

Checkup

Give us 30 minutes.
Our tech test may help you
avoid a disaster

BY DANNY BRADBURY

How healthy is your company's information technology strategy? Canadian firms have a reputation for investing less heavily in computing and being less technologically mature than their U.S. counterparts. Yet technology brings significant business benefits.

Perhaps your company can reap the benefits of a more comprehensive technology strategy, but before you can move ahead you need to evaluate where you are now.

Measuring IT health is a tricky task. It involves more than just assessing your raw technical prowess; instead, it requires a holistic understanding of how well your computing effort is matched to the needs of your business.

To help, *Backbone* created a questionnaire designed to explore the relationships between your technology and business departments in five key areas: Green IT, Web presence, Security, Agility, and Communications and workflow.

The following process will help you get a broad sense of the areas in which you are competent, and those in which you could use some improvement. Consider it a health check: wire your company up to the virtual ECG and see how it performs.



The resulting profile will help form the basis for your ongoing technology strategy. The real test, though, is to come back to this in 12 months and see how far you have progressed. Completing the *Backbone* health check will give you a visual assessment of your overall technological health.

The health check is divided into five categories: Green IT, Web Presence, Security, Agility, and Communications and Workflow. Each category has 10 questions: five focus on technological competency, and the other five focus on the relationship between that technology

and your business' organizational and operational aspects.

To complete the technology test:

- answer each question on a scale of one to 10
- add up the five scores in the business section of each category
- add up the scores in each technological competency section
- this will leave you with two scores in each category
- divide each score by 5

Now either plot your results on page 31 or, for an interactive experience, answer the questions online at www.backbonemag.com/technology-test. More details are online and at the end of this story.

**There is an online version of this assessment that employs bar charts to visualize your results
Please see www.backbonemag.com/technology-test**



Green IT

Business

? How well do you use technology to make the rest of your business more environmentally friendly?

IT isn't simply an aspect of your business that has to be made green. It is also a potential tool to green the rest of your business. For example, using GPS systems to optimize the routes travelled by field engineers could save lots of carbon emissions throughout the year.

(Not at all) 1 2 3 4 5 6 7 8 9 10 (Focused, implemented strategy)

? Do you have a green technology procurement policy in place?

Customers can hold their technology suppliers to account by mandating everything from EnergyStar standards compliance for PCs through to demanding information on the amount of carbon and other natural resources used in the manufacturing process.

(Not at all) 1 2 3 4 5 6 7 8 9 10 (Focused, implemented strategy)

? Do you have a secure, structured IT equipment recycling or donation program?

How do you get rid of your hardware? Throwing it in the landfill is a clear no-no. Recycling is better. Best is a comprehensive approach to donation requiring you to scrub the data from your PCs before donating them to a school or charity, reselling them on eBay or using a vendor take-back program.

(Not at all) 1 2 3 4 5 6 7 8 9 10 (Focused, implemented strategy)

? Are your users talking to the people paying the bills?

In many companies, the people using computers and servers are not directly responsible for paying the electricity bills. Making sure that they have a dialogue—or even charging back electrical usage for end-users based on computing and storage use—can help to drive responsibility for power consumption through the business.

(Not at all) 1 2 3 4 5 6 7 8 9 10 (Focused, implemented strategy)

? Have you developed a green strategy that is aligned with cost reduction goals?

Associating cost savings with green IT measures will give you the impetus to achieve your environmental goals, whether you're concentrating on reducing the environmental impact of your own technology, or using your technology to green the rest of your company.

(Not at all) 1 2 3 4 5 6 7 8 9 10 (Focused, implemented strategy)

TOTAL

Technical

? How much have you consolidated your equipment using virtualization techniques?

Virtualization enables you to get rid of much of your hardware by using existing computing capacity more effectively. Are you using it to full effect?

(Not at all) 1 2 3 4 5 6 7 8 9 10 (Focused, implemented strategy)

? Do you monitor the energy used by your equipment?

To reduce your power consumption, you have to know how much you're using. Rack power monitors can help you to see how many watts your servers are using, and there are also devices available to monitor usage from power sockets. At the very least, you can look at a base spec for your PCs' power usage, figure out how long they are on for each day and do the math.

(Not at all) 1 2 3 4 5 6 7 8 9 10 (Focused, implemented strategy)

? Do you control the energy used by your equipment?

Something as simple as software that automatically suspends PCs after people go home at night can save you 16 hours of electrical usage per computer each day.

(Not at all) 1 2 3 4 5 6 7 8 9 10 (Focused, implemented strategy)

? Have you imposed efficiency targets?

Power consumption is one of the biggest environmental overheads. Imposing power efficiency targets gives you a goal to aim for as you begin to green your business.

(Not at all) 1 2 3 4 5 6 7 8 9 10 (Focused, implemented strategy)

? Have you optimized your computing facility to run at maximum efficiency, or audited your computing services supplier for the same?

It isn't just the electrical equipment in an organization that draws power. The cooling systems in a datacentre can use around a third of the total power in an IT department.

(Not at all) 1 2 3 4 5 6 7 8 9 10 (Focused, implemented strategy)

TOTAL



Web presence

Business

? To what extent have you embraced Web 2.0 principles in your Web presence (e.g. social networking, blogging, crowdsourcing)?

Web 2.0 techniques can encourage your online audience to engage with you.

(Not at all) 1 2 3 4 5 6 7 8 9 10 (Focused, implemented strategy)

? How quickly do you respond to customer queries and comments made through the Web site?

There is an online version of this assessment that employs bar charts to visualize your results

Not responding quickly enough (or at all) can undo all the hard work that you have put into your Web presence.

(Not at all) 1 2 3 4 5 6 7 8 9 10 (Focused, implemented strategy)

? How well integrated is your Web site into your overall business workflow?

Web sites designed to sell goods online or as a portal for customer service queries can be integrated with internal systems to help automate operations.

(Not at all) 1 2 3 4 5 6 7 8 9 10 (Focused, implemented strategy)

? Do you have a well-defined privacy policy in place for your Web site that is easy for visitors to find and understand?

Customers and business partners need to know their information will be used responsibly.

(Not at all) 1 2 3 4 5 6 7 8 9 10 (Focused, implemented strategy)

? To what extent do you analyze data about your Web visitors and use it to refine online and sales strategies?

Your Web server can tell you everything from how long customers have spent on your site to what products they looked at and what pages they missed.

(Not at all) 1 2 3 4 5 6 7 8 9 10 (Focused, implemented strategy)

TOTAL

Technical

? Do you update your Web site frequently?

Not updating your site can make it look out of date and neglected.

(Not at all) 1 2 3 4 5 6 7 8 9 10 (Focused, implemented strategy)

? Have you optimized your Web site to make it as navigable as possible?

Customers who have to click too many times will leave your site before they get what they want.

(Not at all) 1 2 3 4 5 6 7 8 9 10 (Focused, implemented strategy)

? Have you optimized your Web site to make it load as quickly as possible?

Flashy animations that slow down a Web site might force customers on slower connections to abandon ship.

(Not at all) 1 2 3 4 5 6 7 8 9 10 (Focused, implemented strategy)

? Have you ensured your Web site displays properly across different mobile devices?

With more people using mobile devices for online access, you want to be sure you can give them a suitable experience.

(Not at all) 1 2 3 4 5 6 7 8 9 10 (Focused, implemented strategy)

? How complete is the information on your site?

If you're not offering contact information, an About Us section, dealership links or a PR and news area, you could be underusing your site and leaving customers uninformed.

(Not at all) 1 2 3 4 5 6 7 8 9 10 (Focused, implemented strategy)

TOTAL

Our sources

Backbone consulted with several industry experts to help craft the questions in this piece.



Brian Bourne, founder, *SECTOR security conference*

Bourne is an industry expert with more than 15 years of IT experience. He is the co-founder of the TASK Toronto-based security user group and is the president of IT consultancy CMS.



Joe Compeau, lecturer in *information systems at the Richard Ivey School of Business*

Compeau has taught at Queen's University, the University of Calgary and at Carleton University in Ottawa, and has also worked as a consultant to SMBs and start-ups.



James Milway, consultant

Milway has more than 30 years of business and public-policy experience, having worked as a partner in the Canada Consulting Group and the Boston Consulting Group. He has also been the CEO of a specialized insurance firm.



Krista Napier, senior analyst, *Canadian Emerging Technology and Competitive Intelligence, IDC*

Napier has been the lead analyst for IDC Canada's *Technology Innovation Watch* report series and is studying for an MBA at the Schulich School of Business at York University.



Darin Stahl, lead analyst, *Info-Tech Research Group*

Stahl spent more than 20 years managing complex IT environments. Previously, he led the IT group at manufacturing firm Stewart Energy Systems and was IT manager for Royal & SunAlliance.



Security

Business

? To what extent is your computer security included as part of a broader corporate risk management initiative?

IT security doesn't stand alone. Does your board understand its context in the wider risk landscape?

(Not at all) 1 2 3 4 5 6 7 8 9 10 (Focused, implemented strategy)

? Do you have a well-defined and executed training program to teach staff day-to-day security?

If your software is secure, but an attacker is able to convince your receptionist to give up a password, you've failed.

(Not at all) 1 2 3 4 5 6 7 8 9 10 (Focused, implemented strategy)

? Do you have a single person tasked with overseeing IT security?

If the buck for security doesn't stop with one person, chances are mistakes will occur.

(Not at all) 1 2 3 4 5 6 7 8 9 10 (Focused, implemented strategy)

? Do you have a comprehensive and well-tested disaster recovery process in place?

If computing problems or physical disaster hits your business, you must have contingency plans in place to keep things running.

(Not at all) 1 2 3 4 5 6 7 8 9 10 (Focused, implemented strategy)

? Have you assessed the effect a successful attack would have on your business?

If you don't know which systems are most valuable and what the business impact of a successful attack would be, you're in no position to prepare your defences.

(Not at all) 1 2 3 4 5 6 7 8 9 10 (Focused, implemented strategy)

TOTAL

Technical

? Do you conduct regular IT security audits or penetration tests on your internal networks?

A finger-in-the-air approach to system security is not enough. Getting a third-party expert to check is a must.

(Not at all) 1 2 3 4 5 6 7 8 9 10 (Focused, implemented strategy)

? Have you conducted a comprehensive security audit for the Web applications that you operate?

Web applications today are a prime attack vector. Lock yours down or suffer the consequences.

(Not at all) 1 2 3 4 5 6 7 8 9 10 (Focused, implemented strategy)

? How much have you automated IT processes such as change management and patch deployment?

The more automated and standardized your IT procedures, the fewer chances there are for mistakes.

(Not at all) 1 2 3 4 5 6 7 8 9 10 (Focused, implemented strategy)

? To what extent do you secure internal assets against attack, rather than simply securing at the firewall?

If an attacker gets past your firewall, it makes sense to have a second line of defence around the assets you want to protect, such as your e-mail server, Web server and databases. That includes your mobile devices, too, which will be outside your network a lot of the time.

(Not at all) 1 2 3 4 5 6 7 8 9 10 (Focused, implemented strategy)

? Do you have a regularly updated list of your IT assets?

Unless you know what equipment and software you have, you can't fully protect it.

(Not at all) 1 2 3 4 5 6 7 8 9 10 (Focused, implemented strategy)

TOTAL



Agility

Business

? Can your senior board-level executives explain your IT strategy in plain English?

If the board can't understand your IT strategy and how it relates to their business, you'll have trouble getting buy-in for innovative technology projects.

(Not at all) 1 2 3 4 5 6 7 8 9 10 (Focused, implemented strategy)

? How broad are the goals you set?

Concentrating on short-term cost cutting measures is one thing, but technology can also be used to other ends, such as increasing top-line revenue or improving customer service key performance indicators. An open-minded approach to technology is essential if you want to innovate.

(Not at all) 1 2 3 4 5 6 7 8 9 10 (Focused, implemented strategy)

? Is the IT function adequately acknowledged as more than a cost centre by others in the boardroom?

Does the board understand that IT can be a strategic partner for growth, rather than simply an engine room that takes cash to run?

(Not at all) 1 2 3 4 5 6 7 8 9 10 (Focused, implemented strategy)

? How services-focused is your IT culture?

The ideal scenario for an IT department is as an internal service provider that can bolt together services quickly for business users,

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and charge back for those services. A catalogue of desktop services, for example, from which business managers can pick and choose, helps them understand what they're getting. At the other end of the spectrum is a rigid IT department that lives in an ivory tower and doesn't respond to business needs.

(Not at all) 1 2 3 4 5 6 7 8 9 10 (Focused, implemented strategy)

? Does your company outsource areas of IT that are not strategic?

Outsourcing commoditized areas of the IT function that can be better managed by providers with better economies of scale leaves your IT department to concentrate on strategic developments that can grow the business.

(Not at all) 1 2 3 4 5 6 7 8 9 10 (Focused, implemented strategy)

TOTAL

Technical

? Do you implement IT projects on a granular basis?

There are two broad ways to implement technology. You can ask the business department what it wants, spend two years developing it and then deliver it, only to find that the business needs have changed. Or you can divide a project into manageable chunks and deliver it in stages so that the business department can verify that it's getting what it needs and tweak its requirements as business conditions change.

(Rigid, monolithic delivery) 1 2 3 4 5 6 7 8 9 10 (Granular, agile delivery)

? How much of your IT systems are based on legacy hardware and software vs. newer, more open systems?

That legacy system running your sales department—the one created in 1983—isn't going to be very expandable today. A more open, standardized system can be altered to cope with changing business conditions.

(Legacy) 1 2 3 4 5 6 7 8 9 10 (Open)

? Have you used virtualization to expedite the provisioning of resources such as storage, computing power and network bandwidth?

You can stay unvirtualized and require a three-week wait every time a business department asks you for another 100GB of storage, or you can use a storage area network and do it immediately, without wasting unused disk space.

(Not at all) 1 2 3 4 5 6 7 8 9 10 (Focused, implemented strategy)

? How closely do you monitor the success of your projects according to criteria such as budget, deadlines and achieved goals?

A good IT department will have project management systems that hold teams accountable to the original goals for the project. This is important when it comes to winning the trust of the board.

(Not at all) 1 2 3 4 5 6 7 8 9 10 (Focused, implemented strategy)

? How much time do you spend refining your IT strategy vs. coping with operational challenges?

Are you always putting out small fires because you haven't automated your IT processes? Every minute you spend fixing

problems is another minute that you could have been using to plan the new data mining system that will increase company sales.

(Firefighting) 1 2 3 4 5 6 7 8 9 10 (Strategy)

TOTAL



Communications and workflow

Business

? Do you have a policy in place to guide the use of technology to improve internal communications and processes?

Companies with a well-defined strategy for using new technologies to make internal workflow run smoothly will yield a better return on their technological investment.

(Not at all) 1 2 3 4 5 6 7 8 9 10 (Focused, implemented strategy)

? Can staff describe your company's internal processes in plain English?

If the IT department doesn't understand the way its internal business clients work, it won't be able to meet their needs effectively.

(Not at all) 1 2 3 4 5 6 7 8 9 10 (Easily explained)

? Is technology tailored to be more client centric?

Whether your clients are internal business managers or external customers—or both—technology can be used to make their experience a better one.

(Not at all) 1 2 3 4 5 6 7 8 9 10 (Focused, implemented strategy)

? Is your technology strategy sophisticated compared to your industry sector?

To understand how well your technology stands up relative to the competition, you need to know what other manufacturing companies/financial services firms/logging operations are doing with their own technology efforts.

(Not at all) 1 2 3 4 5 6 7 8 9 10 (Focused, implemented strategy)

? How closely do the technology experts work with internal business managers to understand their needs when creating and upgrading IT assets?

Unless you get frequent and meaningful user input, you'll be flying blind when it comes to technology developments.

(Not at all) 1 2 3 4 5 6 7 8 9 10 (Focused, implemented strategy)

TOTAL

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Technical

? Do your IT systems give you a single view of your customers and suppliers?

If your sales and customer service departments are both using their own databases and don't see a customer as a single entity, the left hand of your business won't know what the right hand is doing, and the customer will suffer as a result.

(Not at all) 1 2 3 4 5 6 7 8 9 10 (Focused, implemented strategy)

? To what extent are your applications integrated across different business units?

Duplicated systems in different areas of the business lead to a stovepipe situation in which money is wasted on developing systems that do the same thing but can't talk to each other. That cripples your business and eats up valuable budget.

(Not at all) 1 2 3 4 5 6 7 8 9 10 (Focused, implemented strategy)

? How much are you using VoIP/unified communications/instant messaging strategies to improve communications in your business?

Everything is migrating to IP networks, including communications systems. Moving your phone system this way can enable you to

integrate it with other applications, creating significant business benefits.

(Not at all) 1 2 3 4 5 6 7 8 9 10 (Focused, implemented strategy)

? Are you technically prepared to automate processes between your own systems and those of your business partners?

Extending internal process automation to your business partners can shorten the time and cost involved with your interactions. Can your software talk to their software securely and productively?

(Not at all) 1 2 3 4 5 6 7 8 9 10 (Focused, implemented strategy)

? Do you modify your software to fit your business, or your business to fit your software?

If you have to force your business managers to change to suit your software, then something is wrong. The caveat is that working within a new system occasionally exposes processes that are obsolete or irrelevant.

(Modify business) 1 2 3 4 5 6 7 8 9 10 (Modify software)

TOTAL

So, should you be worried?

To find out, complete the survey and fill out the bar chart here in the magazine or, for a better experience, head to our Web site. Select your answers at www.backbonemag.com/technology-test and we will do all the math and analysis for you. We'll provide a report and charts detailing your results immediately after completing the assessment.

And once a number of people have completed the assessment we will e-mail you a comparative analysis of your results against other individuals, respondents in your industry and your geographic area.

The survey can be completed anonymously, other than providing an e-mail address so we can send you the comparative report. However, *Backbone* will be writing an article on the results and, if you give us your company name, you may see it listed here as one of Canada's healthiest technology users.

So give us 30 minutes of your time and we'll give you insight into your own environment and a look at other Canadian companies.

Visit www.backbonemag.com/technology-test.



Write your totals from each section in the boxes below:



Divide your score by 5 and then plot your chart here or online at www.backbonemag.com/technology-test

Green IT	Agility
Business <input type="text"/>	Business <input type="text"/>
Technical <input type="text"/>	Technical <input type="text"/>
Web presence	Communications and workflow
Business <input type="text"/>	Business <input type="text"/>
Technical <input type="text"/>	Technical <input type="text"/>
Security	
Business <input type="text"/>	
Technical <input type="text"/>	
	TOTAL <input type="text"/>
	50

