Are you ready for the cloud? A readiness assessment tool

Cloud computing makes possible what couldn’t be done a few short years ago. When Animoto Productions, a Web-based video production company, launched their online application as a Facebook plug-in, they found overnight success. Cloud computing enabled them to handle rapidly spiking demand by automatically provisioning 3,500 servers—literally overnight.

You may not need to add thousands of servers in less than 24 hours, but the ability to provision even one extra server in minutes—at no capital expense—can save substantial amounts of time and money. But even if cloud computing is a perfect fit for your organization, are you ready for it?

We’ve designed this resource to help you understand how to prepare for the cloud, what service parameters are important to your organization, and how to evaluate potential cloud providers.

Note: this tool is intended to stimulate focused conversations about cloud computing readiness. When you have completed this assessment, contact your Bell representative for information on a more thorough assessment and an implementation consultation, or have a representative contact you.

Cloud readiness

With the exception of many Software as a Service (SaaS) applications, engaging cloud services is seldom as simple as choosing a provider and connecting to a virtualized data centre. How prepared is your organization for cloud computing?

Are you currently using any cloud computing applications, including SaaS?

- Not at the present time
- Yes, we use a CRM software solution that is provisioned over the Internet
- Yes, we use an accounting solution provisioned over the Internet
- Yes, we use another application provisioned over the Internet
- Yes, we currently make limited use of Infrastructure as a Service (IaaS) in the form of storage or computing power
Have you already optimized your data centres?

- Not yet
- They are partially virtualized, but we don’t plan to virtualize the remainder
- They are partially virtualized, but we have plans to virtualize the remainder
- Yes, they are fully virtualized. We are maximizing hardware resources

Virtualizing the data centre frees up capacity and maximizes the use of hardware resources. Virtualization uncouples application from hardware, making it possible to drag and drop a server—within the data centre, and eventually to the cloud. It’s not a precondition for cloud computing, but it does create economies by putting in-house resources to best use.

To what extent are your current business applications compatible with cloud?

- Not sure
- Some of our applications are cloud-compatible
- The applications that we will be using in conjunction with cloud computing are compatible
- We are in the process of either upgrading to cloud-friendly versions, or replacing non-compatible apps
- All set—we just need to select a provider

To be cloud-compatible, applications must share a common method of programmatic interaction to underlying cloud resources and services. Many older out-of-the-box applications lack this capability.

Have you determined how to integrate your applications into the cloud?

- Not yet
- In the process of understanding what’s involved
- Yes, we are determining whether vendor-built application program interfaces (APIs) will serve our purposes without modification
- We are modifying standard APIs to suit our custom or modified applications
- We are custom-building APIs with a view to future application customization

Vendor-provided SaaS data connectors can rarely feed data to the cloud in a trouble-free manner. In even the simplest scenarios, some form of data connector customization is required to accommodate prior source system customization.
Cloud usage

The advantages of cloud are well established. But which are most valuable to your business model—scalability, moving to an operational expense model or another benefit? Examine your business needs to determine what cloud attributes matter most to you.

How much do your demands for computing resources change over the course of a year?

- 0–10 percent
- 11–25 percent
- 26–50 percent
- 51–100 percent
- 101–500 percent
- More than 500 percent

If the volume of your outsourced computing needs doesn’t fluctuate much, cloud computing solutions may not make economic sense, as it is generally more expensive than contracted data hosting.

What portion of your software applications do you foresee being provisioned in the cloud?

- None in the near term
- A small portion, right away
- A small portion is already in the cloud
- An important portion, in time
- An important portion, right away
- Probably all of them, eventually

Is computer application development part of your business?

- Yes
- No
If application development forms part of your business, how much outsourced computing power would you need for projects on an occasional or ongoing basis?

- For test and development only
- For test and development, as well as Web front-end use
- For full server environment use
- For full server environment use as well as firewalls, load balancers, CDNs and other network support services

On a scale of one to five, with five being most important, how important is the financial aspect (moving from capital to operational expenses) of cloud computing to your business?

- 1
- 2
- 3
- 4
- 5

Cloud service parameters

Is data security a high priority for your organization? What about uptime? Use these questions to discover what service parameters you will require from a cloud provider.

Does your organization currently store sensitive data that requires a certified level of data security?

- Yes
- No

Is your organization under regulatory obligation to store and process all client data within Canada?

- Yes
- No
What is the minimum level of data security that you would accept from a cloud service provider?

- Basic confidentiality terms in the contract, in conformance with PIPEDA and other applicable regulation
- We would want them to show us specifically what security measures they have in place, from physical building security to intrusion protection to encryption in storage and during data transfer
- We require the highest level of security certification in the IT sector
- We are obliged to disclose the details of financial data storage to regulators, so we require Statement of Auditing Standards (SAS) 70 reporting

On a scale of one to five, how critical is uptime to your organization?

- 1
- 2
- 3
- 4
- 5

When it comes to evaluating uptime, look at the terms of providers' guarantees. If the penalties they are obliged to pay are unlikely to compensate for outages at your end, ask for records of past performance.

What kinds of speed-sensitive services will you be running over the cloud?

- None
- Voice services
- Video services
- Quality of Service (QoS)
- Interactive gaming services
What is an acceptable time for employees to learn to use a cloud computing provider’s interface?

- Up to 2 weeks
- Up to 1 week
- A few days
- One day
- A matter of hours
- A matter of minutes

What customer service response scenarios are acceptable to you?

**Contact centre response**

Would you rather speak with a live person, or a voice prompt?

- Live person
- Voice prompt

**Email response time**

- Email inquiry answered within 3 days
- Email inquiry answered within 5 hours
- Email inquiry answered within 30 minutes or less

**Resolving major issues**

- Major issue resolved within 3 days
- Major issue resolved within 1 day
- Major issue resolved in a matter of hours

Keep in mind that some cloud providers do not provide customer service to all users, but just administrators—one more factor to consider in choosing a provider.
Talk to Bell

This readiness assessment tool was designed to cast light on the thinking and actions that need to take place upstream of selecting a cloud computing partner and adding cloud services. For help interpreting the information you have generated with this tool, or to find out more about the specifics of Bell cloud computing services available to you, contact your Bell representative today or have a Bell representative contact you.

If you’ve found this assessment helpful, you might also be interested in some of our other resources:

- Virtualization white paper: Navigating the road to IT optimization
- Virtualization requirements assessment tool
- Bell Insights Q&A: Demystifying cloud computing and virtualization
- White paper: Evolving your network into a strategic asset – A roadmap