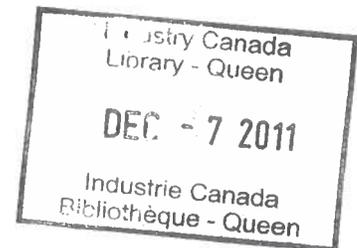
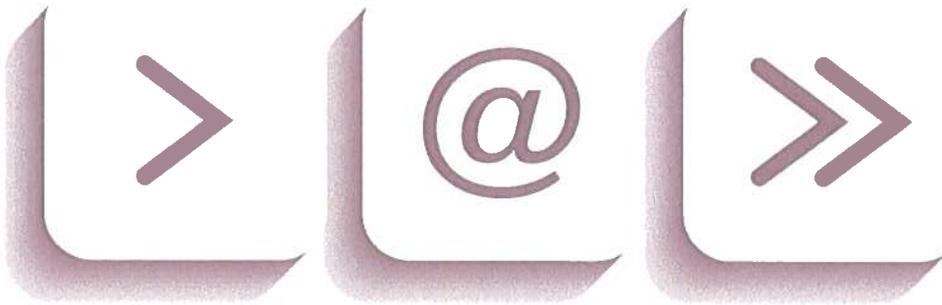


Report of the Canadian E-Business
Opportunities Roundtable

March 2002

FAST FORWARD 3.0:

Maintaining the Momentum



2001: THE ROUNDTABLE IN REVIEW

The Canadian E-Business Opportunities Roundtable was created in mid-1999 to accelerate Canada's leadership in the Internet economy. The Roundtable's goal has been to establish Canada as a globally recognized e-business leader to promote economic growth, job creation and better access to information, goods and services.

Over the past three years, the Roundtable has been active and prolific in fulfilling its mandate. We published two reports that showed where Canada was leading and lagging in e-business, and where the opportunities for capturing a greater share of the global Internet economy lie. In this, the Roundtable's final report on the state of e-business in Canada, we update our E-Report Card and highlight the achievements of Roundtable e-Teams in championing e-business initiatives and policy changes.

The five e-Teams, composed of over 100 public and private sector leaders, continued to 'move the needle' in 2001 when it came to closing the venture capital gap with the U.S. by successfully pressing for regulatory and tax reforms, facilitating e-business adoption in small- and medium-sized enterprises (SMEs), attracting and retaining skilled e-business talent, accelerating government online, and promoting Canada's e-business brand globally. The Roundtable developed strong international partnerships with like-minded business and policy organizations, such as the U.S. Committee for Economic Development.

And we looked at the difficult and pressing problem of bridging the digital divide in an international workshop on that issue.

There are few private sector advisory groups that enjoy the support and success that the Roundtable has been fortunate enough to receive. While it was formed and led by the business community, the Roundtable has operated in full and equal partnership with the public sector. Many aspire to public-private sector partnerships without achieving the level of cooperation and effectiveness that have been the hallmarks of the Roundtable. The quality of this partnership has made our analysis more thoughtful, our understanding of the issues much deeper and our advice on how to address them much sounder.

Many, indeed most, of our recommendations — from changing the tax regime to expanding the venture capital pool to making Canada a hotbed of innovation — have been adopted in successive budgets and announcements by the federal government. As the Roundtable winds down its activities, we look forward to other organizations continuing and expanding this legacy of achievement as Canada pursues an innovation agenda to drive our success in the new economy.

David Pecaut
Chair

ROUNDTABLE MILESTONES

November 1999

Roundtable presents submission to the House of Commons Standing Committee on Finance

January 2000

Release of *Fast Forward: Accelerating Canada's Leadership in the Internet Economy*

May 2000 to March 2001

Roundtable co-hosts series of **Regional Workshops** for SMEs on how to use e-business to enhance productivity and increase sales. More than **2,200** participants in eight cities across Canada — Halifax, Sainte-Foy, Montreal, Toronto, Kitchener-Waterloo, Winnipeg, Edmonton and Vancouver

September 2000

Capital Markets e-Team presents submission to House of Commons Standing Committee on Finance

October 2000

Acceleration e-Team releases *Regional Roundtable Events Report*

November 2000

Talent Pool e-Team releases *E-Commerce in Canadian Universities*

Acceleration e-Team launches first *Canada-U.S. e-Business Gap Analysis*

February 2001

Release of *Fast Forward 2.0: Taking Canada to the Next Level*

Acceleration e-Team presents submission to the National Broadband Task Force

Business Council of Australia launches e-business roundtable modeled on the Canadian E-Business Opportunities Roundtable

March 2001

Acceleration e-Team releases *Analysis of Barriers Impeding e-Business Adoption Among Canadian SMEs*

May 2001

Roundtable and the Committee for Economic Development (CED) co-host *The Digital Economy and North American Growth*, a joint Canada/U.S. forum in New York City

June 2001

Roundtable presents to House of Commons Standing Committee on Industry, Science and Technology

Acceleration e-Team releases second *U.S.-Canada E-Business Gap Analysis*

August 2001

Talent Pool e-Team releases *Electronic Commerce in Canadian Community Colleges and Institutes of Technology*

September 2001

President of the Treasury Board announces the formation of the Government On-Line Advisory Panel, following closely the recommendations of the GOL e-Team

Acceleration e-Team publishes *E-Business: Success in the Post-Dot-Com World*, a special insert in *Canadian Business* that provides an overview of how Canadian SMEs are adopting e-business and profiles a number of successful small firms. Almost **100,000** copies distributed nationwide

October 2001

Acceleration e-Team launches *SME e-Business Information Toolkit*, designed to help Canadian small business overcome common barriers to e-business adoption

Roundtable hosts workshop on the digital divide in Toronto: *The Private Sector's Role in Creating Digital Opportunities*

November 2001

Capital Markets e-Team partners in launch of the first-ever Canadian Angel Investors Summit

Fall 2002

Publication of *Innovation Nation*, an e-book profiling 30 Canadian technology innovation success stories and championed by the e-Branding Team

 Fast Forward – Progressing Rapidly			 Forward – Progressing			 Pause – Limited Progress		
The e-Business Environment			e-Business Readiness			e-Business Adoption		
 venture investment			 businesses online			 GOL		
 tax and regulatory environment			 consumer connectivity			 SME adoption		
 Canada's global e-business brand			 e-business talent					

E-business is a key enabler in the creation of an innovative economy, one where productivity is enhanced and competitive advantage is achieved at the firm, industry and economy levels. E-business eases the transition from knowledge development to market applications. It is a channel and a tool for moving ideas into the products, processes and services that Canadians can use and the world wants to buy. Our ability to harness the power of e-business contributes directly and significantly to the high standard of living and quality of life Canadians enjoy today, and even more so in the future.

The importance of e-business has not diminished over the past year. Despite headlines proclaiming the death of dot-coms and the cooling of over-heated technology markets, e-business matters more than ever, because the new economy has become the whole economy. While much has been made of the big sell-off in technology stocks, little has been made of the fact that technology is still driving much of the wealth creation in Canada and worldwide.

PROMISING SIGNS

Canada continues to prosper in the Internet economy. Canada now ranks above or very close to the U.S. in terms of Internet users and Internet hosts, and sits at the top of G-7 countries in the share of population that uses the Internet. Canada is also a world leader in terms of connectedness and technological infrastructure, nipping at the heels of the U.S.

Firms doing business and R&D in Canada enjoy many advantages. Assuming no changes in the U.S., by 2005 Canadian firms will have a 5.4% corporate income tax rate advantage over their U.S. counterparts. Canada also offers the most favourable tax treatment for R&D among the G-7. Canada has seen a doubling in foreign direct investment in Canada since 1990, with an increasing share of investment going to knowledge-based industries in high-tech manufacturing and service sectors. On a cautionary note, however, Canada's overall market share of direct foreign investment is still falling.

THE E-BUSINESS ENVIRONMENT

2001 Canadian venture investment more robust than in the U.S.

Canada's venture capital community fared much better than the U.S. during a difficult 2001. According to Macdonald & Associates, U.S. disbursements were down 65%, from U.S.\$104 billion in 2000 to U.S.\$36.5 billion in 2001. Meanwhile, Canadian disbursements dropped only 27% from \$6.6 billion to \$4.9 billion.¹ In 2000, U.S. venture capital disbursements were over 20 times more than in Canada, but in 2001 this gap was reduced to just over 11 to 1, a ratio much closer to the relative population of the two nations. Canada held its own

in 2001 because of relatively strong portfolios and more conservative investment strategies prior to 2001.²

Despite last year's dramatic decrease in global venture capital, disbursements from foreign investors in Canada actually grew slightly in 2001. Canada saw a slight increase from \$1.585 billion in 2000 to \$1.602 billion in 2001.³ The largest percentage of foreign investment came from the contracting U.S. venture capital market. While the increase in foreign venture capital is positive, foreign investors indicate they will invest more aggressively with the implementation of new rules that allow them to invest in Canadian venture funds without being deemed resident in Canada, and hence subject to Canadian taxation.

Investment in Canada's technology clusters in 2001 offered signs that they were maturing. According to Macdonald & Associates, Ottawa alone enjoyed \$1.1 billion in disbursements in 2001, of which \$690 million was invested in communications and networking. British Columbia also appeared to be growing into a life science hub, with 40% of the \$502 million disbursed in B.C. (compared to the 22% of national disbursements) going into life sciences investments. Vancouver saw 39% of \$425 million in disbursements go into life sciences.⁴

In *Fast Forward 2.0*, the Roundtable noted that Canadian pension funds significantly under invest in venture capital relative to their peers in the U.S., particularly in terms of committing capital to professionally managed venture funds. In 1999, only 5.6% of new venture capital raised in Canada came from pension funds committing capital to Canadian venture funds. In 2000, this share rose to 11% before falling back to 3% in 2001. This is dramatically below the 40% share of total new capital commitments that pension funds accounted for in the U.S. in 2000. Achieving progress in this area is a priority because increased participation from pension funds would have a tremendous impact on capital available to Canadian entrepreneurs.

A handful of large Canadian pension funds, including Caisse de dépôt et placement du Québec, OMERS and Ontario Teachers Pension Plan, have become very active direct investors in recent years. However, this focus on direct investment limits the growth of the private independent venture funds, which are the backbone of the industry in other countries. While the large pension funds are critical to the development of a diverse venture capital industry, they represent only 25% of the venture capital under management in Canada, compared to approximately 85% of the venture capital under management in the U.S. With a significant increase in the amount that Canadian pension funds commit to venture capital, we could achieve levels comparable with those in the U.S. Considering the size of our economy relative to the U.S., by matching their levels of venture capital investment, Canada would in effect be surpassing them.

» Tax and regulatory environment steadily improving

Tax changes introduced in 2000 and 2001 have continued to improve the climate for e-business and innovation in Canada. In 2000, we saw a drop in the federal capital gains inclusion rate from 75% to 50%, a reduction in the corporate tax rate that, when combined with announced provincial reductions, will make Canadian rates five percentage points lower than the U.S. rates by 2005. We also saw the treatment of employee stock options become more competitive with the U.S. and the creation of a tax-free rollover structure for qualified investment in young companies, which will encourage angel and venture capital investing.

The Roundtable's Capital Markets e-Team was a strong and effective proponent of these and other progressive tax changes that were introduced the following year. Over the last few years, the federal government has taken steps to ensure that Canadian shareholders of foreign corporations can participate, on a tax-deferred basis, in foreign mergers and corporate spin-offs. The 2001 Budget included two measures to facilitate the use of limited partnerships by Canadian pension funds and foreign investors in structuring their venture capital investments.

Despite these positive changes, the Roundtable sees room for further movement in tax and regulatory policy. The remaining barriers that inhibit foreign and domestic institutional investors from investing in Canadian venture capital funds must be removed. Efforts to improve our tax and regulatory regime should do more than put us on an equal footing with the U.S.; they should continue to position us to be more competitive than the U.S. Sustained and aggressive reform of our tax and regulatory structures may be our most effective lever in accelerating Canadian e-business.

> Rising awareness of Canada's global e-business brand, but perception still trails performance

There is some evidence that Canada's international brand is beginning to improve. Canada moved up three spots to #4 in the high profile e-readiness rankings compiled by the Economist Intelligence Unit and Pyramid Research.⁵ Also, despite a dramatic drop in worldwide venture funding, investors continued to find deals in Canada. Foreign disbursements in Canada actually increased slightly in 2001 despite the lower level of global activity. This can be read as a sign that the foreign venture capital community's opinion of Canadian companies is very positive.⁶

But not all reports were this positive. For example, Canada was ranked 12th out of 75 nations in a recent study of "Networked Readiness" compiled by the Center for International Development at Harvard and the World Economic Forum.

Overall, Canada's brand still has a long way to go and perception still trails performance. Many still see Canada as a difficult place for technology businesses to succeed and improving the country's international image is very much a work in progress.

E-BUSINESS READINESS

> 63% of businesses now online

Canadian businesses eagerly embraced the Internet in 2000: 63% used the Internet, up from 53% in 1999, with increases across almost all industry sectors. The level of connectivity also continued to rise. Although over 70% of firms still access the Internet using regular dial-up

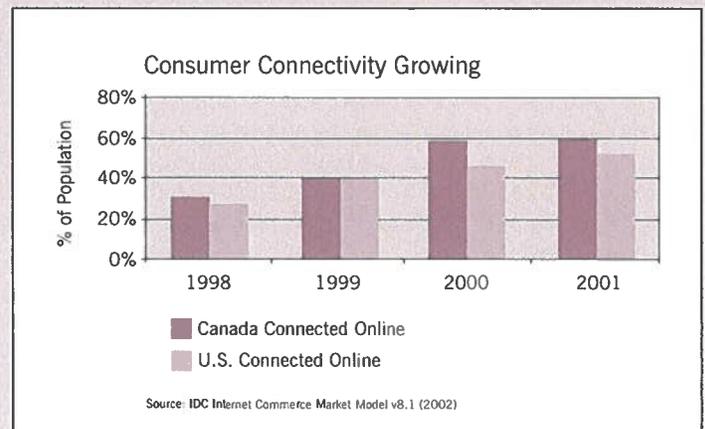
modems, more than one-third have high-speed access through cable, ISDN/DSL, T1 or other faster connections.⁷

In 2001, half of Canada's small businesses were doing business online — an increase from 45% in 2000. While Canada has reached an important milestone in small business connectivity, we continue to lag well behind the U.S., where 77% of small businesses are online.⁸

The challenge going forward for many companies is to use the Internet more effectively to improve the efficiency of their operations in areas like sales, marketing, procurement, customer relationship management, human resources and communications — where e-business can generate dramatic gains in productivity.

» Canadian consumers continue to move online

Canada continues to lead North America in connectivity, with the percentage of Canadians online reaching 60% in 2001. By comparison, only 52% of the U.S. population is online.



Despite this lead in connectivity, Canada's consumers continue to purchase online much less readily than their counterparts across the border. According to IDC, only 17% of the Canadian population purchased online, far less than the 27% of the U.S. population that purchased online in 2001.⁹

> Modest progress in e-business talent

Building e-business skills and a strong technical workforce is, and must remain, a critical element in making Canada a more innovative and competitive economy. Canada needs to build its talent pool both by increasing the number of highly trained Canadians in and entering the workforce, and by attracting skilled people from outside the country. Though the economic cycle has taken some pressure off the demand for skilled workers in the short term, the projections for a longer term shortfall remain unaffected.

The Roundtable has continued to monitor e-business related programs and research institutes at universities and colleges around Canada, and notes that the number of programs continues to climb. Benchmarking our progress over time is essential; however, there is a need to assess the effectiveness of formal education institutions and workplace training in terms of their ability to operate in a global Internet economy and particularly their capacity to deliver e-education and online training.¹⁰

The federal government has begun to reform immigration policy and procedures to increase the flow of technical talent into Canada. Regulations that could improve the ability of highly qualified persons

to become landed immigrants are expected to come into effect in January 2003. Dealing with the significant number of applicant backlogs (estimated at 500,000) in the skilled worker category will enable Canada to compete more effectively against other nations for immigration talent.

E-BUSINESS ADOPTION

> Government online gaining some momentum

Although the Canadian government pushed back its pledge to have all key government services online from 2004 to 2005 in the 2001 Budget, there has nevertheless been a positive shift in the tone of the GOL debate. Four provinces and the federal government committed in writing to publish their GOL project plans. The President of the Treasury Board also established a private sector Advisory Panel in 2001 — following closely the recommendations of the Roundtable's GOL e-Team. The federal government announced its intention to provide \$600 million in funding to implement the GOL strategy over the next four years. Finally, the government has begun to talk about GOL as more than a series of Web sites and instead as a fundamental shift in the way that government provides services to the population.

The Roundtable believes that the government has begun to understand and deal with the complexity of the internal restructuring that will be necessary to succeed in GOL. However, the needed transformation of back-office operations will be significantly more difficult than tasks completed to date, and will require sustained commitment and effort.

Some provincial and municipal governments have also moved to shift their activities online. But progress here has been uneven and the great potential for cost reduction and service improvement, especially in health care and education, is largely unfulfilled.

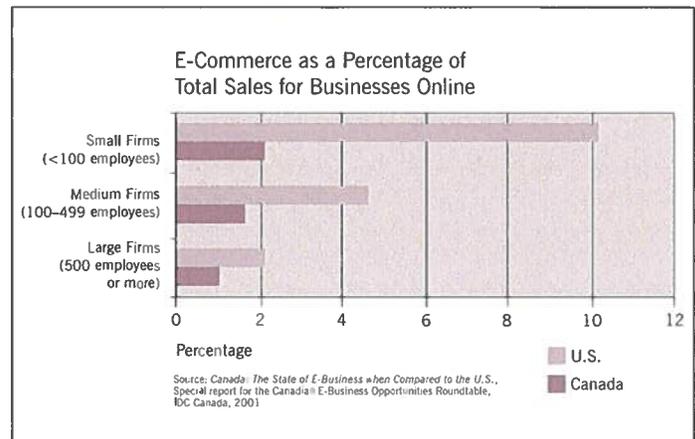
|| Canadian SMEs slow to adopt e-business

E-commerce in Canada continues to grow. According to IDC, Canada had US\$26.4 billion worth of e-commerce in 2001 — an increase of 69% from the 2000 figure of US\$15.6 billion.¹¹

However, small Canadian businesses still lag well behind their U.S. counterparts in e-business adoption. In 2000, e-commerce sales for small Canadian enterprises doing business online accounted for slightly over 2% of total sales, compared to over 10% for their counterparts in the U.S.

Canadian SMEs tend to be more reluctant to embrace e-business for sophisticated applications such as supply chain management or order processing and fulfillment. Many of them have not yet recognized that having a Web site is not enough to gain ground in a global Internet economy. They must exploit the power of the Internet to reach new

customers, suppliers and employees that they could not otherwise reach. They must also overcome a narrow view of their markets, uncertainty over return on their e-business investment and resolve concerns over security and Web site integration.



Responding to this challenge, the Roundtable's Acceleration e-Team created an online 'toolkit'. By illustrating the potential return on investment (ROI), identifying local suppliers of e-business solutions, and discussing the relationship between Internet security and risk management, the SME E-Business Information Toolkit¹² helps demystify some key areas that inhibit small enterprises looking to innovate through e-business.

Expanding broadband connectivity is also important to the future of e-business, particularly for the 80% of Canadian communities that are not currently served.

The federal government's renewed commitment to GOL reflects the public's increased awareness of and demand for government services online:

- In 2001, 56% of Canadian Internet users visited a Government of Canada Web site
- 77% of Canadians think that the Internet will improve how they receive services from the Government of Canada
- 73% believe that putting services and information online is a good use of tax dollars
- 78% believe that GOL makes the government more innovative
- 77% believe that GOL will improve how Canadians interact with government

(Source: Communication Canada — Fall 2001; Listening to Canadians 2001 as cited in Government On-Line and Canadians, Government of Canada, January 2002)

¹ Macdonald & Associates. Numbers in Canadian dollars.

² <http://www.redherring.com/vc/2002/0204/1528.html>.

³ Macdonald & Associates. Numbers in Canadian dollars.

⁴ Ibid.

⁵ The Economist Intelligence Unit/Pyramid Research e-readiness rankings (<http://www.ebusinessforum.com>).

⁶ Macdonald & Associates.

⁷ "Survey of Electronic Commerce and Technology 2000", Statistics Canada, 2001.

⁸ IDC, Internet Commerce Market Model, v8.1 (2002), U.S. Small Business Forecast: 2001-2006.

⁹ IDC, Internet Commerce Market Model, v8.1 (2002).

¹⁰ Details can be found at http://www.ebusinessroundtable.ca/talent/post_ecom.html.

¹¹ IDC, Internet Commerce Market Model, v8.1 (2002). Numbers in \$U.S.

¹² <http://www.ebusinessroundtable.ca/tools.html>.

ROUNDTABLE BUDGET SCORECARD

Roundtable Recommendation	Federal Response (February 2000 Budget)
<ul style="list-style-type: none"> Enable Canadian e-business start-ups to attract and retain talented employees by changing the tax treatment of stock options to be more comparable to U.S. rules Reduce capital gains taxes to encourage new venture funding Narrow the gap between Canadian and U.S. corporate taxation rates Expand the pool of available seed capital in Canada for Internet-related businesses 	<ul style="list-style-type: none"> Postponed the taxation of capital gains on shares acquired under qualifying stock options to when shares are sold, rather than when the options are exercised Immediately lowered the capital gains inclusion rate from three-quarters to two-thirds and allowed for the tax-free rollover of capital gains on qualified investments from one small business to another Reduced corporate tax rates from 28% to 21% within five years for sectors currently facing the highest tax rates (including high-tech industries), beginning with a reduction to 27% on January 1, 2000 Injected \$80M of new equity into the Business Development Bank of Canada (BDC) to support knowledge-based economy lending
Roundtable Recommendation	Federal Response (October 2000 Economic Statement)
<ul style="list-style-type: none"> Reduce capital gains tax to 30% for assets held more than one year More generous capital gains deferral upon reinvestment of gains in qualified small businesses to encourage angel and investor funding Lower personal taxes to retain talent in Canada Efficient tax treatment of cross-border share mergers Better treatment of employee stock ownership plans Expand use of RRSPs for early-stage venture employees Tax deductibility of student loan principal 	<ul style="list-style-type: none"> Capital gains tax reduced to 50% immediately Increased deferral from \$500K to \$2M; size of company increased from \$10M to \$50M; individuals only Taxes decreased by up to 3% for taxable incomes up to \$100K; deficit reduction surtax eliminated immediately Announced intent to develop roll-over rule in consultation with private sector Deduction for employee stock options increased from 1/3 to 1/2, consistent with new 50% capital gains rate Self employed now able to deduct employer portion of CPP/QPP Increased education tax credit from \$200 to \$400 per month
Roundtable Recommendation	Federal Response (December 2001 Budget)
<ul style="list-style-type: none"> Remove roadblocks to Canadian pension fund investment in venture capital funds by increasing the ownership limits on Qualified Limited Partnerships (QLPs) Eliminate tax on capital gains realized by foreign investors by allowing non-resident investors to invest in Canadian QLPs on the same terms as Canadian investors Stimulate economic growth through Government On-Line (GOL) by devoting a portion of economic stimulus funding to accelerate GOL adoption 	<ul style="list-style-type: none"> Proposed eliminating the 30% ownership limit beginning 2002 for Qualified Limited Partnerships Section 115.2 of the Income Tax Act to be amended so that non-resident partners will not be considered carrying on business in Canada — and subject to Canadian taxes — simply because the partnership benefits from investment management or administration advice provided by Canadian residents The government is providing \$600M over the next four years to implement the Government On-Line strategy by 2005 and has committed additional resources to modernize information management and IT infrastructure of government departments and agencies

Roundtable Members

David Pecaut, (Chair), President and CEO, iFormation Group

Kathryn Beaton, President and CEO, Hydro One Markets Inc.

Leonard J. Brody, CEO and Chairman, Ipreo

Rick Brown, Vice President, Strategic Planning, Sears Canada

Lloyd Darlington, President and Chief Executive Officer, Emfisys, The Bank of Montreal

Gaylen Duncan, President and CEO, Information Technology Association of Canada

John F. Eckert, Managing Partner, McLean Watson Capital

Anne Golden, President and CEO, Conference Board of Canada

Robert Greenhill, Vice President, Strategic Initiatives, Bombardier

Louise Guay, President, Public Technology Multimedia Inc.

V. Peter Harder, Deputy Minister, Industry Canada

Matt Holland, Vice President and Managing Director, The Boston Consulting Group (Canada)

Dean Hopkins, President and CEO, Cyberplex

Nancy Hughes Anthony, President and CEO, Canadian Chamber of Commerce

David Johnston, President, University of Waterloo

Pierre Laferriere, Senior Vice President, Telesystem Ltd.

Claude Lajeunesse, President and Vice Chancellor, Ryerson University

Patrick Lavelle, Chairman of the Board, Export Development Corporation

Martin Lippert, Vice Chairman and CIO, The Royal Bank of Canada

Vernon Lobo, Managing Director, Mosaic Venture Partners

Ronan McGrath, President, Rogers Shared Services

Richard Nathan, Managing Director, Brightspark Ventures, L.P.

Peter Nicholson, Chief Strategy Officer, BCE Inc.

Ken Nickerson, Clearpulse

Kelvin Ogilvie, President, Acadia University

Roger Palmer, Deputy Minister, Alberta Environment

Gerry Pond, Executive Vice President, Aliant Inc.

Anna Porter, Publisher and CEO, Key Porter Books

Jesse Rasch, Chairman, InQuent Technologies

Hal Ryckman, Executive Vice President, Western Canada, EDS Canada Inc.

Gerri Sinclair, President, Premier's Council on Technology, Province of B.C.

Jean-Pierre Soublière, President & CEO, Anderson Soublière Inc.

John Wetmore, Vice President, Americas, IBM.com

Ted Wozniak, Vice President, Information Technology, Magna International

Strategic Advisors

Mary Macdonald, Macdonald & Associates (Canadian Venture Capital)

Michael O'Neil, IDC Canada (Internet Data and Research)

Scott Wilkie, Osler, Hoskin and Harcourt LLP (Tax and Public Policy)