The Importance of Global Workers
in Canada's ICT and Digital Media Industries

January 2014

The Information and Communications Technology (ICT) and Digital Media industries are among the fastest growing sectors of the Canadian economy. The ICT sector generates $155 billion in annual revenues and is growing at a rate nearly twice as fast as the Canadian average. It currently employs over 520,000 Canadians ICT professionals are also ubiquitous throughout other sectors, bringing the total information technology workforce to approximately 800,000 Canadians. Similarly, the Canadian digital media industry employs over more than 52,000 professionals, with annual revenues estimated between $3.5 and $5.1 billion.

The Canadian video game industry is just one ICT/digital media sector which is experiencing tremendous success and growth. Canadian video game publishers and developers create some of the most successful game titles, and Canada now has the third largest video game industry in the world (second only to the United States and Japan), and first on a per capita basis. In 2012, the industry generated over $2.3 billion in GDP for the Canadian economy and directly spent approximately $1.6 billion, up 12.5% from 2010. The Canadian entertainment software industry employs the equivalent of over 16,500 full time employees, up 5% from 2011.

The unemployment rate in the ICT and Digital Media industries hovers between 2% and 3%, which is statistically viewed as full employment. And, as one would expect in a tight labour market, our workforce is well-compensated: in ICT, the average wage is 52% higher than the national average, while the average salary of $72,500 in the video game industry is significantly higher than the Canadian average of approximately $45,000. The workforce is also highly educated – 44% of employees in ICT have a university degree compared with the national average of 25%. Similarly, the vast majority of positions in the games industry require extensive post-secondary education and/or practical experience, and 86% in technical positions have a college, university or graduate degree, while 93% in creative/artistic positions have a post-secondary degree or training from a technical or professional institution.

The primary input for production in the information and communications technology industry is the brainpower – the skill and experience – of its workforce. Access to a rich supply of skilled people to fuel our growth and drive our innovation is critical for the ongoing success of the ICT and digital media industries.

There are essentially three sources of supply for the Canadian ICT and digital media labour markets:
1. Canadian and Permanent Resident employees graduating from primarily post-secondary institutions and retained in Canada;
2. Retrained workers from within the ICT sector or elsewhere in the economy.
3. Temporary immigrant employees, either trained in Canada or abroad; and

The challenge for the Canadian ICT sector is to grow its supply of domestic talent, retain the resources we currently have and attract top talent from all around the world.

Industry Canada recently conducted a study of supply/demand projections of university educated professionals. The study forecasts a very tight labour market. The demographic crunch anticipated by many nations as baby boomers exit the workforce will exacerbate the pressures on the domestic supply of ICT employees.

In the short term, however, the Canadian video game industry will be looking to fill approximately 2,184 positions, representing roughly 13% of the existing workforce, within the next 12-24 months. Demand will be particularly high for intermediate (2-6 years of experience) and senior (6+ years of experience) level talent, with industry expecting to hire for approximately 432 intermediate and 288 senior creative positions and 421 intermediate and 282 senior technical positions, or 65% of total hires.

Canadian educational institutions produce sufficient new graduates to meet demand for junior level positions in the Canadian video game industry, but due to this high demand there is a shortage of available talent at the intermediate and senior levels in various disciplines, including programmers, game designers, digital artists and creative directors.

This in turn underscores the importance of immigrant workers in the ICT labour pool. A study prepared by Nordicity for Industry Canada in 2012 notes:

> "Most Canadian ICT firms hire foreign trained professionals although not all use the same techniques. Two-thirds of them use foreign recruitment for a significant number of hires … while the remainder uses foreign recruitment to address specific gaps. However, about half of the firms interviewed generally only hire landed immigrants to avoid the challenges and perceived delays in the immigration process."[1]

Clearly, in a very tight labour market, success in recruiting and retraining foreign trained professionals is key to business health. Many ICT companies work closely with immigrant organizations to develop workplace programs to help acclimatize foreign trained professionals and their families to the Canadian workforce. And they generously share best practice information in this aspect of human resource management as a means of making the whole ICT talent pool stronger.

It is important to note that costs are higher for Canadian ICT companies to hire foreign workers than domestic ones; not only can foreign talent in high demand command a premium, but ICT industries routinely assist foreign workers and their families with moving (flight, accommodation, etc.) and

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[1] "Labour Supply/Demand Dynamics of Canada's Information and Communications Technology (ICT) Sector," Nordicity, March 2012, page 15.

integration (language courses, new IDs, etc.), not to mention the additional recruitment and processing costs.

Immigrants and foreign workers are also a proven resource for competiveness and innovation. The positive impact of immigration on innovation and entrepreneurship is well documented. As early as 1999, Anna Lee Saxenian documented the role that immigrant labour and capital played in the formation of California's Silicon Valley. In 2007, a Duke University team of researchers led by Vivek Wadhwa illustrated that the innovation and job creation impact of immigrants is not restricted to California but is indeed a national phenomenon. Examining US engineering and technology companies founded between 1995 and 2005, Wadhwa learned that fully one quarter of the companies had at least one foreign-born founder. His research also revealed the huge impact immigration has had on entrepreneurship in ICT. Forty-five percent of the immigrant founded companies he examined were in software, microelectronics, computing or communications. And in Canada, studies conducted by the Conference Board of Canada have documented the clear linkage between innovation, entrepreneurship and immigration.

ICT companies hire foreign trained professionals to address labour gaps the domestic market cannot fill. These may be for specific jobs that are in particularly high demand or short supply. But frequently they are for a specific set of strategic skills that simply cannot be found in Canada.

In an innovation-driven industry that depends upon the rapid internalization and commercialization of new knowledge, it is not uncommon, particularly for research and development positions, for employers to seek individuals with very esoteric technical expertise. Similarly in a global business market, specific skills in customer knowledge and care may be impossible to find in the Canadian marketplace. For example, building and implementing a security solution for the Canadian operations of an airline based in Hong Kong may require recruiting (temporarily or permanently) a resource from that jurisdiction. In both cases, securing the needed resource from the global labour market can be business-critical – even enterprise-critical.

In the Canadian video game industry, emerging areas of activity require targeted skills sets. Digital distribution and analytics skills are areas where the Canadian supply does not always meet the demand of the industry. A recent survey of video game studios also revealed that general business and project management skills were also most lacking among Canada's video game talent pool.

ICT companies will frequently use Canada's Temporary Foreign Worker Program to fill gaps of this nature especially in cases where the permanent process may be cumbersome or work is time-sensitive. During the period from 1998 to 2011, the ICT industry participated in the facilitated processing of the **Information Technology Workers Program,** which expedited the process of admitting temporary foreign IT workers after ensuring that there were no available resources in Canada to fill the position. Since this program was terminated, ICT employers must now also obtain a labour market opinion in addition to verifying the lack of availability of resources in Canada to fill the position before proceeding with recruitment.   This process has become increasingly cumbersome and costly.

Over the past few years, ESDC and CIC introduced policy changes, including new minimum recruitment requirements, the elimination of LMO extension applications (requiring new recruitment even to extend a TFW's Work Permit), shorter validity periods for LMOs (3 years down to 1 or 2 years), and a reduction in the length of work permits. At the same time, both ESDC and CIC have become more stringent in their

review processes, emphasizing hiring Canadians at the expense of other important factors like job creation and retention as well as skills and knowledge transfer.

In many cases, foreign recruitment has proven to be an exceedingly time-consuming process with many companies reporting frustration with the length of time it takes to complete. Sometimes the process is so protracted that the prospective employee abandons hope and accepts another offer and the Canadian economy loses a high value resource. What's more, the delay in processing temporary foreign workers is interfering with the timely completion of highly time-sensitive projects including video game launches and/or updates. The cancellation of the Accelerated Labour Market Opinion process announced on April 29th by ESDC has only compounded this frustration.

Since the termination of the Federal Information Technology Workers Program, processing times for LMO applications and work permit renewals have lengthened significantly. For time sensitive projects (like most video games), such massive delays are debilitating and are causing video game companies to reconsider developing projects in Canada. A chart comparing current processing times to previous years is below:

Permit	Current Processing Time	Previous Processing Time
Regular LMO applications	8 to 9 weeks	0 (for IT Workers under federal IT Workers program) / 2-4 weeks
Simplified procedure applications (Quebec)	4 to 5 weeks	2-3 weeks
Intra-Company Transfer	1 to 2 weeks	1 to 2 weeks
Work permit renewal applications	Up to 12 weeks	6 to 8 weeks
Work permit applications sent to embassies	Up to 25 weeks (depending on embassy)	Up to 8 weeks

Work permit applications sent to certain embassies suffer delays of up to 25 weeks, and can be denied on seemingly arbitrary grounds. A chart[2] outlining processing times is below:

Country	Current Processing Times
United States	7 weeks
United Kingdom	11 weeks
Western Europe	13 weeks
Eastern Europe	17 weeks
India	19 weeks
China	25 weeks
Asia (not incl. India or China)	19 weeks
South America	24 weeks

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[2] "Canada's Video Game Industry in 2013," Nordicity, July 2013, page 35

Foreign workers with strategically vital skills or customer knowledge can have a catalytic impact on Canadian colleagues. They can anchor a major research and development project and in the process transfer knowledge acquired in academic or industrial organizations in other jurisdictions thus enriching the Canadian knowledge pool. Similarly, foreign workers with specific client skill sets can provide knowledge that is critical to client satisfaction and the success of a project and the ongoing client relationship. In large organizations, the ability to access resources like these in a timely fashion can be business critical. In smaller organizations, the opportunity cost from long delays can threaten the whole enterprise.

Canada's ICT industry was quick to grasp the imperative of competitiveness in global markets. Canada's relatively small domestic market is simply insufficient to drive success and return on investment in information and communications technology innovation and excellence. So virtually from inception, Canada's ICT industry has been a leading export sector. Sixty percent of all ICT goods and services created in Canada are exported. In the Canadian video game industry, the percentage is even higher as games are primarily developed for global audiences.

The pursuit of export business; the quest for smart customers all around the world has made the ICT industry particularly adept in global markets. It has also taught us that no country has a monopoly on creativity and innovation. So we have developed an acute appreciation for highly qualified talent found in markets throughout the world. We believe that while it is important to safeguard Canadian jobs from abuses such as labour arbitrage, it is also important to begin to see the virtues of the global labour market for the growth of an innovative and competitive national economy.

Many new innovations in Citizenship and Immigration within ESDC and CIC policy clearly reflect the value of foreign work experience to the Canadian labour pool. The new Start-up Visa pilot program begun on April 1, 2013, which is aimed at attracting immigrant entrepreneurs to build their business in Canada, is an excellent example of this kind of thinking in action and clear indications that Canada was advancing toward a more global view of the labour market that strengthens Canada's talent pool. The systemic loopholes in the Temporary Foreign Worker Program should be addressed so that it does not impact the ability of the Canadian skilled workforce to stay engaged in the labour market. On the other hand the program should not be over-hauled in such a way as to prevent trusted employers with no track record of abuse, who are building high value jobs in Canada for Canadians from accessing key resources which are critical to that process. Currently, the need for highly-skilled, highly-paid strategic employees from foreign jurisdictions and the need to protect workers generally from wage arbitrage and other workplace abuses are seen as polarities in the current discussion about the Temporary Foreign Worker Program. We believe that uncoupling the two issues provides a clearer path to solutions in both cases.

Recognition of the ongoing need of trusted employers of highly skilled Canadians and foreign workers for strategic, highly leveragable resources can lead to governable solutions (such as those provided in the former Facilitated Processing for IT Workers program) while still providing protection to Canadian employees in our sector and elsewhere in the economy.

We encourage CIC and ESDC to see the distinctions between these two challenges and to adopt measures to address the critical need for access to temporary foreign workers in knowledge-based sectors such as ICT. **Given the competitiveness and dynamic nature of the industry, the ICT sector needs processes that speed up recruitment of temporary and permanent foreign workers and make the processes of attracting them less cumbersome than they currently are.**

To this end, we urge the Government to consider practical solutions to these issues to ensure the success of our industries, Canada's continued prominence in the ICT and digital media sectors, and the overall health of Canada's digital economy. Accordingly, we strongly urge the Government to:

- Fully restore and modernize the federal IT Worker Program to fill gaps in provincial programs. Modernization would include updating the existing occupations and including new occupations (such as Artists and Designers) consistent with the evolving nature of the ICT and digital media business.
- Exempt ICT and digital media companies from the requirement to provide a formal plan to transition to a Canadian workforce. Given that the constant and fast evolving nature of our labour markets, imposing this requirement on Canadian companies will not accomplish the intended policy objectives, will impede the growth of the industry domestically, and will encourage companies to move projects out of the country.
- Maintain existing flexibility in the Intra-company Transferee program. Officers must have discretion to determine specialized knowledge on a case-by-case basis.
- Implement clear guidelines and timelines around service standards and deliverable dates for LMO applications/renewals and work permits that gives due weight to skills of TFWs, economic benefits of knowledge transfer and is consistently implemented across all regions.
- Revise NOC Codes to accurately reflect the industry occupations to ensure proper and accurate labour market data is obtained (for instance, NAICS classifications were recently revised to include game development occupations).
- Removal of the current advertising and salary scale requirements for positions requiring an LMO when factors can be demonstrated (such as filling a labour shortage, job creation or retention, and transfer of skills and knowledge to the Canadian employees).
- Reintroduce the Accelerated Labour Market Opinion Process.
- Over the long term, work to create a trusted employer approach to accessing foreign workers that both ESDC and CIC will utilize. Trusted employer programs are in use in countries facing similar labour market and demographic challenges to Canada such as Australia and Sweden. These programs recognize that the business community plays a critical role in a legal immigration regime that delivers economic benefits to Canadians. They place the onus of compliance on employers and impose stiff penalties for non-compliance.

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