company willing to pay the subscription fee can access a public cloud.

A private, or "internal," cloud delivers services over a company's intranet. It is an enterprise's offering to its users, customers, vendors, and suppliers—maintained by the corporate IT group and residing within the company's firewall. The private cloud is a logical extension of virtualization and uses many of the same technologies.

For the ultimate in flexibility, some companies combine the best features of public and private clouds in a "hybrid cloud" model. They typically establish rules about which types of activities will be handled by internal versus external clouds, ensuring that all business activities will run at appropriate processing speeds and receive adequate levels of security.

## Why the Cloud Can Work for Your Company

Cloud computing can deliver major benefits for a large corporation with a sprawling data center and a gigantic IT organization. But small and midsized companies shouldn't overlook the benefits of leveraging the cloud. Here are just a few of the advantages that virtually any company can gain with cloud computing:

- **Provision resources on demand.** IT departments can respond more quickly to increasing demands by tapping into the offerings of external cloud providers. Automating provisioning can enable IT departments to meet the needs of users on a near real-time basis.
- **Control costs.** Using infrastructure as a service allows companies to maintain greater control of their IT spending and avoid building out their server rooms or data center faster than necessary.<sup>6</sup>
- **Reduce waste.** "While virtualization has enabled organizations to increase the utilization of the server environment, cloud computing takes this a step further by taking over the management of server utilization, reducing 'wasted' computing power. It also allows very effective load balancing. This flexibility helps ensure resource-intensive processes don't slow down other business processes and computing services are always operating in a least-cost model. Result: IT resources are always optimized to meet current needs."<sup>7</sup>

<sup>&</sup>lt;sup>5</sup> IBM. "Dispelling the vapor around cloud computing: Drivers, barriers and considerations for public and private cloud adoption." IBM Smart Business Thought Leadership White Paper. January 2010.

<sup>&</sup>lt;sup>6</sup> Sungard. "Sungard Cloud Computing." White paper. 2010.

<sup>&</sup>lt;sup>7</sup> Sungard.

- **Expand your marketplace.** By tapping into public clouds that offer web e-commerce and customer-facing applications, you can quickly and easily extend 24x7 ordering capabilities to your customers around the globe. You can also position your company for acquisitions and mergers. Cloud solutions help you introduce new technologies—such as smart phones and social networking—with rapid deployment.
- Smarter decision-making. A properly configured cloud can give you greater access to the data you need for business analytics.

### What Comes Next?

Cloud computing is here to stay-and it's catching on:

"While it took virtualization many years to be widely accepted by businesses, cloud computing will have a much shorter ramp-up period for acceptance. Virtualization was viewed by many as a 'disruptive' technology. With cloud computing, the battle has partly already been won since it relies heavily on virtualization. The business benefits are also much clearer than they were initially with virtualization. At the end of the day, cloud computing saves businesses money on day-to-day operations and therefore it is an easy decision for most organizations to consider adopting it."<sup>8</sup>

Yes, moving to the cloud has been an easy decision for many companies. And according to the IBM document we cited earlier, decision-makers are open to both public and private clouds—but they're far more interested in private clouds.<sup>9</sup>

In our next white paper, we'll focus on how companies like yours can plan and implement internal cloud projects. In the meantime, if you'd like to discuss your cloud strategy with ConRes, an IBM Premier Business Partner with international authorization, please call us at 1 800-937-4688.

<sup>&</sup>lt;sup>8</sup> Sungard.

<sup>&</sup>lt;sup>9</sup> IBM.