

TeraGo Networks

CUTTING I.T. COSTS WITH CLOUD COMPUTING

TeraGo
Networks

Broadband. Only for Business.

Internet | Data Networking | Voice | Redundancy

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OVERVIEW

Finding a way to reduce costs and operate more efficiently is a critical aspect of running a successful business. However, many businesses equate cutting costs with eliminating personnel or slashing budgets, which isn't always the best practice. Companies need to examine outside resources and new technologies as a source for cost savings.

Cloud computing is an effective tool for businesses looking to cut IT costs and save money. Finding ways to minimize expenditures is critical to the overall success of your business, as financial constraints prevent growth and development. Migrating your company's data, software, and applications to the cloud will reduce costs immediately, as well as minimizing long-term expenditures, and delivering significant operational benefits.

Despite being an essential department in any company, IT is confronted with the same budgetary pressures as other departments while still being expected to deliver exceptional support and functionality. Traditionally, IT budgets are heavily allocated to hardware, maintenance, software, and upgrades, leaving only a small portion for any new deployments, installations, developments, or new devices. Cloud computing allows for your IT department to move a large portion of these items into a virtual environment, therefore eliminating the cost of hardware

and saving the company a significant amount of money.

Once the need for hardware has been eliminated, any maintenance, upgrades, or installations that would have been required over time are eradicated as well. If your company has multiple locations, the amount of money saved by removing any unnecessary hardware is quite substantial. Additionally, IT personnel can now be redeployed or utilized for other tasks, as they will no longer need to spend a great deal of time tending to hardware maintenance and upgrades.

Cloud computing has also allowed for new and small businesses to get off the ground by significantly decreasing start-up costs. The price of purchasing all the hardware required to operate is astronomical and can hinder, or even prevent, a business from launching. Utilizing cloud computing has allowed for companies to remove hardware costs, providing them with the opportunity to re-allocate finances to other areas of the business.

This whitepaper examines the ways in which cloud computing can save your company money by minimizing operational costs through a reduction in equipment, space, and personnel.

CLOUD COMPUTING

Cloud computing is a set of technologies and services that allow for the delivery of computing service over the Internet in real-time. This allows for end-users to instantly access data and applications from any device with Internet access. There are 3 varieties of cloud computing to choose from; public, private, and hybrid.

A public cloud is formed when a provider, such as Google, makes computing resources, such as storage, memory, applications or processing power, publicly available over the Internet. The term “private cloud” is used to describe a computing infrastructure that is privately held by a corporation and has capabilities similar to cloud, but it kept internally. While a hybrid cloud is a combination of both private and public cloud computing. Depending on the size and needs of your business, the type of cloud that is best for a company will vary.

In a recent study conducted by Rackspace¹, 88% of businesses using the cloud stated that they have saved money as a result; with three in five believing that cloud computing has improved their company’s infrastructure efficiency, giving them more time to “focus on strategy and innovation”. Additionally, 49% of survey respondents believed that cloud computing has helped grow their business¹. Large businesses, in particular, have

recognized the benefits of cloud computing and are quickly adopting the technology. Nine out of ten large organizations cited cloud as a factor in increased investment, while two thirds said cloud allowed for them to focus more on strategy¹. However, small and medium businesses aren’t far behind in their use of cloud computing and recognition of its benefits. 84% of small and medium businesses have contributed increased investment to cloud computing, and 58% believe that it has allowed them to concentrate on building their strategy¹.

Buying and maintaining on-premise hardware can consume a large portion of a company’s IT budget, not to mention the additional costs required to allocate staff and resources to manage and monitor any hardware, including servers. Although some may believe that investing in hardware is worthwhile, the cost of replacing or upgrading servers every three to five years after they have sustained a significant amount of wear and tear should be taken into consideration².

Cloud computing is able to reduce costs through economies of scale, saving organizations a lot of money. Cloud providers purchase servers and maintenance contracts in bulk, which reduces the overall cost that is charged to their customers. This economy of scale is also applicable to software.

CLOUD COMPUTING continued

Businesses that choose to keep their operations in-house are required to purchase any software licenses that may be needed, which can be charged at a premium price. Cloud computing allows for businesses to pay only for the seats and licenses that are needed, cutting software costs considerably. Using cloud-based software also provides businesses with the option to increase or decrease the number of licenses they require on-demand.

The amount of storage space provided by cloud computing is also a significant benefit to businesses. Previously, businesses were required to purchase several hardware devices to store the growing amount of data and information accumulated over time. The demand for data storage is increasing as a result of compliance regulations which necessitate the storage of data for long periods. Once again, cloud computing is able to cut costs through economies of scale by purchasing data storage space in bulk and passing on the savings to their customers. In the early stages of cloud computing, some sectors felt that their customer and business data would not be secure in the cloud. However, any doubts regarding cloud security are now diminishing, as confirmed by analysis firm Gartner, who has predicted that more than 50 percent of Global 1000 companies will have stored sensitive data in the cloud by 2016³.

¹ <http://www.rackspace.co.uk/economic-impact-cloud-computing/>

² www.gficloud.com/uploads/CostSavingsWhitePaper_EN_GEN.pdf

³ www.networkworld.com/news/2012/111412-gartner-cloud-security-264268.html

ADDITIONAL BENEFITS PROVIDED BY CLOUD COMPUTING

Updating Company Information: By storing all company data and information in one location, all permitted users are able to access the most up to date resources. This is especially useful for companies who do not have a LAN (local area network) or WAN (wide area network) connecting multiple office locations. IT staff members only have to perform the update in one location, the cloud, instead of attempting to distribute the information to all employees.

Updating Software: Depending what type of cloud system your company utilizes (private, public, or hybrid) software updates are conducted by either your cloud provider or your IT staff. Either way, the update only occurs in the cloud, allowing for employees to access the most current version of software without having to take time out of their schedule to surrender their devices to their IT department. This also saves your IT staff time and money, as they only need to perform the update once instead of purchasing multiple license renewals for each employee's device or desktop.

Scalability: Another highly beneficial feature of cloud computing is its ability to scale quickly to meet the demands of your company. Since cloud providers purchase items supplies in bulk, such as servers or data storage space, they can easily add or remove services on-demand. This is especially useful to seasonal businesses, which may have little use for software applications during the off season, but need to run software at full capacity during operational periods.

Security: Although some companies have previously been concerned about the security of cloud computing, a global Microsoft study conducted in 2012 has found that 35% of businesses surveyed have experienced noticeably higher levels of security since moving to the cloud⁴. That same study revealed that 32% of respondents spend less time worrying about security than before they went to the cloud⁴. Improved disaster preparedness and additional security measure implemented by cloud service providers have contributed to the minimization and elimination of security concerns.

Personnel: By implementing cloud technology, there is a significant reduction in the amount of maintenance and oversight required to keep applications and hardware up to date and operational. This can allow for organizations to redeploy skilled IT employees to apply themselves to other important projects and tasks within the company. Although some may feel that the adoption of cloud will result in the reduction IT staff within the company, that is not necessarily the case. Cloud computing provides IT employees with renewed focus on core activities, which adds value to the business. However, by using your existing IT employees more efficiently, your company can eliminate the need to hire on additional staff.

⁴ www.techweekeurope.co.uk/news/small-business-cloud-security-77968

IMPLEMENTING CLOUD COMPUTING

Before your company begins its search for the right cloud provider, it is important to assess your current internet technologies. Cloud computing is a web-based service and will require a secure and reliable connection in order to operate efficiently. The utilization of cloud services by companies is continuing to grow, and this has resulted in an increasing demand for additional bandwidth.

Typically, Internet Providers are focused on providing a “one way” connection, where bandwidth heavily flows down to the user and upload speeds are minimal. However, since cloud computing requires users to upload their information into the cloud, they will need an upload speed sufficient to handle the volume so as to not experience delays. Without suitable transfer speeds, many of the benefits of the cloud are lost.

SUMMARY

Businesses looking to cut costs need to view their IT departments as a resource for projects that can reduce costs and improve productivity, not as just another budget they can cut. Minimizing technology investments to save money is counterproductive. When a business begins to develop and expand, it may lack the technical capabilities needed to support a growing business. Making the right IT investments, such as cloud computing, can deliver cost savings immediately as well as over time.

TERAGO NETWORKS AND CLOUD COMPUTING

TeraGo Networks provides its customers with the internet technology required to take full advantage of all that the cloud has to offer. By employing true symmetrical bandwidth, TeraGo customers are able to download and upload data at the same speed. This allows for businesses to move data to and from their cloud-based services without experiencing any significant differences in speed. Consistently high capacity data transferring allows for businesses to anticipate productivity levels and plan accordingly.

If a business is using a traditional copper or cable connection, they are likely to suffer from intermittent slowdowns in speed throughout the day as a result of increased internet traffic. In most cases, the reduction in internet speed is a result of residential customers coming online in the late afternoons. Consequently, business productivity takes a nosedive because they are sharing the same bandwidth.

Because TeraGo owns and operates its facilities-based network and only offers its high capacity broadband network to businesses, residential internet use does not interfere with business productivity. Additionally, the ability to manage a cloud-enabled system requires a robust and symmetrical internet connection that not all Internet Service Providers can offer.