“MaRS, Jobs, Banks and Small Business”

by

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It's a real pleasure to be here today to contribute to the important discussion of job creation and innovation in the knowledge economy.   My perspective is influenced by three decades of work in financial services, my role as Chair of MaRS, and my concern with the critical issue of improving Canada's productivity.

The New York Times reports that there is a white brick café in Greensboro, Alabama called the Pie Lab, which brings people together to eat pie and generate ideas. Their self-described formula goes like this:

- PieLab = a neutral place + a slice of pie.
- A neutral place + a slice of pie = conversation.
- Conversation = ideas + design.
- Ideas + design = positive change.

MaRs is PieLab, minus the pie. The premise is that innovation doesn't happen in isolation. It happens when people interact, debate, discuss and in doing so, foster innovation with purpose.

Author Steven Johnson defines innovation as occurring when "we take ideas from other people – from people we've learned from, from people we run into in the coffee shop, and we stitch them together into new forms, and we create something new. This means that we have to change some of our models of what innovation and deep thinking really looks like."

He calls this the "liquid network"... an environment that enables the coming together of ideas, in sometimes unpredictable but satisfying combinations.

Job creation, the success of our entrepreneurial class and our economic vitality here in Canada <u>depends</u> on the creation of these liquid networks. Especially now, as we stand poised at a new and significant inflection point in our national history, created by:

- The aftershocks of the financial crisis, including the grumblings of new protectionist attitudes and populist distrust in traditional social frameworks
- The rise of China and India as economic powers and influencers
- The continued globalization of the world economy
- The issue of global warming and the growing tensions between resource-rich and resource-poor countries.

These very large and powerful trends raise a multitude of questions for Canada. What will be our role in the world as it faces its social, political and economic challenges?

How do we participate more fully for the benefit of Canada and those countries we connect with? How do we as a country recognize and act on our relative strengths and weaknesses?

Canada is fortunate to have many, many singular gifts and opportunities.

- We live on the second largest territorial mass in the world which is rich with natural resources, including the increasingly scarce resource of clean water.
- At 34 million people -- which puts us in the lowest decile of population density in the world -- we take in more immigrants per capita than any other country.
- We are one of the few nations in the world that has not experienced war on home ground for more than two centuries.
- We are adjacent to what is still the largest economy in the world, with all the attendant benefits.
- The World Economic Forum considered Canada to be one of the bright lights during the recent recession, thanks to strong fiscal policies and banking system.

In short, we are a young country that has not grown up with same stress or disadvantages of many others. Our collective memory is of political and economic stability, strong health and education infrastructure, good social safety nets and more peace and goodwill than not. And so we are well positioned to achieve any and all goals we set for ourselves.

But we have to rise to the occasion and can't be complacent. As good as our story is, our standard of living is faltering and we have not kept apace of the global developments in innovation and R&D – key components of future success. Our economic success remains rooted in natural resources rather than in innovation and the knowledge economy.

We need a better way to translate research and ideas into viable commercial successes that create jobs and new businesses and represent Canada well on the world stage. We must transform our economies and look to the future rather than rely on the past.

Earlier this month (October 4, 2010) the Globe and Mail announced the findings of a C-Suite survey, which puts the blame for this country's poor track record on innovation squarely on C-Suite executives. According to my peers who were polled for this study, the two top factors important in explaining weak Canadian productivity is business leaders' risk aversion and a culture of complacency.

The World Economic Forum finds that Canada's competiveness position has slipped from 9th to 10th place, and warns that we need to improve innovation, increase R&D and produce higher on the value chain. We did receive some good marks -- we ranked first in the world for having minimum procedures for starting a new business and ranked a respectable ninth for the time required to start a business.

This is an important success, since Canadian small businesses employ nearly half of the private sector work force and in 2008 were responsible for 21 percent of the total value of exports, with an average value of $1.5 million per firm.

Here in Toronto, Stats Canada reports that the city experienced the country's highest small-business growth rate between 2008 and 2009, at 7.5 per cent, compared with a national average of 2.7 per cent. It also found that we are home to a self-employed population in excess of 240,000, the highest number in Canada.

But our bad marks included ranking 24th and 19th respectively on ease of access to loans and venture capital availability. Equally troubling, we were 20th in company spending on R&D, and 19th in our capacity for innovation, tied with Iceland, China and Slovenia. In other words, it is easy to start a new business but difficult to grow and transform that business into a global leader.

Yes, we have examples of world-class innovation in Canada, from Research in Motion, Bombardier, SNC Lavalin and our banking system, but we need more – more examples and more action. It's time to stop spending our future and start investing in it. Innovation, R&D, Venture Capital – that is the equation we must solve for and they are all interrelated.

I say this because Canada's labour productivity level in the business sector has been lower than that of the US for almost 50 years. And a recent report by the Institute for Competiveness and Prosperity shows that if the GDP per capita gap between the US and Canada were closed, Canadian families would have $12,200 more in annual personal disposable income.

This is a compelling carrot for encouraging innovation and increasing productivity. There is also a stick. Our population is aging, and underwriting their retirement years and health care will present a serious fiscal challenge. As well, the world economic order is changing around us at lightning speed, driven by the BRIC economies that are aggressively investing and competing to increase their own living standards. Competitiveness, efficiency and productivity will be more important than ever.

We face no serious obstacles to taking action, except for our complacency with the status quo. As a small country, however, we must develop strategies that fit our profile, competitive advantages and political realities. MaRS is a great example of a "made in Canada" strategy.

Our future standard of living will get its sustenance from a supportive, collaborative environment for entrepreneurship and more successful commercialization of innovation. Collaboration, rather than competition across our institutions – like MaRS Innovation – helps compensate for our size disadvantage. We also need to encourage diversity and immigration that can generate variability and velocity in idea generation, and thus commercial synergy and jobs.

Small populations tend to increase a country's need to outsource ideas and knowledge and today, Canada has a small population by virtually any standard. Pundits predict that our population will reach 50 million by mid century, but accelerating this growth through immigration will exponentially expand our collective intellectual vibrancy, and our connection with and understanding of markets around the world. What really matters to innovation, says Ridley, is not how smart individuals are, but how smart our collective brain is.

MaRs is a powerful example of Ridley's notion. It's a place where the best laid plans to stop by for twenty minutes can turn into two hours of sharing ideas, meeting new people and learning new things. I know this because we advise and bank most of the companies at MaRS.

What is the role of the banking sector in commercialization?

Sixteen years ago, RBC created a group dedicated to knowledge-based industries in Canada. The group consists of growth companies in emerging market sectors that are R&D oriented, highly innovative, export oriented and with high growth potential. Our clients comprise the full range – from very small, early stage to the largest multinationals.

It is one of our fastest growth segments in our Canadian Banking business with double digit loan growth (14%) in 2009, and we are very honoured to be the leading bank in this sector. We got to be the market leader because we've been working with knowledge-based companies for a decade and a half, through all points of the cycle. We're the only bank with a strategic advisor and specialists in knowledge-based businesses… we have specialists in information and communication technology, cleantech, media and entertainment, and life sciences and healthcare. Because of this specialization, we understand the business models and can provide customized business advice, and provide financial solutions that enable the journey to commercialization. This includes debt capital, great advice and connections to angels, VCs and government funding. We also refer companies to each other – with material results, again and again.

For example, Grant Tipler who works in our life sciences and health services sector, was out seeing one our biotech companies, and asked the CEO, "What is your biggest issue?" He responded that his biggest problem was dealing with the manufacturer doing their product trials in Germany. Grant arranged some introductions, and the trials are now taking place – with no problems -- in Toronto. In other words, our longevity in the knowledge economy allows us to see possibilities for connections that others don't, and we use this knowledge for the benefit of our clients.

Our work with knowledge based businesses – through MaRS, across Ontario, and through organizations like Cleantech North Association -- makes us acutely aware of their challenges. Complexity related to globalization, world-scale competition and regulatory issues are issues, and early stage companies are particularly hamstrung by insufficient access to capital.

We typically lend capital at the latter stage of a companies development and bridging the funding gap between early stage companies, R&D and commercialization is a persistent problem.

Canada doesn't suffer from a lack of pure research. It is abundant and reasonably well funded. Applied research, which moves an idea toward commercialization, is our national Achilles heel because of the paucity of funding. As it stands today, countries like Israel and the US are well ahead of us in terms of programs and financial support to the knowledge economy – although as I always emphasize, we can't solve our problems by imitating someone else. We can learn but not replace as dynamics are different.

Now, we often get the question why banks don't invest in early stage companies. Although we do have some equity investment activity taking place in funds of funds, the simple answer is that we're in the business of advice and lending senior capital, not venture capital.

We are not qualified as venture capitalists or capable of lending the management support that good VC's can provide to a companies success. Banks are first and foremost providers of debt and early stage companies require equity – not debt. It is a later stage of development where banks play a broader role in capital formation. But we do know who does make these kinds of investments, and what government programs are available, and we make hundreds of connections between our clients and VCs every year. In a world where capital is hard to find, our knowledge of where it is valuable.

But there is a very large difference between what VC firms do financially for knowledge-based businesses and what RBC does.

Banks have a different risk profile than do VC firms. Financing by banks is short to medium term collateral-based debt financing that requires regular cash outflows of regular interest and principle payments by the company.

For a start up, debt financing's assumption of cash flow can be extremely difficult and timeframes are much different than those of the banking industry.

Venture capital is a better option because of its long term horizons and because it doesn't require collateral, thus allowing the company to preserve cash flow that would otherwise have gone to debt repayment. Start-ups often say VC funding lets them sleep better at night because they don't have to worry about a pending covenant or payment.

When a VC takes a stake in the company – be it in the form of common and preferred shares, convertible warrants or options, its goal is to exit its investment at some later stage by selling it a third party or the other equity owners, or listing it on the stock market. This type of capital infusion reduces balance sheet leverage, as opposed to bank financing, which increases leverage.

In addition, the VC's operating model is to make a number of investments with the hopes of a small number hitting a home run. It then makes its money by selling the company or merging it with another company. RBC makes its money on interest spreads. It would be foolish to earn debt returns for what amounts to an equity investment. Quarterly results and accounting don't lend themselves to private equity investment and, as a matter of interest banking regulation is discouraging and even preventing banks from providing private VC on private equity investments. As much as I believe banks play a role in facilitating early stage companies, we are not the solution to this problem of early stage underfunding.

So how does Canada and Ontario solve the early stage funding short fall? In my view, a lot of little things are necessary. We will never have a developed VC market like Silicon Valley nor will – or can – our governments spend billions on commercialization as is the case with some emerging countries.

Our solution must work for Canada, a small country with a highly skilled work force, outstanding science but limited domestic markets. Our solution must be a combination of different initiatives:

- government programs and support has to increase (R&D tax credits – subsidized funding programs)
- ways to give easy access to VC's from the United States (access, tax equality, relationship building)
- Specialty funds like those in MaRS or government support funds (RBC contributes to the Ontario Innovation Fund)
- Angel programs and initiatives (info sharing and transparence)
- The development of a VC industry in Canada

It is not easy but we have to find ways to improve access to funding.

Now, just because RBC doesn't provide financing for early stage company doesn't mean we're not involved at the incubator stage. Unlike other banks that wait for stable cash flows, RBC is there right at the beginning. At this stage, our client may not have fully built out their business but have developed their research into a marketable idea. We bring advice, our network and our expertise, all of which are helpful to early stage growth. By helping early, we're betting that we will be the bank of choice as the company grows based on the relationship we've built and the value we've provided. We've followed this process with companies like Open Text, a public high-tech company, and Arctic-DX, a company that is developing molecular test for macular degeneration, and it's a process that makes a real difference to the ultimate success of early stage companies.

Let me give you an example. We met a company with an idea four years ago. Claron's idea was software for image-guided surgery using CT scans. One application was software designed to take a CT scan and perform a virtual colonoscopy for diagnostic purposes. In this case, we provided a loan against tax credits (secured lending), we successfully introduced the company to a US VC firm, and when Claron moved out of MaRS, we provided a mortgage on their new building. The company now provides systems to medical centers through North America and in Europe, China and Japan. We're proud of our continued contribution to Claron's success, and our deep understanding of their business allows us to continue to provide good advice and counsel.

Canada has a tremendous opportunity in its knowledge based industry:

- Canada's bio-based economy is valued at more than $78 billion and is considered foundational to our national economy.
- In media and entertainment, we expect that the shift from physical distribution to digital distribution of content will generate new growth and revenues.
- The cleantech industry grew by almost 50% during the financial crisis of the past two years and is rapidly shifting from a domestic market to an export market. Canada has the potential to build world class companies in this space, with virtually all cleantech companies looking to move beyond Canadian borders.
- In IT, despite very strong growth in IT services, our productivity in this sector is lagging the US due to underinvestment and shortages of skilled people but attracting a skilled labour force plays into our strengths.

Despite many challenges, Canadian companies in the knowledge-based industry are translating new ideas into real and economically significant contributions to our country. For us at RBC, it is a real privilege and immensely satisfying to be a part of this process with our clients, with MaRS, and with the many partners we have who play a role in the success of this key industry. But we have to find ways to take it to the next level which is what today is all about. The future vitality and productivity of Canada will be driven by our success in this area. Thanks for your attention and enjoy the conference.

Thank you.