

The Urgent Need for a Regional ICT Strategy¹

By Gerry Pond, Chairman and Co-Founder, Mariner Partners Inc.

I have spent a lifetime pursuing business growth in the region. It is often an elusive target in all sectors of our economy.

In researching economic development plans in other parts of the world, I was stuck by the sheer number of them and perhaps more importantly the fact that cities or regions that are at the very top of the performance measures are engaging their communities to do better. This should create a sense of urgency here in Atlantic Canada. Yet the regional conversations on economic development seem to meander without too much concern for how far behind we are in the Canadian context, let alone the developed world.

If we are going to grow the region's economy, we have to imbed a sense of urgency and an understanding that there is some risk associated with a quest for growth on the east coast. Establishing some fairly difficult or stretch set of goals would likely derive a sense of urgency.

A Two-Pronged Strategy

I'm recommending that the leaders of Atlantic Canada adopt a two-pronged strategy across the entire region, **which I have referred to as** "Two Diamonds in the Rough."

The first strategy is to stimulate the Atlantic Canadian Information and Communication Technology (ICT) sector by focusing on enhancing talent, capital and acceleration services. This initiative would be overseen by a new partnership that I am proposing between Propel ICT (the regional industry accelerator), the Council of Atlantic Premiers (representing the four provinces) and ACOA (representing the federal government).

¹ This Commentary is based upon a keynote address, entitled "Two Diamonds in the Rough" delivered to APEC's business Outlook conference in Fredericton on November 3, 2016. The theme for APEC's conference was "The Quest for Growth: New Directions for Atlantic Canada."

The second strategy is to **stimulate the development of “social enterprises,” focused on mining the silver economy**² (often described as the demographic tsunami) and other critical social issues. This initiative would be overseen by the Pond-Deshpande Centre (PDC) in affiliation with the Atlantic Universities, the Council of Atlantic Premiers, and ACOA. Much of this effort will leverage ICT solutions and will strengthen the first strategy.

The timeframe for these two strategies would cover 2017 – 2027, a 10-year span to ensure efforts could take hold. A seven-year time horizon is common with venture capital-backed efforts and a cultural shift can take up to 20 years, so a 10-year planning period is an appropriate timeframe to see significant outcomes.

I am not prescribing what these two partnerships should do. There would be sufficient knowledge and expertise at each table, and other resources that they can draw upon. What is critical is that they come together as regional partners and develop an effective strategy.

And to be clear, this regional focus on ICT and social enterprise does not mean that other sector strategies should stop. Tourism, shipbuilding, electricity grids and aquaculture are a few of the well-developed regional industry strategies already approved and in place.

Why Focus on ICT?

The case for ICT is compelling:

- 1) Strong growth historically on a global level
- 2) North American leadership is dominant globally
- 3) Flourishing in all cities in Atlantic Canada
- 4) Environmentally friendly
- 5) Very low stress on public transportation infrastructure such as highways and ports
- 6) Young, non-unionized and flexible workforce
- 7) Non-regulated (globally)
- 8) High compensation levels
- 9) Internationally integrated (standards, languages, etc.)
- 10) Small business friendly
- 11) Free trade friendly
- 12) Proof of global best in class performance in region (e.g., NBTel, Star Choice TV, iMagicTV, Xplornet, Radian6, Q1 Labs)

But the final and biggest reason is that the ICT industry, as a rule, promotes development for the common good, even among competitors. This is a most unusual characteristic and applies

² The “silver economy” refers to market opportunities arising from public and consumer expenditure related to the needs and demands of the growing senior population. (Adapted from http://ec.europa.eu/research/innovation-union/index_en.cfm?section=active-healthy-ageing&pg=silvereconomy.)

throughout the world community. This augers well for a sustainable, long-term growth strategy in Atlantic Canada.

Bringing mentors, incubators, angel investors, universities and accelerators together in a holistic ecosystem was started by Propel in Saint John in 2003 and this phenomenon is now alive and well throughout Atlantic Canada. Propel ICT began in New Brunswick, spread to the Maritimes and now reaches all four Atlantic provinces. Incubators have also been established in all major Atlantic Canadian cities, including Planet Hatch (Fredericton), Venn Garage (Moncton/Saint John), ConnexionWorks (Saint John), Common Ground (**St. John's**), Volta (Halifax), Navigate (Sydney) and Startup Zone (Charlottetown).

ICT also embodies the broad economic initiatives that are already underway, including cybersecurity, smart grid, e-government or digital government, big data and the Internet of Things.

Simply put, the ICT sector is reaching a critical mass in Atlantic Canada for the first time in its relatively young life.

Why a Regional ICT Cluster?

We need a critical mass for talent, capital and big commercial ideas. But without aggregating our collective resources, we do not have critical mass.

A minimum two million population base provides such a critical mass in the North American **context. This is the size needed to produce “Centres of Excellence” and then clusters with their own momentum.** It is in this environment that high growth companies (gazelles and unicorns) flourish, perpetuating still more R&D in a virtuous circle.

The achievements of the last 15-20 years suggest a growth nucleus around an ICT cluster is emerging in the region.³

For example, Mariner Partners and its affiliates have invested some \$15 million in its core business and another \$10 million in 35 start-ups throughout Atlantic Canada and \$3 million in three accelerators (PDC, Propel, East Valley Ventures) over the past 13 years. Mariner has leveraged an additional \$5 million in grants from federal and provincial governments for its core **business. We didn't do this alone, but we were leaders. We were not always successful, but we have succeeded with Mariner and have three substantial “exits:”** two national award-winning exits -- Q1 Labs and Radian6 -- and one substantial exit in 2015 -- Brovada.

³ I am focusing on ICT. There are also clusters in Bioscience in Halifax, **marine technology** in St. John's and aerospace in Prince Edward Island.

These are all ICT companies and they represent some \$1.1 billion of value created in just 13 years, not to mention that Mariner Partners continues to scale-up.

There is a significant common thread in Atlantic Canada over the last 10 years:

- About 70% of start-ups are in the ICT sector
- The biggest exits include R6, Q1Labs, Whitehill, Spielo, Brovada, GoInstant in ICT⁴
- The biggest ICT scale-ups include Innovatia, Mariner and T4G. These three companies all based in Saint John, New Brunswick are the three largest independent ICT companies in Atlantic Canada. Collectively, their export focused revenues exceed \$100 million, growing at approximately 15% per year, and their employment level currently exceeds 900. This is definitely an early cluster in big data/analytics.
- **Bluedrop Performance Learning Inc., a publicly traded company out of St. John's**, Newfoundland and Labrador is another high growth ICT company in the region.
- Xplornet, now a large national rural internet service provider, has strong New Brunswick roots with the founders being Barrett Diversified out of Woodstock, New Brunswick.

The availability of risk or venture capital, while still wanting, has increased dramatically in the last five years. The four provincial governments deserve praise for establishing what is now **“Build Ventures”, a regional venture capital fund. Furthermore, provincial funds have added** early stage investment funds in all four provinces and a new fund is about to be established in Nova Scotia to supplement Innovacorp, as well as a new fund in Prince Edward Island. Investment tax credits have been introduced in all four provinces with New Brunswick leading the way with the most aggressive credits. Now we need an Investment Tax Credit that is applicable among all four provinces to allow a regional approach for angel capital.

Why Social Entrepreneurship?

According to the Canadian Social Entrepreneurship Foundation, “Social enterprises are social mission driven organizations which apply market-based strategies to achieve a social purpose. The movement includes both non-profits that use business models to pursue their mission and for-profits whose primary purposes are social. Their aim is to accomplish targets that are social and/or environmental as well as financial.”⁵ A social entrepreneur is someone “who recognizes a social problem and uses entrepreneurial principles to organize, create, and manage a venture to make social change (a social venture).”

Stimulating social entrepreneurs of high impact enterprises is in a much earlier stage of development in Atlantic Canada and, in fact, in Canada too. The regional (and Canadian) leader in this regard is the Pond-Deshpande Centre (or PDC) based at the University of New Brunswick

⁴ Ocean Nutrition was a large bioscience exit in Nova Scotia.

⁵ http://www.csef.ca/what_is_a_social_entrepreneur.php.

(UNB) in Fredericton but serving all of **the province's** universities and colleges, and in time, all Atlantic Canadian universities.⁶ It is at about the same state that Propel was at 10 years ago when it started out serving only New Brunswick. Today, Propel ICT serves all of Atlantic Canada and graduates 70 companies per year, mostly in ICT.

The PDC accelerator called B4 Change is now two years old with 30 graduates to date. Its most successful graduate has been Resson. What is important to recognize about the PDC is the “D.” Mr. Deshpande, a Masters graduate of UNB, is an immensely successful entrepreneur (in ICT). He has made a fortune (in the billions) and he has created both economic and social enterprise acceleration at MIT and the University of Massachusetts in Boston and Hubli, India.⁷ He provides a well-connected conduit into the Boston entrepreneurial community, one of the **planet's most successful hubs. This personal connectivity is why** I made social entrepreneurship my second Atlantic Canadian priority. While MaRS in Toronto remains a valuable partner, our strong connections to Boston are more powerful for Atlantic Canada.

We need to jumpstart this form of entrepreneurship and further engage our millennials as we create new direction for the Atlantic Economy.

The Need for Talent

Governments, universities and colleges, and established businesses need to play a strong supporting role in creating necessary talent to execute these two key strategies. They need to step up and enhance degree programs in:

- Entrepreneurial studies
- International business to business sales
- Computer science
- Software engineering
- Programming (coding)

I have been on a personal campaign for the last 18 months attempting to encourage Atlantic university business schools to offer a degree program in “international sales”. I have raised \$1 million seed capital to jumpstart it. All to no avail, so far. But 68% of Canadian export companies define sales as the most difficult resource to find.

Moving forward with entrepreneurship education is simply not enough to support the rapid **growth in these new sectors I've described. The region's established business community also** needs to play a much stronger role in providing early adoption environments for the growth in

⁶ For a brief, but powerful video about the PDC see: <https://drive.google.com/drive/folders/0B9L86bGJJWkmM1VndmISO3VRTmc>

⁷ Mr. Deshpande recently announced a second Canadian hub at Queen's University - The Dunin- Deshpande Centre – a twin to our PDC.

new productivity and marketing tools, provided by the start-ups. **The “Internet of Things Living Lab” being proposed by Tech Impact Group is one of the better initiatives being proposed to formalize the structures required to achieve this important link between traditional and new business in Atlantic Canada.**

Summary

We need to co-ordinate and collaborate in the Greater Atlantic Area over the next 10 years to:

1. Stimulate ICT sector growth
2. Stimulate social enterprise growth

We need to establish a critical mass of ICT and social enterprise development in our quest for growth. And we need to establish a much stronger sense of urgency and be willing to accept the risks of some failures.

If you want to see a region in Canada that is fully engaged in this approach, look to British Columbia, where despite extremely high cost of living, their technology sector is now greater than the GDP from utilities, forestry and oil and gas combined. And they are not resting on their laurels. They want to create an international innovation or tech corridor with the state of Washington (a.k.a. Bill Gates) called the Cascadia Corridor.

It’s time for us to get serious about these two diamonds in the rough.

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