

Business Matters

TECHNOLOGY

Is Cloud Computing Pie in the Sky?

Computing may be moving off premises and becoming a utility.

Cloud computing is not quite here yet but its simplicity from the user's point of view makes it very attractive. Nevertheless, there are significant legal and technical problems primarily of security and privacy that need to be resolved before cloud computing can come into universal use.



What Exactly is Cloud Computing?

The central idea behind cloud computing is that data will no longer be stored on the hard drives of the office servers, desktop computers or laptops but offsite on a network of servers accessed through the Internet for a fee. (The word "cloud" comes from the use in the IT industry of the simple image of a cloud to represent complex telephone networks or the Internet itself.)

Types of Service

The cloud model could offer several types of service. For example, Software as a Service (SaaS) would let you load a single application onto your home or office computer that would allow you to log into a web-based server hosting the programs you need such as word processing, accounting, data base, storage, games, etc. Platform as a Service (PaaS) would let you design your own application which would run on the service provider's infrastructure and be delivered to users via the Internet. There would be many other services available to manage security, spam, email, and so on.

Pay Per Use

As currently conceived, the comparable business model of cloud computing is that of the utility industry. Instead of having a generator in your basement producing power for all the needs of your home or business, you access the energy grid and draw off the amount of energy you need on a pay-for-use basis.

Middleware

Through a process called server virtualization, a special kind of software known as middleware would maximize server capacity utilization. Middleware can divide the capacity of individual servers into virtual environments so that each physical server functions as multiple servers. The result is greater server

efficiency because less capacity is wasted, as happens now. The dedicated servers making up the cloud computing system would have all the applications society would need for work or play.

The host system would be owned by a company that would charge you some type of fee for providing your customized service.

Programs formerly run in-house will be on external network servers.

Benefits

The primary benefit is that your infrastructure, training and licensing costs will be substantially reduced or even eliminated. Hardware costs would be reduced because there would be no need to buy and house increasingly powerful computers as your business grows. The programs formerly run by your in-house IT system would now be on the cloud network servers. The space currently occupied by servers and storage devices would now be freed up for more productive uses. If you are currently renting space to house your servers, that expense would be gone. Increased capacity would also be available on the host's servers as needed. Server virtualization on the cloud system would ensure you are not paying for overcapacity as you might be doing now with your in-house system. All you need is a basic computer, cloud-enabled appliance (e.g., television), mobile phone or tablet device capable of running the external server's interface software which might be as simple as a web browser.

Server Security

Time-consuming decisions about buying and complying with expensive software licences will be a thing of the past. You will no longer have to worry about who is and who is not covered by your existing software user licences. With cloud computing, you will no longer require licences; the company will have access to the programs it needs on a fee-for-service model.

Easy Access

The cloud servers would be accessible from anywhere on the planet through the Internet. But you will not have to worry that sensitive company information might be compromised if a USB or laptop is lost by an employee on a business trip; all the information would be on the server and not on the hard drive of the laptop.

Reduced IT Staff

With software managed by the offsite server company and only basic computers required onsite, the expense of in-house IT personnel will be substantially reduced. Fewer IT personnel will be required by your business and those who will be needed will cost less because they will not need the training now required to run complex in-house systems. The good IT jobs will be with the server companies.

Concerns

Cloud computing could, in effect, double your security risk: once in-house and once at the remote servers. When servers are located in-house as they are now, you know where the data is stored and can access it and maintain it physically. You can design an authentication system of user names and passwords to control access to your own servers. This can be supplemented with an authorization system which allows users to access only the applications and data needed for their particular job.

In the cloud system, on the other hand, you as the client do not know where the vendor's servers are physically located and who has access to them. They may even be located in a jurisdiction outside Canada where privacy and security laws are not as tight as they are here. You also do not know the effectiveness of the vendor's security system. In other words, you do not have complete control over the storage and use of

your own data, yet current privacy legislation makes you responsible for the security of your clients' personal information.

The best that can be said at this time is that you will still need in-house security at your end but the server companies will need to develop a level of security that will give their clients confidence that they are not in violation of Canadian law. It is obviously in the server companies' best interests to do so since they depend on the trust of their clients to keep themselves in business.

Where Are We Going?

Computer systems are becoming so complex that new ways of organizing the relationship between system and user is inevitable. The number of computing devices in use and the complexity of each new device are both increasing rapidly and putting pressure on the architecture of existing systems. Cloud computing as a utility is not yet a sure thing but it is looming larger and larger as a potential solution.

TAXATION

Year-End Tax Issues

Check your portfolio; you may not have to pay as much capital gains tax as you thought.

As the year end approaches owner-managers can find themselves faced with difficult choices in order to keep the tax liabilities of their businesses, themselves and their families to a minimum. Three important areas are capital losses, pre-tax remuneration vs. dividends and RRSP contributions.

Capital Losses

If you have an investment portfolio outside your TFSA, RRSP or RRIF, you should review it with your investment advisor to see whether you could reduce your capital gains by taking some capital losses before the end of the year. Since capital losses can be carried forward from prior years to offset gains in the current year, review your last tax return with your Chartered Accountant to see whether any capital losses are available. Keep in mind that any sales to create capital losses must be made at least three trading days before the final settlement date of December 31 in any given year.

For 2011, because of the way the holidays fall, the last day to sell a stock may be December 23. Check with



your broker to make sure. Further, if you sell the losing stock to get the benefit of the capital loss but would like to repurchase it to retain a position in the company, you must wait 30 days or you will not be able to claim the capital loss (the superficial loss rule). The capital loss would also be denied if your spouse were to acquire the stock either from you or on the market within that 30-day period and continue to hold it at the end of that period.

Next Year's Capital Losses

Investors who realize capital gains (net of capital losses) in 2011 but have no losses carried forward will pay tax on the capital gains. However, because capital losses can be carried back three years, capital losses generated in 2012, 2013 and 2014 can be used to recover taxes paid on the capital gains

incurred in 2011. Just in case you are thinking of selling a security at a loss in order to create a usable capital loss then repurchasing under your RRSP umbrella, remember the superficial loss rule will still apply.

Paying out taxable profits can reduce the corporate tax rate to zero.

Pre-Tax Remuneration vs. Dividends

Salaries and bonuses to owner-managers or family-member employees should be considered as a way of reducing corporate taxes. Your Chartered Accountant can determine how additional remuneration to family members will impact the collective tax liability of the family. Your Chartered Accountant may also be able to time the payment of remuneration to reduce the corporate taxes paid while deferring the personal income tax liability to the following year.

Payment of cash dividends is another option. Cash dividends are paid out of retained earnings, i.e., after the corporate income tax has been paid, and attract a lower income tax rate than remuneration, which is deducted in computing corporate income and therefore before the calculation of the corporate tax liability.

The choice between cash dividends or remuneration can become contentious where tax rates vary among family members and where not all family members are shareholders. Taking dividends rather than salary, for example, will impact CPP and future RRSP contributions. Thus, it is advisable to be aware of the impact on each family member and to obtain shareholder consensus on the preferred means of remuneration.

Although dividends may be declared any time in the year, they are not taxable until they are actually paid. Any plan to defer payment to a later calendar year should be discussed with your Chartered Accountant as it impacts the corporation as well as the individuals receiving the dividends.

RRSP Contributions

Owner-managers who decide to give themselves or family members a raise to reduce corporate taxes, may put themselves in a higher income tax bracket. Then, the only means of reducing personal taxable income may be to contribute to an RRSP. For 2011, the RRSP limit is \$22,450.

Keep in mind that, if you have not yet made the maximum contribution (the lesser of \$22,450 or 18% of 2010 earned income minus any pension adjustment) for the 2011 calendar year, you have until February 29, 2012, to do so. The cash realized from a dividend or salary deferral from 2011 received in 2012 can therefore be used to top up your 2011 contribution.

The On-Time Payment Rules for Taxes

There is some confusion as to what constitutes paying on time. Some payments are considered to have been made only when received by the CRA; other payments are considered to have been made when mailed.

For clarification, section 248(7) of the *Income Tax Act* reads:

For the purposes of this Act,

- (a) anything (other than a remittance or payment described in paragraph 248 (7) (b)) sent by first class mail or its equivalent shall be deemed to have been received by the person to whom it was sent on the day it was mailed; and
- (b) the remittance or payment of an amount
 - (i) deducted or withheld, or
 - (ii) payable by a corporation,

as required by this Act or a regulation shall be deemed to have been made on the day on which it is received by the Receiver General.

Payments at Financial Institutions

Payments for HST, income or withholding taxes made at any financial institution belonging to the Canadian Payments Association will be accepted on the day they are processed. A payment made at an Automated Teller Machine (ATM) must be processed the same day to be considered paid on the payment date. Payments will be late if they are made after public banking hours since many financial institutions do not process the data until the following day. Payments made Friday after closing are usually not processed until the following Monday.

If, however, the due date falls on a Saturday, Sunday or public holiday, the payment will be considered "ontime" if the funds are processed by the financial institution or received by CRA on the next business day. For example, if the deadline is Saturday, April 30, and the return is mailed on April 30 but not received by CRA until Monday, May 2, it is considered to have been received on time. If, however, a payment required by Tuesday, April 30, is mailed on April 30 and not received until Wednesday, May 1, it is considered late.

Seek Advice from Your Trusted Lipton Advisor

Addressing capital-gains-and-loss issues, salaries, pre-tax remuneration or dividends, and RRSP contributions with your Chartered Accountant before year end should be foremost on the minds of owner-managers at this time of year. Some ways of reducing tax liability may be time sensitive and require a review of available options with shareholders and family members.

Disclaimer:

BUSINESS MATTERS deals with a number of complex issues in a concise manner; it is recommended that accounting, legal or other appropriate professional advice should be sought before acting upon any of the information contained therein.

Although every reasonable effort has been made to ensure the accuracy of the information contained in this letter, no individual or organization involved in either the preparation or distribution of this letter accepts any contractual, tortious, or any other form of liability for its contents or for any consequences arising from its use.

BUSINESS MATTERS is prepared bimonthly by The Canadian Institute of Chartered Accountants for the clients of its members.

Richard Fulcher, CA - Author; Patricia Adamson, M.A., M.I.St. - CICA Editor.