STAYING ON TOP OF THE "CLOUD"

Despite the hype, it’s an important trend. A perspective for nontechnical bankers

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Like many of us, you have probably grown tired of all the hype surrounding “cloud computing.”

For those non-tech types in the banking industry, you hear the term overused and sometimes even mis-used as a solution to a vast variety of software, hardware, or service offerings.

It becomes difficult to discern what the cloud is really about and how might it impact you personally, your bank’s technology strategy, or the future of computing as we know it.

One thing is for sure, cloud computing is not a fad, nor will it fade away. Experts are saying that cloud services will be a $160 billion industry by the end of 2011—hardly a passing technology or strategy.

Defining the cloud

So what is cloud computing? Gartner, a leading technology advisor, defines it as:

“A style of computing in which scalable and elastic IT-enabled capabilities are delivered as a service to external customers using Internet technologies.”

In other words, outsourced computing services offered over the internet.

Google, Microsoft, and even Amazon have become big players in the cloud market, offering services to individuals and businesses with varying levels of technical approaches and cost objectives. Early models of cloud computing included email services from Google and Yahoo (Gmail and Yahoo! Mail). They’re very popular with consumers, and are gaining market share at the enterprise level. Google now offers a suite of productivity applications that exist in the cloud rather than as desktop software to compete with Microsoft Office, which is expensive to maintain for small businesses.

Cloud rolls on, and on, and on

There are many slices to this particular technology pie and the market continues to grow. The flavors of cloud computing are far too many to list.

Most initial offerings—like those described above—were developed out in the “public cloud.” By its nature, the public cloud refers to the wide-open or public access for software and services. However, other forms of cloud computing exist.

For instance, besides public cloud services, there are “community/industry clouds”. These services are designed around a common industry, like financial services or healthcare. Many financial services providers might be included, encompassing vendors like FIS, Fiserv, and others—companies that provide core/legacy platforms and other services to the banking industry. For decades these core community offerings have been delivered over private networks. Today, vendors encrypt the traffic using virtual private networks (VPNs), which are basically “encrypted tunnels” to preserve security and data integrity. While methods for delivering community clouds have been around for years, they have been very efficient and popular, while based on older mainframe computing architecture. More recently vendors are leveraging the internet for delivery of even more services—still browser-based, but encrypted.

The term “private cloud” is also used by vendors. It refers to strategies that utilize the scalability and flexible designs of cloud computing, but the services are retained and structured around and within a firm’s existing internal/private network infrastructure.

Mostly larger firms have taken advantage of this structure, although this strategy is gaining in popularity with middle-market companies as well.

This approach allows for the benefits of cloud computing architecture without the loss of ownership/direct control relating to software, hardware, and data. Ownership of hardware and data is still a sensitive subject relating to highly regulated industries like financial services and healthcare due to legal, privacy, and compliance issues.

A common approach for many organizations is to consider a hosted (outsourced) approach using browser-based technology. This form of implementation of a particular application or platform on the internet is commonly known as “software as a service” or SaaS. Many organizations outsource their payrolls and have for years been using the SaaS model.

There are also many companies that can benefit from hybrid cloud solutions, leveraging the best aspects of both a private cloud and public cloud design. This will be the favored approach to transitioning services and infrastructure over time to the public cloud as organizations become more comfortable with the risks associated with sharing services.

One of the fastest-growing segments of cloud computing is known as “infrastructure as a service.” Generic offerings of hardware relating to servers and storage capacity capable of hosting entire virtualized environments are being marketed by vendors. “Virtualized” refers to the ability to run multiple software servers (the software functions as if it were a physical server) on one piece of hardware. In some instances, the entire data center can be hosted out in the cloud, since companies may no longer wish to maintain their physical IT infrastructure.

These generic hardware building blocks are quickly becoming more standardized as software companies like VMware, Microsoft, and Citrix gain market share and promote their virtualized environments.

The cost for banks and other companies to maintain and support increasingly complex, on-site IT environments over their

life cycles continues to increase. This may become an opportunity for many to move their private datacenters out to the cloud, thus driving down cost of ownership.

IT resources can then be shifted to competitive differentiation rather than simply maintaining existing systems and network infrastructures.

Bringing the cloud down to you

So what does all of this hype over cloud computing really mean for community banking and for you, as a stakeholder in your bank’s technology strategy?

It comes down to managing two simple and, in some cases, opposing, objectives in banking: cost and risk.

On the cost side of the equation, cloud computing has the potential to drive down dramatically the physical aspects and resources of managing the bank’s IT infrastructure. As complexity to support, patch, and upgrade IT environments for growth continues to escalate, costs will rise, unless greater efficiencies can be gained by commoditization of the physical components of datacenters.

Through virtualization and standardization of a bank’s infrastructure, more of the applications already maintained by a particular bank can be moved to the cloud—HR being one example. Competition for these cloud services will drive prices down, making the transition even more cost-effective.

The limiting factor in the rate of transition to the cloud comes down to managing the second objective, which relates to risk.

Dealing with the risk inherent in cloud computing will continue to limit the speed at which more highly regulated industries such as financial services will migrate to the cloud. Maintaining control of the systems/applications from a business strategy perspective; maintaining ownership of data due to privacy within the IT infrastructure; challenges from hackers, viruses, and “malware,” and acknowledging the absence of true standardization of cloud services will continue to fuel arguments that hinder migration to the cloud.

Through standardization and better controls, these arguments will wane and migration will accelerate.

“Cloud” will be part of your description

Understanding the benefits and risks associated with cloud computing and how IT resources will be applied in your organization will be critical for you as time progresses.

Cloud computing is not really a new technology, but rather a new way to manage technology, and it is here to stay.

Your IT function should already be considering how and when they will be transitioning to the cloud. Over the next three to five years, because of the increasing complexity of an in-house IT infrastructure, more services will be pushed out to the cloud. Not everything, but an increasing number.

Each new technology platform, along with each new investment relating to technology, should be challenged with the question: “Is this service right for the cloud?”

This is the best way to migrate services over time—weighing the business strategy along with the cost benefits and risk objectives.

We hope you find this new blog helpful. Please send suggestions for IT and bank technology topics you’d like to see Pete Graves deal with to scocheo@sbpub.com

What is your bank doing about cloud computing? Share your experiences, insights, challenges, and victories by leaving a comment below.