



March 23, 2017

Standing Committee on International Trade

Dear Sir,
Dear Madam,

Good afternoon and thank you Mr. Chairman for your invitation to present on behalf of ABB in Canada to this Committee and its study on the steel industry of Canada and its ability to compete.

I am the Vice President of Public Affairs and Corporate Communications of ABB in Canada and the focus of my content is strictly about my company's view about how technology can accelerate innovation and performance for growth.

I am a Canadian born of immigrants who fled war and poverty and came to Montreal in the early 1950s. Most of my family worked in Canadian owned factories throughout Quebec and Ontario in manufacturing and cement. I was the first to graduate from university.

I will speak about people, technology and the future of the innovation ecosystem in Canada from an ABB view and potential to contribute to the ability of the steel industry to compete.

For the benefit of the committee members, ABB is a global company with headquarters in Zurich born of the merger of two technology giants in the 1980s called ASEA and Boveri from Sweden and Switzerland respectively. Present all over the world in 100+ countries, in Canada we employ 4000 Canadians experts in power and automation in more than 50 locations coast to coast. We are in Canada leading in our technology supply to utilities, to industries and for infrastructure, from high voltage direct current systems for Hydro Quebec or the Maritime Link, which allow the transmission of electricity over thousands of kilometres with little energy loss, to energy efficient mining hoists in Saskatchewan for potash, or electrification systems that power intelligence and control for Oil and Gas pipelines such as for our customers Transcanada and Suncore among others, or robots and automation for manufacturing that today are instrumental for the maintaining and re-shoring of jobs for our industries in Canada.

We have customers in the steel industry here, in the United States and all over the world are they are the experts for their products and their markets.

What ABB would like to bring to the table is the message that there is an information technology revolution happening, it is happening in a context of a sustainability, energy concerns, COP22 engagement and the disruption to the power supply model as well as the fourth industrial revolution—the meshing of the digital world of people and machines as internet meets production.

According to the McKinsey Global Institute, the fourth industrial revolution's internet of things, services, and people represents an \$11.1 trillion business opportunity within the next eight years, that's more than 10 percent of global GDP.

Our workforce challenge and that of our customers are facing the pressures of finding people with the right technical skills and the ability to communicate effectively and engage for productivity.

The future of our workforce both for ABB and our customers, are millennials, and they are the most connected generation in history who will network right out of their current workplace if their needs are not met. As computer or native digital experts, millennials are connected all over the world by email, instant messages, text messages, and the internet.

This can be good news for the steel industry and other industrials who have already incorporated software and automation into their operations and processes. The risk opportunity lies in thinking that the digital-industrial era is just a fad, or who believe that their company or their industry will somehow be immune to the transformative upheavals that digitalization is creating throughout the global industrial marketplace, the success of a digital transformation goes to the generational shift and to close the competitive gap with real time information and response capability.

In today's world, volatile and unpredictable, the business cycles have become so radically compressed that every industry needs to think about transformation looks like in response to change in terms of 6 months or 12 months rather than across multi-year swaths.

Digital isn't merely a thing—it's a new way of doing things. 3-d printing has revolutionized how we produce plastic components today. Additive manufacturing will take the printing of steel or any metal products to a whole new level never seen before....i.e two weeks ago the world's first back hoe digger was produced purely by additive manufacturing methods.

According to McKinsey Global Institute, many companies are focused on developing a digital strategy when in fact the real challenge is on integrating digital into all aspects of the business, from channels and processes and data to the operating model, incentives, and culture. The analysis of how companies with a high digital quotient (dq) operate shows that 90 percent of top performers have fully integrated digital initiatives into their strategic-planning process."

The next-generation for Canada is to think of how important economic players such as the steel industry can be supported in complete digital transformations – reinventing fundamental value propositions, business models, business processes, technologies, and the human element – not only within their own companies and for their customers inside a context or network of intelligently planned infrastructure that supports energy efficiency, zero waste, reduced emissions. "green steel".

Canada, with our geography of nearly 10 million square kilometers filled with valuable natural resources, 35 million people and the world's longest coast line, a national strategy that supports our industrial players to compete with digital and an export infrastructure that is energy efficient and intelligent is a must.

Moreover, with the billions of dollars of investment required to update and modernize our energy infrastructure simply to maintain current levels of reliability and safety performance without taking into consideration the increased investments required to integrate a future energy world that incorporates lead buildings, new infrastructure for vehicle to grid demand supply, ev charging networks for cars or larger flash charging systems for electrical buses and trains –this goes to the heart of creating a sustainable as well as competitive economy for Canada. Steel is there at the centre of potential future demand especially with new ways of producing.

This transformation is a strategy to building our industries as important pillars in a planned infrastructure that focusses on delivery, transport and export... with information from rapidly accelerating progress in open-source software, sensing technologies, big data, artificial intelligence, automation, machine learning, expert systems, communications, and block chain.

Despite digitization's deep penetration in the media, retail, and high-tech sectors, less than 40 percent of global industry in general is currently digitized, according to McKinsey.

What the first generation of Chief digital officers struggled to create has become the baseline enabler for the next generation. My company, for example, has built a digital solutions and services platform – called ABB ability™ – with Microsoft's azure cloud and IBM's Watson analytics as key components. But so have other companies. What was leading edge for the first generation is simply a toolbox now. The responsibility of next-gen cdos is to use the hammers and screwdrivers in that digital toolbox to build solutions and services for our customers that deliver on visions of their glorious futures.

The changes we're facing are, quite simply, unlike anything we have come across before: in the types of products we create, the services we offer, the value we deliver, the nature of the new competitive advantage we will seek, the engagement models with customers, and—perhaps most importantly of all—the metrics and perspectives by which our customers view this challenge as a pass/fail test: if we embrace this digital future intensely and strategically and view it through the lens of what customers want and need to succeed in their own rapidly evolving businesses, we stand an excellent chance of leading our country into an exciting new era of innovation, growth, opportunity, and success.

Carolina Gallo
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