

## Technovation: a shift in philosophy, an investment in Canada's future

From around the globe, technovation's (technology driven Innovation) influence on our lives continues to increase at an exponential pace. Technology is a common factor in the daily lives of virtually everyone and in every sector. Mobile Apps, Facebook, in-vehicle monitoring systems, office webinars, robotic field personnel – technology and the knowledge-based economy are here and must be embraced for any level of productive living, working, interacting.

As the global economy evolves at an increasing rate of speed, technology and cyber or e-business is now a fundamental part of mainstream commerce.

Canada is lagging in its investment in and commitment to innovation and technology, according to the Conference Board of Canada Michael Porter's economic cluster model to economic success<sup>1</sup> a white paper written on Silicon Valley, says the private sector plays prominently as a key contributor to a robust technovative society. This paper lists five major components that contribute to the success in Technovation experienced by Silicon Valley:

- Publicly funded Researchers
- Privately funded Innovators (technovators)
- SME's/Entrepreneurs
- Venture Capitalists
- Political Advocates

Critics cite a focus on traditional sectors and a resistance to adaptation as factors undermining Canada's transition to the knowledge-based economy<sup>2</sup>. Conventional approaches to innovation (e.g. SR&ED, IRAP, Tech Futures, etc.) focus on product birthed in or in some fashion attached to academia, resulting in overlooked knowledge-based business ideas born in the field rather than the lab. Private sector inspired, innovative knowledge or cyber based business ideas such as mobile apps, cloud based computing apps, social networks, etc. run into obstacles that often prevent them from getting to market.

The *Report Card on Canada* gives Canada a 'D' on innovation, describing a lack of understanding of and commitment to knowledge-based innovation. E-business entrepreneurs whose ideas may not have tangible assets are at a distinct disadvantage, contributing to Canada's brain drain.

The adoption of a *Proof of Concept*<sup>3</sup> project model approach for Canada's technology-related grants, loans and new business programs would offer technovators latitude to create, prove out and patent valuable assets that could be legally protected and then made available to entrepreneurs for commercialization in Canadian and global markets.

Many enduring mainstream technologies today were born in garages and cyber space, and the majority of technovations have come from the private sector. With focus on and public sector investment in private sector R&D and technological innovation, new technovations could become more readily available to enterprising SME's/entrepreneurs, who in turn would build businesses on the technovation creating profits, giving back to our economy through increased tax base, employment, competitiveness, provincial acclaim, and ancillary economic activity through the supply chain.

Although Venture Capital (VC) can and should play a role in the commercialization of technovation, it is the Canadian economy that stands to gain. A recent article in the [Globe and Mail report on Community Futures](#) cites that "For every \$1 spent in loans to SME's, on average, Canada gets \$4.2 back".

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<sup>1</sup> Silicon Valley White Paper, Jarunee Wonglimpiyarat [www.sciencedirect.com](http://www.sciencedirect.com)

<sup>2</sup> Innovation Policy for the Knowledge-based Economy, David A. Wolfe  
[http://www.utoronto.ca/progris/pdf\\_files/Wolfe\\_InnovationPolicy.pdf](http://www.utoronto.ca/progris/pdf_files/Wolfe_InnovationPolicy.pdf)

<sup>3</sup> *What is Proof of Concept*, Wise Geek, <http://www.wisegeek.com/what-is-a-proof-of-concept.htm>

Provinces such as Ontario have recognized the need for this type of change and are implementing programs to accommodate and support private sector knowledge-based businesses<sup>4</sup>, recognizing that meaningfully supporting and promoting technovation reaps many benefits; however, there is no national strategy.

Through capitalizing on a balanced combination of educational programming and the cultivation of market-driven, private sector technovation opportunities, Canada can address issues such as job creation, a stable, diverse economy, brain drain, wealth creation and global competitiveness and strengthen its enviable position as a stable, robust, continuously growing global economic force.

### **Recommendations**

That the federal government:

1. Reallocate current narrowly-focused grants & loans programs funds to a more broadly defined Technovation grant fund to support Small and Medium Enterprise's/Entrepreneurs willing to take patented or IP protected Technovations to market.
2. Augment the budget for R&D to include applicants who wish to execute Intellectual Property (IP) copyrightable and/or patentable Technovation Proof of Concept projects.
3. Revise the current pre-qualifying criteria for Technovation grants and loans to be more inclusive of the private sector.
4. Review and revise the definitions of technology innovations across ministries and initiatives country wide to be consistent and current, and to ensure such definitions are kept current.
5. Modernize Canada's IP regime by reviewing and revising legislation related to Intellectual Property (IP) rights and patent laws to help protect innovators as well as SMEs and Canadian multi-national companies willing to commercialize these patented innovations.

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<sup>4</sup> <http://www.itworldcanada.com/news/canada-3-0-wraps-up-with-15-ideas-from-co-chairs/140649>