The Cost Benefits of the Cloud are More About Real Estate Than IT

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Why the Cloud Really Is More of a Business Decision than an IT Decision

While many consider working from home to be only for sole proprietors or budding entrepreneurs, a growing number of mid-sized and large organizations are allowing some of their employees to work from home or otherwise work remotely at least part of the time. For example:

- Forty percent of IBM's employees work from either a client site or from home[1].

- Thousands of Boeing employees work from home as part of the company's Virtual Office Program[2].

- Most of the teachers at the 600-employee Pennsylvania Cyber Charter School work from home[3].

- In Massachusetts, roughly 200 Comcast customer service employees out of the 4,000 employees in the state work from home[4].

- In 2008, 102,900 US Federal government employees worked remotely[5].

THE ADVANTAGES OF TELEWORK

Allowing employees to work from home or directly at a client site provides a number of important advantages to both employees and their employers:

- **Employees**
  Commute times in urban areas are substantial, ranging from 26.8 minutes each way in Dallas to 43.4 minutes in New York[6]. If we assume that an employee works from home only two days per week and has a 30-minute commute each way, working from home will save an employee about 100 hours each year. Further, employees who work remotely tend to have higher morale and experience greater job satisfaction according to a meta-analysis of 46 different telecommuting studies conducted by the American Psychological Association[7].

- **Employers**
  The advantages to employers of allowing at least some of their employees to work from home are also significant. These include reduced real estate costs by allowing companies to lease or purchase less office space; reduced property taxes; and reduced power costs for lighting, computers, heating and air conditioning.

  Further, productivity can be substantially higher when employees work from home. For example, if just 40% of the commute time in the example above was devoted to work, an employee with a fully burdened annual salary of $80,000 would generate more than $1,500 in additional productivity each year for his or her employer.

THE DISADVANTAGES OF TELEWORK

That said, there are two fundamental problems that organizations can experience when they allow employees to work from home:

- Allowing employees to work from home requires a different style of managing people. Instead of evaluating employees based on how much time they spend at their desk or how well they schmooze at the water cooler, managers need to focus much more on a task-oriented approach to managing people. Employees who work from home need to be evaluated based on largely objective criteria associated with the quality and volume of their work, and less by subjective factors like the amount of time they spend physically in an office or when they arrive each morning.

- From an IT perspective, telework can be a nightmare if companies rely on traditional means of providing email, collaboration tools and other services. For example, instead of IT worrying about what comes in or goes out through "the corporate firewall", IT must now deal with content passing through hundreds or thousands of individual firewalls on individual's home computers or through employees' personal Internet connections. They must deal with archiving and compliance for data that is stored on possibly thousands of home computers, corporate laptops and smartphones. They must manage anti-virus and anti-malware systems on home computers and corporate laptops distributed over hundreds of square miles or worldwide. They must respond to e-discovery requests by accessing content from many more sources than would be required if all of the employees, their computers and their data assets were in one physical location. And, they must do all of this with an IT budget that, in many cases, is smaller than it was two years ago.

  In short, the problems associated with managing teleworkers complicates the IT management problem dramatically, while at the same time making problems of security, compliance and overall data management much worse.

THE CLOUD AS AN ENABLER FOR TELEWORK

While many are touting the advantages of the cloud because of the potentially greater cost savings that it can provide relative to on-premise infrastructure (which is true in most cases), we believe that the cloud will ultimately find its true value in two key areas:

- **The cloud recentralizes IT control…**
  If we assume that an organization provides its employees with cloud-based services for email, security, archiving, encryption, file services, etc., this will make IT's job easier in several ways compared to managing traditional, on-premise systems:

  o Email management will be easier because of the elimination of .PST files and other individual email repositories scattered across both the company and individuals' home systems.

  o Archiving of content will be dramatically simplified because all users' content is located in a single data center and/or with a single provider.

- o Content filtering and security are much easier to manage because data is being processed through a single firewall instead of hundreds or thousands of them.

- o Other tasks and processes, such as e-discovery, encryption and backups are easier and more efficient because all corporate data is centralized. With respect to e-discovery considerations, there have been a number of cases in which employees' home computers have been included in a discovery order – the cloud eliminates or significantly reduces the likelihood of that occurring.

- **….but the greater cost benefit is reduction in real estate costs**
  As important as the cost benefits of recentralized IT are, the cloud will provide an even greater return-on-investment through its enabling a reduction in real estate and related costs. For example, consider the following, fairly conservative, example in which cloud-based email and other services are deployed in a 500-person company, enabling employees to work from home and be fully productive:

  - o Employees average one day per week working at home.

  - o Real estate costs are $20 per square foot per year.

  - o An office requires an average of 150 square feet per employee for their work and common areas.

  Based on these assumptions, a 500-person organization would save $300,000 per year on real estate costs alone:

  (500 employees x 20% working from home x $20/year x 150 square feet/employee)

  That means that cloud infrastructure will save this organization an average of $600 per employee per year, or $50 per employee per month, simply as a result of reduced real estate costs. Power savings, reduced taxes and other savings will make the return even more substantial. This means that even if cloud-based services were *more* expensive than on-premise systems (which is typically not the case), an organization that deployed cloud services would still end up realizing significant hard cost savings.

Summary

Cloud services can clearly make IT more efficient by allowing the recentralization of IT services in distributed work environments, and can make compliance, e-discovery and other processes much more efficient. However, while cloud-based email and other services are often (but not always) less expensive than on-premise infrastructure, the primary benefit that organizations will realize from use of the cloud is as an enabler for employees working from home some or all of the time. Telework that is enabled by cloud services, while requiring a different management style and corporate culture than exists in many organizations today, can dramatically reduce an organization's overall cost of doing business.

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[1] http://www.ibm.com/ibm/responsibility/employees_well_being.shtml
[2] http://www.buildings.com/tabid/3413/ArticleID/3428/Default.aspx
[3] http://goo.gl/RMwPF
[4] http://www.boston.com/jobs/topworkplaces/2009/articles/a_cable_company_that_listens/
[5] Source: *Status of Telework in the Federal Government*, August 2009
[6] http://www.payscale.com/research/US/Country=United_States/Commute_Time
[7] http://www.apa.org/news/press/releases/2007/11/telecommuting.aspx