

WHITE PAPER

Demystifying the Cloud for SMBs



Introduction

YouTube. Skype. Facebook. Twitter. Flickr. If you use any of these services in your day-to-day life, then you are already using cloud computing. Look around your business, too. Chances are you are also using cloud services, but just not calling it that. And according to recent industry reports, small and midsize businesses like yours are projected to be among the biggest adopters of cloud services in the coming months.

Cloud computing. SaaS. PaaS. IaaS. Whatever you call it, you are looking for a more cost-effective, secure way to deliver IT. One way to do that is by heading to the cloud to bring in one, two or three services over the Internet for a flat monthly payment, without having to add new equipment or IT staff.

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Why the cloud is catching on with SMBs

The goal of cloud computing is to provide easy, scalable access to computing resources and IT services. Its forte is elasticity. You purchase as much or as little capacity as you need at any given time. Scale up and then back down based on your business needs to meet, for instance, seasonal requirements. Because cloud computing is sold on demand, billing is metered and delivered much like a utility in your home. And it is accessible via most Internet-enabled devices such as desktops, laptops and mobile devices.

Small and medium-sized businesses have been adopting cloud services at a faster pace than larger enterprises. Research published by McKinsey in 2010 found that SMBs with fewer than 250 employees are more than twice as likely as larger companies to adopt subscription or on-demand technology services. SMBs typically have less complex IT requirements, fewer legacy applications and fewer IT support staff.

A 2010 MarketBridge survey of 1,000 SMBs reports that 44% of respondents are already using at least one cloud-based application and more than 70% plan to move at least one new application within 12 months.¹ These findings are supported by an IBM study, whose global survey of 2,100 mid-sized companies revealed that 66% already have or are adopting cloud computing technologies.² And a recent Microsoft survey found that four in 10 small businesses plan to turn to cloud computing within the next three years.

In the MarketBridge study, growth was the key trigger in respondent's move. Its survey revealed that SMBs currently growing at a rate of 10% or more per year were nearly twice as likely to move their applications and infrastructure to the cloud. Why? Growth companies need a scalable environment and an affordable pay-as-you-go pricing model to meet their expanding requirements.

However SMBs that are focused solely on profitability are also eyeing the cloud as it meets their need for predictability and low overhead. A Microsoft-commissioned study of 3,200 SMBs in 16 countries showed little difference in cloud adoption rates between SMBs that expect to grow in the next three years (42%) and those solely focused on profitability (40%).³ The ability to keep software up to date was cited as the main reason for choosing cloud services.

Other cloud adoption triggers cited in these various SMB studies include the growing need to support workforce mobility as well as system reliability and data security. In fact, 48% of the SMBs surveyed by MarketBridge believe data security would be better in the cloud.

The advantages of cloud computing add up

Cost control – You pay for what you use when you use it, which reduces your operational costs and capital expenditures. In this way, you can avoid over or under-investment in a data center.

Scalability/flexibility – The faster your business can address change, the faster you can react to your market. With cloud computing, when conditions change, you can immediately scale services up or down based on your business need for hardware, software or implementation services. No worries about unused capacity.

Automatic updates – You are freed from having to keep up with latest software versions.

Speed – Dealing with physical resources often requires months of time devoted to everything from specifications to ordering to installation and configuration. Then you have to allow more time for application and solution integration. With cloud-based computing, the equivalent resources can be running in minutes and an entire solution could be configured in hours.

Conversely, consider possible disadvantages of cloud computing

Loss of control – The reality is, you are not in control of what's happening in the cloud. Your cloud service provider is. Consider the recent technical problems at an Amazon.com data center that caused several websites and Internet services like Foursquare and Reddit to crash or have limited availability. This may not happen often, but when it does, your business can suffer. What's more, with cloud computing, your data is normally stored on a cloud that is shared by other companies' data, making security and data integrity a valid concern.

Reliance on the Internet and high-speed connectivity – Access to the cloud is completely reliant on a high speed Internet connection. If that Internet connection is lost, how will this affect your workflow?

Difficult to customize – With cloud computing, software customization can be challenging. After all, you do not own the application; you are leasing it on an "as needed" basis. Much depends on the level of access provided by the software manufacturer.

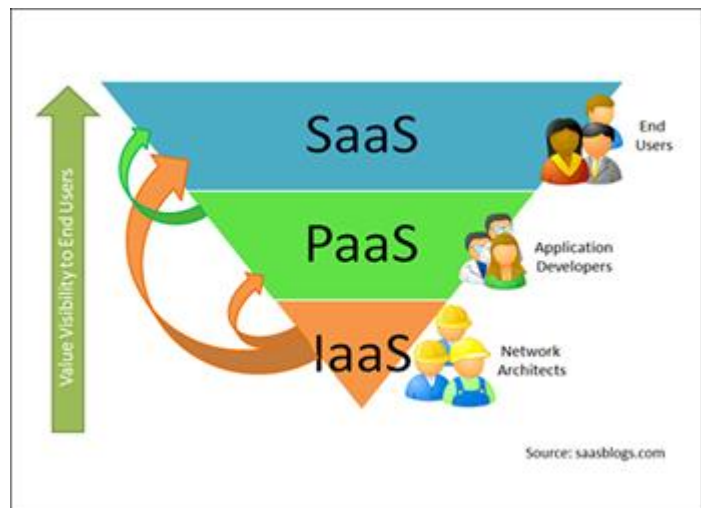
Stacking up the acronyms

With all the talk about cloud computing, numerous terms and acronyms get caught up in the buzz, with little regard for how they relate or the value they bring to which user community. For the purposes of this discussion, here are some basic definitions:

Cloud computing, in the most general definition, is a collection of computing resource, including virtual servers, computing capacity, storage capacity, network capacity or software delivered over the Internet as a service. It is often described as a stack due to the broad range of service delivery models built on top of one another, namely Software-as-a-Service, Infrastructure-as-a-Service and Platform-as-a-Service.

Commercial offerings are generally expected to meet your quality of service requirements and typically include service-level agreements (SLAs). The major cloud service providers include Amazon, Google, Microsoft, Navisite, Rackspace and Salesforce.

Software-as-a-Service (SaaS) is web-based software leased as a subscription, which means the application is available to users as needed through a computer's web browser. In the world of business applications, SaaS can be anything from email to web-based inventory control, CRM, marketing automation, banking services, project management tools, retail point of sale and WebEx meeting software.



Your internal IT resources or a service partner configure the application and your SaaS provider maintains it, including patches and updates. Because you rent the software rather than own it, you can increase or decrease the number of licenses depending on your need. SaaS is also known as hosted software or on-demand software.

Often you will see the terms SaaS and cloud used interchangeably. *This is erroneous.* SaaS and cloud are related, yes. But interchangeable? No. SaaS is a delivery mechanism through which an end-user application is delivered to you over the Internet. Cloud computing is a technology that includes

infrastructure, software and services delivered over the Internet. So cloud computing can enable SaaS, it is not a substitute for SaaS.

For example, a SaaS-based CRM application can reside on a cloud, in which case the cloud enables the CRM to be delivered to you via the Internet. However that SaaS-based CRM application can reside on a server in an off-site data center, in which case cloud computing is not part of the equation.

Infrastructure-as-a-Service (IaaS) provides the cloud infrastructure – such as servers, CPUs, storage, memory or network equipment – as an on-demand service. Rather than purchasing, deploying and maintaining the infrastructure onsite you buy what you need as a fully outsourced service, scaling up or down based on need.

The IaaS service provider maintains all systems. Your hardware and the data located on them are housed in secure data centers, which are backed up and typically come with a Service Level Agreement (SLA). In the event of a disaster, the IaaS service provider is responsible for getting your services back up and running, not you.

Most IaaS providers incorporate a high availability design model that enables you to not only grow your infrastructure as needed, but also provide extremely secure uptime. IaaS examples include Amazon Web Services, GoGrid (ServePath) and Mosso (Rackspace).

Platform-as-a-Service (PaaS) delivers a computing platform, facilitating the development of new applications or the enhancement of existing applications without the cost of purchasing and managing the underlying hardware and software. Like SaaS, this service is maintained by a service provider. Force.com (Salesforce.com), Azure Services Platform (Microsoft), AppEngine (Google), Bungee Connect, Long Jump and Wavemaker are examples of PaaS.

PaaS is favored by IT departments who prefer to customize their own solutions and by independent software vendors (ISVs).

Comparing cloud computing with traditional on-premise solutions

So how do you decide which path is right for your business – off-premise cloud computing or traditional on-premise computing?

From the early stages of a business through growth and profitability, cloud computing can provide an SMB with the tools that enable you to compete on a larger scale while retaining precious capital and maintaining agility. Cloud computing is a more flexible approach, allowing you to move resources up or down to meet specific demands. Upfront costs are less because you are not investing in any hardware or software to fill a data center. It is also well suited to high capacity, high-processing and high-bandwidth uses, such as those required by a media or imaging company, for example.

Most SMBs have limited IT staff and every employee must support and contribute to revenue generation. With cloud computing, operational efficiencies are increased, which allows you to move staff to more strategic activities associated with driving business growth.

On the other hand, if your organization's infrastructure is already in place, purchasing your own solution and then running it and managing it on premise might be the right option for your business. One advantage is obvious: Traditional on-premise computing give you more control over every aspect of your solution – from Service Level Agreements (SLAs) to dedicated system and security and regulatory compliance requirements.

You also can be directly involved with any business critical integration decisions and processes. In addition, an on-premise solution carries less chance that data will be inaccessible due to a loss of outside connectivity issues with your service provider or compromised in any way due to factors outside your control.

Charting your course

Moving (or not) to the cloud is a major business decision. As you plan your course, consider these key questions:

- Does your business need its own data center, servers, storage and other equipment running software applications that you own and update?
- How much control does your business need to have over key applications?
- What kind of service-level agreements (SLAs) does your business need?
- What are your capacity, performance and bandwidth needs?
- What are your data security and data location requirements?
- What are your regulatory compliance requirements?
- How predictable is your business growth?

- Are you facing space, power and capital expenditure issues due to an increasing number of in-house servers?
- Do you experience constantly fluctuating numbers of staff?
- Is your current IT becoming outdated?
- Are you planning to implement a complex business application that will require adding IT staff with a specific area of expertise to support it?

Summary

The reality is many small businesses don't devote enough consideration or upfront planning when it comes to cloud solutions. Here's a typical scenario:

You decided you want to move to the cloud. So you choose a popular solution such as Salesforce, Basecamp or a Microsoft product. As you begin to realize the power of these applications, you may start selecting more software for other aspects of your business.

Before you know it, you have myriad applications that aren't integrating properly, not to mention a growing number of monthly subscription costs. And, bottom line, your operations aren't that much more efficient. It's definitely not the right formula for business growth.

Today we are at the forefront of the cloud computing evolution and the topic is clearly garnering a lot of press. However it may not be appropriate for all businesses. To make that determination for your company, identify your requirements, set your priorities and chart your course carefully to ensure the move is grounded in solid business planning.

About the author

OSF Global Services (www.osf-global.com) has been delivering SLA-grade professional services since 2003, having established itself as a trusted advisor and technology integrator to clients in 17 countries. The company's forte is application development and technology integration across key markets, including Cloud, Ecommerce and CRM. Headquartered in Quebec, Canada, OSF has offices in the U.S., Romania and Ukraine. This mix of onshore and offshore expertise offers comprehensive, follow-the-sun support for its clients. OSF Global Services is ISO 9001:2008 certified, Microsoft Certified, a Salesforce.com Consulting Partner, a NetSuite Solutions Partner and a Rackspace Hosting Member Partner.

For information on how OSF Global Services can help with your cloud requirements, please contact us at info@osf-global.com or (888) 548-4344.

¹ [Cloud Adoption Triggering Fundamental Changes in Mid-Market and SMB](#)

² [Inside the Midmarket: A 2011 Perspective](#), IBM January 2011

³ [SMB Cloud Adoption Study](#), Microsoft March 2011