Building an Innovation Ecosystem

By Staff
June 21, 2012

It takes a village. In the case of a young tech company, that village is an ecosystem of investors, incubators, accelerators, mentors, networkers, educators, researchers and experts in human resources, law and finance—a list that goes on and on. When building the Alpha Exchange Innovation Campaign, a microcosmic view of this ecosystem developed through its sponsors, each bringing unique industry experience, understanding of the challenges faced by early-stage technology companies, and with services and capabilities to help them to better survive and thrive.

Driving the digital economy

Since the dot-com bubble burst in 2001, Canada’s tech sector has been lagging behind, said Jos Schmitt, CEO of Alpha Group. He points to our weak position in the Internet economy compared with other G20 countries, as well as tech under-performance in Canadian benchmark indices compared to other countries and regions, or the discounted price/earnings ratios of Canadian technology companies in comparison with their non-Canadian peers.

It’s a situation Schmitt wants to do something about. He said tech is acting as a critical engine for economic growth around the world, but it seems broken in Canada.

“Everyone knows how important it is to have a strong digital economy. It’s critical to economic growth and to increasing employment. Canada cannot put all its eggs in the resources basket,” he said. “And if we don’t manage to achieve it, it will impact the overall economy in the longer term.”

In April, Schmitt launched the Alpha Exchange, a new-generation Canadian stock exchange with a focus on technology and innovative financial products. The exchange is part of the Alpha Group, an organization set up by nine leading financial institutions to reinvigorate trading in
Canada markets. For the past three and a half years, Alpha Group’s Alternative Trading System (ATS) has been changing the trading space in Canada through its market structure innovations, leveraging technology in a new and highly successful way. The results for the Canadian markets are better-quality executions, a lower cost of doing business and liquidity that fled away to the U.S. being repatriated to Canada.

The Alpha Exchange is poised to bring that innovation to securities listings. And it will do it based on a few key principles: don’t be everything for everyone and understand the needs of the issuers you focus on (the technology sector is unique and this needs to be acknowledged), stricter requirements for businesses wanting to list to ensure they are ready for a successful IPO and the subsequent listing; help build and participate in an ecosystem for technology sector success; and, help support technology companies from the cradle to commercial success.

The underachievement of technology start-ups in Canada all comes down to funding and management talent, according to Schmitt. Entrepreneurs with great ideas are neither finding nor being found by investors. At the same time, start-ups often lack overall management, marketing and sales experience needed to take off and soar.

The good news is Canada has no lack of great talent; universities turn out researchers and students with great ideas, Schmitt said. Also, he adds, the regulatory environment and public initiatives are strong and supportive.

Still, in order to help create a market of strong technology companies, capital must become easier to come by and entrepreneurs need more choices. Too often, technology start-ups must fly south for funding, sell-out or, worse, jump to a listing too early (often leveraging the detrimental reverse take-over of shell companies model) just to find the critically needed capital that will take them to the next level in their life-cycle.

“I really see improving access to capital as the go-to action for the Alpha Exchange,” Schmitt said. “Venture capital dropped 80 per cent between 2000 and 2010. So how can we develop new pools of capital? The answers are there and it all comes down to injecting liquidity in the funding process, but it will take a focused exchange with a long-term vision to unleash these answers: support innovative types of funding already proven outside of Canada, further facilitate angels investing, provide mechanisms to enable pre-IPO liquidity, ensure companies only list when they are ready, incentivize liquidity provision for listed companies, etc.”

Beyond working to tackle the funding issue, Schmitt said the Alpha Exchange is also focused on helping make the connections needed to support and grow the innovation ecosystem. The components all exist. There are mentors, incubators, accelerators, lawyers, investment bankers, accountants and so forth all with the skills and focus needed to help a young tech company, but finding and bringing them together is too much for many entrepreneurs to do alone. Moreover, the entrepreneurs often lack the experience to understand what their company needs on its growth path.

Schmitt notes that the Alpha Exchange Innovation Campaign that Alpha Group launched with Backbone magazine is a great example of an initiative aimed at strengthening that ecosystem that
technology entrepreneurs need, having multi-disciplinary top experts coming together to support and promote technology innovation. It’s an initiative that needs to be replicated and the new networks it will build across Canada need to be institutionalized, built upon and integrated with all local and regional networks already in place.

“The network is fundamental to the success of a start-up,” Schmitt said. “But many are lost when trying to find the best people and organizations to help them grow. We need to streamline and rationalize that network and enable highly efficient connections.”

Innovation connections

The need for a strong ecosystem supporting innovation is one heard across the country and, in Ontario, the Ontario Research and Innovation Optical Network (ORION) acts as the glue binding the organizations in that ecosystem together.

As provider of the world’s fastest research and education broadband network that connects all universities and colleges, the majority of teaching hospitals and school boards, as well as research, cultural and educational facilities in the province, ORION has a strong hand in helping innovative researchers and students connect with the support system they need. Today, ORION connects 2 million students and researchers—the entrepreneurial leaders of tomorrow—over a 100Gbps network.

“If you’re going to be generating new ideas, you’re going to need to have a strong network backbone to make that happen,” said Darin Graham, president and CEO of ORION. “We are that backbone.”

But it’s not simply about the physical network—even though ORION has enough bandwidth to transfer 100 000 MP3 or the concurrent live streaming of more than 15,000 HDTV channels—it’s about the connections. Incubators and accelerators use ORION to connect as do various service providers. It can also act as an infrastructure for the delivery of cloud services from innovators in everything from e-health and digital media, to remote control systems and robotics.

“It comes down to being a cost-effective solution for shared services, and cloud can be that, and ORION is a great way to help that happen,” Graham said.

Graham has been involved in the innovation landscape for the past 20 years, especially in helping turn university and college researchers into successful start-ups. Prior to joining ORION he was president and CEO of Communications and Information Technology Ontario (CITO), one of the original Ontario Centres of Excellence, and director of NZi3, New Zealand’s ICT Innovation Institute. He continues to mentor numerous early-stage companies.

As well as hustling to make their first sale, he reminds start-ups that it’s all about making the right connections. “If you want to soar with eagles, go find eagles.”
The wired west

Tech has been the fastest growing industry sector in BC over the past decade, almost doubling in revenue. That said, there remains a dearth of mid-sized companies on Canada’s West Coast. That’s where the B.C. Technology Industry Association (BCTIA) comes in.

The association, which is about to celebrate its 20th year, has spent that time helping fuel the discussions between public and private sector around the policies and investment frameworks that foster the growth of tech companies in its province.

“I feel very good about the impact our organization, our peers and the government have had to build a strong tech sector in B.C.,” said Bill Tam, president and CEO of BCTIA. Still more work needs to be done to help move companies upstream to the mid-market, he said. Currently, 96 per cent of all tech companies in B.C. employ less than 50 people.

“We’ve crunched the numbers and seen that we can have a disproportionate impact on the economy by even a small growth in the mid-market. If we grew from three per cent to say five or six percent, it would double the GDP in our province in terms of the tech industry and would probably result in an increase of 60 to 70 per cent in jobs and employment.”

To help grow small ideas into big business the association launched Centre4Growth. The program’s core is the CEOs-in-Residence (CIR) coaching program, which matches entrepreneurs to seasoned tech executives who have earned the scars of success and can help with any business issue. Additionally, entrepreneurs and their teams can access GrowthWorkshops, for hands-on learning; use the E-Library, filled with hundreds of templates and documents; subscribe to Business Opportunities, for new business development opportunities; and book a Business Clinic, to privately discuss a finance, legal or marketing issue.

There’s still a long road ahead, but Tam urges entrepreneurs to be optimistic: capital markets are improving and there’s great talent to be found right in their backyard. And, as for the next 20 years, BCTIA will remain steadfast in its commitment to help B.C.’s technology companies grow.

Digital media hub

Unlocking great ideas and helping turn them into reality requires a little help and some space to work. That’s where the Ryerson Digital Media Zone comes in.

Located in downtown Toronto, and as such infused with the energy and resources of a world-class city, is an incubator unlike many others. The DMZ, which opened in April 2010, doesn’t set limits on how long early-stage companies can be part of their program—creating a unique environment where companies in different stages of development, and with different
backgrounds, learn from one another and cross-pollinate ideas, and even products.

Designed to bridge the resource gap faced by early-stage companies, and give young Canadians a head-start in launching their own businesses, the DMZ is a flexible workspace where entrepreneurs collaborate on the next great social and commercial innovations. Ryerson student participants are selected through “Start Me Up,” a business start-up program run by Ryerson’s award-winning Students In Free Enterprise (SIFE) and a committee of industry leaders, faculty experts, peers and mentors. Ryerson alumni and non-Ryerson entrepreneurs come in through the DMZ admissions process.

“Through the DMZ, Ryerson is helping support the young people who will be at the heart of bringing about the next big innovations in the digital economy,” said Valerie Fox, executive director of the Ryerson Digital Media Zone. “Rather than educating students who immediately head to Silicon Valley, they have a home hub from which to build their businesses, launch their products and develop successful Canadian companies.”

This approach has proved successful: already in the past two years, 43 companies have been incubated and accelerated, and more than 400 jobs have been fostered through newly formed companies that participated, like Bionik Labs, HitSend and Flybits. Presently the DMZ’s 16,530 square foot facility houses approximately 165 entrepreneurs in 38 teams.

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**Financing financial tech**

When Steve McLaughlin founded Financial Technology Partners (FT Partners) in 2002, it was with an entrepreneurial spirit that the investment banking firm maintains to this day.

McLaughlin, a former senior investment banker at Goldman Sachs, saw the need for an investment banking firm focused exclusively on the financial technology sector; offering services to financial services companies that leverage technology, tech companies serving the financial services industry and technology that services financial functions within larger non-financial services organizations.

“We serve the dynamic space where there is a convergence of technology-based solutions and financial services or transactions,” McLaughlin said. His firm, which has clients across the world including in the U.S., Canada, Europe and Asia, is currently the only investment bank with such an exclusive focus. Just in the last few years, FT Partners has sold three Canadian financial technology companies across Victoria, Winnipeg and Toronto.

Because of its roots, technology agnosticism and focused verticals, the investment banking firm has grown to a staff of 35, most of which come with extensive financial technology, M&A and investment banking know-how. The firm was recently recognized as “Dealmaker of the Year” and “Investment Banking Firm of the Year” by The M&A Advisor.
Because of the opportunity for technology to create significant advantage in financial services, McLaughlin said his market sees a never-ending evergreen evolution, one that is becoming extremely vibrant with new companies springing up and venture capital being attracted. Perhaps because of its history, FT Partners takes great interest in these emerging companies whose innovation may further transform the financial services landscape.

“Entrepreneurship and innovation is in our blood,” said McLaughlin, adding that the company understands the needs of an early-stage company.

He advises Canadian start-ups to bootstrap as much as they can and build sweat equity in their companies. As they continue to grow, he said, it’s important to be flexible with how they are funded. “Don’t just look at Canadian VCs, or to the U.S., look to strategic investors who can add value.”

Capital ideas

Funding is a perpetual hurdle for early-stage companies, and more often than not, start-up entrepreneurs hope to secure debt financing to help extend equity dollars and help their businesses grow to profitability.

But since debt financing isn’t always possible at an early stage, RBC Royal Bank often provides start-ups with value by acting as a connector within the innovation ecosystem. Its technology-focused Knowledge Based Industries unit has been dedicated to the space for 35 years and is unlike any other in the country, said David Rozin, RBC senior account manager for IT and Clean Tech in the Greater Toronto Area.

“What that experience has done is allowed us to build up an incredible network of entrepreneurs, angel investors, consultants, lawyers, accountants, mentors—everyone that a start-up would need as a partner to go from seed to mature,” he said.

The specialization of the Knowledge Based Industries unit was so successful it was adopted as the model for other industry verticals throughout RBC Royal Bank’s Commercial Banking platform. The industry specialized focus allows RBC Royal Bank to move beyond the general expertise found in most banks to more deeply address the needs specific to a tech company.

All this to say it’s not just about providing capital. RBC Royal Bank’s extensive network helps to connect complementary internal partners (such as its Technology Investment Banking unit) and service professionals, introduce entrepreneurs to angel investors, and face the other two major challenges faced by start-ups: managerial breadth and talent shortage.

“When start-ups come to us, do they have a well-articulated business plan? Are they looking at global opportunities and do they know how the right cash management tools, for-ex products and trade advice can help in achieving those global ambitions? ” Rozin said. “We have expertise and connections that go far beyond funding.”
The most common matchmaking RBC Royal Bank does is with CFOs and financiers; investors want to see financial bench strength. Through its longstanding approach to assisting companies through their lifecycle, RBC Royal Bank’s KBI practice has a complement of 50 Bankers and extends across Canada with a presence in every province except PEI. The group has the ability to leverage a broad network of deep relationships consisting of Canada’s top-tier tech companies, as well as relationships it holds with industry associations and incubators across the nation.

**Sky-high innovation**

Since the development of its first product, an audio oscillator, in a Palo Alto, Calif., garage in 1939, HP has been focused on innovation. The HP patent portfolio grows by more than 2,500 every year and now amounts to more than 30,000 patents. HP invests billions of dollars in R&D and M&A each year to ensure that it’s staying ahead of the curve, driving innovation and delivering world-class products, service and solutions to help meet customers’ top business needs.

“It’s just a constant churn of innovation and research and development,” said Geoff Kereluik, vice-president of commercial sales at HP Canada. “At our core, HP is all about organic innovation complemented by strategic acquisition when there are gaps to fill.”

And innovation investment must be constant to remain on top. In February, HP announced its ProLiant Generation 8 (Gen 8) server, the industry’s most self-sufficient line of servers and the result of a $300 million investment and two years of research and development to redefine data center economics by automating every aspect of the server life cycle. Called Project Voyager, this R&D has resulted in more than 900 patents filed and a new systems architecture called HP ProActive Insight architecture, which will span the entire HP Converged Infrastructure.

Kereluik said many of the challenges facing entrepreneurs are consistent: access to capital and information technology resources. The opportunities for an entrepreneur are greater today, however, thanks to innovations in cloud computing.

HP recently expanded the capabilities of its HP CloudSystem Matrix, which allows businesses to provision infrastructure and application in minutes. HP CloudSystem is the first solution to provide clients instant access to additional pay-as-you-go capacity out-of-the-box through cloud bursting. Clients can handle unpredictable needs and deliver services unavailable with the business’s internal resources with a management environment that allows them to maintain visibility, governance and control. HP ProLiant Gen 8 is the horsepower behind its CloudSystem Matrix. HP CloudSystem is a part of the HP Converged Cloud architecture which provides businesses with flexibility and portability across private, public and managed clouds.

For start-ups and entrepreneurs, cloud helps level the playing field, Kereluik said. “In the past, the capital required to get access to necessary technology to be a viable participant in your
industry could be daunting and ultimately a show stopper,” he said. “With cloud services and the CloudSystem, given the price-point and the amount of technology you can get for it, entrepreneurs can get an earlier start without [having to] layout out as much capital.”

In addition, cloud computing provides entrepreneurs with a new method to offer products and services, giving them opportunity to more easily reach a global customer base. In the past, cost pressures would limit a start-up’s ability to reach beyond borders, but Kereluik point out that today, “the world is their oyster.”

Going global to succeed has also become increasingly important for entrepreneurs. In working with various entrepreneurs through the ISV Factory, where he evaluates a lot of early-start technology companies, Kereluik has noticed that Canadian start-ups are quick to see the advantage of selling abroad.

“Technology has really opened up that opportunity, and Canadian entrepreneurs have a really good handle on that.”

He said most entrepreneurs he’s worked with are targeting big markets like the U.S., China and Brazil, even if they test the waters locally. In addition, demand for a particular product and service might be greatest in a foreign market, so turning to the cloud to more easily export it makes strong sense.

As Canadian entrepreneurs look outwards, foreign VC is increasingly eyeing Canadian firms. “There seems to be a lot of interest in Canadian technology firms,” Kereluik said. “I think this is because of our strong reputation for our conservatism and our vetting process as various firms go to market.

“We tend to have a very high success track with respect to the calibre of organizations we help to succeed.”

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**Solving the people problems**

Among the biggest challenge entrepreneurs and small businesses face is recruiting and retaining great talent and freeing enough time to focus on growing a profitable business. Ceridian Canada, a leader in HR and payroll services, recognizes that, and also the need for continuous innovation.

“The space we play in and the services we provide are under constant competition, so we need to be always innovating,” said Dave MacKay, president of Ceridian Canada.

That quest for continuous innovation has allowed Ceridian to boast a number of firsts: in 2001 it was the first HR services company in Canada to have a Web-based cloud service; it was the first to provide payroll mobile applications in Canada; and, it recently launched an extremely innovative e-commerce platform called Ceridian for Small Business.
The result of its focus on innovation and competitiveness is that the company now provides services to more than 40,000 customers across the country, and more than 3 million working Canadians see Ceridian technology in action, even if many are unaware. It provides a suite of tools for human capital management which includes workforce management, from finding talent, to paying it, to developing it and beyond.

Because Ceridian can provide technology and services via cloud, and now over its e-commerce platform, entrepreneurs and small businesses represent a sweet-spot for the company. The services it provides gives small businesses access to capabilities usually only found in some of the largest businesses, allowing them to better source, attract and manage talent and compete.

“When you think of a small business, it doesn’t really compete with other small businesses, it competes with companies of all sizes,” MacKay said. “Some of those companies may have 10,000 employees and a great IT department and an HR department, employment lawyers and things a small business simply can’t afford.

“Our job is to package those capabilities up in an affordable manner to allow small businesses access to them, so they can focus on their business.”

Accounting for brilliance

A professional services firm might not be the first place an enterprising young start-up looks for help, but in many cases it should be.

As a leader in accounting services, PwC Canada makes itself a resource for early-stage businesses beyond consulting on the red and black. Through its industry focus on Technology, Information, Communications and Entertainment (TICE), PwC continually watches and researches the market. This enables the firm’s 5,700 partners across the country to be plugged in to the market information needed by clients big and small.

Still, PwC partner Chris Dulny, the national technology sector leader, sees numerous ways his company helps support new start-ups and innovators. It’s those market insights and expert counsel that PwC can share with a fledgling company. “Often tech start-ups are created by engineers; we can help broaden that experience and increase business acumen.”

As part of its continuing research, PwC has found that currently Canadian early-stage companies are seeing three key challenges: customers, the war for talent, and funding.

“We’re finding that there’s overall a much higher level of optimism in the market,” Dulny said. “At the same time, competition is fiercer than ever. I would tell any start-up to take care of their customers. Repeat business is key and it’s becoming tougher to defend against competition.”

It’s an approach that parallels PwC’s own high customer focus, and Dulny said Canadian start-ups must really think about innovative marketing in the digital world and how to use social
media to create a two-way dialogue. In today’s market, it’s critical to capture the attention of what PwC calls the “selfsumer”, a savvy, evolved consumer that uses social networking and other multimedia tools to collaborate on and make purchase decisions.

At the same time as they are working to retain customers, start-ups must look for fresh ways to motivate employees. In 2012, talent resource management became the top concern of CEOs surveyed by PwC. Required skill sets are becoming more specific, brain-drain to the U.S. continues and, interestingly, it has become easier to simply launch one’s own business, Dulny said. Start-ups need to be agile in their methods when recruiting employees, he adds.

On the other hand, funding is trending positive for innovative start-ups, according to Dulny, who said he sees VC activity rising. Although still short of pre-2008 recession levels, tech is growing as a proportion of this interest. “This is good news, because it’s been either down or flat for so long.”

Dulny also said he’s seeing increasing interest in investing in tech entrepreneurs; for example, pension funds have increased interest in venture capital markets.

Beyond that, early-stage companies should take advantage of connections through the services firms and suppliers a small business works with, Dulny said. PwC has a vast network of clients and more than 10,000 alumni that it keeps in touch with regularly. It uses this network to connect like-minded parties, from clients, to partners, to entrepreneurs and prospects.

“We try to connect those in the industry with each other, both from a personal perspective and from a larger one. We think of it like opening up our Rolodex,” Dulny said pointing to its role in the innovation ecosystem. “Where it makes sense, we also introduce certain clients with the innovative technologies they need to succeed.”

To promote an ecosystem of innovation, PwC also hosts the Vision to Reality Awards, a program that celebrates dynamic Canadian tech companies that have shown growth and outstanding achievement. The awards honour innovators, like last year’s Innovator of the Year winner EcoSynthetix of Burlington, Ont., but also lucrative exits, like Ottawa’s Protus, which won Exit of the Year for its $213 million acquisition.

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**Law of attraction**

When the law firm of Wildeboer Dellelce LLP opened in 1993, it did so with a few entrepreneurial principles that have helped it remain strong to this day: a singular focus, escaping bureaucracy and having more fun.

Its singular focus on corporate finance and tax law has allowed the 40-plus lawyer firm to compete successfully against some of Canada’s largest full-service national firms, while its agility has helped it build a strong base of technology-sector clients. In fact, in 2001, the firm opened a Waterloo office to better serve its tech base.
That tech focus, and its own aggressive entrepreneurial spirit, makes issues facing start-ups and innovators areas of key focus for Wildeboer Dellelce, notes managing partner Perry Dellelce. The firm strives to be the go-to partner for the business leaders of the future looking to grow and transform their businesses.

“We built our business growing with our clients,” Dellelce said. “We had to be very aggressive in order to compete with law firms that had, in some cases, been around since Confederation.”

That meant developing aggressive pricing and alternative fee arrangements that were ideal for the tech start-ups of the ’90s, and helped make the firm synonymous with technology industry corporate finance law, sporting a host of marquee clients like Research in Motion, DALSA and Changepoint.

After the dot-com bubble burst in 2000, the firm’s dedication to technology was unwavering, and it continued to grow its technology-sector focus, in part based on a diversity of large and small-cap clients, Dellelce said. “We can do a $250,000 private placement or a $1 billion public financing, and that’s a unique breadth of experience that we offer to entrepreneurs.”

In addition, the firm offers the Wildlaw Fast Track Program to better support entrepreneurs. The program provides “on demand” availability of services for entrepreneurs, giving them everything they could need—incorporation, counsel on seed funding, tax planning, basic employment, intellectual property and leasing advice and related launch services—exactly when they need it and at a transparent and low cost.

From helping organize and incorporate the business, to employment agreements for key employees and offer letters for prospective talent, to helping ensure intellectual property and ownership is retained in deals, to providing financing advice, the Wildlaw Fast Track Program bundles it all with flat fees affordable for a fledgling business.

“The Wildlaw Fast Track Program is really designed to give all the legal and business advice a start-up needs to launch,” said Eric Apps, partner responsible for the Fast Track Program. “At the same time it frees up cash for other critical, high-priority investments.”

He points out that good paper makes good friends, and entrepreneurs are well served by being focused on the details of their partnerships. “Dot your ‘Is’ and cross your ‘Ts’,” he urges entrepreneurs. “This is where a partnership with a focused law firm, that’s done it before time and time again, can really help.”

The firm is also unique because of its ability to assist clients, in particular early-stage clients, in finding access to capital. Wildeboer Dellelce partners and outside principals own and operate their own dealer, Wildlaw Capital Markets. A licensed Exempt Market Dealer headquartered in Toronto, Wildlaw Capital Markets helps raise early stage capital, provides M&A and business advisory services and administration and corporate governance support for Capital Pool Corporations and NEX listed companies.

It’s also about giving entrepreneurs a trusted partner to turn to, and partnership has its privileges.
Wildeboer Dellelce’s nearly two decades of serving the technology sector has nurtured a significant network of business experts and angel investors. It calls on this network to make introductions and help raise funds for its early-stage clients.

“A strong network is crucial for entrepreneurs, and as a uniquely-specialized law firm we’re able to extend that network,” Dellelce said. “We built our own business, and we know what it takes to help innovators build theirs. Our advice and our network are geared to helping our clients achieve business success.”

Although funding is a consistent challenge, experts across many industries see the investment landscape improving for Canadian technology entrepreneurs with smart ideas, albeit gradually. And there’s no shortage of Canadian start-ups with brilliant ideas. Where experts say early-stage tech companies remain challenged beyond funding is in finding and retaining talent, building an initial customer base and, perhaps most importantly, making the right connections.

Fortunately, there’s also no shortage of companies like the sponsors of the Alpha Exchange Innovation Campaign to help. It takes an ecosystem for entrepreneurs to grow and thrive but, with a little help from partners and friends, innovative companies can do just that.