Foreword

I am pleased to share with you the most recent ICT Labour Force Annual Report. This report shows that despite a challenging global economic environment, the information and communications technology sector in Canada remains resilient in its ability to create jobs and economic growth. A sector that now spans across multiple facets of our daily lives including work, business, learning, leisure and health.

In the next 5 years, emerging technologies and related services will dominate the economic landscape. We estimate that by 2016 approximately 106,000 ICT jobs will be created in Canada with a demand that far exceeds the supply, in both traditional and emerging ICT industries.

Our Annual Report points to a jobless rate of 3.0% in the ICT sector in 2011; significantly lower than the overall Canadian jobless rate of 7.5%. The ICT sector contributed $61.33 billion to Canadian GDP in 2011, accounting for 4.8% of Canadian output. The ICT sector’s contribution to Canadian GDP was $59.56 billion in 2010.

Our ability to prepare tomorrow’s workforce and nurture innovative talent will be vital in ensuring Canada’s competitive advantage in an increasingly global, connected and fast paced environment. Canada needs to encourage and enable all potential human capital resources to partake in ICT, including youth, women, Aboriginal Peoples, and global talent. It will also be critical that we close the gap between industry needs and academia by preparing graduates for the new business paradigm and accelerate their deployment in industry.

We are in an era of tremendous change, where consumer expectations and technologies are rapidly influencing all ICT segments. Having the right talent with the right skills will be critical for Canadian businesses to compete in the global economy.

I encourage you to read through the annual report and trust that the findings will contribute and enhance on-going efforts to develop effective policy measures for the ICT sector. I look forward to engaging you in further dialogue and in exploring the necessary catalysts to empower the ICT skills and innovative talent in the digital economy.

Sincerely,

Namir Anani // President and CEO
Information and Communications Technology Council (ICTC)
Acknowledgement

We thank all of those involved directly or indirectly in contributing to our efforts, while acknowledging sole responsibility for errors of commission and omission. The data and information sources for this report include the most up-to-date customized Labour Force Survey data as well as primary data collected through a cross-section of vehicles including surveys, interviews, Focus Group Discussions, and the social media. Primary research is conducted utilizing ICTC’s extensive network of contacts, built up over many years of work in the sector. Participants hail from Businesses (both large and SMEs), Industry associations, Government programs, NGOs (research and supportive), and Academia. Gratitude is also expressed to national and provincial stakeholders who use our analyses in their decision making processes. Thank you.

This report presents a timely review of the ICT labour market in Canada and showcases that emerging ICT and related services will dominate the economic landscape in the coming years. Marrying the right talent with the right opportunity is, and will be, critical for Canada to compete in the global marketplace.

ICTC’s Annual Report continues to demonstrate its value as a lens for critical and constructive thinking about some of the most fundamental challenges facing the Canadian ICT sector today, and we are confident that this series will remain as central as ever in key ICT debates.
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Acronyms and Abbreviations

- **BA** » Business Analyst
- **IEP** » Internationally Educated Professional
- **IT** » Information Technology
- **ICT** » Information and Communications Technology
- **ICTC** » Information and Communications Technology Council
- **ISA** » Information Systems Business Analyst
- **LF** » Labour Force
- **LFS** » Labour Force Survey
- **LM** » Labour Market
- **PSE** » Post Secondary Education
Executive Summary

The Annual Report focuses on the labour market scenario of the Canadian ICT sector for 2011, with comparisons to 2010 and 2009, a period when the Canadian as well as the world economy was dealing with the aftermath of the global financial downturn.

A lot has certainly changed since those turbulent times. The ICT sectors’ jobless rate fell from 4.2% in 2009 to 3.0% in 2011, and the sectoral output continued to grow, from $58.06 billion in 2009 to $61.33 billion in 2011, reflecting a growth of 5.6%. In contrast, the Canadian jobless rate was 8.3% in 2009, 8.0% in 2010, and 7.5% in 2011.

The ICT labour force grew the most in the Information and Cultural sector, Finance & Insurance sector, and the Public Administration sector in 2011. This is clear evidence of the continually growing importance and pervasiveness of ICT in all sectors as well as of how the ICT workforce is employed throughout the economy.

Highly skilled occupations such as Web Designers and Developers, Electrical and Electronics Engineers, and Information Systems Business Analysts were in very high demand in 2011, evident by particularly low jobless rates among the labour force in these occupations.

Technician occupations such as Web Technicians, User Support Technicians, and Systems Testing Technicians encountered over supply, resulting in higher jobless rates.

Digital Media occupations such as Graphic Designers and Illustrators and Interactive Media Developers experienced the highest numbers of job gains, while occupations such as Information Systems Quality Assurance Analysts, Web Designers and Developers, and Systems Security Analysts enjoyed the highest employment growths.

Ontario continues to lead the provincial share of the ICT labour force and employment in Canada with 48%. All provinces and regions are facing different challenges when it comes to matching the needs of the regional economy with available talents. Many occupations are flourishing in one province/region, while facing declines in another.

Improving workforce diversity and a healthy mixture of youth and experience are benchmarks that the ICT sector needs to achieve sooner rather than later. In 2001, 23,000 ICT workers in Canada were 55 years of age and above, representing 4% of the total ICT workforce. In 2011, workers in this age group almost tripled, to 60,000 ICT workers, 9% of the total ICT workforce.

Wages of ICT workers in Canada are increasing, having witnessed a 3% growth in their returns to skills in 2011 over their earnings in 2010. Average gross income of ICT workers in 2011 was $1,216 per week, translating to $63,250 per annum. ICTC’s exhaustive consultation with ICT stakeholders indicates that many employers are planning to further increase salaries in 2012.

Our ability to prepare tomorrow’s workforce and nurture innovative talent will be vital in ensuring Canada’s competitive advantage in an increasingly global, connected and fast paced environment. Inclusive attraction and retention practices will be essential for organizations competing for talent in the ICT sector.
As talent needs change, findings from this report will help to inform advanced planning for companies positioned to grow in the Digital Economy. An important element of the ICT human resource planning will be creating an enabling environment to attract and retain under-represented workers into the ICT labour force.

The large cohort of baby boomers is currently in the 45 to 64 year age group and played a significant role in the rising age profile of the labour force. The last of the baby boomers will retire from the workforce in 2030.

For the ICT sector, the aging workforce is a long term issue and will require early consideration to pre-empt future challenges. Today’s youth or “millennials” will play a key role in the sector as baby boomers retire. As this new generation of workers enter the workforce, organizations have to consider and adjust current workplace practices.

Addressing the issues of the aging workforce is a long term issue and requires long term consideration and ongoing review. One aspect of the resulting programs and efforts will have to be accommodating the needs of young workers that are entering the workforce.

ICT has transformed the global economy into a knowledge-based digital economy. It underlines the new reality that while digital literacy and technical know-how is critical to be successful in the ICT space for professionals and their employers, not combining these skills with business and interpersonal skills will seldom produce sterling results.

Canada faces challenges and opportunities in ICT that are quite unprecedented in recent history. Following from being an early leader in the global digital economy, Canada now finds itself on the bottom rung in productivity and innovation among OECD countries. Overcoming the challenges and seizing the opportunities will depend on Canadian companies’ ability to focus on specializing in knowledge-intensive, high-value-added goods and services to remain competitive.

Investing in innovation, education, and training as well as promoting digital skills training for employees and new hires across industries feature prominently in Canada’s Digital Economy Strategy, since skilled workers are the greatest assets of their respective companies, which need to invest in the tools that help ensure success.

Canada is well positioned to fully leverage the digital economy, a catalyst for innovation, jobs and economic growth. Empowering tomorrow’s ICT workforce is vital for Canada’s competitiveness in a global economy. A measured and prioritized digital strategy in key sectors of the economy is essential to propel Canada onto the world stage.

At this unique time Canada needs leadership and as the only national organization in Canada for labour market intelligence as well as development of occupational standards and talent programs for the digital economy, ICTC is in an excellent position to contribute.

As a centre of expertise in ICT workforce solutions, ICTC enables industries to maintain a competitive advantage in a global market, and develop Canada’s future skilled and innovative talent. The findings of this report will help ICTC — in collaboration with its government and industry partners — perfect its on-going efforts as well as introduce new initiatives for improved recruitment, integration, and retention in the ICT sector in Canada.
Introduction

This is the tenth report in a series prepared by ICTC – Canada’s leading authority in ICT human resource trends and issues – that analyses Labour Force Survey data for ICT occupations. The current report, referred to as the 2011 Annual Report, focuses on the labour market scenario of the ICT sector in 2011, with comparisons to that of 2010 and 2009, a period when the Canadian as well as the global economy was dealing with the aftermath of the global financial downturn.

A lot has certainly changed since the financial turmoil that the ICT sector had to navigate through. The jobless rate fell from 4.2% in 2009 to 3.0% in 2011, the sector output continued to grow, from $58.06 billion in 2009 to $61.33 billion in 2011, reflecting a growth of 5.6%.

A fitting evidence of continually growing importance of ICT in all sectors — as well as how the ICT workforce is employed throughout the economy — is that compared to 2010, the ICT labour force grew the most in the Information and Cultural sector, Finance & Insurance sector, and the Public Administration sector in 2011.

The report begins with an overview of the Canadian economy and the ICT sector’s contribution to total Canadian output. It then provides comparison between the ICT sector and the overall Canadian economy, in terms of labour force, employment, and the jobless rate. A detailed analysis of ICT occupations that are currently in demand, occupations that are facing high jobless rate, occupations that are creating the most number of jobs for ICT workers, occupations in which jobs are being lost the most, the occupations that are witnessing the highest employment growths, and the occupations that are facing the highest employment declines is provided in the following section. The next section discusses industrial sectors where the ICT labour force is growing the most and sectors where it is declining the most. A detailed provincial/regional perspective is provided in the following section. The report then provides demographic analysis including workforce diversity, age composition, and educational attainment of the ICT workers. The following section discusses the hours of work of the ICT workers as well as their returns to skills or earnings. In a final section of the report, findings are summarized and conclusions drawn with a brief discussion on the way forward.

1 For previous editions of reports in this series, please visit http://www.ictc-ctic.ca/Labour_Market_Intelligence/Trends/Annual/Reports/
Canada fared comparatively well during the global financial turmoil that had engulfed the world in the recent past, mainly due to the inherent strength of its economy. Canadian Gross Domestic Product (GDP) was $1,266 billion (in 2002 chained\(^2\) dollars) in 2011, increasing from $1,193 billion in 2009 following the financial meltdown.

The ICT sector contributed $61.33 billion to Canadian GDP in 2011, accounting for nearly 5% of Canadian output. The ICT sector’s contribution to Canadian GDP was $59.56 billion in 2010 and $58.06 billion in 2009.

**Figure 1: Canadian and the ICT Sector GDP, 2009-2011 (in million dollars)**

In 2011, the ICT sector was a key driver of national growth with a 3% sectoral GDP growth over 2010, following on from a 2.6% sectoral GDP growth in 2010 over 2009. On average, annual growth of the ICT sector has been over 4% since 2001, almost twice as fast as the overall economy’s growth rate of over 2% in this period. This accelerated growth also means that the ICT industries have accounted for over 8% of the Canadian GDP growth since 2001.

2 Real dollar amounts adjusted for inflation.
Employment and Jobless Rate

Of the 667,000 workers in the ICT labour force in 2011, 647,000 were employed and the remaining 20,000 were unemployed, the lowest number of unemployed workers since the height of the financial crisis in 2008. Consequently, the jobless rate in 2011, at 3.0%, was the lowest in three years, plummeting from 4.2% in 2009 and 3.4% in 2010. The jobless rate rose sharply in 2009 as a result of the financial downturn in 2008.

Figure 2: ICT Labour Force, Employed, and Jobless Rate, 2011

Source: Statistics Canada, ICTC
The jobless rate in the overall Canadian economy was 8.3% in 2009 and continued to decrease to 8.0% in 2010 and to 7.5% in 2011. A drop of 0.8 percentage points in two years — from 8.3% in 2009 to 7.5% in 2011 — reflects a 10% reduction in the jobless rate in Canada.³

In contrast, the jobless rate in the ICT sector was 4.2% in 2009 and dropped to 3.4% in 2010 and to 3.0% in 2011. A drop of 1.2 percentage points in two years — from 4.2% in 2009 to 3.0% in 2011 — reflects a 29% reduction in the jobless rate in the ICT sector.

This is further evidence that the ICT sector has played, and continues to play, a major role in the turnaround of the Canadian economy.

³ A reduction in the jobless rate is a good thing.
High Demand Occupations

The following occupations were in very high demand in 2011, evident by particularly low jobless rates among the labour force involved in these occupations:

» Web Designers and Developers (jobless rate 0%);
» Electrical and Electronics Engineers (jobless rate 1.0%); and
» Information Systems Business Analysts (jobless rate 1.6%).

Over Supply Occupations

There was an evident over supply in the following ICT occupations, mostly Technician positions, resulting in higher jobless rate among workers:

» Web Technicians (jobless rate 6.7%);
» User Support Technicians (jobless rate 6.3%); and
» Systems Testing Technicians (jobless rate 6.1%).

Job Gains

A significant number of new jobs was created for:

» Graphic Designers and Illustrators (+7,300);
» Interactive Media Developers (+7,100); and
» Software Engineers (+5,600).

Employment Growth

Highest employment growth was enjoyed by:

» Information Systems Quality Assurance Analysts (+208%);
» Web Designers and Developers (+85%); and
» Systems Security Analysts (+54%).

4 Comparison between 2011 average and the average in 2010
Job Losses

A significant number of jobs were lost among:

- Information Systems Business Analysts (-19,500);

Information Systems Business Analysts (ISAs) was one of the high demand occupations in 2011, with one of the lowest jobless rates (1.6%) among all ICT occupational groups. At the same time, nearly 20,000 less workers were employed in this occupation in 2011, compared to 2010.

A decline in the number of people searching for work in this occupation pushed the jobless rate down. Or in other words, reduction in the labour force outpaced the reduction in employed workers. Workers involved in a high demand occupation, one in which the jobless rate is particularly low, do not suddenly change their occupation. A more likely explanation is that the definition of ICT occupations are continually expanding and many ISAs who identified themselves with this occupation previously are no longer doing so and instead are identifying themselves with other ICT occupations. This may occur when newly defined ICT occupations are gaining prominence in the sector but have not yet been quantified in sufficient numbers to be included in the LFS. Another detail to note is that ISAs category is not entirely representative of the broad range of job titles/occupations that people work in with the same set of skills required by the ISAs. Nevertheless, these large changes certainly warrant further analysis. ICTC will closely monitor the developments in this occupation from a labour market perspective.

Furthermore, ICTC is currently undertaking a qualitative Business Analyst (BA) Study to better understand BAs and the value they bring to Canadian companies. As the labour market landscape for the BAs keep evolving, ICTC's BA study will provide highlights and insights with regard to the broader domain of business analysts. (Read more...)

Other occupational groups that lost a significant number of jobs were:

- Computer Programmers (-14,300); and
- Computer and Information System Managers (-8,000)

Employment Decline

Highest employment decline was suffered by:

- Database Administration Analysts (-24%);
- E-Commerce Managers (-23%); and
- Web Technicians (-23%).
Sectoral Growth

Only in three industrial sectors did the ICT labour force grow in 2011 compared to 2010. Annual labour force growth was witnessed in the following sectors:

» Information and Cultural (+6,700 or +11%);
» Finance & Insurance (+4,800 or +10%); and
» Public Administration (+100 or +0.2%);

Figure 4: ICT Labour Force Growth by Sector, 2010-2011

Emergence of ICT in the financial services has changed the landscape of ICT employment in this sector. As a thought leader in ICT human resource trends and issues, ICTC has launched a new study to understand Canada’s ICT human resource needs within the Finance sector. (Read more...)
## Sectoral Decline

ICT Labour force decline was observed in these sectors:

- Utilities (-1,800 or -12%);
- Educational Services (-3,200 or -11%); and
- Health Care (-1,600 or -10%).

## Regional / Provincial Report

Ontario was the only province that recorded a growth, albeit a very small growth at 0.3% (+1,000), in its provincial labour force in 2011, while the Prairies (-6,300 or -7%) encountered a large decline. The ICT labour force of Quebec shrank by 4.7% (-7,600), while that of both Atlantic Canada (-800) and British Columbia (-2,000) decreased by 2.7%.

### Figure 5: Annual ICT Labour Force Growth by Province / Region

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<th>Province / Region</th>
<th>Growth Rate</th>
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<tr>
<td>British Columbia</td>
<td>-2.7%</td>
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<tr>
<td>The Prairies</td>
<td>-7.1%</td>
</tr>
<tr>
<td>Ontario</td>
<td>0.3%</td>
</tr>
<tr>
<td>Quebec</td>
<td>-4.7%</td>
</tr>
<tr>
<td>Atlantic Canada</td>
<td>-2.7%</td>
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Source: Statistics Canada, ICTC
Atlantic Canada

Expansion of the Labour Force

In 2011, the following occupations witnessed the highest annual increase in the ICT labour force in Atlantic Canada. These numbers and occupations are in sync with ICTC’s Outlook for Human Resources in the Atlantic Region Labour Market, 2011-2016:

» User Support Technicians (+350);
» Graphic Designers and Illustrators (+300); and
» Software Engineers (+250).

Contraction of the Labour Force

On the other hand, the following occupations witnessed the highest annual decrease in the ICT labour force in Atlantic Canada in 2011:

» Computer Programmers (-900);
» Information Systems Business Analysts (-650); and
» Web Technicians (-600).
Québec

Expansion of the Labour Force

In 2011, the following occupations witnessed the highest annual increase in the ICT labour force in Québec. These numbers and occupations are in sync with ICTC’s Outlook for Human Resources in the Québec ICT Labour Market, 2011-2016:

» Graphic Designers and Illustrators (+5,700);
» Interactive Media Developers (+4,400); and
» Electrical and Electronics Engineers (1,400).

Contraction of the Labour Force

On the other hand, the following occupations witnessed the highest annual decrease in the ICT labour force in Québec in 2011:

» Information Systems Business Analysts (-9,700);
» Computer Programmers (-4,400); and
» Computer and Information System Managers (-3,600).

Ontario

Expansion of the Labour Force

In 2011, the following occupations witnessed the highest annual increase in the ICT labour force in Ontario. These numbers and occupations are in sync with ICTC’s Outlook for Human Resources in the Ontario ICT Labour Market, 2011–2016:

» Graphic Designers and Illustrators (+4,000);
» Computer Network Technicians (+3,200); and
» Database Administrators (+3,100).

Contraction of the Labour Force

On the other hand, the following occupations witnessed the highest annual decrease in the ICT labour force in Ontario in 2011:

» Information Systems Business Analysts (-6,400);
» Computer Programmers (-4,000); and
» Computer and Information System Managers (-3,900).
The Prairies

Expansion of the Labour Force

In 2011, the following occupations witnessed the highest annual increase in the ICT labour force in the Prairies. These numbers and occupations are in sync with ICTC’s *Outlook for Human Resources in the Prairies ICT Labour Market, 2011–2016*:

- Computer Network Technicians (+1,600);
- User Support Technicians (+950); and
- Computer Engineers (+700).

Contraction of the Labour Force

On the other hand, the following occupations witnessed the highest annual decrease in the ICT labour force in the Prairies in 2011:

- Computer Programmers (-5,000);
- Graphic Designers and Illustrators (-2,800); and
- Information Systems Business Analysts (-1,500).

British Columbia

Expansion of the Labour Force

In 2011, the following occupations witnessed the highest annual increase in the ICT labour force in British Columbia. These numbers and occupations are in sync with ICTC’s *Outlook for Human Resources in the British Columbia ICT Labour Market, 2011–2016*:

- Software Engineers (+2,600);
- Information Systems Quality Assurance Analysts (+750); and
- Computer Engineers (+600).

Contraction of the Labour Force

On the other hand, the following occupations witnessed the highest annual decrease in the ICT labour force in British Columbia in 2011:

- Information Systems Business Analysts (-3,600);
- Electrical and Electronics Engineers (-2,400); and
- Interactive Media Developers (-800).
**Workforce Diversity**

161,000 women participated in the ICT labour force in 2011, compared to 169,000 in 2010 and 172,000 in 2009. In contrast, there were 506,000 men in the ICT labour force in 2011, up from 504,000 in 2009, but less than the 514,000 in 2010. For men, these numbers reflect a 2% annual decrease in the ICT labour force in 2011, while for women the growth plummets to -5%.

*Figure 7: ICT Labour Force by Gender, 2009-2011*

This is further evidence that workforce diversity (e.g. women, Internationally Educated Professionals (IEPs), Aboriginal Peoples) needs to be fully utilized to solve the pervasive skills shortages that Canada is facing. Integrating diverse talent into the Canadian ICT sector by developing key programs, resources, and tools has been one of the major stumbling blocks in Canada. As a result, a disproportionately low number of women, IEPs, or members of the Aboriginal community work in the ICT sector in Canada, hindering Canada realize its ICT potential to the fullest.

Developing key programs, resources and tools for women, IEPs, Aboriginals, and employers with the integral support of partners and stakeholders is vital. ICTC fosters partnerships with employers, immigrant serving and community agencies, associations, and governments, allowing our initiatives to help Canadian organizations build and sustain a diverse and inclusive workforce. Easing international talent hiring restrictions, support ICT firm’s investment in training and professional development will help.
Labour force entry and exit of various cohorts of the prime aged workers (between 25 and 54) remained practically unchanged. There were 567,000 workers in this group.

Figure 8: Annual ICT Labour Force Growth by Age Group, 2010-2011

Nevertheless, the Canadian ICT workforce is aging at a rapid pace. In 2001, there were 23,000 ICT workers in Canada that were 55 years of age and above, representing 4% of the total ICT workforce. In 2011, workers in this age group almost tripled, as there were 60,000 ICT workers that were 55 and above, 9% of the total ICT workforce. Even in the near to medium term, this proportion is increasing. There were 51,000 workers in this age group in 2009. This adds further credence to the growing evidence that workers are retiring later and many are returning to the labour force upon retirement as well.

Figure 9: ICT Labour Force by Age Group, 2011
The last of the baby boomers will retire from the workforce in 2030. This is a long term issue and requires long term consideration and ongoing review. One aspect of the resulting programs and efforts will have to be accommodating the needs of young workers that are entering the workforce. This has to be emphasized through increased support for integrating recent graduates into ICT employment, through strengthening the practicum component of ICT and related academic programs, and integrating these programs with other fields of study.

**Education**

Labour force participation by ICT workers with educational attainment less than a Bachelor’s degree continues to decrease. There were 57,000 workers in the ICT labour force in 2011 that had at most a high school diploma, plummeting from 62,000 in 2010 and 65,000 in 2009. Likewise, workers with below Bachelors degree decreased from 287,000 in 2010 to 275,000 in 2011.

On the other hand, the number of ICT workers with a bachelor degree increased from 228,000 in 2009 to 240,000 in 2011. Workers with post-graduate degrees rose from 88,000 in 2009 to 94,000 in 2011. The uncertain overall labour market outlook seems to have encouraged many workers with education below the Bachelor’s level to augment their academic credentials and return to the labour market at a later date.

**Figure 10: ICT Labour Force by Education**

ICTC’s ongoing and exhaustive consultation with ICT stakeholders reveals that there is a mismatch between the demands of the industry (employers) and the supplies of the post-secondary system.
The graduating cohorts are not coming out of schools with all the skills and requirements their potential employers are expecting. In a rapidly evolving digital economy, educational qualifications without employability skills are not being deemed enough. ICT occupations that demand a mix of technical, communications, interpersonal and business skills are experiencing skills shortages. Examples of such occupations include Business Analysts, Information Systems Analysts, Computer Systems Analysts and Database Analysts and Consultants.

Matching industry needs to education and vice versa is vital. To change the way the ICT labour market serves both employers and job-seekers will require a strategy that addresses the pervasive mismatch between the capability profile sought by employers and the skills and experience profile of job-seekers. There are four dimensions to this challenge:

- The design of post-secondary programs;
- Managing the transition from graduation to employment;
- Integrating IEPs into the Canadian labour market; and
- Expanding the re-skilling opportunities available to current ICT professionals.

**Hours of Work**

Average hours of work remained fairly constant at 35 hours per week among ICT workers since 2009. However, many workers reportedly work a lot of extra hours each week. In 2011, 552,000 workers reported to have worked extra hours. The total number of additional hours, beyond the standard 40 hours per week, worked by ICT workers on average in a week in 2011 was 1.95 million hours. At 40 hours per week per worker, 1.95 million weekly hours equates to 48,500 additional jobs. This is an area policy makers need to focus on and formulate a responsive policy that can help the ICT sector as well as Canada reduce the jobless rate further and combat loss of employment with an additional tool.

**Earnings**

Average gross income of ICT workers in 2011 was $1,216 per week, translating to $63,250 per annum. This is a 3% gain since 2010 and a 4% gain since 2009.

50% of the workers earned less than $1,200 weekly, while the other half of the workers earned more than this amount, making $1,200 the median weekly income. This translates to a median income of $62,500 per annum. The happy combination of increasing demand for ICT workers, falling jobless rate, and decreasing lower-paid workers implies that the ICT workforce enjoys one of the highest paycheques in Canada and is likely to get further increased returns to skills in the near term.

ICTC’s exhaustive consultation with ICT stakeholders indicates that many employers are planning to further increase salaries in 2012.
Conclusions

The Canadian ICT sector has recovered well from the turbulent global financial meltdown. The jobless rate in the ICT sector fell from 4.2% in 2009 to 3.0% in 2011, a decline of 29%. The sectoral output continued to grow, from $58.06 billion in 2009 to $61.33 billion in 2011, a growth of 5.6%.

While Ontario continues to lead the provincial share of ICT labour force and employment in Canada, all provinces and regions are facing different challenges when it comes to matching the needs of the regional economy with available talents. Many occupations are flourishing in one province/region, while facing declines in another.

The ICT labour force continues to experience considerable imbalance in terms of workforce diversity and is wrestling against a rapidly increasing age profile of the workers. ICT workers are well educated and their educational attainment continues to improve. Of late, the uncertain labour market outlook seems to encourage many workers to augment their academic credentials and return to the labour market at a later date.
ICT workers in Canada are increasingly better paid, having witnessed a 3% growth in their returns to skills in 2011 over their earnings in 2010. Average gross income of ICT workers in 2011 was $63,250 per annum. Many employers are planning to further increase salaries in 2012.

ICTC’s 2011–2016 Outlook for Human Resources shows that Canada will experience a shortage of 106,000 ICT workers between now and 2016 across all sectors. The problem will be exacerbated by the fact that there are systemic shortages of ICT workers with the capabilities — a skilful mix of technical, business, and interpersonal skills — that Canadian employers need and want in order to be competitive in the new economy, since there is a pervasive mismatch.

Canada is well positioned to fully leverage the digital economy, a catalyst for innovation, jobs and economic growth. Empowering tomorrow’s ICT workforce is vital for Canada’s competitiveness in a global economy. A measured and prioritized digital strategy in key sectors of the economy is essential to propel Canada onto the world stage.

Notes

1. Annual figures are averages of the monthly data from the respective calendar years.
2. 2007 annual figure is calculated using the October, November, and December monthly data only, due to rebasing of Labour Force Survey Data.