



Canadian ICT Sector Profile

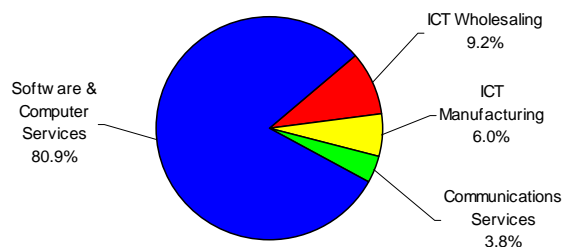
The ICT Sector consists mainly of small companies...

- About 33,500 companies comprise the Information and Communications Technologies (ICT) sector, of which 80.9% are in the software and computer services industries and 9.2% in the wholesaling industries.
- The number of large companies in the Canadian ICT sector is relatively small; in 2011, there were about 100 companies with more than 500 employees. Comparatively, there were over 27,900 companies with less than 10 employees, accounting for 83% of all the companies in the sector.
- Among the three sub-sectors, manufacturing stands out as the one with larger companies. In 2011, 14.5% of the manufacturing companies had more than 50 employees while for the whole ICT sector, this share was only 3.7%.

...and generates \$168[†] billion in revenues.

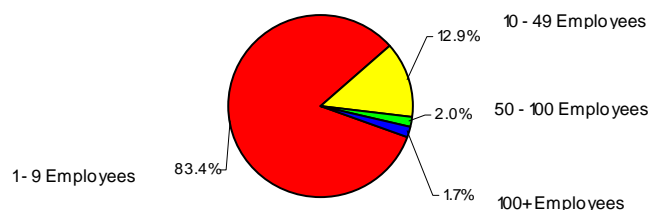
- Revenues in the ICT sector increased 5.1% in 2011, the second consecutive increase following a slight decline in 2009. The 2011 growth was driven by the services industries which grew by 5.7% and accounted for 66% of the sector's growth. This growth was led by the software and computer services industries (7.4%). The wholesaling industries accounted for 27% of the sector's growth while the manufacturing industries accounted for only 7%. The manufacturing industries grew by 2.6% in 2011, after three consecutive years of decline.
- ICT sector revenues increased from \$129 to \$168 billion between 2002 and 2011, a 30% increase. Depicted at right is a clear shift from manufacturing industries towards services industries (as a share of the sector). Since 2002, manufacturing revenues have declined by 17%, while services revenues grew by 58%.

Companies by ICT Sub-sector, 2011



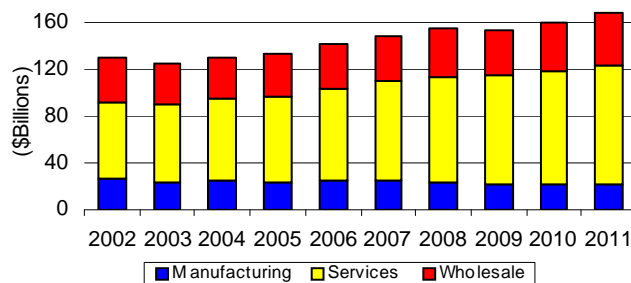
Source: Industry Canada, Canadian ICT Statistical Overview

Companies by Employee Size for Total ICT Sector, 2011



Source: Industry Canada, Canadian ICT Statistical Overview

ICT Sub-sector Revenues, 2002-2011



Source: Industry Canada, Canadian ICT Statistical Overview

Information and Communications Technologies Sector*

ICT Manufacturing:

- Computer and Peripheral Equipment Mfg
- Communications Equipment Mfg (including wired and wireless)
- Electronic Component Mfg
- Audio and Video Equipment Mfg
- Instruments Mfg
- Communication Wire and Cable Mfg
- Commercial Industry Machinery Mfg

ICT Services:

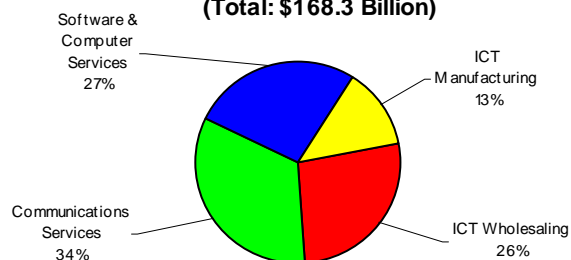
- Software and Computer Services (software publishers, computer systems design, and data processing)
- Communications Services (telecommunications services, ISPs, Cable and Other Program Distribution)

ICT Wholesaling

*Based on the North American Industry Classification System (NAICS).

† 2010 totals and growth rates are based on estimates calculated by Industry Canada

Revenues by ICT Sub-sector, 2011
(Total: \$168.3 Billion)



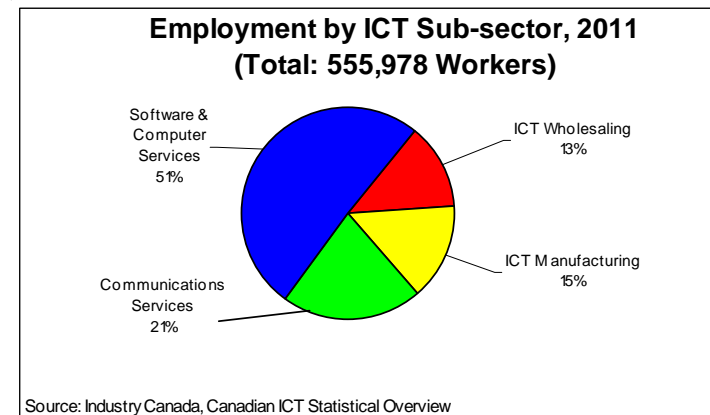
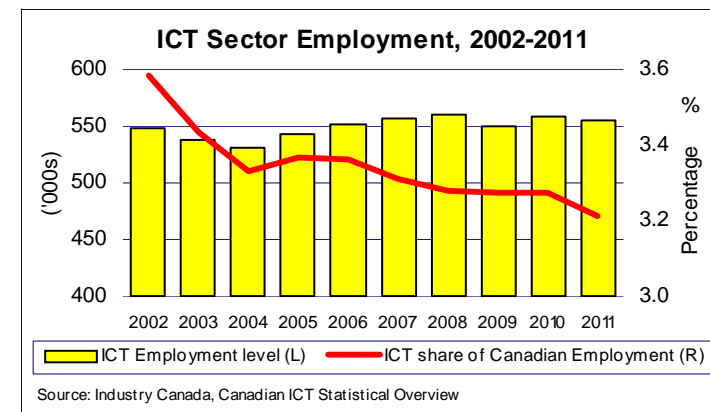
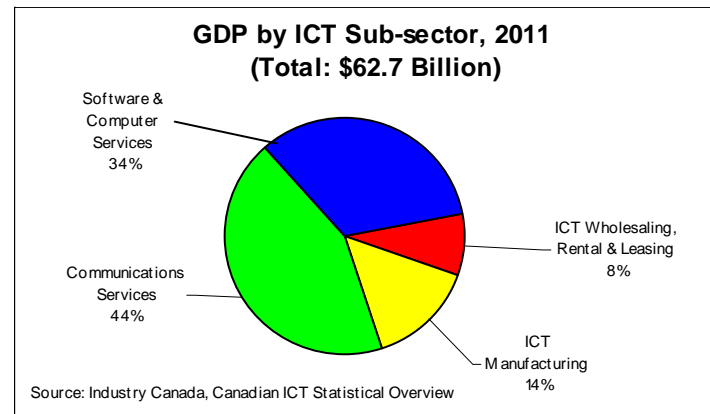
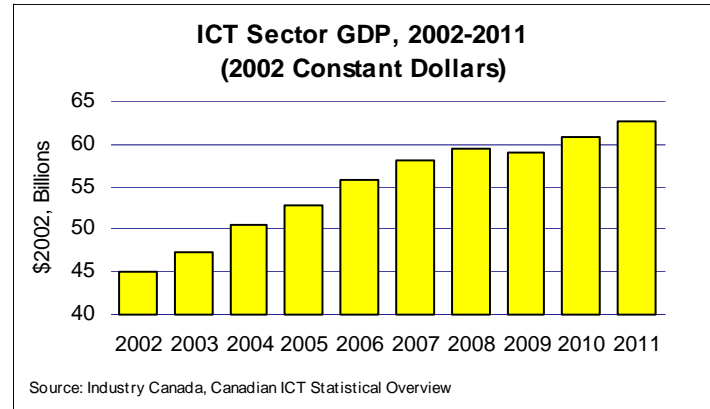
Source: Industry Canada, Canadian ICT Statistical Overview

The ICT Sector makes a substantial contribution to the Canadian GDP...

- The ICT sector contributed \$62.7 billion to Canadian GDP (in 2002 constant dollars) in 2011.
- The ICT sector outgrew the overall economy in 2011. The sector increased by 3.1% from 2010 compared to a 2.6% increase for the total Canadian economy. On average, annual growth in this sector has been 3.8% since 2002, which is two times higher than that of the overall economy (1.9%). This faster growth also means that the ICT industries have accounted for 8.9% of the Canadian GDP growth since 2002.
- The ICT wholesaling industries GDP had the highest growth in 2011, up 10.9% from 2010. The manufacturing industries also had strong growth (5.6%) in GDP in 2011 led by the electronic components industry. GDP in the services industries increased by 1.9% in 2011, one percentage point higher than in 2010. This growth was led by the software and computer systems design industries. Since 2002, the services industries have driven the ICT sector by generating 70% of the growth.

...and is a major source of jobs.

- The ICT sector accounts for 3.2% of total employment. However, employment in the ICT sector decreased 0.4% in 2011, amounting to 555,978.
- Employment decreased in all ICT sub-sectors in 2011. Employment in the wholesaling, manufacturing, and services industries dropped 1.1%, 0.4%, and 0.3%, respectively. Employment declined the most in software and computer services industries, down about 2,500 jobs which is more than the overall decline of 2,300 jobs in the entire ICT sector.
- Reflecting structural changes that are happening in the ICT sector, the share of the manufacturing industries in total ICT sector employment has declined from 18.4% in 2002 to 14.6% in 2011, while the share of the services industries has increased from 67.8% to 72.5% over the same period of time.





ICT industries are the largest performers of private sector R&D...

- ICT sector R&D expenditures totalled \$5.3 billion in 2011. After falling for three years in a row from 2008 to 2010, ICT sector R&D increased by 7.0% in 2011. R&D spending increased in all three sub-sectors; wholesaling (9.5%), manufacturing (8.6%), and services (4.7%). The ICT sector continues to be the largest performer of R&D, accounting for 34.1% of all private sector R&D expenditures in Canada.
- At the industry level, the data processing (24.1%), communications equipment (21.0%), and communications services (11.2%) industries posted the largest increases in 2011, while the instruments industry (-9.5%) recorded the largest decrease.
- Since 2002, R&D spending in the ICT industries has not changed significantly, increasing by only 1.2%. While spending has increased in both the wholesaling (261%) and services (37%) industries, it has decreased in the manufacturing industries (-27%).

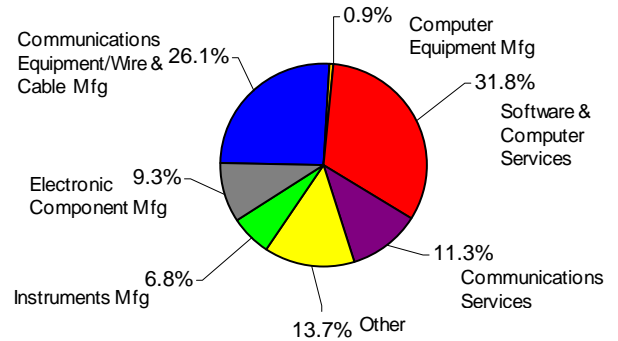
...and have a knowledge-intensive workforce...

- ICT sector employment is characterized by a highly educated workforce. In fact, 45.8% of workers had a university degree in 2011, compared to a national average of 26.0%.
- The top three industries that employ the largest share of university educated personnel are computer equipment manufacturing (64.7%), software and computer services (53.8%), and communications equipment manufacturing (51.6%).

...that earns above-average wages.

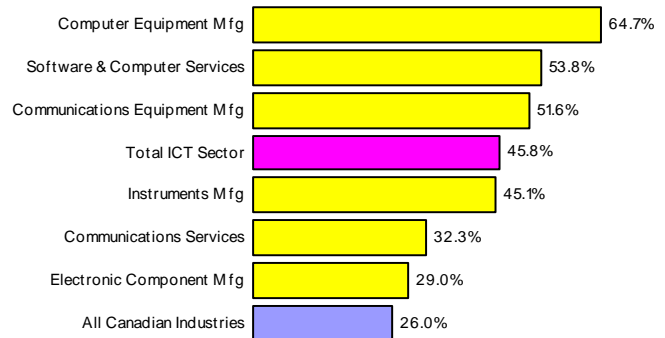
- Employees in the ICT sector are also well compensated. These workers earned on average \$67,911 in 2011, or 49% more than the economy-wide average of \$45,488.
- The highest earners in the sector work in the software and computer services industries. Average earnings in these industries were \$72,653 in 2011. Despite being the lowest paid workers (\$48,889) in the ICT sector, employees in the electronic components industry still earned 7% more than the national average in 2011.

R&D Expenditures by ICT Industry, 2011 (Total: \$5.3 Billion)



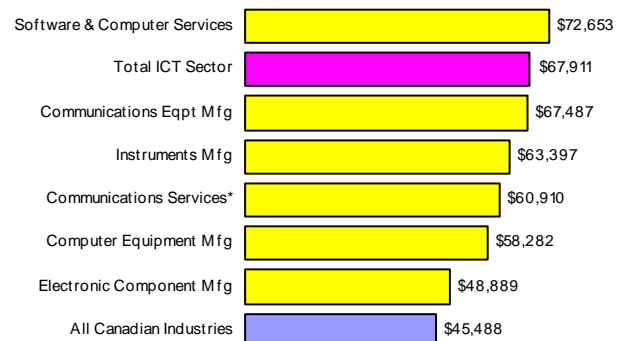
Source: Industry Canada, Canadian ICT Statistical Overview

Percentage of Workers with a University Degree by Major ICT Industry, 2011



Source: Statistics Canada, Labour Force Survey (LFS)

Average Annual Earnings by Major ICT Industry, 2011



* Including Cable and Other Program Distribution
Source: Statistics Canada, Survey of Employment,

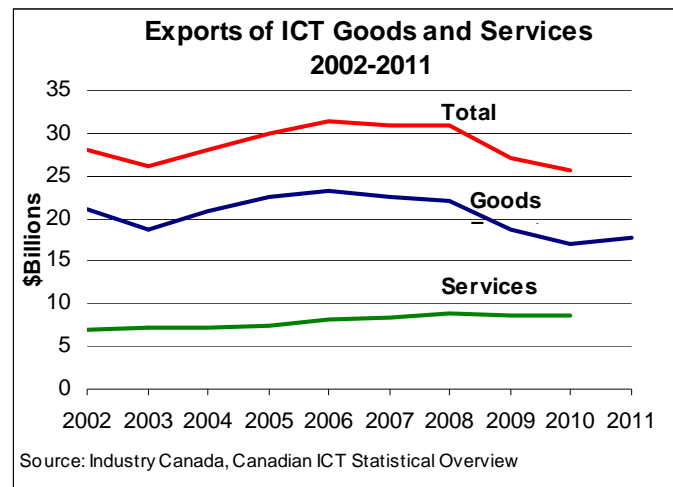
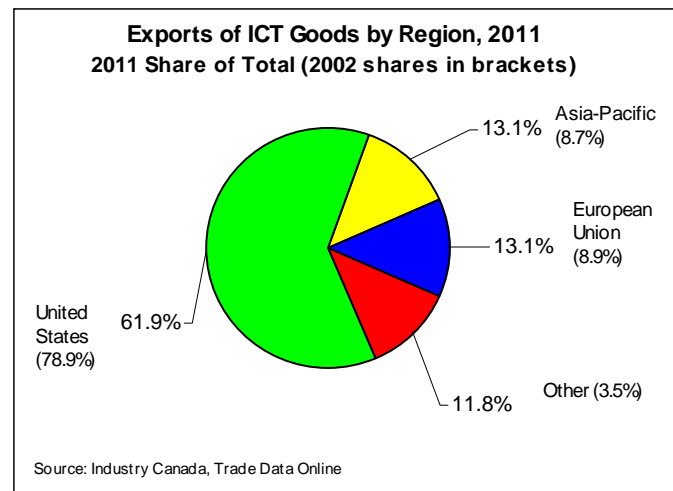
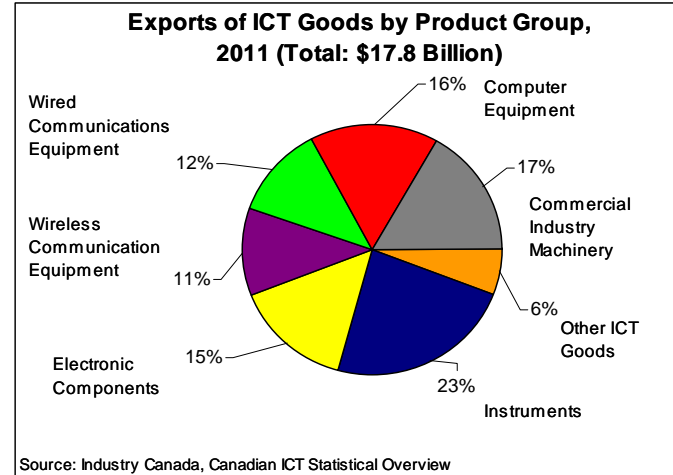


ICT manufacturing industries are export-oriented...

- The Canadian ICT manufacturing sub-sector relies on the export market. Almost 59% of ICT products manufactured in Canada were exported in 2011.
- After four years of decline, Canadian exports of ICT goods increased by 4.0% in 2011 to reach \$17.8 billion. Growth in exports of commercial industry machinery (\$383 million), instruments (\$295 million) and electronic components (\$293 million) contributed the most to this increase.
- Exports of ICT goods dropped by 15.4% between 2002 and 2011. Since 2002, exports of wired communications equipment (-49.8%) fell the most while exports of instruments (31.3%) increased the most. Over this period, the share of wired communications equipment in total ICT goods exports dropped from 20.3% to 12.0%, while the share of instruments increased from 15.0% to 23.2%.
- Exports of ICT goods to the United States increased by 1.5% in 2011 to reach \$11.0 billion, accounting for 61.9% of Canadian ICT goods exports. Shipments to the US have dropped since 2002, where it represented 78.9% of Canadian ICT goods exports, and accounted for \$16.6 billion. Shipments to the Asia-Pacific region increased 12.7% in the same period, totalling \$2.3 billion or 13.1% of Canada's ICT goods exports in 2011. Since 2002, the share of shipments to the Asia-Pacific has increased by 4.4 percentage points. Exports to the European Union increased by 8.0% in 2011 to a total of \$2.3 billion or 13.1% of Canada's ICT exports. Since 2002, its share has increased by 4.2 percentage points.

...while ICT services industries are more domestically oriented

- Although exports represented only 9% of total revenues in the ICT services sub-sector in 2010, exports of ICT services have been trending up, growing by 23.2% from 2002 to 2010. However, the increase in exports of ICT services during the 2002-2010 period was not large enough to offset the decline in exports of ICT goods. Total ICT goods and services exports decreased by 8.2% during that same period.



Note to Readers: Some data reported in this article may be slightly different from data reported in previous publications as they include the latest revisions made by Statistics Canada to data previously published.