

Cloud Computing - Benefits and Pitfalls

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There has been a great deal of interest generated through Cloud Computing.

Cloud Computing Business Strategies have become a popular way for a company or organization to reduce costs and grow their bottom line. Rather than purchasing their own hardware and software, a company may enter into an agreement with a Cloud provider that allows access to a Cloud provider's infrastructure in software applications and data storage through the Internet on an as-needed basis. Therefore rather than purchasing equipment or software, or upgrading hardware and software systems and rectifying any inconsistencies, one may simply enter into a licensing arrangement and pay on an as needed basis.

Although there are many benefits that can be realized through the use of Cloud Computing, one should also consider some of its drawbacks.

Benefits of Cloud Computing:

Simple to Move to the Cloud:

The transfer of business data into the Cloud is easy as everything is run by the Cloud provider. There is no need to install hardware or software. The Cloud provider takes care of all of the details, monitors and upgrades the off site computer hardware and software and obtains and maintains all software updates and security procedures.

Cost Effectiveness:

Businesses that move to the Cloud generally experience cost savings as IT hardware and software expenditures are substantially reduced, and generally fewer staff or resources are required for IT maintenance as it is the responsibility of the Cloud provider to purchase and maintain the Cloud hardware and software.

Flexibility of Business:

It is relatively straightforward to increase the use of Cloud services as the business grows or to decrease costs without incurring large capital costs. Most Cloud service allows for this flexibility. There is no need to expend large capital cost to purchase additional hardware or as the business grows. Furthermore many organizations do not utilize the full capacity of the systems that they have in place.

Enhanced Productivity:

Since a company's data and required software applications are located off-site in a Cloud, this information can be

accessed from anywhere in the world through the Internet, which generally leads to increased productivity. The user is no longer tied to the office and can work according to their schedule at any time or place.

Improved Security:

Cloud service providers generally commit large resources to securing their facilities from attack and develop security systems which are well beyond the means of any small business.

It is critical to the Cloud provider to have the very best security software as their business depends on it. Moreover, since the company's data is in a Cloud, there is less likelihood of accidentally losing information from a misplaced laptop or computer as there is no need for the data to reside in the laptop.

Less Downtime:

Cloud Computing service providers generally offer 24/7 service through multiple data centres with less downtime than that of a company maintaining their own IT system. It is not unusual for companies or organizations to experience down time especially when they have multiple offices in different jurisdictions.

More Choice:

It is generally easier and less costly to change Cloud providers than it is to terminate traditional IT contracts requiring expensive software licence and long-term equipment leases. Many Cloud providers have inexpensive monthly plans, while large capital costs for computer systems need to be amortized over several years.

Better Cultural Adjustment:

Many businesses hire employees from different countries, and a large segment of employees work from their homes. Cloud Computing has made business and a professional working environment more accessible, inexpensive, and user friendly.

Simple Purchasing:

Many Cloud services can be purchased over the Internet with a credit card and service becomes available instantly. There is no need to issue a complicated Request for Proposal, or negotiate the complicated agreements that typically accompany large capital computer hardware and software acquisitions.

Collaboration:

Groups of users at multiple sites may access a common document quickly, easily and in real time from the Cloud, which facilitates collaboration amongst the group, enhances the prospect of creativity and speeds up the process of completing a task.

Cloud Computing has many benefits but comes with some pitfalls that must be considered before jumping into the Clouds; they include:

Intellectual Property:

Intellectual Property rights are generally jurisdictional. In other words a Canadian patent only extends protection in Canada and nowhere else. There is growing concern whether intellectual property owners will be in a position to enforce their proprietary rights when computing resources result in unauthorized distribution of video, music and other rights, and the location of the infringing activity may be difficult to determine.

Protection of Privacy:

Cloud Computing architecture provides that vendors may process resources in and through a number of jurisdictions at any time. Concerns have been expressed as to whether business or personal information may be accessed by foreign law enforcement bodies, through anti-terrorism legislation or the like. Antiterrorism is a growing concern in today's society. Users also need to consider the risks that their data may be disclosed to foreign governments in which their data is held, possibly without their knowledge or consent. Relevant Canadian legislation such as the *Personal Information Protection and Electronics Documents Act* needs to be considered when a company thinks about outsourcing their processing or storage of personal information to a Cloud provider.

Jurisdiction:

There is always the issue of which court will have juris-

diction to resolve disputes based on activity in one jurisdiction causing harm in another jurisdiction. Moreover the intellectual property may not extend to where harm is caused.

Foreign Exports:

Compliance with foreign federal export controls may be difficult to determine or control especially where software encryption technologies are developed in the Cloud, particularly where the Cloud services may be provided in a multitude of locations.

Loss of Data:


Since the data is held in the Cloud, there are concerns about losing this data. It is critical that all of one's data is in a format that can be imported into another application at any time and in different locations.

Ownership:

Care must be given to ensure that the intellectual property rights of users and Cloud providers are clearly delineated so as to minimize any future disputes. It is always better to spell out these rights in writing before entering into the arrangement, since it is not unusual for one party to have a different view from that of another.

Contractual Issues:

The terms of a Cloud provider's contracts must be carefully reviewed and if unreasonable or unwarranted, other Cloud service providers should be sought out, particularly if the negotiation is protracted over unreasonable terms.

While corporations or organizations may obtain significant benefits from the Cloud, they must also understand the full implications of these new arrangements. 

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Murray Ellins	820	May 3, 2011
Kenneth S. Hulme	955	May 14, 2011

MEMBERS CANCELLED

Ralph Bode	1738	May 17, 2011
David Maughan	1884	May 17, 2011
David Pesce	1776	May 17, 2011
William Plaxton	1161	May 17, 2011

Steve Ruttan	1671	May 17, 2011
Eric Salzer	1894	May 17, 2011
Lawrence Woods	1135	May 17, 2011
Sayed Yadollahi	1866	May 17, 2011
John Young	1493	May 17, 2011

MEMBERS REINSTATED

David Maughan	1884	May 20, 2011
Eric Salzer	1894	May 20, 2011
Sayed Yadollahi	1866	May 20, 2011