IT MARKET SUMMARY FOR CANADA

ADDENDUM TO IT INDUSTRY OUTLOOK 2014

RESEARCH

JANUARY 2014

www.comptia.org

About this Research

The enclosed report is an addendum to CompTIA's *IT Industry Outlook 2014.* This report focuses on the Canadian market, while the *IT Industry Outlook* is a broad-based look at the global IT industry.

Data sources cited throughout the report include: IDC, EMSI, Burning Glass Technologies Labor Insights, Indeed, and Canadian government statistics.

Other potentially useful CompTIA resources include:

- *International Technology Adoption and Workforce Trends* report and Canada summary
- *The State of Canadian Technology Adoption and the IT Workforce* infographic
- *2nd Annual IT Career Insights* report and Canada summary

CompTIA is responsible for all content and analysis. Any questions regarding the study should be directed to CompTIA Research and Market Intelligence staff at research@comptia.org.

CompTIA is a member of the Marketing Research Association (MRA) and adheres to the MRA's Code of Market Research Ethics and Standards.

Key Points

- The Canadian information technology (IT) sector reached nearly $100 billion in revenue in 2013. Hardware, software and IT services account for slightly more than half of the market, with telecom services accounting for the remainder.

- The Canadian IT industry is comprised of approximately 80,474 firms, according to Canadian government data. This includes both employer firms – those with payroll, as well as the self employed, such as an IT consultant or mobile app developer working for himself or herself. The IT services segment of the industry is the largest in terms of the number of firms and the number of workers. Estimates suggest the Canadian IT channel consists of around 15,000 firms, nearly all of which are classified as small businesses (<500 employees).

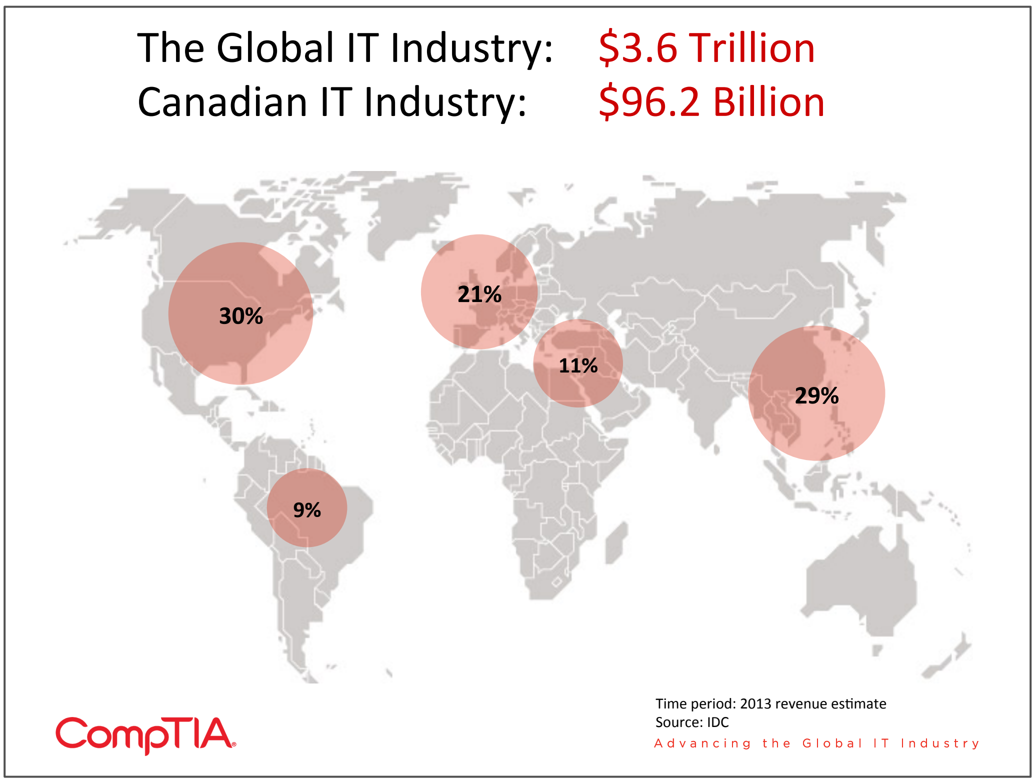
- Canada's National Occupational Classification for Statistics (NOC-S) defines eleven core IT job occupations. The largest categories include information systems analysts and consultants (175K+ workers in 2013), computer programmers (142K+ workers) and user support technicians (73K+ workers). In the aggregate, more than 679,000 IT workers are employed by businesses across Canada. The Canadian IT jobs market grew by 1.6% in 2013 and 6.4% since 2011.

Overview of the Canadian Information Technology (IT) Market

According to the research consultancy IDC, the global information technology (IT) market reached an estimated $3.6 trillion in 2013. This covers revenue generated from the sale of hardware, software, IT services, and telecommunications (in some countries, referred to as ICT).

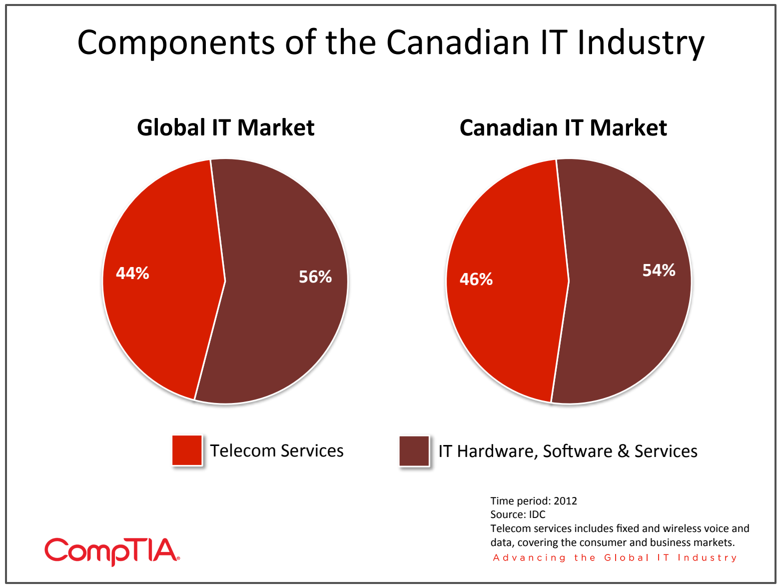
The vast majority of spending stems from IT purchases made by business or enterprises, with a small portion coming from consumer spending. With the increasing blurring of work and personal life, along with the BYOD phenomenon, it is difficult to classify certain types of technology purchases as being solely business or solely consumer.

- The Canadian market represents slightly under 3% of the worldwide total, or approximately $96 billion, according to IDC. The Canadian IT market is about one-tenth the size of the U.S. market.



The IT industry can be segmented into a number of sub-categories. One common break divides the industry into a grouping of hardware, software and services and a grouping of telecommunications, which includes broadband services.

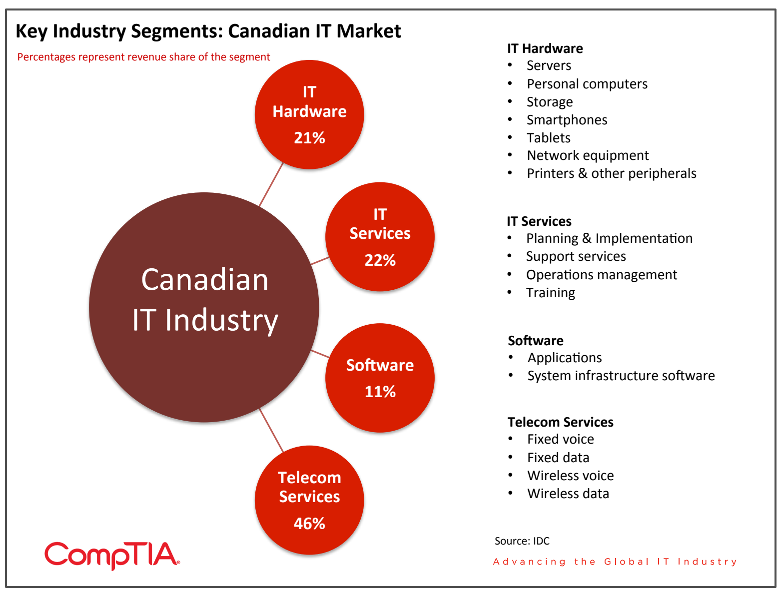
On a global basis, hardware, software and services account for 56% of the industry, with telecom services accounting for the remaining 44%.



The Canadian IT market syncs up pretty closely to the global market.

In most markets, telecom and data services account for a significant portion of the overall IT sector pie. Monthly fees for voice and data services quickly add up.

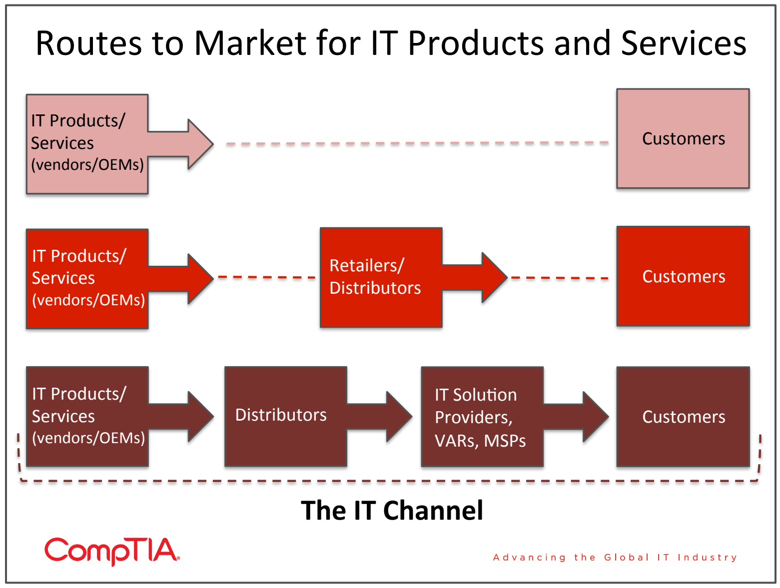
While traditional fixed landline business fades, new mobile devices requiring data subscriptions, as well demand for ever-faster broadband, have been growth drivers for telecom services. Moreover, in many markets, prices for hardware fall relatively faster due to economies of scale and in some cases competition, which affects the revenue-based proportions.



IT segment analysis reveals the Canadian market closely mirrors global averages. The Canadian market over-indexes in the IT services category, while spending slightly less on hardware. This is a common pattern for countries with a more mature services sector, whereby businesses have more options to use managed service providers, cloud service providers and a host of other *[fill in the blank]*-as-a-service providers.

Overview of the Canadian IT Channel

Every industry sector across the economy has a mechanism for connecting customers to products and services. While some producers or manufacturers of goods sell direct to customers, most rely on intermediaries, or indirect channels, that can more efficiently or effectively deliver products and services to customers.



In the information technology sector, this mechanism is referred to as the IT channel. As depicted in the chart to the right, technology vendors or OEMs develop a product, which may then flow through a distributor and/or a value added reseller (VAR) before reaching the customer. See Appendix for examples of the types of companies that can be found in each segment of the IT channel.

Among those outside the IT industry, it is not uncommon to wonder why vendors do not simply sell directly to customers? In some cases, vendors do sell directly to customers. A small software vendor may sell direct to customers via the software-as-a-service model. Or, a hardware vendor may sell a large order of servers for a datacenter directly to an enterprise level customer.

In many cases, though, vendors see value in working through their channel partners. Estimates suggest about 75% of IT products flow through or is influenced by the channel. The primary benefits of the channel model include:

Implementation – many IT products require set-up, integration, testing and in some cases, custom development. Even for sophisticated customers, this can be a challenging endeavor. By relying on channel partners, such as solution providers, for implementation, vendors can focus on innovation and design. This is especially critical for small customers (think a small law firm) that need IT expertise, but do not have the scale to be able to work with a large IT vendor.

Support/Maintenance – customers expect a lot from their IT investments. They demand maximum uptime, ease of use and security safeguards. Even with advances in remote monitoring and support, a technical problem may require a visit to a customer's office. The large number of solution providers and MSPs spread across the country are well equipped to meet customers' need for local service.

Specialization – IT has entered the era of specialization. The needs of one customer segment are often quite different from another segment (think healthcare technology vs. manufacturing technology vs. retail technology). Because vendors cannot be experts in every sector, solution providers fulfill this need. Channel partners are often well positioned to develop deep expertise of a sector's operations, regulations and challenges, resulting in technology solutions optimized to meet customers' needs.

Sizing the Canadian IT Sector and Channel

Size estimates of the number of companies in the IT industry and the channel vary. Much of the variance can be attributed to challenges in accurately quantifying the large numbers of single-person firms.

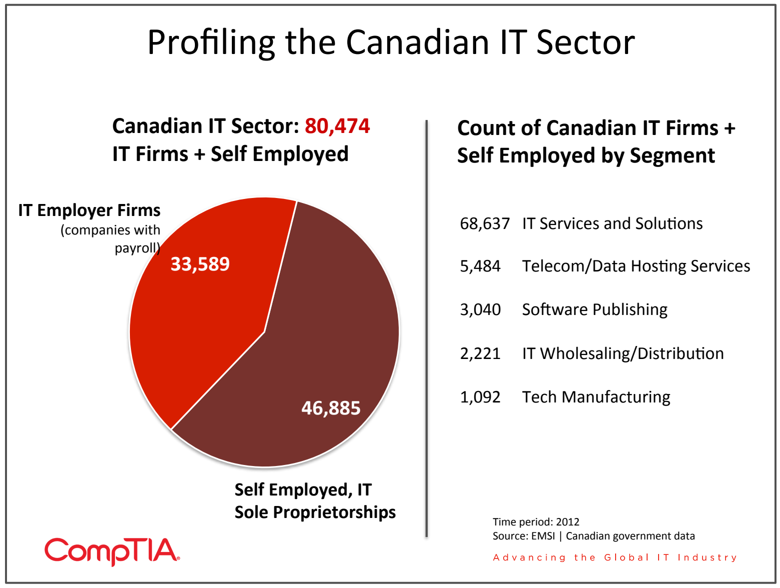
Distribution of IT firms by size follows the classic pyramid pattern with an enormous pool of small firms at the base and a few very large firms at the point. In the aggregate, about 99% of Canadian IT firms can be classified as small and medium-size businesses using the traditional threshold of 500 employees to designate a small business.

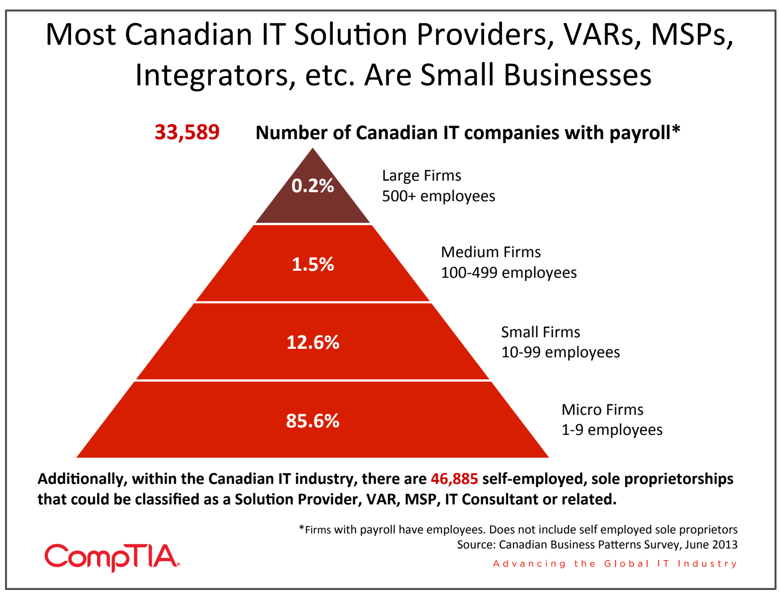
The very smallest, those without employees or payroll (non-employer firms), may be individuals acting as sole proprietors providing IT consulting services, web design, mobile app development, or technical support services. Some individuals engage in business on a part-time basis or on the side, further complicating the sizing process.

15,400 Approximate number of firms that could be classified as part of the Canadian IT channel

Note: this includes employer firms only – it does not include self employed sole proprietors. Additionally, the estimate above attempts to exclude custom software developers. While it is not a perfectly precise measure of solution providers, VARs, MSPs, integrators and related, it provides a good starting point for understanding the size of the Canadian IT channel.

Assuming the Canadian IT sector relies on the channel at the same rate as the U.S. IT sector, that translates to nearly $40 billion flowing through or influenced by Canadian channel partners.





Overview of the Canadian IT Workforce

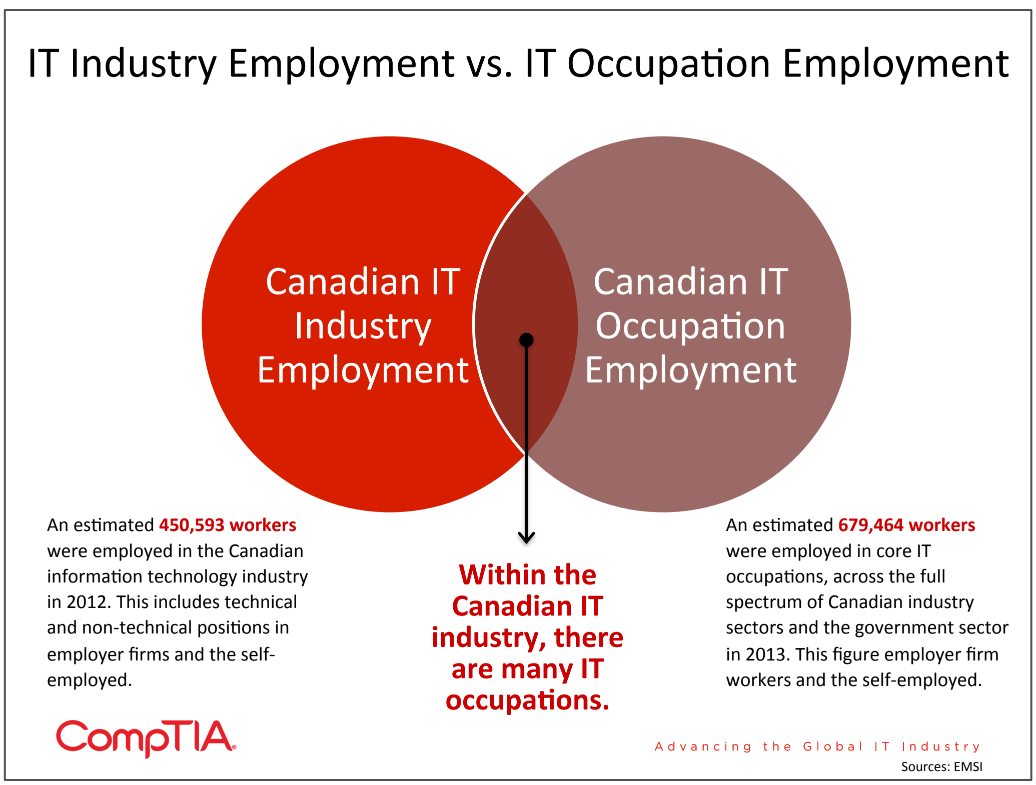
There are two distinct elements of the IT workforce: 1) Employment within IT companies, and 2) IT occupations.

IT Occupation Employment

- Includes technical occupations, such as software developers, network engineers, technical support specialists, etc. working in a range of industry verticals, such as healthcare, education, services, natural resources and others.
- In addition to core IT occupations, positions on the periphery, such as project managers or technical skills, are often referred to as knowledge workers.

IT Industry Employment

- Includes technical occupations, such as software developers, network engineers, technical support specialists, etc.
- Includes non-technical professions, such as sales, marketing, HR, finance, operations and general management that support and facilitate the operation of IT companies with paid employees. Note: a secondary segment of employment exists in this categories, which includes self-employed sole proprietors, such as mobile app developer working for himself or herself.



The *IT Occupation Employment* segment of the Canadian workforce employed approximately 679,462 workers as of year-end 2013. This translates to 1.6% annual growth and 6.4% growth since 2011.

IT Occupations in Canada with the Highest Growth Rates (2011-2013)

25%	Computer network technicians
23%	Software engineers and designers
17%	Telecommunications installation and repair workers
15%	Computer engineers
10%	Computer and information systems managers

IT occupation employment spans every industry vertical. For example, the IT department within a hospital will employ a range of senior, mid-level and staff level IT staff to ensure physicians, nurses and administrators have reliable access to computers, networks, applications and so on.

In addition to core IT positions, there are many technology-intense occupations on the periphery. For example, occupations such as IT project management, health information technicians, audio/video technicians, technical sales, technical writers, computer operators and IT training positions, all require significant expertise and experience with aspects of technology. While these positions are not typically found in an 'IT Department' they are an important component of the Canadian IT workforce.

Number of Canadian Workers in Core IT Positions

NOC-S Code**	Job description	2011 Count of Workers*	2012 Count of Workers*	2013 Count of Workers*
A122	Computer and information systems managers	49,156	53,384	53,858
C047	Computer engineers (except software engineers)	19,297	21,665	22,116
C070	Computer and information systems professionals NET	404,016	416,460	423,274
C071	Information systems analysts and consultants	165,985	172,553	175,743
C072	Database analysts and data administrators	27,548	26,611	27,522
C073	Software engineers and designers	36,956	44,351	45,403
C074	Computer programmers and interactive media developers	142,659	140,949	142,081
C075	Web designers and developers	30,867	31,994	32,527
C18	Technical occupations in computer & information systems NET	140,336	147,227	149,720
C181	Computer network technicians	51,662	63,013	64,477
C182	User support technicians	77,486	72,530	73,368
15-1131	Systems testing technicians	11,188	11,683	11,875
H216	Telecommunications installation and repair workers	26,062	29,701	30,494
	TOTAL EMPLOYMENT	**638,867**	**668,437**	**679,462**

*Includes workers employed by companies + self-employed workers | red font signifies a subset of header category

**Canada's National Occupational Classification for Statistics (NOC-S)

Source: EMSI / Canadian government statistics

Advancing the Global IT Industry

While the overall unemployment rate in Canada slightly increased to 7.2% in December 2013, wage gains held steady at 2.4% and experts expect the pace of hiring to pick up. As previously noted, double-digit growth is projected for many IT occupations.

Furthermore, there were 18,472 IT job postings for the same month, a 5% increase since December 2012 according to job openings analysis from Indeed. (Note: this figure includes periphery jobs such as graphic designers.).

Top Five Core IT Job Opening Postings in Canada:

- Software developer
- Technical support specialist
- Network administrator
- Data analysts
- System administrator

IT Occupations* by Canadian Province

Province	2011 Jobs	2012 Jobs	2013 Jobs
Ontario	297,149	310,370	314,831
Quebec	156,075	165,374	168,735
British Columbia	66,448	73,795	75,393
Alberta	58,239	61,259	62,242
Manitoba	15,058	15,091	15,215
Nova Scotia	13,430	12,245	12,359
Saskatchewan	9,900	11,085	11,237
New Brunswick	10,123	10,935	11,020
Newfoundland, Labrador	4,327	4,910	5,004
Prince Edward Island	2,217	2,340	2,387
Yukon Territory	468	520	526
Northwest Territories	480	434	436
Nunavut	122	79	79
TOTAL	**634,036**	**668,437**	**679,464**

*Includes workers employed by companies + self-employed workers
Covers core IT occupations outlined in previous chart

Source: EMSI

Advancing the Global IT Industry

Appendix

Key Summary Points: Canada

Key Stats for Canada	
$41,500	GDP per capita (PPP) | world rank: 24th
1.7%	GDP growth forecast for 2013 (IMF)
58%	% of Canadian executives expecting 2013 business conditions to be better than 2012
18.8m	Total workforce
76%	% of workforce employed in the services sector
679K	Estimate of IT workforce* in core IT occupations
35%	% of Canadian executives expecting to increase IT staff headcount at their business in 2013
26.96m	Internet users | world rank: 16th
27.38m	Mobile phone users | world rank: 37th
80%	NET % of Canadian executives indicating IT is important to the success of their business
4.6%	Planned increase in IT spending in 2013 (YOY)

Sources used for above stats: CompTIA, IMF, CIA World Factbook, IDC

Key Strategic Priorities for Canadian Businesses:

1. Reduce costs/overhead
2. Reach new customers
3. Improve staff productivity/capabilities

*See appendix for definition of core IT occupations

Key IT Priorities for Canadian Businesses:

1. IT security
2. Web/online presence/e-commerce
3. Updating aging computers/software
4. Data storage/back-up
5. Mobility related initiatives

Cybersecurity:

59% of Canadian executives believe the cybersecurity threat level is increasing. Additionally, 38% of Canadian executives believe human error is a growing factor in security security incidents: Top human error related factors include:

1. Increased use of social media by staff
2. Failure of end-users to follow security procedures and policies

IT Skills Gaps:

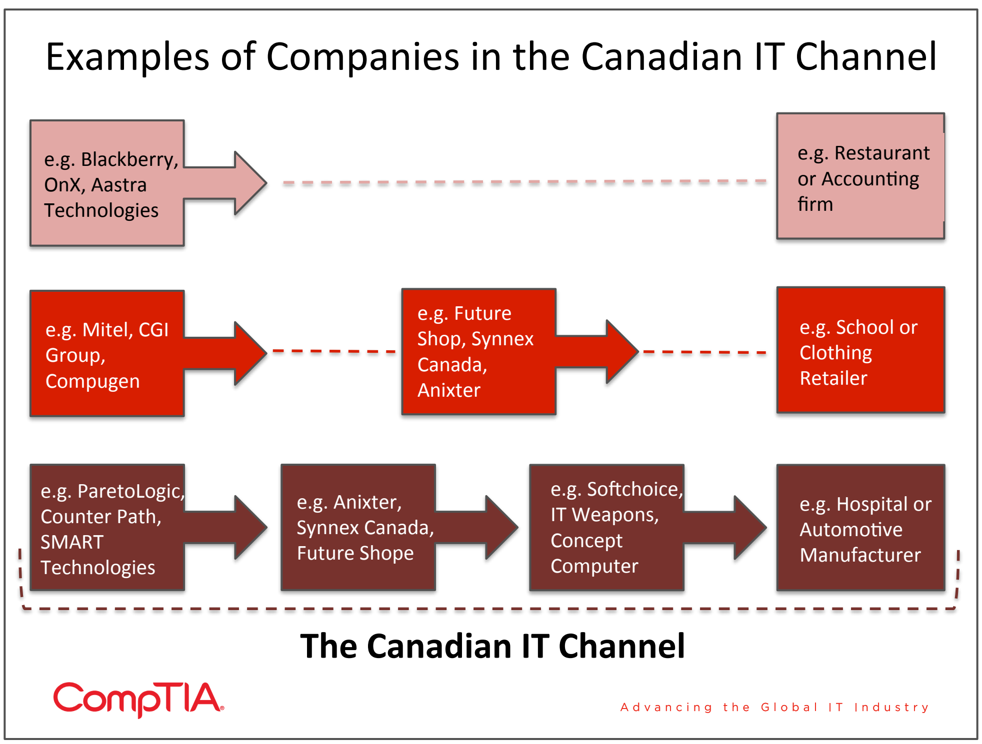
90% of Canadian executives indicate at least some degree of gaps in IT skills at their business exists. For 39%, the reported skills gaps are small, while for 50% the gaps are more extensive. Top negative effects of IT skills gaps at Canadian businesses:

1. Lower staff productivity
2. Poor customer service

IT Training and Certification:

90% of IT staff at Canadian businesses engaged in some type of IT training during the past 12 months.

1. 60% of Canadian executives believe IT certifications will increase in importance over the next two years; 36% believe IT certifications' importance will remain constant
2. 73% of Canadian executives believe it's important to test after training to confirm knowledge gains



For the top 250 ICT companies in Canada, see list from the consultancy Branham Group Inc. http://www.branham300.com/