

## Cloud computing's silver lining for small to mid-sized companies

Cloud computing is a hot technology that's gaining tremendous popularity among companies big and small. Essentially, cloud computing is a data processing infrastructure in which the software and the data are stored on remote servers. These servers are connected to the Internet rather than a PC or a company's LAN. When one needs to use some form of software application or access data, the computer connects to the remote server through the Internet.

So what do clouds have to do with all this? The cloud is a metaphor used to describe as well as represent the Internet in computer diagrams. The explosive growth of the Internet has fostered the idea of shared data infrastructure. Cloud computing is more prevalent than one might think and most people don't even realize they're operating in this fashion. Have you ever created a profile on LinkedIn or Facebook or sent an e-mail from Yahoo? If the answer is yes, you have engaged in cloud computing. The data that was created resides on a remote server instead of on your PC or other form of conventional hosting. Simply put, cloud computing includes server processing, data storage, security and voice applications.

As one might imagine there are tremendous advantages to cloud computing. First and foremost, according to Jay Brown of Murray-based TriTel Networks, cloud computing enables small to mid-sized businesses to leverage storage space and application solutions without having to make significant capital expenditures on hardware or infrastructure. As a company needs more storage space or software they can pay as they go. In other words, providers offering cloud computing offer services based on utility (such as Amazon S3), subscription or a flat monthly fee. Software as a Service

(SaaS) is another advantage of cloud computing because companies can tap into solutions hosted on the Internet such as Salesforce.com, Brown said.

Easy collaboration is another great benefit of cloud computing services. With both the application and the data stored in the cloud it's easy for multiple users to work together on the same project – anytime, anywhere. This gives companies with virtual employees extreme flexibility as well as enhanced productivity, Brown said. Furthermore, depending on the provider the data and applications stored in the cloud in most situations have complete disaster recovery. The information is protected by multiple, geographically dispersed data centers with extensive backup, archive and failover capabilities. In addition to SAS, cloud computing has given rise to platform as a service, meaning one can build their own applications to run on the cloud provider's infrastructure. Again, it can be tapped into by multiple people regardless of their location.

According to Gartner, a technology research firm, worldwide cloud services revenue is estimated to top \$150 billion in 2013. Cloud computing is still in its infancy but the value proposition is quite clear and should be on every IT department's radar, although there are issues that still need to be worked out from a security standpoint because hackers do pose a threat. All in all the technology provides both a reliable and scalable solution that can greatly impact an organization's cost structure, support for future growth as well as enhance operating efficiency and employee productivity. More and more attention will be directed towards cloud computing, especially as organizations learn how to harness its power.

