TECH Practices

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From On-Premise Applications to the Cloud

Owners of small and medium enterprises (SMEs) often have dreams, either to keep their business small and nimble or to grow it. As a management accountant, your job is to facilitate the business running optimally, which means you play a critical role in decisions to buy solutions and services for running businesses smoothly. One of these decisions could involve the cloud.

If you haven't already made a return on investment (ROI) assessment of using on-premise accounting and finance applications vs. using the cloud, you probably will soon. Many signs point to the rapid adoption of cloud computing as fundamentally shifting the delivery business model of information technology. For example, Gartner, Inc., a technology research company, forecasted the public cloud services market "to grow 18.5% in 2013 to total $131 billion worldwide, up from $111 billion in 2012."

Use of the cloud for core financial and business reporting is growing quickly. Management accountants and business owners need to develop a clear understanding of the basics of key emerging cloud service models and the benefits and considerations to include in their evaluations of on-premise vs. cloud solutions. It's time to add cloud computing to your professional vocabulary.

What Is the Cloud?

In the simplest terms, cloud computing means storing and accessing data and programs over the Internet instead of on the hard drive of your on-premise computer. In this sense, the cloud is a metaphor for the Internet. Cloud computing has eliminated program installations and updates—a seductive concept for many SMEs with limited budgets. It can be applied to make a business leaner and more effective to help SMEs focus on their core business, not IT. Today, SMEs typically begin with simple e-mail cloud solutions without knowing that they are already using the cloud. Some seek file-sharing platforms that work like Google Drive and Dropbox. Others are starting to run core accounting and reporting processes in the cloud. These companies aim to grow without new equipment or infrastructure that becomes outdated quickly and that requires more maintenance and control. With the cloud, all you need is an Internet connection and devices to access it. Then you choose the service that meets your core needs.

Four Key Cloud Service Models

In 1999, Salesforce.com pioneered the concept of delivering enterprise applications via a simple website, spurring the birth of other cloud-based business models. Cloud computing today doesn't only involve infrastructure technology but also software, platforms, storage, security, data, databases, test environments, Open APIs (sets of technology that connect websites to each other), and many others. The new cloud applications and services models can be simplified into four basic categories of cloud services:

1. Infrastructure as a Service (IaaS): Infrastructure offering memory, storage, and networks for backup and recovery services, including traditional Web hosting.
2. Platform as a Service (PaaS): Applications infrastructure for those who want to develop applications (e.g., the platform for mobile applications development). Many also provide services around integrating applications with back-end databases.
3. Software as a Service (SaaS): Applications and services that are on demand or available with a subscription.
4. Communication as a Service (CaaS):

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Cloud Services Models	Sample Cloud Products
Infrastructure as a Service (IaaS)	Amazon Elastic Compute Cloud (EC2), Microsoft Windows Azure, Rackspace, Google Compute Engine
Platform as a Service (PaaS)	Amazon Elastic Beanstalk, Microsoft Windows Azure, Heroku, Salesforce.com, Google App Engine, Apache Stratos
Software as a Service (SaaS)	Salesforce.com, Microsoft Office 365, Workiva Wdesk, Xledger
Communication as a Service (CaaS)	Skype

Communication services like VoIP (Voice-over-Internet Protocol) on demand or available with a subscription.

Cloud computing is quickly becoming the norm because storing information and using software hosted on the Internet has many advantages. It has been developed to be an on-demand service that requires little knowledge or input from the end user.

Some of the benefits from using cloud computing include:

1. Increased focus on availability of unlimited data storage and services from the cloud can be expanded anytime. This allows businesses to shift and optimize resources, track expenses, and improve internal controls and auditability. Accountants can make alterations to cloud-based operations with minimal disruption to existing and ongoing accounting activities.

2. Increased time and effort spent on business strategies and solutions. Companies can realize better business performance because of the portability, flexibility, efficiency, and productivity that the cloud provides. It can even help bolster your application's data analytics with reports and dashboards that truly integrate into your architec-

ture. You can also reduce your dependency on experts by quickly developing new reports and dashboards on your own, on the fly.

3. Financially, renting your infrastructure from a cloud service provider can make sense. Pay-as-you-go (PAYG) plans or subscription seat models are especially attractive to the limited cash flow of SMEs because no capital procurement is needed. You can account for your computing expenses as operational expenses. Additionally, as your on-premise infrastructure ages, you can simply provision new servers.

4. You can streamline business reporting processes with cloud-based applications where teams can coauthor documents and reports. Innovative live-linking technology ensures that documents, spreadsheets, and presentations are always synchronized. When numbers or text change, the corresponding uses are automatically updated in real time across hundreds or thousands of pages. You can mash up charts, tables, crosstabs, maps, and external components from different data sources.

5. Sophisticated and high levels of security protocol ensure business and data protection.

To Switch or Not to Switch

This question is challenging to answer without making an internal assessment and understanding the individual SME's circumstances. Although many potential benefits of migrating to the cloud can be enumerated, some benefits may not apply to all individuals' application needs. Making the decision requires an in-depth understanding of the cost implications of all the possible choices specific to each company's circumstances. The benefits are clear, but just being able to add the cloud to your IT infrastructure isn't the reason to do it. There has to be a viable business reason, too. The most cost-effective approach for an organization might, in fact, involve a combination of cloud and in-house resources rather than choosing one over the other. Future articles will address this key issue. **SF**

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