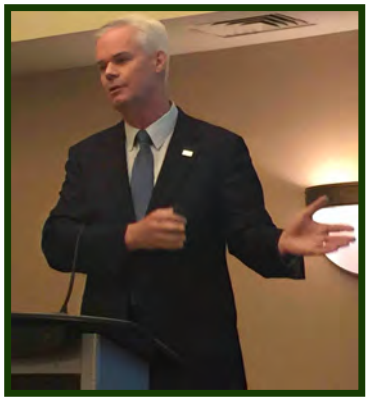

Opening Keynote

"IBM Canada: Perspectives on Innovation"

Pat Horgan

VP, Manufacturing, Development & Operations, IBM Canada

Introduction by Bettina Hamelin, VP Research Partnerships, NSERC

Horgan started by describing IBM's view of the future as optimistic. He noted that next year marks the company's 100th anniversary in Canada, where the term "International Business Machines" was apparently coined and eventually adopted by the parent firm. IBM is listed in the top five Canadian R&D spenders and has been consistently for many years. IBM is also part of the reason why Canada ranks second out of 175 countries in terms of software development. The company also ranks highly in polls of attractive employers.

Speaking as a former chair of the Canadian Chamber of Commerce, he cited that organization's list of leading barriers to economic competitiveness facing the country. He singled out the call for a more aggressive and effective innovation strategy that would enable businesses to respond rapidly to change. "We need to move ahead, whatever your definition of innovation is. You need to progress, you need to improve and change even if things are going well now."

Horgan also pointed to innovation rankings from the Bank of Canada and The Conference Board of Canada of various countries, which shows the country's place as

having risen over the last few years. In addition, three provinces — Ontario, Quebec, and British Columbia — rank higher than the country as a whole.

An accompanying video referred to the significant leaps in research capability that will be possible once the power of intelligent computing can be made compatible with the human beings engaged in various types of data-intensive undertakings, such as modelling climate change. Given the complexity of all systems that are becoming integral to the economy that governs our contemporary way of life, this kind of approach will extend beyond research to improve the quality of life in other areas. That being said, however, it is essential to make the necessary investments in this new technology, which will determine who survives in the global marketplace.

More specifically, IBM's response to this call for investment has taken the form of Collaborative Innovation Centres, where the company brings its skills and expertise together with those from the academic and government sectors. "When we ask 'what can we do for the digital economy of Canada', this is our answer," said Horgan. This approach has been further refined to reflect the country's particular challenges, which includes bolstering the skills required for economic development, providing the computing infrastructure required by researchers, accelerating home-grown commercialization initiatives required by growing businesses, and attracting the R&D investment required to maintain these activities.

IBM's Southern Ontario Smart Computing Innovation Platform (SOSCIP) is an example of the kind of advanced computing infrastructure that will be necessary for collaborative research in areas such as energy, health, water or advanced manufacturing. Since its inception, SOSCIP has been responsible for 50 new research projects and engaged 38 businesses, creating more than 240 jobs and generating some $2 billion in revenue.

A second phase of SOSCIP doubled the size of the project, with federal and provincial participation. In February, Ontario announced its partnership in the IBM Innovation Incubator Initiative, an accelerator aimed at various business incubators being mounted elsewhere in the research community. Horgan offered three examples of the results being yielded by these efforts: Guelph-based LifeLearn, which harnesses the data processing capabilities of the celebrated Watson computer system to create an interactive diagnostic database for veterinarians; Toronto-based Blue J Legal, which offers tax law practitioners particular case backgrounds with unprecedented speed and detail; and IBM Sports Insights Central, which develops administrative frameworks and game strategies for the Toronto Raptors.

Horgan concluded that such accomplishments demonstrate that this is the right way to build partnerships. And while many of these partnerships benefit IBM directly, he counted all of them as beneficial. "Why? Because the ecosystem has become stronger.

There are many more people out there that have analytical skills and can apply them to innovative ideas. The idea of these tools being out there in front of many more people is definitely good for the country, it's definitely good for science and R&D in the country, and its also good for us."

Bettina Hamelin then asked Horgan about the difficulties surrounding the task of getting multinational firms to invest in Canada, something she experienced in working for a major pharmaceutical firm. He acknowledged that this represented a major challenge, but added that Canada has a substantial appeal in this regard.