



The Issue: The Importance of Canada's Domestic and Global ICT Labour Force

The information and communications technology industry depends upon a robust talent pool to drive its growth and capacity for innovation. Measures that encourage educational and career choices in science, technology, engineering and mathematics contribute immensely to the formation of a strong domestic labour market. And measures that address the importance of access to the global ICT labour market, such as the Temporary Foreign Worker program, also provide important relief from chronic labour shortages. The industry advocates measures that continue to expedite access to domestic and global talent.

The primary input for production in the information and communications technology industry is the brainpower – the skill and experience – of its workforce. ICT is one of the fastest growing sectors of the Canadian economy. The industry's unemployment rate 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 with an average wage 52% higher than the national average. Our workforce is also highly educated – 44% of our employees have a university degree compared with the national average of 25%.

ICT is also one of the fast growing sectors in the Canadian economy. Access to a rich supply of skilled people to fuel our growth and drive our innovation is a critical concern for our industry.

There are essentially three sources of supply for the ICT labour market: Canadian employees graduating from primarily post-secondary institutions; permanent or temporary immigrant employees either trained in Canada or abroad; and retrained workers from within the ICT sector or elsewhere in the economy.

The domestic supply of Canadian ICT workers is not robust. Concerns about declining enrollments in computer science and other disciplines supplying graduates to the ICT industry have prompted employers to take action to encourage stronger interest in technology careers. The Canadian Coalition for Tomorrow's ICT Skills was created in 2007 to change the perceptions of young Canadians planning their careers about ICT jobs. CCICT launched a successful program, CareerMash that uses mentors, video and text case stories, social media and special events to communicate with youth about the pervasive, dynamic and exciting careers that can unfold with a strong foundation in technology.

CCICT also stresses the foundational nature of technological literacy throughout all disciplines through its Business Technology Management (BTM) program. BTM programs bridge the gap between business and information technology. BTM programs have been developed in association with 14 universities across Canada and are already demonstrating strong levels of enrollment and high post-graduation employment rates. In 2014 CCICT became the ITAC Talent division and will continue to deliver these programs within ITAC.

Additionally, the relatively low engagement of women in ICT also weakens the domestic ICT labour pool. Women comprise approximately 25% of the Canadian ICT work force and this low ratio has persisted for at least the past ten years. ITAC has made the issue of gender diversity a priority for the association. Through regular networking events, research papers and other initiatives, the association is attempting to make the industry more welcoming and supportive for women.

The ICT industry is also a leader in continuous education for its workforce. This is an imperative driven by the continuously changing cycle of innovation that drives ICT. Regular opportunities for program learning, self-directed learning and the transfer of tacit knowledge on the job are all hallmarks of the ICT workforce.

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.

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 use 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."

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 acclimate 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.

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 hot demand or short supply. But frequently they are for a 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

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

permanently) a resource from that jurisdiction. In both cases, securing the needed resource from the <u>global</u> labour market can be business-critical – even enterprise-critical.

ICT companies will frequently use programs such as the Temporary Foreign Worker Program or the International Mobility Workers 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 for 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 pilot ended, 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. Large multinationals and other companies with operations abroad may also apply for visas to bring employees to Canada on inter-company transfers. In many cases, this 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.

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 knowledge 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 its inception ICT in Canada has been a leading export sector. Sixty percent of all ICT goods and services created in Canada are exported.

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 and HRSDC 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 Temporary Foreign Worker Program was recently the subject of a major review with major changes to the program announced in June of 2014. The changes drew a clear distinction between the use of foreign workers in low wage sectors and high wage sectors. ITAC

welcomed this change noting that they will enable high wage sectors facing labour shortages to continue to have access to global talent. Our industry believes that this is good public policy and takes a measured step towards a return to the specifically sectoral approach such as the Facilitated Processing for Information Technology Workers Program provided.

ITAC favours a return to a sectoral approach for the access of global ICT workers. It is important to note that while the Facilitated Processing for Information Technology Workers Program operated, it helped to sustain our industry's competitiveness without having a negative impact on wage rates and without increasing unemployment.

To fully ensure ready access to the global labour market, we believe the Government should also consider a trusted employer program which countries like Australia and others have deployed to expedite access to global workers.

These programs operate in a similar fashion to "trusted traveler" programs with high standards for compliance and severe penalties for non-compliance. With so much at stake in a company's ability to access global workers, there is simply no incentive for abuse of a trust-based system.

Given the competitiveness and the 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.

Karna Gupta
President and CEO

August 2014