WHAT CLOUD COMPUTING MEANS TO THE SMALL MEDIUM BUSINESS (SMB)

When you talk about computing technology today, the "Cloud" becomes a topic. The "Cloud" is becoming a serious option for small and medium size organizations. If your organization's data is processed off premise and accessed via the internet, then you are a user of Cloud Computing. This white paper provides a definition of Cloud Computing, discusses some of the risks, and then offers areas of consideration before jumping into the Cloud.

What is Cloud Computing?

The National Institute of Standards and Technology (NIST)[1] provides an objective and specific definition. The term "Cloud" is used as a metaphor for the Internet, based on the cloud drawing used in the past to represent the telephone network, and later to depict the Internet in computer network diagrams as an abstraction of the underlying infrastructure it represents. Typical cloud computing providers deliver common business applications that are accessed from a computer or device via the internet.

Some of the more common Cloud Computing applications are hosted email services or business applications such as Salesforce.com or QuickBooks On-Line. Another example is online-banking. If you use the internet to access your account and pay bills, you are working "in the cloud". With Cloud Computing, your company's data is not stored at your business office. The monthly fee that your organization pays the provider includes the cost of the licensing the software as well as the infrastructure needed to run the application. A SMB has the ability to quickly set up an application without investing capital dollars for the technology infrastructure which includes software licensing, hardware and related operating systems and processes. Your provider is responsible for the technology infrastructure, data backups and provides tools to secure your data. You have hired someone to provide the control over the IT environment and trust the provider to process and protect one of your company's vital assets, its data. If your company has regulatory or compliance concerns, perform the necessary due diligence before jumping to the Cloud. For example, an ITAR (International Trade in Arms) regulation requires the data of a US corporation to reside in the United States and not be accessible by foreign nationals. If the provider of your hosted application is outside of the United States or employs foreign nationals that have access to your data then your business is not in compliance with the

regulation. Another example is the Massachusetts Data Privacy regulation which requires encryption of personal information. If storing personal information at a hosted site, the personal information must be encrypted. A SMB incurs other costs when implementing a new software application. The other traditional costs such as training and maintenance remain a consideration.

Considerations Before Moving to the Cloud

The decision to utilize Cloud Computing involves the consideration of multiple factors. Management should understand:

1 Compliance issues of the organization related to Information Technology

2 The location(s) of the hosting facility, its data backup location(s) and infrastructure backup location(s)

3 Service Levels required by the organization, how they will be measured and what the consequences are if the provider does not meet Service Levels.

4 The process by which you will be informed of a breach of security of your data, if it occurs

5 Data encryption methods while sending and receiving data over the internet

6 Data encryption methods at the hosting facility

7 How your organization's data will initially be loaded

8 What is the process to export and ultimately remove your data if you wish to change providers

9 Who has access to your data besides your employees

10 What happens if you provider goes out of business or has a major business interruption

Cloud Computing offers scalable solutions without the need of capital IT related expenses and eliminates the need for a disaster recovery plan for applications in the Cloud. This is an attractive option for the SMB market. By considering the factors above, management will make an informed, sound decision for the organization.

(1) **National Institute of Standards and Technology (NIST)**, known between 1901 and 1988 as the **National Bureau of Standards (NBS)**, is a measurement standards laboratory which is a non-regulatory agency of the United State Department of Commerce. The institute's official mission is to promote U.S. innovation and industrial competitiveness by advancing measure science, standards, and technology in ways that enhance economic security and improve quality of life.