



Atlantic Canadian Startup Data

2015

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CONTENTS

Executive summary	3	Part 6 – Employment.....	23
Part I – Overview	5	6.1 Breakdown of Jobs	23
1.1 Macro-Economic Background	5	6.2 How Big is #Startupeast?	26
1.2 Methodology	5	Part 7 – Educational Institutions	27
1.3 2014 Recap	6	Part 8 – Provincial Data.....	29
Part 2 – The Atlantic Canadian Startup Community		8.1 Nova Scotia	29
2.1 Introduction.....	7	8.2 New Brunswick	31
2.2 Geographic Locations.....	7	8.3 Newfoundland and Labrador	32
2.3 Company Formation	8	8.4 Prince Edward Island.....	33
2.4 Sectors	10	Part 9 – Exits	34
Part 3 – Growth Stage	15	Part 10 – Failures	35
3.1 Gazelles.....	15	Part 11 – Mentorship Programs and Incubators.....	36
3.2 International Acclaim	16	11.1 Mentoring Groups.....	37
Part 4 – Revenue.....	18	11.2 Local Incubators or Co-Working Spaces.....	38
4.1 Revenue Overview	18	11.3 Life Sciences Organizations	39
4.2 Sources of Revenue	20	Part 12 – The Entrevestor Databank.....	39
Part 5 – Funding	20	About Entrevestor.....	50
5.1 Total Funding.....	20	About the Author.....	50
5.2 Sources of Funding	22		
5.3 Equity Crowdfunding	22		

EXECUTIVE SUMMARY

The Atlantic Canadian startup community has entered a transformative phase. It is evolving from a group of largely experimental companies to an integrated network of high-growth corporations. Our research in the past six months has led us to conclude there are now about 30 members of the community with annual sales above \$2 million, and about 130 with sales above \$100,000. At least three of these companies have offices in California or will soon open them. We estimate that the community (including companies that have exited) now directly provides about 3,400 full-time equivalent jobs in Atlantic Canada. Most important, this community of companies has accelerated its sales growth for the second year in a row. Our research shows sales growth of about 66 percent in 2015 – almost double the growth rate of the previous year.

This is the third year in a row that Entrevestor has produced its Atlantic Canadian Startup Data analysis. Entrevestor is best known for producing daily news on the East Coast startup community – or as it's referred to on social media, #startupeast. We also collect data on this community. We survey companies in the sector – 152 responded this year. And we draw information from the hundreds of interviews and discussions we conduct with founders, investors and professionals each year. As a result, we're able to gain a unique understanding of what is happening in #startupeast. When we say unique, we believe that there are no similar analyses available for any other startup community in Canada.

The concept of an Atlantic Canadian startup community is quite new. It was only five years ago, in March 2011, that Radian6 announced its sale to Salesforce.com for \$326 million, sparking instant interest in the startup movement. These are our findings for the calendar year 2015:

- There are now 368 startups – locally owned high-growth companies, which are developing innovative products for the global market – in the Entrevestor Databank. The number of companies has risen 29 percent over the previous year. It's the first time in two years that the number of companies we track has increased. We counted 104 companies formed in 2015 – almost 30 percent of the entire community.
- We believe there are about 130 companies that have \$100,000 or more in annual sales and are increasing revenues by 20 percent or more a year. That's up from about 80 in 2014. This is of paramount importance because the real economic impact of the startup community is found in scaling companies. We estimate there are now about 30 companies with revenues of \$2 million or more.
- The growth is concentrated in the information technology space. IT accounted for almost four-fifths of the new companies launched in 2015. The IT companies that shared revenue data with Entrevestor increased revenue by 65 percent. And nine-tenths of the new jobs created in the startup community occurred in the IT segment.
- Overall, Atlantic Canadian startup revenues rose 66 percent – up from about 37 percent a year earlier and 30 percent in 2013. Again, this is important because the community is accelerating sales as it bulks up. Roughly four-fifths of the sales are outside the Atlantic Region. If there is one area of concern about the community's revenues, it is that almost all the companies we surveyed identified Canada and the U.S. as their dominant markets. There is very little penetration in Europe, Asia or other markets.
- Companies providing jobs data to us reported 25 percent growth in staff based in Atlantic Canada – an improvement from about 14 percent a year earlier. The companies most responsible for the strong hiring are the growth-stage companies. We also found evidence that the hirings are being financed not just by investment or government programs but by revenue – companies reporting revenues of \$50,000 or more increased their staffing by 41 percent in 2015.
- Once again, we found that companies affiliated with universities (those that grew from university research or entrepreneurship programs, or those working with university researchers) grew at a stronger rate than the overall

community. These companies reported revenue growth of 110 percent – 40 percentage points more than the overall community.

- Funding by startups was mediocre in 2015. East coast startups raised about \$76.5 million – a drop of 39 percent from an exceptionally strong year in 2014. If we strip out private equity, the total was \$58.8 million, down 12 percent from the previous year and in the middle of the \$46 million to \$67 million range we've seen in the past five years. The funding in 2016 promises to be much stronger.

Underpinning this growth was the further development of the ecosystem, especially in the IT segment. Propel ICT, the regional tech accelerator, is now accepting about 70 companies a year and is on the cusp of offering programs in all four provinces. There are incubators in seven cities offering work space and programming. And the funding picture has improved with the launch of the Venture Newfoundland and Labrador fund.

The strong performance of the Atlantic Canadian startup community is especially fortuitous because it meshes perfectly with the policy priorities of so many governments. The new federal government of Justin Trudeau has begun to identify its priorities, and the startup community supports many of them, including clean growth, innovation, youth employment and the nurturing of the middle class. The government has also highlighted First Nations development as a national priority, and Atlantic Canada boasts the first tech accelerator for Aboriginals, the Aboriginal Business Accelerator based outside Fredericton. Innovation is the cornerstone of the economic development policies of the New Brunswick and Prince Edward Island governments. In Nova Scotia, the foundation of government policy is the Ivany Report, which called for the development of the private sector and an increase in innovation and company formation. The startup community adds to all these policy aspirations.

If there is one weak part of our startup community, it is that it is populated by startups in the strictest sense of the term. More than half the companies in #startupeast are less than three years old. Although the current growth rate is impressive, the companies are just too young to have made a big impression nationally or internationally. The best benchmark for high-growth companies is the Deloitte Fast 50, which identifies the fastest growing companies in Canada based on four years of revenue. Few startups in Atlantic Canada have a four-year revenue history and only one, STI Technologies, made the 2015 Fast 50. Deloitte Canada placed STI in 41st place with revenue growth of 204 percent over the past four years. Deloitte also named STI to its North American Fast 500 list, assigning it the 319th spot.

ABOUT ENTREVESTOR

Entrevestor was founded in 2011 by Nova Scotia-based writers Peter and Carol Moreira as a portal to unite and inform the startup community in Atlantic Canada. It posts daily news on Atlantic Canadian startups on its website, www.entrevestor.com, and its articles appear three times weekly in the Chronicle-Herald. Entrevestor produces four free Entrevestor Intelligence reports annually to provide a more in-depth examination of the startup community in Atlantic Canada.

PART I - OVERVIEW

1.1 Macro-Economic Background

As the value of energy and other commodities remained weak in 2015, the Atlantic Canadian economy faced a range of challenges. The low resource prices hit Newfoundland and Labrador especially hard. Statistics Canada reported that the GDP in the northeastern province contracted 2.2 percent in 2015, the second-worst provincial performance in the country. The economy grew 1.9 percent in New Brunswick and 1.5 percent in P.E.I., both well above the national GDP increase of 0.9 percent. Nova Scotia's GDP increased 0.8 percent – a tepid increase but its best in five years.¹

Economic growth is a key economic measurement for the region, given that its four provinces are the poorest in Canada and need growth badly. The three poorest provinces in terms of GDP per capita in 2014 were Prince Edward Island (\$41,060), Nova Scotia (\$41,465) and New Brunswick (\$42,480). Only Newfoundland and Labrador, with a per capita GDP of \$63,341, exceeded the Canadian figure of \$55,510, but it should be noted that Newfoundland's per capita GDP fell by about \$4,500 between 2013 and 2014.²

Unemployment has proven a persistent problem in the region, and has been exacerbated by problems in the energy sector as unemployed oil patch workers have been returning home. The unemployment rate in the region ranged from 8.6 percent in Nova Scotia to 14.4 percent in Newfoundland and Labrador in December 2015. The problems with rural unemployment were due to continue, as exemplified by the Potash Corporation of Canada laying off 430 people in Sussex, N.B., in January 2016.

The economic characteristics that are common to all four provinces are weak labour markets (despite high levels of education) and an aging workforce. Most of the region continued to suffer from a shrinking population. In 2015, the population shrank marginally in all four provinces

except Nova Scotia. That province reported its first population increase (albeit a tiny gain of 0.1 percent) in four years. The population growth in Halifax was able to offset the 0.7 percent decline in the rest of the province.³

The economic challenges of the region were highlighted in February 2014 when the Nova Scotia government released *Now or Never: An Urgent Call to Action for Nova Scotians*, better known as the Ivany Report. It noted the persistent economic weakness and need for private sector growth in Nova Scotia, though its analysis could apply to the region overall. The report has focused the attention of the Nova Scotia business and government communities on the need for private sector growth.

The weakness of the employment market is a mixed blessing for Atlantic Canada's startup community. The ocean-side provinces offer an attractive lifestyle to their inhabitants, and many people choose to live in the region in spite of the economic challenges. For many, the lack of opportunities with established employers means that entrepreneurship is the best way to make a living in the Atlantic Provinces. The downside is that the shortage of talent, especially computer programmers and business development executives, is acute. (To be fair, programmers are in short supply globally.)

1.2 Methodology

To the best of our knowledge, our annual startup analytics reports are the most comprehensive studies of a regional startup segment available in Canada. The data has come from two main sources: a survey of startups conducted between March and June 2016, and Entrevestor's daily reporting on the community over five years.

We distributed our survey to almost 300 startups, guaranteeing them confidentiality. These companies had to meet three criteria: they must be locally owned; they must be developing a scalable product or products; and the product(s) must be based on proprietary technology. There are vast grey areas in the selection

¹ Taken from CBC media report at <http://www.cbc.ca/news/business/canada-economy-gdp-2015-1.3579034>.

² https://en.wikipedia.org/wiki/List_of_Canadian_provinces_and_territories_by_gross_domestic_product

³ <http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/demo02a-eng.htm>

process and we did our best to apply the same metrics to all regions and sectors.

We received responses from 152 companies. However, not all of them answered each question: some withheld sensitive information such as revenue, payroll or funding. These surveys trickled in, and some arrived after we published our first results in our first two *Entrevestor Intelligence* reports of 2016. We've continued our analysis since the first two *Intelligence* reports were published. Therefore, there have been a few revisions in our data since it was first published earlier this year, especially in the Company Formation category.

We're able to supplement this survey with our deep knowledge of the startup community. *Entrevestor* has posted about 2,000 articles on the community since September 2011 and has an intimate knowledge of the startup community. We pride ourselves on reporting on all four Atlantic Provinces and have used this broad and deep understanding of the community to complement the results of the survey.

Wherever possible, we've used the largest sample size available. Preferably, we use the 368 startups we've identified. However, for some data we can only get information from the 152 companies that responded, or those that responded to the survey supplemented by other information. In each case, we have tried to be as clear as possible about the number of companies we've counted and how we arrived at the details.

Unless we state otherwise, all the data is as of Dec. 31, 2015. In most cases, we have rounded percentages off at the decimal point – we're collecting data that can best be described as messy, and it's a fool's game to be too precise in reporting growth. The important thing is the broad trends.

We guaranteed complete confidentiality to the companies that completed our survey. Therefore we cannot reveal any company-specific data garnered from the data. However, we do amplify on some findings throughout this document by bringing out information we gathered through our interviews and which we have already reported on.

We would like to sincerely thank the Atlantic Canadian startups that trusted us with confidential information.

1.3 2014 Recap

In 2013 and 2014, the Atlantic Canadian startup community bulked up, then slimmed down and became more efficient. There was strong growth in the segment in 2013, with employment at the region's startups increasing about 43 percent and revenues up 30 percent. After such strong growth, the hiring binge eased off and employment at the region's startups increased a more moderate 14 percent in 2014. But revenue growth in 2014 actually accelerated – up about 37 percent year on year.

What we learned in our surveys on the 2014 calendar year was that a solid core of the Atlantic Canadian companies was now selling products to paying customers. Some 122 companies shared revenue data with us, and they showed revenues rising 37 percent in 2014. We estimated there were about 80 companies making \$100,000 to \$5 million in annual revenue, and their revenues were up more than 20 percent annually – which would be a loose definition of a growth-stage company in the region. Our research showed that 78 percent of the profit came from outside the Atlantic region.

The other findings of our research for the 2014 calendar year included:

- The Information Technology segment increased its dominance in the region. In 2014, it accounted for 65 percent of the startups, up from 63 percent a year earlier. Including the landmark \$60 million private equity investment in Verafin, it accounted for three-quarters of the equity investment in the region.
- Even without the Verafin funding, 2014 was a strong year for financing. Excluding private equity, Atlantic Canadian startups raised \$66.8 million in funding – an increase of 44 percent from the previous year. There was strong funding by angels and venture funds backed or owned by provincial governments.
- Startups with relationships with universities (born of university IP; graduates from entrepreneurship programs; or using lab facilities) showed exceptionally strong growth. More than half these companies shared their revenue data with us, and overall their revenues rose 71.1 percent.
- Employment by startups increased by about 14 percent, led by strong growth in Nova Scotia. We learned that 90 percent of the jobs created by startups in the region

stay within Atlantic Canada. We estimate about 3,000 Atlantic Canadians were directly employed by startups.

- Eight percent of the startups in Atlantic Canada were led by women. Startups run by women accounted for 4 percent of the VC funding and none of the strategic funding.
- We counted 46 startups that failed in 2014 – about 16 percent of the companies we identified at the end of 2013. More than half had no paid employees. We estimate 10 startups moved to other locations, mainly Ontario.

PART 2 - THE ATLANTIC CANADIAN STARTUP COMMUNITY

2.1 Introduction

Entrevestor has found 368 startups operating as of year-end in Atlantic Canada – a 29 percent increase over our dataset in 2015.

The word “startup” is misleading because it suggests a company that was formed recently. A more accurate – though less succinct – label would be “high-growth innovation companies.” In truth, there are a few companies we follow that were launched in the last century. We pay little heed to the age of the company, but do demand three criteria: they must be locally owned, or have at least one founder based in Atlantic Canada; they must be developing a scalable product or products; and the product(s) must be based on proprietary technology. In short, they are companies that should be suitable for investment.

This portrait of the Atlantic Canadian startup community is the most accurate snapshot possible of what the group looked like in the winter of 2015-16. But it is impossible to categorically place hard numbers on this group. The nature of the startup world is such that the companies rarely fit nicely into groups we’ve chosen for them. Many companies are in the process of becoming service companies. Others are teams working on a project, but not yet incorporated. Several have their C-level executives elsewhere and their development team in the region. In placing startups in segments, there are often massive grey areas between our four industries – IT, Life Sciences, Manufacturing and Cleantech.

The description of the Atlantic Canadian startup community in the following pages is as accurate as we could make it. We won’t say it’s our “best estimate” because our research constitutes far more than an estimate. The only time we estimate data is when we try to calculate the total size of the startup community or the number of gazelles. Overall, this is an accurate presentation of an often confusing industry group.

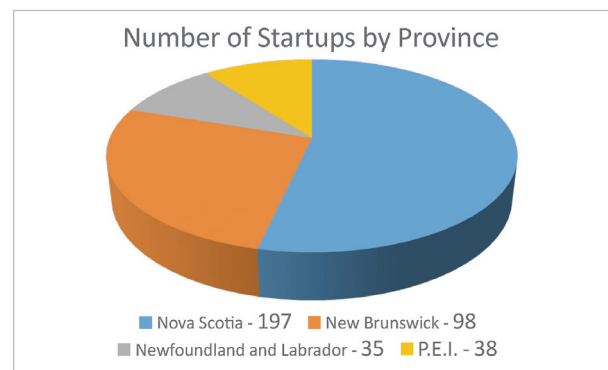
2.2 Geographic Locations

Some 54 percent of the companies we track are in Nova Scotia due to two factors: first, Halifax is the largest metropolitan centre in the region, and startups tend to thrive in urban areas; and second, the Cape Breton startup community has been adding companies rapidly in the past few years.

Entrevestor, which is based just south-west of Halifax, has received criticism for focusing too much on Nova Scotia. Some people claim we have missed startups in the other provinces. We accept that in the startup world some companies get overlooked, or are just beginning and not yet counted. Being Nova Scotians, we tend to run into more Nova Scotian companies. However, the evidence shows there are simply more startups in Nova Scotia than the other provinces. For example, Nova Scotia and New Brunswick host biennial startup competitions in alternating years, and the I-3 Technology Startup competition in Nova Scotia typically receives twice the entries that New Brunswick’s Breakthru competition receives.

The following is the breakdown of where Atlantic Canadian startups are based:

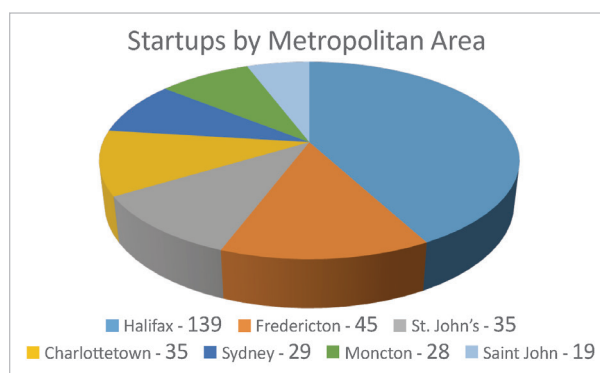
Chart 2.1



Dataset: 368 startups

Halifax accounts for 38 percent of the startups in the region, representing all sectors and ages of companies. Several of the gazelles we'll examine in Section 3.1 are based there, and it can claim both exits and failures in 2015. Halifax's startup community is truly a cross section of the community in the entire region. Investors and professionals in the city have quietly complained recently that the Halifax startup community has lost its buzz, or that there are problems with quality, especially in new companies. It's impossible to assess the quality of new companies, but overall our data do not support the criticism. There were 42 Halifax startups launched in 2015 – about 40 percent of the new companies in the region. And Halifax boasts several companies –Spring Loaded Technology, PACTA, 4Deep Inwater Imaging, Affinio – that are moving aggressively from seed to growth stages.

Chart 2.2



Dataset: 368 companies

Chart 2.2 highlights the dominance of Halifax in terms of the number of startups, but it also brings out a few other bright spots and challenges in the region. First, it shows that St. John's, Charlottetown, Sydney and Moncton are forming a middle band of startup centres, behind Halifax and Fredericton. With about 30 to 40 startups in each, these four cities are nice, diversified communities with their own startup houses where people meet.

The first challenge highlighted by Chart 2.2 is the weak company formation in Saint John recently. It's astonishing that the Port City has less than half the startups of Fredericton and one-third fewer than Moncton or Sydney. This is the birthplace of Propel, the home of Mariner and the city that was not long ago held up as a smart city. There could be a few reasons for this drop in the number of startups. First, several of the company's

most promising startups, such as R17, MedRunner and Enovex have all wrapped up in recent years. There was no common cause for their problems. However, with the growth of the Connexion Works co-working space, Saint John now has a development program that is nurturing several young companies in 2016.

The second challenge is the persistent underrepresentation of startups in rural areas. This isn't just an Atlantic Canadian thing – startups tend to be urban phenomena. Only 38 startups – or just over 10 percent of the total number – are located outside these major urban centres. It's a weak number given that about 45 percent of Atlantic Canadians live in rural areas. (Some observers say that we're missing some startups working quietly in rural areas, but many of these are service providers, rather than startups.)

There are groups actively working to nurture more startups outside of the cities. Andrew Button's Mashup Lab has launched its Spark accelerator to provide lean mentorship to startups in more remote locations. Corner Brook's two main academic institutions—Memorial University's Grenfell Campus and the College of the North Atlantic—have come together to form the Navigate Entrepreneurship Centre. It has graduated more than 70 entrepreneurs and works with 25 to 40 students at any one time. Acadia University's Rural Innovation Centre works closely with the Acadia Institute for Data Analytics to encourage innovation in rural enterprises.

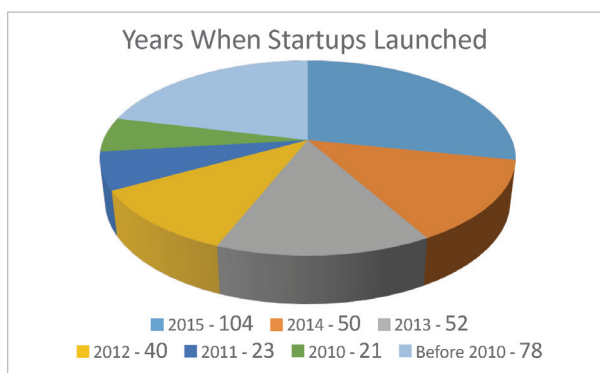
There has been considerable success in rural startups lately. Wolfville, N.S.-based Singolar, which developed algorithms that can help companies interact better with customers, was accepted into the Canadian Tech Accelerator in Silicon Valley and the SAP Startup Program. And WoodsCamp, the Mahone Bay, N.S., company that has an online market for the timber trade, was one of the highlights of the recent Propel ICT Build accelerator.

2.3 Company Formation

There was an explosion of company formation in 2015. In our current list of startups in Atlantic Canada, there are now more companies launched in 2015 than those launched in both 2013 and 2014.

Chart 2.3 shows the preponderance of rookie companies in the Atlantic Canadian startup community. Some 104

Chart 2.3



Dataset: 368 companies

companies launched in 2015, or 28 percent of the total databank. That compares to 50 formed in 2014 and 52 from 2013.

Of course, the nature of the startup world is that there are companies that announce they have launched but fail instantly. There were 64 companies launched in 2014 (14 of them have already failed) and 67 launched in 2013 (of which 15 failed).

The issue to monitor in the coming months and years is whether the 2015 crop of companies experiences the roughly 20 percent attrition rate of their predecessors, in which case about 80 companies will last a few years or more. Or, will 2015's flood of companies produce a wave of failures in 2016 and 2017? In which case, the wave of company formation will not be matched by the number of successful companies. It is, of course, too soon to tell, but

Chart 2.4

Where New Companies Are Based	
Halifax	42
Fredericton	16
Sydney	11
St. John's	10
Charlottetown	8
Moncton	7
Saint John	4

Dataset: 98 urban companies founded in 2015

examining how companies came into being gives some indication of their prospects.

As expected, most of the companies formed last year were in IT and more were founded in Halifax than in any other city. In fact, IT has been responsible for by far the most company launches in the past two years.

Chart 2.5

Sectoral Breakdown of Companies Formed in 2015 and 2014.		
Sector	Number of companies launched in	
	2015	2014
IT	80	46
Life sciences	13	6
Cleantech	8	2
Manufacturing	3	6

The growth of launches in IT has been aided by the rapid expansion of Propel ICT accelerator programs. The program that graduated 10 companies in 2012 expects an intake of more than 70 companies in 2016. Propel ICT offers its Launch program (for young companies) in Halifax, Fredericton, St. John's and (as of fall 2016) Charlottetown and hopes to offer a cohort in Sydney in 2017.

Meanwhile, university programs are increasing the number of companies coming out of institutions. University of New Brunswick, Dalhousie University and St. Mary's University all offer graduate or post-graduate programs that encourage the creation of new companies.

There are indications that there is some strength in the current crop of rookie companies. The responses to our survey show some impressive results.

Revenue

Of the 39 rookie companies that completed the revenue section of the survey, nine reported having revenue in their first year, two of them more than \$100,000. The nine companies recorded a total revenue of \$569,000 in 2015. Thirty-two companies are predicting they will have revenue in 2016, and the total of the projection is \$6.9 million.



Funding

We received information from 16 companies showing they had raised a total of \$4.1 million, either from the founders or other sources. By contrast, in the previous year, 17 new companies raised a total of \$2.57 million. The breakdown can be seen here:

Chart 2.6

Source	No. of Companies	Total
Founders	11	\$236,000
Friends and Family	4	\$670,000
Angels	5	\$2.17M
Venture Capital	2	\$770,000
Strategic	3	\$227,000

Dataset: 41 companies founded in 2015.

Staff

Young entrepreneurs often confuse “team members” with “paid employees” so these data should be taken with a grain of salt. Some 21 companies told us they had at least one employee. In total, they reported 69 staff members.

Our reporting in the past year also shows there are dynamic young companies entering the community. For example, Appili Therapeutics of Halifax raised \$2.3 million in equity funding and \$1 million in non-dilutive funds or loans. The company had a paid staff of nine by the spring of 2016. A spin-off from Innovatia, Gemba Software Solutions of Saint John launched with \$1.5 million in investment from the New Brunswick Innovation Foundation and Innovatia. Another spin-off is RevIQ, a Charlottetown company that came out of Gogii Games of Moncton. RevIQ launched with three employees in mid-2015 and by the end of June 2016 had 19 employees. The growth was financed entirely by revenue.

One thing to note about the companies founded in 2014 and 2015 is more and more are being founded by industry veterans or people with deep academic backgrounds in their chosen field. This is important because a startup's chances of success increase dramatically if the founders have industry experience. They understand the problems

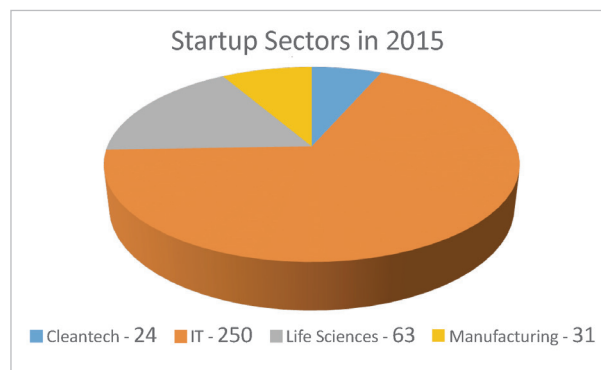
of the industry and have a network of industry contacts. The following is a list of some companies formed in 2014 and 2015 with experienced founders.

The examples of Gemba Software and RevIQ are worth noting because they are startups that have spun off from more established companies (Saint John-based Innovatia and Moncton-based Gogii Games respectively.) The New Brunswick Innovation Foundation is taking the lead in a movement to encourage established businesses to spin out startups. President and CEO Calvin Milbury says there is profuse experience, knowledge and contacts within established businesses, many of which have ideas for innovation but are unsure how to unleash them. These companies should form startup subsidiaries to develop these ideas and attract outside funding. There are other companies pursuing such a strategy. Halifax-based web developer Norex, for example, is evolving into an incubator of innovation and has spun off such companies as educational software company EyeRead and Pursu.it, a crowdfunding platform for elite athletes.

2.4 Sectors

The Atlantic Canada Startup Community is becoming more and more dominated by information technology. This simple pie-chart shows the dominance of IT in the startup community in 2015.

Chart 2.8



Dataset: 368 companies followed by Entrevestor

This dominance has grown in recent years. The startup community has added a net 68 IT companies in the past two years, more than the other three sectors combined. (It should be added most of the failures of companies in the past two years have been in the IT space, which is

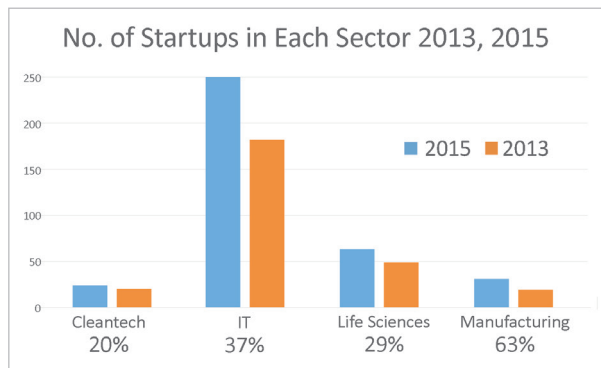
Chart 2.7

Experienced Founders of Young Companies		
Company	Location	Founder
Afri-Sea/Natural Ocean Products	Halifax	Tim Cranston, a scientist specializing in bioactive compounds in biomass, including seaplants.
Airbly	Argyle Shore	Christopher VanHorne, experienced electronics technician.
Appili Therapeutics	Halifax	Kevin Sullivan, a biotech vet who has raised \$40 million and taken a drug candidate through Phase II trials
Covina BioMedical	Halifax	Caitlin Pierlot, a PhD in biomedical engineering.
Gemba Software Solutions	Saint John	Daniella Degrace, a veteran of successful startups Q1 Labs, Radian6 and iMagicTV.
Liv9	Fredericton	Dan Pike, an experienced pharmacist.
Lux Wind Turbines	Halifax	Terry Norman, who has 35 years of experience in business and five years in wind energy.
MusicEdZone	St. John's	Lisa Gillam, a career music teacher who has run her own business since 2010.
Neothermal Energy Storage	Halifax	Louis Desgrosseilliers and Moe Kabbara, graduate students at Dalhousie University engineering school.
Onset Communication	Charlottetown	Brian Sharp, a 25-year veteran of the film industry.
Orenda Software Solutions	Sydney	Tanya Collier MacDonald, who has been in the communications business since 2007.
RevIQ	Charlottetown	John Kimmel, who has been in gaming and film since 2008.
Seaformatics Systems	St. John's	A team of Memorial University engineers and scientists who have been working on the project since 2007.
Singular	Mahone Bay	Suman Kulyan, who spent 18 years working for blue chip companies and startups around the world.
Sustane Technologies	Chester, NS	Peter Vinall, who has a deep background in business and engineering.
Ubique Networks	Sydney	Vijai Karthesegu, who has founded four startups and has deep experience in data centres.



why net growth in the past two years (68 companies) falls short of the IT companies added in 2015 (80 companies.) Although manufacturing has been the fastest growing sector in the past two years, it has started from a smaller base. It should be added that most of the manufacturing companies are in essence hardware companies, so the digital industries comprise more than three-quarters of the startup community.

Chart 2.9



*Dataset: 368 companies in 2015; 287 companies in 2013.
(The percentage figures denote the growth in each segment over two years.)*

Why has IT grown so much? The obvious reasons are: first, this is part of a global boom in IT startups; second, it requires low amounts of capital and is therefore ideal for Atlantic Canada, which has limited capital; and third, IT companies can often reach customers online, which mitigates the adverse effects of high travel costs experienced by Atlantic Canadian companies. What's more, it's said that it has never been cheaper

to launch an IT company or more expensive to grow an IT company because of the cost of programming talent. The cliché doesn't fully apply to Atlantic Canada because programming talent for now is less expensive here than other parts of the world.

But there is something more at play in the rapid development of IT companies. IT is the only sector that has a regional trade association and accelerator – Propel ICT. Though it grew in New Brunswick, Propel for the past five years has aspired to offer mentorship to startups in all four provinces. The growth of IT companies (and we believe the few number of failures) is largely attributable to Propel's ambitious roll out across the region. Propel's success also has helped the development of the manufacturing companies as some advanced manufacturers (or hardware companies) like Airbly and SmartPods have gone through the Propel programs. By contrast, the support groups in life sciences are provincially focused, and there is no support group in cleantech.

The dominance of IT is a mild cause for concern. Without overstating the case, one of the strengths of the Atlantic Canadian startup community has been its diversity. There are no real clusters, but the broad range of company pursuits means there is a superb range of expertise across the spectrum. The strength in IT aids the growth in medical devices, for example, and the strength in film has helped the gaming business. Some of that strength will be lost if the Atlantic Canada startup community becomes simply an IT grouping with a smattering of biotech and cleantech.

Chart 2.10

Revenue Growth by Sector (Dollar figures = \$,000)				
Sector	Companies	Revenue 2015	Revenue 2014	Change
Cleantech	8	\$110	\$85	29%
IT	90	\$25,055	\$15,205	65%
Life Sciences	17	\$188	0	NA
Manufacturing	9	\$780	\$477	65%

Dataset: 124 companies reporting revenue data.

Information Technology

Within the information technology segment, there are no truly dominant subsectors. There are stars in various subsectors such as gaming (Orpheus Interactive, RevIQ), social media analytics (Affinio), multi-channel marketing (SimplyCast), Agtech (Resson Aerospace), fintech (Verafin) and educational tech (Ooka Island). There are SaaS companies that are difficult to classify (Proposify, Celtx). The IT segment is advancing across a broad front.

In geographic terms, Charlottetown, Cape Breton and St. John's are growing their IT communities much more quickly than a few years ago. All now have community incubators (Startup Zone, Navigate Startup House and Common Ground, respectively) and energetic communities of programmers. There's excitement in these cities, whereas the more mature communities like Halifax and Fredericton have grown somewhat blasé about the whole startup thing.

Two facets of the IT segment speak to the health in the community – ambition and failure. There are some incredibly ambitious companies that want to build global dominance in their sectors – Mariner Partners, Verafin, Affinio, SimplyCast. Mariner Partners Chair Gerry Pond predicts Atlantic Canada will have its first billion-dollar tech company as soon as 2019, but there's still no clear favourite on which company it will be. As noted above, revenues are increasing 65 percent overall in the IT segment, and even the larger companies are reporting sales growth of 56 percent. Pond's prediction may prove accurate.

But the ambition is not limited to the established companies. Consider the ambition of WoodsCamp, a one-year-old company in Mahone Bay, N.S., that is developing an online market place for the timber market. Founded by Will Martin and Alastair Jarvis, WoodsCamp is a young company that aims to revolutionize the way timber is harvested in private woodlots. Within 10 years, it hopes to be the world's leading manager of timber. That title now belongs to Weyerhaeuser Co. of Washington State, which now records about US\$7 billion a year in revenue. They are planning massive disruption in a \$23 billion market.

It's counter-intuitive to think that failure and ambition could both be hallmarks of the IT segment but there is some correlation between the two. More than 60 percent of the companies that failed in 2015 in the Atlantic

Canadian startup community were digital companies. Most of them were in their first or second year. That means the talent and resources in these companies were quickly available to be redeployed into other startups with better prospects. So the failure of weaker companies has benefited stronger companies.

Given the segment's prominence in the community, we were able to secure more and better data about the IT sector than the others. Ninety IT companies provided us their revenue data, and their revenue rose 65 percent in 2015. They expect profits to more than double next year. What is impressive is how quickly some of these companies are getting to market. Two first-year tech companies have more than \$100,000 in revenue, and 14 have attained revenues in their first two years.

Life Sciences

The life sciences segment is populated with more established companies than the other sectors. Whereas the average age of an IT company in Atlantic Canada was just over four years as of December 2015, the average age of biotech companies was six-and-a-half years. It's a given that biotech products take longer to roll out than those in other segments. And a few life sciences companies, such as Mabou, N.S.-based Halifax Biomedical and its Cape Breton neighbor Health Outcomes Worldwide of New Waterford, do have products on the market.

The greatest successes in the life sciences space are those that have avoided drugs or devices that need approval from health regulators in Canada, the U.S., and the European Union. Charlottetown-based Abbey Island Foods does not release revenue numbers, but CEO John Rowe says revenue growth is strong, with 80 percent of 2014 sales coming from export markets. Entrepreneur Marc St. Onge sold his Ascenta natural beauty product business to Nature's Way of Germany last year, and already has another product in the market with Bend Beauty. TruLeaf of Halifax and Spring Loaded Technologies of Dartmouth (which we classify as a manufacturer but could also be considered a life sciences company) have made great headway bringing a product to market.

And there are companies making headway with regulators in 2016. Halifax-based Densitas has received regulatory clearance in the European Union and Canada

to sell its first product, DM-Density. Two companies, Appili Therapeutics of Halifax and Soricimed Biopharma of Moncton, have recently received orphan drug approval from the Food and Drug Administration in the U.S. Orphan drug status fast-tracks the regulatory process and offers an exclusive market for several years. Soricimed has also said publicly its Phase I trials have shown positive results.

The data that we collected on the life sciences sector revenues (17 companies, only two of which had 2015 revenues) is not a valid illustration of this sector. We needed data from some of the more successful companies, but sadly didn't get it. What we can say with some confidence is that the life sciences segment overall risks being left behind by digital industries. There is competition in the startup world for capital, for government programs, for media attention. If Atlantic Canada gains a reputation as an IT hub, the overall ecosystem could cut its cloth accordingly. The life sciences segment needs some of its potential stars to grow dramatically and visibly in 2016 and 2017.

Cleantech

The forces driving Cleantech are more complicated than they were a few years ago, which may be benefiting the Atlantic Canadian segment. The collapse of energy prices was expected to be a bullet in the heart of clean technology investment. In the U.S., cleantech investment by venture capitalists fell from US\$2 billion in 2014 to US\$1.2 billion in 2015, according to Price Waterhouse and the National Venture Capital Association.⁴ However, there is renewed interest in cleantech for various economic, governmental and technical reasons.

First, the cost of alternative energy has fallen, making it economically viable to invest in clean energy. Globally, investments in clean energy increased 17 percent to US\$270 billion in 2015, easily outpacing investments in carbon-based energy.⁵

Second, governments around the world have increased their resolve to battle global warming, as seen at the Paris Conference of 2015. The new Liberal government

in Ottawa is emphasizing cleantech (what it calls "clean growth") as one of its economic priorities, and will no doubt unveil programs to reflect this emphasis.

Third, technology has advanced so low-capital enterprises— sometimes known as "cleantech lite" — can benefit the environment while rewarding entrepreneurs and investors. Cleantech has traditionally been seen as a capital-intensive segment, but the marriage of low-cost solar and new technologies can result in feasible, environmentally sound products.

In Atlantic Canada, the most successful companies of late have been those requiring the least capital. CarbonCure Technologies of Halifax is selling its carbon-reduction technology to concrete producers across North America and said it will be profitable in late 2016. Other companies like Eosense of Dartmouth, Island Water Technologies of Charlottetown, EMSAT of St. John's and BioPolyNet of Fredericton are making strong inroads with clients. It's also worth mentioning that the winner of the I-3 Startup Technology Competition in Nova Scotia was Sustane Technology, a cleantech company dedicated to recycling garbage rather than putting it in landfill.

As was the case in the Life Sciences segment, we did not receive enough sound data to make a conclusive statement on revenue growth in this segment.

Advanced Manufacturing

There has been surprising growth in manufacturing in the region in the past few years, with the number of companies in the segment almost doubling. The average age in the segment is four years, yet many companies are bringing products to market. SmartPods of Moncton signed a major distribution deal in the spring of 2016, and 4-Deep Inwater Imaging of Halifax formed a research and sales partnership with Guangzhou Bosma Corp. of China. Spring Loaded Technologies has held a successful crowdfunding campaign and signed a partnership agreement with the Canadian military.

The manufacturers that provided revenue data to us are a mixed group, ranging from students who decided to make

⁴ Found at <http://fortune.com/2016/03/29/clean-tech-investing-boom/>

⁵ Found at <http://fs-unep-centre.org/publications/global-trends-renewable-energy-investment-2015>

and sell a consumer product to advanced companies that are selling sophisticated products around the world. Seven of the nine companies providing revenue data had some sales last year, with sales overall rising 65 percent. They expect revenues to quintuple in 2016.

It's difficult to give a reason for the explosive growth, but to some extent advanced manufacturing is an adjunct of IT. Virtually all these companies require programing. To speak the language of the IT segment, they're hardware companies. There is a community of "makers" in the region and they're beginning to hit their stride. Those that have been fiddling with hardware are now forming companies, and those with companies are now making sales.

PART 3 - GROWTH STAGE

3.1 Gazelles

We recently estimated in Entrevestor that there are about 100 Atlantic Canadian gazelles – startups that have at least \$100,000 in revenue and are growing sales by at least 20 percent annually for a period of four years. There were about 80 of these companies in Atlantic Canada at the end of 2014, and their numbers have grown.

For the purposes of this discussion, we're going to modify the definition of gazelles somewhat. Almost three-quarters of the startups in our databank were launched since 2010, and few of these companies have had four years of revenue. So we've classified gazelles as companies with \$100,000-plus in revenue and "are growing revenues at 20 percent or more." In other words, they are in the process of becoming real gazelles.

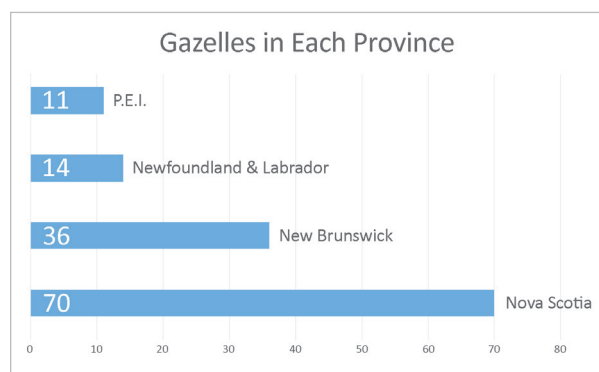
Now that we have received surveys and gone through the data bank, we believe we have under-estimated the number of gazelles in the region. Our more accurate estimate is 131 gazelles, as defined in the previous paragraph. (For the purists out there, we believe there are 77 companies that would meet the text book definition of gazelles.) We arrived at this list by going through the companies one by one and assessing whether their revenues are above \$100,000 in 2016 and increasing 20 percent annually. Given that we're mid-way through

the year, we've included a few companies that are certain to meet our criteria by year-end. In some cases, we've made estimates on companies' revenue streams. But even if our estimate is off by one-quarter (which we doubt) there would still be about 100 gazelles in the region. Based on our estimates, more than one-third of the startups in the region can be considered gazelles.

The focus on gazelles is important because the real economic benefit of the startup movement will only be realized if startups grow into corporations. When companies of significant size (i.e., \$100,000 in annual sales) increase by one-fifth in four consecutive years they develop into stable enterprises with strong future prospects. And they begin to spread economic activity beyond their immediate supply and talent chain. "Our philosophy here is to grow these companies," said Calvin Milbury, President and CEO of the New Brunswick Innovation Foundation. "It's those companies, the ones that are growing quickly over a period of time, that are creating wealth in the economy."

It should be noted that we're holding the bar pretty low with our definition of a gazelle. It's not that uncommon for a startup to gain \$100,000 in revenues. In many cases, if they can't make the mark through product sales, they can pad their top line through contract work. And some founders tell us the 20-percent-annual-growth threshold is way too low. "In Silicon Valley, your revenues should be tripling or you're not growing fast enough," said Sean Fahey, the CEO of Moncton-based Vidcruiter. He added that his company is "trending toward that and I don't think I'm an outlier."

Chart 3.1



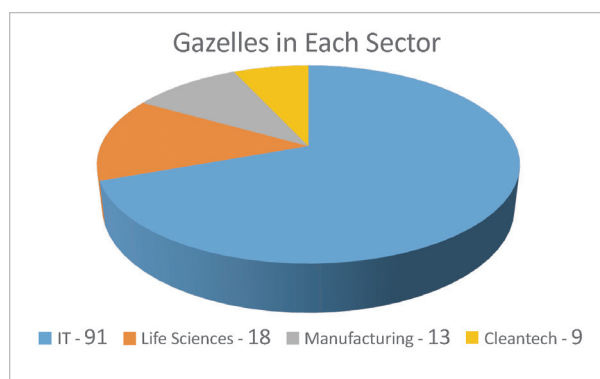
Dataset: 131 companies identified as gazelles



By our estimate, the highest concentration of gazelles is in Newfoundland and Labrador. Some 42 percent of the startups headquartered “on the rock” are gazelles, compared with 38 percent in New Brunswick, 36 percent total in Nova Scotia, and 29 percent in P.E.I.

The sectoral breakdown points again to the dominance – and the success -- of the IT segment. Almost seven in ten gazelles are found in the IT field. We’ve identified 36 percent of the IT companies we track as gazelles, which compares with 38 percent in cleantech, 42 percent in manufacturing and 29 percent in life sciences.

Chart 3.2



Dataset: 131 companies identified as gazelles

What’s worth noting is how quickly some companies are breaking the \$100,000 barrier. We’ve counted six companies that will hit \$100,000 in revenue in their first year and a half. On average, the companies in IT and manufacturing with more than \$100K in sales are six years old, compared with eight years for cleantech and ten for life sciences.

3.2 International Acclaim

For the past two or three years, more and more Atlantic Canadian startups and founders are going outside the region to compete against national and international peers. These adventures may take place in international competitions, or national and international mentoring programs. Here is a selection those that have fared well:

Affinio

Halifax-based Affinio, which has data-base technology that helps large companies to understand their customer base, was accepted into the third cohort of Microsoft’s

Seattle Accelerator early in 2016. There were applicants from 50 countries. At Demo Day, Affinio was selected to pitch last, and CEO Tim Burke’s presentation was a highlight of the evening.

Itavio

In June 2016, the Moncton startup that helps parents control how much money their children spend on online games, was accepted into the prestigious Matter accelerator in Silicon Valley. Itavio was accepted into the sixth cohort and is the first Canadian company to join the accelerator, whose partners include Google News Lab and The New York Times.

Sentinel Alert

The St. John’s company’s CEO Sarah Murphy participated in Communitech’s Women Entrepreneurs’ Bootcamp (now known as Fierce Founders), won the event and walked away with a \$35,000 cheque. Sentinel, which makes worker safety software, returned to Kitchener-Waterloo in the summer of 2016 to work with Deloitte at the technology hub’s industry outpost.

PACTA

Google invited Halifax-based contract management startup PACTA to pitch at its annual Demo Day in May 2016 in Silicon Valley. PACTA and Knowledgehook of Kitchener were the only Canadian companies among 11 pitchers at the event at the Google Headquarters in Mountain View, Calif.

ABK Biomedical and Densitas

The two Halifax medtech companies traveled to San Francisco in February 2016 to take part in the Dose of the Valley – a mentoring and networking event for Canadian life sciences companies. It is the biotech equivalent of 48 Hours in the Valley – an event that helps Canadian startups benefit from resources in the area. Last year, the Canadian Commission in San Francisco and C100 (a group that helps Canadian startups make connections in Silicon Valley) began Dose of the Valley for the biopharma, medical device and health IT sectors.

BioPolynet

Fredericton’s BioPolynet, whose nanotechnology helps to bind or stabilize granular solids, won a technology competition from Statoil and GE Oil & Gas in August 2015 with a prize worth as much as US\$400,000. The

Norwegian state oil company and the oil and gas unit of the conglomerate General Electric Co. announced BioPolynet was one of five winners of their Open Innovation Challenge. The competition asked entrants — and there were about 100 from more than 30 countries — to submit technologies that can improve the use of sand in the hydraulic fracturing process. Each of the five winners received US\$25,000 and could win an additional US\$375,000 if they reach certain milestones.

Eigen Innovations

The Fredericton Industrial Internet of Things startup made it to the final 12 participants in the Creative Destruction Lab, a Toronto accelerator that successively weeds out weaker startups and helps the stronger ones to grow. Making the final 12 in the CDL is a great accomplishment. Then Eigen placed third at the second annual Cisco Innovation Grand Challenge in Dubai, winning a US\$25,000 cash prize. But the money may be the least of the benefits. As a top-three finisher, Eigen was granted a long-term relationship with Cisco and VIP access to industry, investment and business experts.

Kinduct Technologies

The Halifax sports medicine tech company attended and thrived in the Dodgers Accelerator, the mentorship program for sports and entertainment startups run by the Los Angeles Dodgers. In his pitch at Demo Day in November 2015, CEO Travis McDonough told the audience that Kinduct has built “the world’s most advanced human performance software platform.” That means the company can pull together disparate data on athletics and health and present them on one platform.

RtTech Software

The Moncton company, whose IoT software helps large facilities reduce energy consumption, took home several awards in 2015. It was named to the Top 20 of the Canadian Innovation Exchange. (Halifax companies SkySquirrel Technologies and Leadsift also made the Top 20.) RtTech also won the BCD Award for Innovation and was named Innovator of the Year by Startup Canada.

Alex Gillis

The young man who founded Bitness of Halifax at the age of 15 was celebrated across Canada as an example of youth entrepreneurship. He was named the young entrepreneur of the year for 2015 by Startup Canada and

in May 2016 was one of eight young Canadians to meet Prime Minister Justin Trudeau to discuss innovation. (Halifax-based Sage Franch was another.)

Chris Cowper-Smith

The CEO of Spring Loaded Technologies of Halifax won the 2015 BDC Young Entrepreneur of the Year.

The federal government’s business development bank said Cowper-Smith beat out competitors from nine other provinces to capture the national award, and awarded Spring Loaded the \$100,000 first prize.

Melissa Butler, owner of the Real Food Market in St. John’s, captured the \$25,000 second prize.

STI Technologies

The Halifax pharmaceutical technology company was named to the 2015 Deloitte Fast 50, the first Atlantic Canadian company to make the list of the fastest-growing Canadian tech companies in three years. Deloitte Canada placed STI in 41st place with revenue growth of 204 percent over the past four years. Deloitte also named STI to its North American Fast 500 list, assigning it the 319th spot.

Addo, Vendeve and Zora

When The Mill accelerator opened in Las Vegas in 2014, its first cohort included Halifax-based Zora, which helps landlords vet tenants and manage their properties. Zora CEO Milan Vrekic is the former executive director of Volta, and in the next cohort there were two more Volta companies: Vendeve, which has developed an online marketplace where professional and freelance women can find customers; and Addo, which developed a platform that helps organizations encourage physical activity and good health among their members.

We should make two notes about these awards and appearances. First, there is no tokenism in awarding them. Too often, national awards like representation from across the country so they add in an East Coast company for the sake of appearances. In virtually all the examples listed above, the Atlantic Canadian company competed with other startups from across the country or continent and triumphed.

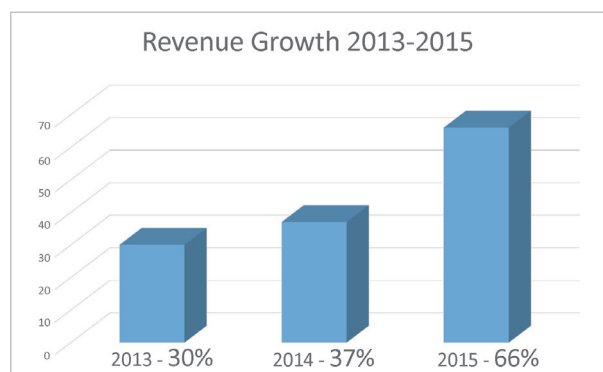
Second, most of these awards are for young companies. Atlantic Canada is excelling at launching startups but its

startup community lacks the maturity to do well in the more advanced competitions. In the Deloitte Fast 50, which requires at least four years of revenue history, we have had only one representative in three years (STI Technologies), and it placed 41st out of 50 companies. The kudos for young companies are impressive, but Atlantic Canada now has to win recognition for bona fide growth-stage companies.

PART 4 - REVENUE

4.1 Revenue overview

Chart 4.1



Dataset: The 100+ companies reporting revenue in each of the last three years.

As we have said in previous reports, revenues are the greatest indicator of the health of a startup community, and the hardest data to secure. The data we've collected shows not just growth but acceleration -- rapid acceleration. Atlantic Canadian startups sharing revenue information with Entrevestor increased revenues by 66 percent in 2015. The revenue numbers are up so strongly because the largest companies in the community by and large doubled revenues last year. And there were some companies reporting revenue for the first time that had six figures in sales. The 66-percent growth in 2015 compares to 37 percent in 2014 and 30 percent in 2013. (It should be noted that the 2013 figures included one company with about \$25 million in revenue, that skewed the figures.) As the Atlantic Canadian startup community grows, it is also becoming a more powerful engine of revenue generation.

We're extremely proud that of the 152 companies that provided data to us, 127 included revenue data. That means that we have revenue stats from about one-third of the community, and we have great diversity of companies in terms of age, location and sector. Before publishing this report, we delivered a few oral presentations with preliminary results, and we dampened down the preliminary revenue estimates, saying the growth rate was about 50 percent. We have now double- and triple-checked the numbers. We're confident that this statistic accurately reflects what is happening on the ground in the Atlantic Canadian startup community.

There is another public report that supports our findings. The Atlantic Venture Forum each year releases data provided by pitching companies, and the 14 companies at the 2016 forum displayed strong revenue growth. The seven growth-stage companies at the forum showed how startup revenues can grow once sales begin. Only one of these companies had six figures of sales in 2014, but in 2015 all but one had sales exceeding \$100,000, and for the group they totaled \$830,000 -- an increase of 83 percent from the previous year. Collectively, they expect revenues to increase almost fourfold in 2016 to \$3.1 million. Among the seven early-stage companies at the AVF, none had 2014 revenue and only one, Zora, had revenue in 2015. (It was \$58,000, and CEO Milan Vrekic said the company's monthly recurring revenue is already up to \$16,000 midway through 2016.)

There is also plenty of anecdotal evidence that revenues are increasing. As mentioned above, Sean Fahey, CEO of Moncton-based VidCruiter, said his revenues are more than doubling and his target for 2016 is to triple sales. Halifax's Proposify has said publicly that its MRR rose 1,500 percent in 2015, and the company staff gathered at a Halifax pub at the end of May 2016 to celebrate its first month of \$100,000 MRR. In his pitch at the Microsoft Accelerator, Affinio CEO Tim Burke revealed quarterly revenue rose from about \$50,000 in the second quarter of 2015 to more than \$400,000 for the same period in 2016. Halifax's Fundmetric said at the AVF that its MRR is now increasing 30 percent per month.

Overall, a look at revenues in each sector of the community demonstrates the strength of the digital industries.

The obvious conclusion to draw from this chart is that the digital industries are dominating the race for higher revenue. In the sample we collected, the 26 companies reporting revenues above \$100,000 are from the IT

Chart 4.2

Revenue Breakdown by Sector					
2015 Revenue	Cleantech	IT	Life Sciences	Manufacturing	Total
\$0	6	40	12	2	60
\$1-\$99,999	2	27	5	4	38
\$100,000-\$999,999	0	16	0	3	19
\$1M or more	0	7	0	0	7
Total	8	90	17	9	124

*Dataset: 127 survey respondents reporting revenue data.
Three companies were removed because they omitted 2014 revenue data

or advanced manufacturing industries. We know that there are some million-dollar-a-year companies in other segments that did not reveal their sales data, but in broad terms IT is the strongest segment in revenue growth. What the chart does not show is that the more successful companies are actually accelerating sales. In 2015, the companies with million-dollar-plus sales increased revenues by 56 percent. That's an increase from 30 percent in 2014.

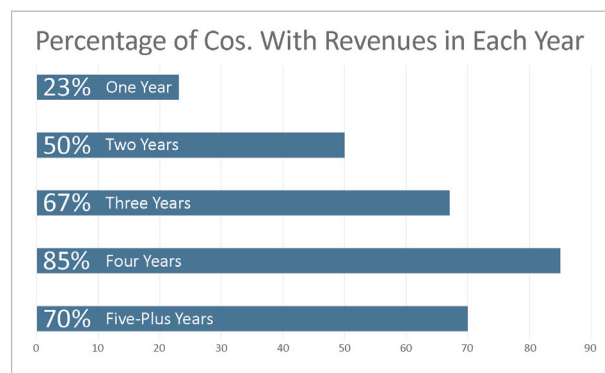
There was also strong growth in the companies with six figures of revenue. Their sales rose 76 percent in 2015, and one-quarter of them reported revenue for the first time. As a group, they expect to increase sales about 120 percent in 2016, and half of them are forecasting seven figures of revenues in 2016.

Our dataset on revenues includes a strong weighting of pre-revenue companies, which account for almost half the respondents. One reason for this is we had a

strong response from young companies. The 60 pre-revenue companies included 30 founded in 2015 and 11 founded in 2014, so two-thirds of these companies were one or two years old. One reason for optimism in the numbers is there are fewer companies taking years to get to revenue. When we compiled our first report two years ago, we worried that there was a broad swath of two- to five-year-old companies, including IT companies, that had yet to book their first revenues. In 2015, 41 IT companies are pre-revenue, but only three of them are more than two years old.

Chart 4.3 shows the number of companies in each year of existence showing revenues. One-Year refers to companies founded in 2015, and 23 percent of these rookies booked revenues. In fact, two companies founded in 2015 had more than \$100,000 in sales. Across the community, by the time startups are in their fourth year, 85 percent of the companies are bringing in some money.

It will come as no surprise that startup founders are remarkably optimistic about revenue growth in 2016. Overall, the founders that already have revenue are forecasting revenue growth of 120 percent. (We don't tally revenue projections by pre-revenue companies because, quite frankly, some are ridiculous.) Founders tend to err on the side of optimism when they make these projections. At the end of 2014, founders predicted their revenue growth in 2015 would average 131 percent. In the end, the revenue growth tally came in at 66 percent. So it's doubtful that a broad range of companies will double revenues in 2016. But there should nevertheless be strong growth. And given that we're now considering a larger community, the economic benefits will be amplified.

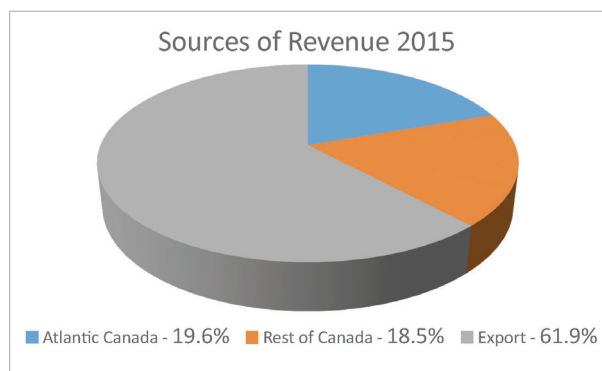
Chart 4.3

Dataset: 126 companies reporting revenue

4.2 Sources of Revenue

Once again in 2015, we have found that Atlantic Canadian startups make the vast majority of their money outside the region. But we have also unearthed a factor that may be a cause for concern – a strong reliance on the North American market.

Chart 4.4

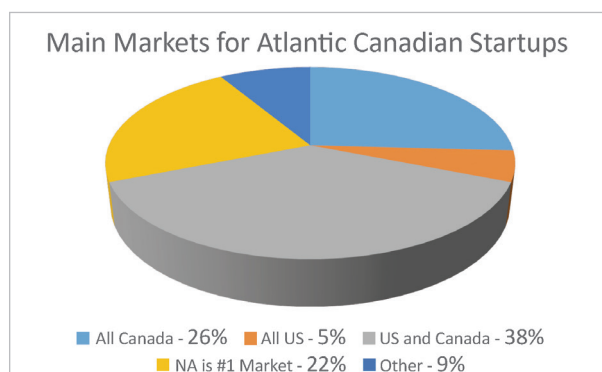


Dataset: 126 companies providing revenue data

Our respondents told us this year that they made only 19.6 percent of their money in Atlantic Canada. On the surface, that's an improvement from 22 percent in 2014, but so many founders round off their response to the nearest 10 percent that it would be fallacious to become too specific with this statistic. So we'll say that for the second year in a row, startups generated about four-fifths of their revenue outside the region.

About 19 percent of the revenues came from the rest of Canada and 62 percent from outside the country. And again these are similar results to those we reported in our previous reports.

Chart 4.5



Dataset: 58 companies providing information on their markets

This year, we tried to get more specific about the target countries so we asked founders which countries accounted for most of their revenue. We asked them to give the percentages for the top three countries.

One area of concern is that Atlantic Canadian startups make most of their money in Canada and the U.S. Only five startups of 58 respondents said their main markets were anything other than Canada or the US. Almost seven in 10 startups make all their money or virtually all their money in these two countries. This is a concern because the startups are missing huge opportunities in fast-growth economies. And a shock to the U.S. economy would jeopardize the health of the Atlantic Canadian startup community. The companies that are exporting beyond North America are all reporting more than \$100,000 a year in sales and are growing quickly.

PART 5 - FUNDING

5.1 Total Funding

The year 2015 was an odd year for funding in the Atlantic Canadian startup community. On the surface, the numbers were acceptable: Including private equity funding, there was total funding of \$76.5 million, down

Chart 5.1

Total Equity Funding by Atlantic Canadian startups:				
Year	Including PE (millions)	Annual Change	Excluding PE (millions)	Annual Change
2011	\$80.8	--	\$50.8	--
2012	\$60.5	-25%	\$60.5	19%
2013	\$63.3	4.6%	\$46.3	-23%
2014	\$126.8	100%	\$66.8	44%
2015	\$76.5	-39%	\$58.8	-12%

Dataset: The companies that provided funding data in the last five years.

significantly from a year earlier but an improvement on 2013 and 2012. If we strip out private equity (which some experts say should not be counted when considering the funding of young growth companies), investors placed \$58.8 million into the community, a drop of 12 percent from the previous year.

The reason we call it an odd year for funding is the two largest funding deals were all but ignored by the community overall. Unique Solutions Design Ltd. said in June it raised US\$15 million (C\$17.75 million at the time) in a round led by Northwater Capital of Toronto and investor Skip Battle. And AirVM took on \$8 million in funding from Rho Canada Ventures, Wesley Clover, and Build Ventures in August. Neither created much of a stir, even though they totaled more than \$25 million, or almost one third of the equity capital raised in 2015.

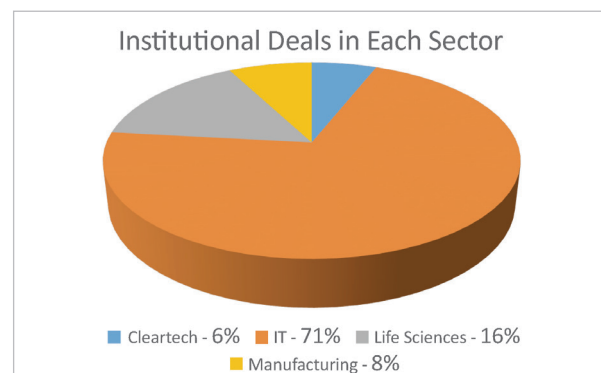
Unique Solutions, which operates under the brand name Me-Ality, has produced scanner technology able to take precise body measurements while a person is fully clothed. The company is headquartered in Dartmouth and has offices in Santa Clara and Philadelphia. The company raised \$30 million from Northwater in 2011 to fund a series of scanner booths in U.S. malls – a strategy that didn't work and had to be reversed. The company is now licensing its technology to enterprise clients. (Disclaimer: The author of this report invested in Unique Solutions in 2010.) We have classified this investment largely as a private equity investment as it's understood most of the funding came from Northwater.

AirVM said in its press release that it is an Ottawa company, though it has a substantial development team in Saint John and some say it has dual headquarters. The company is a leading global provider of cloud enablement software, and it is in the portfolio of Terry Mathews, one of Canada's leading tech investors and entrepreneurs.

There is another large investment that we did not include in the databank – Shift Energy. The Saint John company, which provides IIoT solutions to control energy consumption in large complexes, received a series of investments from Mariner Partners and members of East Valley Ventures. Eventually, the investments became so substantial that Mariner bought out other investors and made Shift a wholly owned subsidiary. The deals were never announced and were revealed in an interview that Mariner CEO Curtis Howe granted *Entrevestor*. When asked how much was invested, he would only laugh

and say: “It was a lot. More than I ever thought we'd invest in a startup.” It's obviously a substantial amount, but the exact value isn't known so it does not appear in our databank.

Chart 5.2



Dataset: 368 startups

Chart 5.3

Major Institutional Deal in 2015		
Company	Amount	Lead Investors
Unique Solutions	US\$15M	Northwater
AirVM	\$8M	Rho, Build
Affinio	\$4M	Whitecap Venture, Build
CarbonCure	\$3.5M	BDC, Eagle Cliff
Metamaterial Technologies	\$3.1M	Innovacorp, FAN
RtTech Software	\$3M	McRock Capital
Athletigen	US\$1.55M	Exponential Partners
Gemba Software Solutions	\$1.5M	Innovatia, NBIF
Eyeball	\$1.1M	Clearwater
Clockwork Fox	\$1M	Venture NL, Killick
DashHudson	\$1M	Innovacorp
Neurodyn	\$1M	Previous investors
QRA Corp	\$1M	Innovacorp
SkySquirrel	\$1M	Innovacorp

More than seven dollars from of every ten raised in 2015 went to information technology companies. They are the most plentiful companies and are gaining the most traction, so it makes sense that investors are gravitating toward them. If the Unique Solutions and AirVM deals were excluded from the tally, IT would still account for 56 percent of the funding in the region.

Aside from these two deals, as Chart 5.3 shows, there were four other deals \$3 million or more, and a handful of smaller seven-figure deals.

5.2 Sources of Funds

The highlight of funding last year was probably strength in angel funding. Though it was not as strong as 2014, individual investors still placed \$15.1 million in Atlantic Canadian startups last year. There were a few organizations that were channeling the money of private individuals into the region's innovation companies. TruLeaf of Halifax raised money on a U.S. crowdfunding platform (See details in Section 5.3). Appili Therapeutics received \$1.8 million from a range of angel investors who were brought together by Bloom Burton & Co., a Toronto investment boutique. And Metamaterial Technologies drew funding from the Wilmington Investor Network of North Carolina, which was brought into the funding deal by the First Angel Network.

Table 5.4

Sources of funding (Thousands)			
	2013	2014	2015
Founders	\$4,468	\$12,902	\$1,696
Friends & Family	\$2,294	\$2,768	\$1,612
Angels	\$10,897	\$20,009	\$15,129
VC (Inc. PE)	\$42,807	\$84,885	\$54,760
Strategic	\$2,852	\$6,055	\$3,288

Dataset: all Atlantic Canadian startups

In the venture capital space, the fundings were a mixture of public and private money. There were notable deals by VC funds from outside the region, such as White Venture Partners leading the \$4 million investment into

Affinio, BDC Capital leading the \$3.5 million funding of CarbonCure, and McRock Capital investing \$2.5 million into RtTech Software.

Fundings affiliated with the Propel ICT Build program have become a regular feature of the community.

BDC Capital was active in giving \$150,000 convertible notes (\$250,000 for hardware companies) to select graduates of Canadian accelerators, including Propel. Only grads of Propel's more advanced Build program are eligible. As of June 2016, the VC arm of the federal development banks had 16 Atlantic Canadian startups in its seed stage portfolio.

In April 2015, Innovacorp and NBIF announced they would provide an additional \$100,000 in funding to select Propel grads from Nova Scotia and New Brunswick respectively. And in June the Venture Newfoundland and Labrador fund managed by Pelorus Capital said it would also finance select Propel grads from NL. Four companies – HeyOrca!, PACTA, Xiplinx, and Swept (formerly Clean Simple) benefited from the program in 2015.

The provincial venture funds – New Brunswick Innovation Foundation, Innovacorp, and Venture Newfoundland and Labrador – were active. Not all the deals have been announced publicly as of writing this report. Our best information is that in calendar 2015 these institutions made 28 investments for a total value of \$10.7 million.

One final thought on the outlook for funding: the number of Atlantic Canadian startups rose by one-quarter last year. If a broad mass of these companies begins to grow, it will put pressure on a range of funding sources. Certainly, only the best will get VC or strategic investment. There is a danger that the weaker companies will drain angel investment away from stronger companies and overall dilute the concentration of angel money in good companies. Similarly, the demands on non-dilutive programs and attractive loans like ACOA's Business Development Program will be stretched as the community grows.

5.3 Equity Crowdfunding

By mid-January 2016, Canadian provincial regulators had authorized two sets of regulations under which companies could sell securities through crowdfunding.

The impact on the Startup community has been negligible as the wave of crowdfunding campaigns foreseen in some circles has not yet materialized.

Equity crowdfunding is the practice, common in Europe, of companies selling equity in small amounts to a broad range of people over the internet. In Canada, regulators have approved two sets of rules overseeing equity crowdfunding, known in legalese as the Crowdfunding Exemption and the Startup Exemption. Both are approved in Nova Scotia and New Brunswick.

The Crowdfunding Exemption, which came into effect in early 2016, allows companies to raise a maximum of \$1.5 million each year, with a \$2,500 ceiling for most individual investors per deal, to a maximum of \$10,000 a year. This set of rules places tighter restrictions on the fundraising portal than the other plan.

The Startup Exemption was outlined by six provinces in May 2015. Under this set of rules, no company can raise more than \$250,000 in a single campaign, and companies are limited to two campaigns a year. Investors are limited to maximum investments of \$1,500 per company.

By the middle of 2016, only one Atlantic Canadian company we are aware of has attempted to raise money by these methods. Halifax's Lux Wind Turbines company was hoping to raise \$500,000 to \$800,000 in a crowdfunding campaign mixed with other forms of fundraising. The crowdfunding campaign was carried out on the platform of FrontFundr, a British Columbian crowdfunding platform. Lux was using the startup exemption in some provinces and the crowdfunding exemption in others. It also aimed to raise money through a Community Economic Development Investment Fund, or CEDIF, in Nova Scotia and through exempt market dealers in provinces where crowdfunding is not yet allowed. At press time, there was no indication of the success of the campaign.

The successful equity crowdfunding campaign undertaken by an Atlantic Canadian company actually took place in the U.S. Halifax's TruLeaf raised money through AgFunder, a San Francisco-based crowdfunding platform for agricultural technology. All investors using AgFunder are accredited investors (meaning they can prove they are wealthy individuals) so there are few regulatory restrictions on the size of the investment. TruLeaf publicly stated it raised US\$1.28 million, or C\$1.7 million, in the campaign.

In Canada, the prospects for raising money through crowdfunding look bleak. Founders are worried about the time and effort required to mount the campaign and the risk of a very visible failure if the company doesn't reach its target. Most of all, founders don't want to end up with scores of investors they don't know. For example, to raise the \$1.5 million maximum allowed under the Crowdfunding Exemption, the startup would end up with 600 shareholders, which could create administrative burdens and pose other problems.

PART 6 - EMPLOYMENT

6.1 Breakdown of Jobs

After a year of subdued job growth, Atlantic Canadian startups hired strongly in 2015. What's more, there's evidence from several companies that the growth in hiring is underpinned by strong increases in revenue.

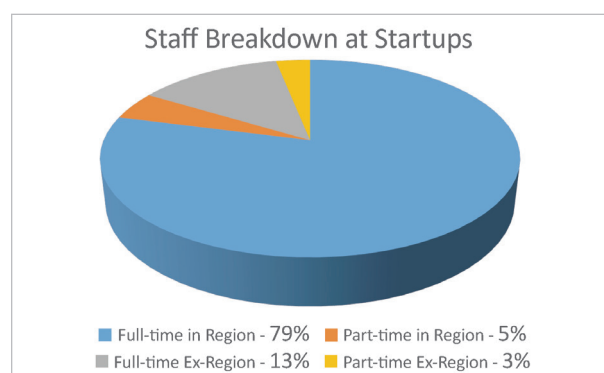
We received employment data from 152 companies, and they revealed that their Atlantic Canadian-based staff increased 25 percent in 2015. That compares with 14 percent in 2014 and 43 percent in 2013. In broad terms, Atlantic Canadian startups went on a hiring binge in 2013, powered largely by dilutive and non-dilutive financing. They pulled back in 2014, many admitting they had brought on staff before they had revenues to justify the hires. Now in 2015, the hiring is taking place in tandem with rising revenues.

The 152 companies that completed our survey or provided employment data through other means told us they employed 751 full-time employees as of Dec. 31, 2015, and 83 part-time employees in the region. (We stripped out a few new companies that had neither funding nor revenues but told us they had full-time staff.) We give part-time jobs a weighting of one-half, so these companies full-time equivalent staff in Atlantic Canada was 792.5 employees. That was up 25 percent from 632 FTE positions a year earlier.

These companies also employed 149 full-time equivalent employees outside the region. Here's a breakdown of the FTE staffing, according to our data.



Chart 6.1



Dataset: 152 companies providing employment data.

We see that 84 percent of the jobs created by Atlantic Canadian startups are based in the region. The employment in other places is usually for sales personnel or technical talent that can't be found in Atlantic Canada. And these companies told us they employed in total 25 percent more Atlantic Canadians at year-end than they did a year earlier.

These numbers are representative of the entire community – a dataset of 152 companies is 41 percent of the entire databank. But there are factors in the employment picture that are not reflected in our data, especially job losses for companies that closed or left the region. For example, 60 people lost their jobs when TechLink Entertainment of Sydney closed in 2015 – the company no longer exists so that important decrease in employment was not considered in our statistics. What's more, a few companies exited and most added employees under new ownership. Again, that did not appear in our tallies.

What we'd like to emphasize is evidence in the data and our discussions with founders which shows that much of the employment growth is generated by revenue growth. Some 44 surveyed companies reported making \$50,000 or more in sales in 2015, and these companies had 41 percent growth in their staff based in Atlantic Canada. And several companies with rising revenues have reported hiring sprees. One example is RevIQ, a Charlottetown startup that helps gaming companies improve their sales. RevIQ, a spinoff of Moncton-based Gogii Games, launched in mid-2015 with three employees and was instantly cash-flow positive. Its revenues rose dramatically, and it continued to hire. The company was on track to reach 19 employees by Canada Day 2016.

Where is the job creation taking place? In scaling IT companies.

Chart 6.2 graphically illustrates the economic impact of scaling companies. It is the companies with 10 or more employees that are creating the greatest employment opportunities. In our sample, these scaling companies added about 120 jobs in 2015 – three times as many as the companies with fewer than 10 employees. One reason for this outperformance is that several companies with a few employees are struggling and have therefore had to decrease employees over the year. By the time companies reach a staff level of about 10, they generally have found their product-market fit and hit the growth stage.

Hiring by scaling companies will likely continue to be the case in the coming year. The companies that have recent large amounts of funding have big hiring plans. Resson, which raised \$14 million in June 2016, told

Chart 6.2

Size of company				
Number of staff As of Dec. '15	FTE Staff* Dec. 2015	FTE Staff* Dec. 2014	Jobs Added	Percentage Change
10+ staff	455.5	335	120.5	36
4-9 staff	229.5	211	18.5	9
1-3 staff	107.5	86	21.5	25
Total	792.5	632	160.5	25

Dataset: 152 companies sharing their employment data.

** Only the jobs based in Atlantic Canada are considered.*

Chart 6.3

FTE Positions in Atlantic Canadian Innovation Sectors				
Sector	FTE Staff* Dec. 2015	FTE Staff* Dec. 2014	Jobs Added	Percentage Change
Cleantech	42.5	36	6.5	18
IT	639	495	144	29
Life Sciences	73.5	76.5	-3	-4
Manufacturing	37.5	24.5	13	53
Total	792.5	632	160.5	25

*Dataset: 152 companies sharing their employment data. * Only the jobs based in Atlantic Canada are considered.*

Entrevestor that it plans to double its staff to about 45 by early 2017. The day after the funding announcement it posted four jobs on the Entrevestor Job Board – for two developers, an optical engineer and an agronomist. The posting for an agronomist is interesting because it shows that startups are hiring people from a diverse range of fields, and a varied startup community can create a range of employment opportunities. Affinio has told us that it plans to increase its staff to 60 by year end and its rapid expansion will likely continue in 2017. Kinduct Technologies had 48 employees in May 2016 and expected to increase the number to 65 by the end of the year.

Overall, the 152 companies providing employment data said they plan to hire 529.5 people in Atlantic Canada and elsewhere in 2016, which would represent a 44 percent increase in staffing. It's doubtful that the community can add that many jobs in one year. Two years ago, our respondents predicted about 50 percent job growth and the actual percentage growth for 2014 turned out to be 14 percent. At the end of 2014, the survey produced a prediction that staffing would increase 29 percent in 2015, and ended up in the 25 percent neighbourhood.

Chart 6.3 highlights several facets of the innovation community in Atlantic Canada. Most noticeably, the biggest economic impact is clearly in the IT sector – by a long shot. We got responses from 40 percent of the startups in the region, which is a huge sample, and we learned that nine out of every ten jobs created by startups last year occurred in the IT space. What's interesting about that is IT is supposed to be a segment having huge problems finding programmers. They're in high demand and short supply everywhere. Yet the tech

companies that shared information with us hired about 140 people last year. If half of them were developers – a reasonable assumption – then these companies added 70 developers last year. Our results suggest the Atlantic Canadian IT segment overall is probably adding about 150 programmers a year. It probably has demand for more, but it's encouraging that so many appear to be getting hired.

The IT founders expect this to continue as they plan to hire 393.5 people in 2016, which would represent a staffing increase in Atlantic Canada of 50 percent.

Second, the advanced manufacturing segment is showing some potential. It's not big but there is strong growth in this segment. It bears watching as manufacturing bases could be located in rural areas.

Finally, the results from the life sciences segment are disappointing. We received data from more than one-third of the life sciences companies, so we do feel we have a representative sample size. The founders in this segment expect a better performance in 2016, when they forecast a 69 percent increase in employment.

Finally, the following is the breakdown of jobs and job growth by province. Nova Scotia reported the strongest job growth in 2015, and founders in New Brunswick and Newfoundland and Labrador expect to have the strongest growth in 2016.

One final piece of information we include in this report each year is the average salary. Sixty-one startups this year, with payrolls of \$50,000 or more, provided us with payroll data. We simply divide the total number of FTE jobs in these companies into the total payroll. And from

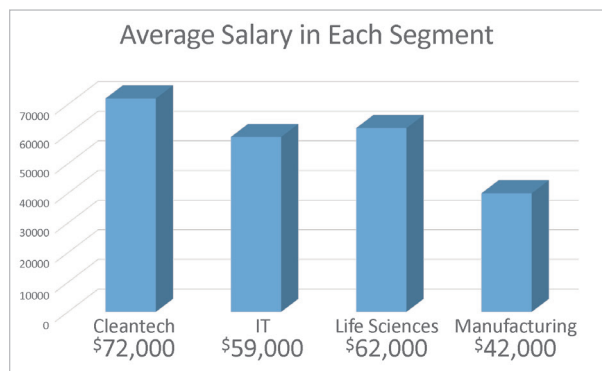
Chart 6.4

Breakdown of Jobs by Province				
Province	FTE Jobs* 2015	FTE Jobs* 2014	Growth Rate	Projected 2016 Growth
Nova Scotia	458	336.5	33%	68%
New Brunswick	204	174	17%	72%
Newfoundland and Labrador	69	70.5	-2%	75%
Prince Edward Island	61.5	51	21%	41%
Total	792.5	632	24%	

*Dataset: 152 companies sharing their employment data. * Only the jobs based in Atlantic Canada are considered.*

this, we've gleaned that the average salary at an Atlantic Canadian startup was \$59,000. That breaks down as follows on a sector-by-sector basis:

Chart 6.5



Dataset: 61 companies providing payroll data.

6.2 How Big is #Startupeast?

Two years ago, when we did our first major report analyzing startups in Atlantic Canada, we concluded the Atlantic Canadian startup movement had created about 3,000 jobs. Once again this year, we've conducted a company-by-company assessment of employment in the industry. And we estimate there are now about 4,000 people directly employed by Atlantic Canadian startups, or companies that began as startups.

There was little finesse in coming up with this number. We went through each of the 368 companies in the databank and came up as best we could with their employment levels as of Dec. 31, 2015. More than half

gave us the numbers, either by completing the survey or through interviews. And many others had the information on their websites. There were some companies for which we had to estimate staffing levels, but in most cases it was based on a fundamental knowledge of the company, often with previous staff levels as a benchmark.

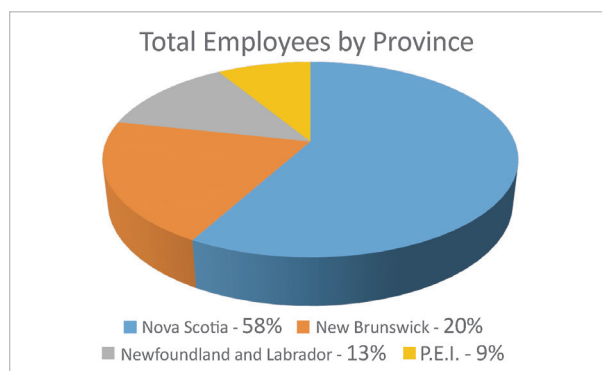
The result is we found there were 3,189 people employed at these 368 companies – a number we'll round off to 3,200. But there are other employers in the region that are no longer startups. For example, there are several companies that have exited through a sale or public listing. Many of these are big employers – BioVectra, about 200 employees, DSM Canada, about 200 employees, Bluedrop Performance Learning, 130 employees. Salesforce has a substantial workforce in the region following its acquisitions of Radian6 and Golnstant. And we can add in the startups that became service companies, many of which have significant staffs. We believe strongly that 4,000 employees is a reasonable estimate of the current workforce among these innovative companies.

The following charts show how the overall staffing breaks down by province and sector;

There are some major employers in each sector. So even though Life Sciences accounts for only 17 percent of the startups in the databank, it accounts for 24 percent of the jobs in the community.

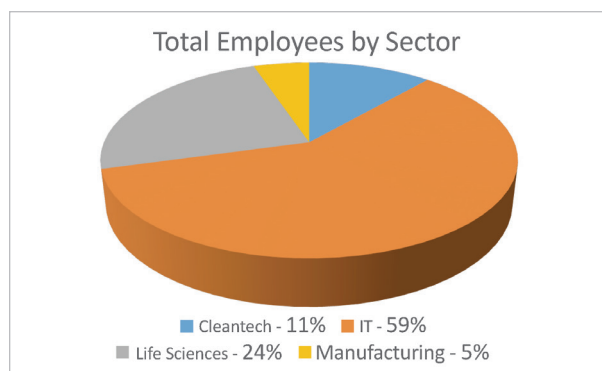
As stated above, about 84 percent of the employees of Atlantic Canadian startups are based within the region. So that means that about 3,400 are in the Atlantic Provinces.

Chart 6.6



Dataset: 368 startups followed by Entrevestor.

Chart 6.7



Dataset: 368 startups followed by Entrevestor.

As we highlighted in our report two years ago, research by Enrico Moretti of the University of California at Berkley shows that each high-tech job creates 4.3 indirect jobs due to professional services, taxes and individual spending. If we apply this multiplier to the 3,400 jobs in Atlantic Canada, we find that the Atlantic Canadian startup community is responsible for about 17,700 jobs in the region.

PART 7 - EDUCATIONAL INSTITUTIONS

In our report last year, our data analysis drew the attention of the academic community when we reported that the revenue growth among startups associated with post-secondary institutions is double that of the

broader community. We learned that companies with revenues performed better if they grew out of university IP or entrepreneurship courses or had long-term research partnerships with universities. (One or two companies had relationships with colleges, but universities are far more active in the startup space than colleges.) Such companies' revenues were increasing 71 percent, when the startup community overall was producing 37 percent revenue growth.

We found a similar trend in 2015, with one proviso. Some 57 companies with connections to universities provided revenue data to us. And those with revenue reported a total sales growth of 110 percent. Like the startup community overall, revenue growth has accelerated in this group of companies. As was the case last year, the university-affiliated companies outperformed the broader startup community by about 40 percentage points.

The one area for concern is the high proportion of companies in the group that have yet to produce revenue. Of the 57 companies sharing revenue information with us, 32 had no revenue yet. Some were new companies coming up through entrepreneurship programs, but the group also featured companies that had been around for several years and yet had no revenue on the books.

Chart 7.1

Performance of Startups Affiliated with Universities and Colleges	
Number of Startups	111
Jobs	394.5
Revenue	\$11.1M
Revenue Growth	110%
Pre-growth Companies	56%
Funding	\$27.3M
No. of Cos. Funded	43

Dataset: 111 startups affiliated with universities

The community of startups that begin life in an academic institution is a bit more balanced than the broader community. Half the startups are in the IT space, compared with two-thirds in the total community. At more than one-quarter of the companies, life sciences in particular plays a bigger role. University research continues to be central to the development of



companies, but more recently entrepreneurship courses are producing more companies.

Chart 7.2

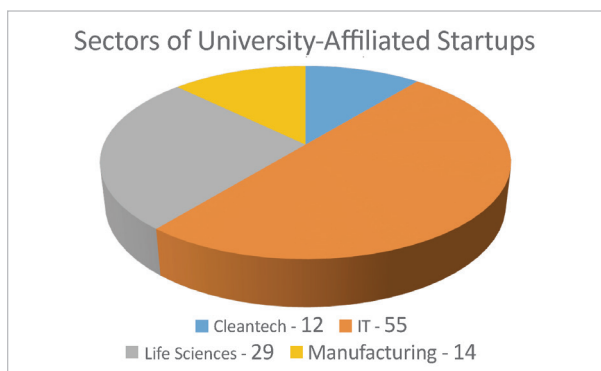


Chart 7.3

Number of Startup Relationships at Each Post-Secondary Institution			
Acadia	5	NSCAD	1
CCNB	1	SMU	6
CBU	5	St. FX	3
Dal	46	UdeM	2
Holland	1	UNB	27
Mount A	2	UPEI	7
MUN	13		

Dataset: 111 startups affiliated with universities

At least six Atlantic Canadian institutions are now offering some form of curriculum to teach entrepreneurship, most of which have courses that include credits for degrees. The University of New Brunswick is worth watching because of the concentration of young companies now emerging through its MTE program. There are seven companies at the Fredericton campus that are preparing to launch in the near future. Another development that has been gaining momentum is the work at Dalhousie University to host Canada's Business Model Competition, which is affiliated with the International Business Model Competition. For each of the past three years, Dal has hosted the contest, which attracts teams of student entrepreneurs from across the country.

Here are the academic centres in the region:

The influence of universities is growing because of entrepreneurial initiatives. They include:

Acadia Entrepreneurship Centre
Acadia University
www.acadiaentrepreneurshipcentre.com
Findlay MacRae

The AEC predates the startup boom. But within the startup efforts in the region it takes a unique focus, striving to apply cutting edge technology to agricultural and rural initiatives. It works closely with the Acadia Institute for Big Data, which has launched several projects involving the wine and agricultural industries.

Genesis Centre
Memorial University of Newfoundland
www.genesis.mun.ca/GenesisCentre
Greg Hood

The commercialization centre of Memorial University was established to incubate IP developed at Atlantic Canada's largest university. In recent years, it has opened its doors to other companies including startups developed outside the university. It will move to new headquarters in two years.

Masters of Technology, Entrepreneurship and Innovation
St. Mary's University
www.smu.ca/academic/sobey/mtei
Dawn Jutla

Launched in 2013, the program is an accelerated graduate program aimed specifically at people who want to develop their own company or lead innovative divisions of existing corporations. The MTEI takes only 16 months to complete and focuses on lean methodology. The intake has increased strongly in each year of its existence.

Dal Launchpad
Dalhousie University
starting-lean.com
Mary Kilfoil and Ed Leach

The class began in the autumn of 2012 and has since launched some of the leading startups in the region. The program includes a summer session, which awards \$10,000 each to a group of 10 companies so they can develop their project. It's worth noting that one of

the star companies in the Launchpad this year was Neothermal Energy Storage, which was started by two Dal engineering students who designed a heat storage device. Their participation is noteworthy because it is an example of engineering students participating in the entrepreneurship training.

Technology, Management and Entrepreneurship
University of New Brunswick
www.unb.ca/fredericton/engineering/tme
Dhirendra Shukla

Housed within the Faculty of Engineering, the Dr. J. Herbert Smith Centre for Technology, Management and Entrepreneurship emphasizes the role of engineering and design within the development of a product. The university's research has been vital to many of the leading companies in the Fredericton area, one of the hubs of entrepreneurship in the region. The program now includes a Masters of Technology, Management and Entrepreneurship.

UIT Program
Cape Breton University
uitstartup.org
Mike Targett

The UIT program was established in 2014 by tech entrepreneur Gavin Uhma (UIT actually stands for Uhma Institute of Technology) to help develop the tech and entrepreneurship capabilities of CBU students. The program does not offer a degree, but works with young people to launch their businesses. Half the participants are female.

Nova Scotia also has a "sandbox" program, which is a series of groups within universities that encourage entrepreneurship. The sandboxes have in most cases been effective in sparking interest in entrepreneurship. It's difficult, however, to point to companies that have been nurtured within a sandbox and are flourishing into revenue-producing companies.

One final note about startups and universities is several startups in the region are developing ties with institutions around the world. Fiddlehead Technology, a Moncton company that uses data analytics to predict food demand, has built a relationship with Cardiff University. Athletigen, a Halifax company that uses genetic data to improve athletic performance, is working with Baylor University. And Ryerson University in Toronto has two Atlantic Canadian companies in its

incubators. These are the online marketplace for used clothes, Saint John-based Ella; and eSport analytics company Repable of Moncton.

PART 8 - PROVINCIAL DATA

8.1 Nova Scotia

The startup community embodies the principles of the Ivany Commission, whose 2014 report *Now or Never: An Urgent Call to Action for Nova Scotians* laid out the framework for economic development in the province. The central tenets of the document called for changing attitudes and expanding the private sector. The startup community is doing these things in Nova Scotia and Atlantic Canada. Culturally, the startup community is an inclusive, welcoming society of risk-takers and creative thinkers. The one caveat to this statement is that it must do a better job of welcoming women into the community. Last year, we found that eight per cent of founders were female, but they only received four per cent of venture capital.

Overall, at the end of 2015, there were 197 startups in Nova Scotia, up 28 percent from a year earlier. They're growing quickly – the 38 percent rise in employment at the Nova Scotian companies was the strongest in the region. The most noticeable number on Chart 8.1 is the projected revenue growth for Nova Scotian startups in 2016. The companies that provided revenue data expect revenue to more than triple in 2016. The main reason is one major company foresees quintupling sales this year. Even if that company is stripped out, the high-growth segment in Nova Scotia expects to more than double profits this year. Again, the reason is a handful of major companies that are just beginning to generate strong growth in recurring revenues. This handful of companies – which we won't name because several of them provided confidential information – have credible management and their claims that they will more than double revenues in 2016 must be taken seriously. Some even made the claims half-way through the year, meaning they had a good idea of their year-end sales.

The startup community in Nova Scotia is characterized by a diversified weighting of companies in all sectors. IT companies comprise 62 percent of its startups,



Chart 7.3

Provincial Data

The following is a summary of the data Entrevestor collected broken down by province.

	NS	NB	NL	PEI	Total
No. of Startups					
IT	117	82	27	24	250
Life Sciences	47	7	1	8	63
Cleantech	16	4	2	2	24
Manufacturing	17	5	5	4	31
Total	197	98	35	38	368
Employment					
Atlantic Canadian staff levels from the 152 companies providing data on their staff:					
Jobs as of 12/31/15	458	204	69	61.5	792.5
Jobs as of 12/31/14	336.5	174	70.5	51	632
Employment growth	33%	17%	-2	21%	24%
Projected growth '16	67%	62%	70%	41%	
Revenue					
(From 64 survey responses from companies with revenues)					
Sales growth '15	96%	43%	68%	68%	
Projected growth '16	217%	73%	59%	49%	
Equity Funding (\$,000)					
(Our best information on 368 startups)					
2015	54,769	15,869	3,779	2,069	76,486
2014	40,395	14,983	63,984	7,327	126,689
2013	30,064	17,522	1,526	2,206	51,318
2012	34,324	22,405	723	3,190	60,642
2011	56,415	13,730	1,698	8,921	80,764

which seems high until you consider that next door, in New Brunswick, the figure is 83 percent. As the startup community becomes dominated by growth-stage corporations, the Nova Scotia community is maintaining this diversification with champions in each sector: In IT, these are SimplyCast, Affinio, AIOTV, B4Checkin, Proposify and The Rounds, to name a few. In life sciences, there is Halifax BioMedical and promising companies like ABK Biomedical, Appili and Sona Nanotech. CarbonCure and LED Roadway Lighting are doing well in cleantech,

and Metamaterial Technologies is poised for growth in advanced manufacturing.

The community is continuing to grow and government is studying how it should develop. The provincial government has committed \$25 million to a new venture capital fund led by a private manager, and has called for parties to submit proposals to invest in and manage the fund. The Department of Labour and Advanced Education is also collaborating with Dalhousie University

on a study of innovation in the province. The most intriguing development may be the conversion of the former Coast Guard base in Dartmouth into an oceans industries park, which will include an incubator for ocean-related startups.

Yet there are two areas of concern in the Nova Scotia startup world – Cape Breton and Life Sciences.

In our previous report, we noted that the growth in new startups in Cape Breton spiked in 2014, due to the energetic tech community on the island and the success of the UIT program at Cape Breton University. At the end of 2015, we were tracking 32 Cape Breton startups, of which 28 were IT companies and 21 were less than two years old. We believe the Cape Breton community will experience both pain and elation in the next few years. The elation will come from the success of some companies with great potential – young companies like Ubique Networks, Orenda Software Solutions, Sona Nanotech, and some veterans like Health Outcomes Worldwide, Halifax Biomedical, Mimir Networks and Marcato Digital Solutions.

But the pain will come from the half of the community that has yet to receive meaningful funding or revenues. We didn't receive enough data from Cape Breton companies to make conclusive statements on this. We received revenue data from seven companies, four of which were pre-revenue. Many of the companies have been financed by the Spark Cape Breton competition, which provides up to \$50,000 in funding – a help, but not enough to develop and sell new innovation. There's no indication that many of these companies are making enough revenue to overcome the scant funding. There is a surfeit of tech talent in Cape Breton, so it's logical to expect that, as the stronger companies grow, they will hire the talent of the weaker companies, which will vanish. One final note about Cape Breton is that it is beginning to attract tech companies, such as Ubique, that are coming from elsewhere because of the tech talent. Mimir Networks CEO Jim DeLeskie in particular has been effective in encouraging companies to come to the Sydney region. Cape Breton is also the site of the 2016 MentorCamp, presented by international mentor Permijot Valia.

8.2 New Brunswick

New Brunswick is more concentrated in digital industries than any other part of the Atlantic Canadian startup

community. While IT companies account for 68 percent of the startups across the region, they account for 83 percent of the New Brunswick startups.

The province has featured many of the region's most celebrated exits – most famously Radian6 and Q1 Labs, which are famous for producing a windfall of more than \$1 billion. New Brunswick has also produced such exits as iMagicTV, UserEvents, Clarity, Brovado, Spielo, Conseros, Whitehill Technologies, and Chalk Media. The development and sale of these companies has left New Brunswick, not only with a rich talent pool, but also with indigenous sources of capital. Tech giant Mariner and its funding arm East Valley Ventures emerged in the aftermath of iMagicTV and Q1 Labs. East Valley has invested in dozens of companies, and Mariner itself has invested in seven or eight. And the sale of Spielo resulted in the formation of Technology Venture Corp. of Moncton, which has an active and growing portfolio, mainly in New Brunswick.

From this fertile turf has sprung a crop of remarkable IT companies. We estimate about 30 of the New Brunswick IT companies – or about 45 percent of the total – have more than \$100,000 in annual revenue and are increasing sales by more than 20 percent per year. This group has featured in many of the biggest deals in the past year. AirVM, which has a major development team in Saint John, attracted one of the biggest funding rounds in the region last year when it raised \$8 million from Rho Canada Ventures and Build Ventures. As of the writing of this report, the largest funding of 2016 was another New Brunswick tech company – Resson's US\$11 million raise from Monsanto and others. Mariner quietly bought out its former portfolio company Shift Energy. Though the companies declined to release the value of the Shift deal, it's significant that Mariner now identifies Shift as one of the pillars of its operation and touts the potential of the unit.

The current provincial government has made innovation a cornerstone of its economic development strategy, with Premier Brian Gallant himself holding the Innovation portfolio. Lately, the government has placed more emphasis on the particular segment of cyber-security, capitalizing on the base established by Q1 Labs and others. Gallant highlighted the province's capabilities in the area during a trip to Silicon Valley. IBM then selected the University of New Brunswick as one of eight universities in North America to help adapt its iconic Watson cognitive technology for use in cybersecurity.

Although IT dominates the startup landscape in New Brunswick, there is increasing activity in other segments, which feature several companies that are poised to advance strongly in the coming years. In particular, Soricimed of Moncton has reported encouraging results during its Phase 1 trials and appears headed to Phase 2 trials in 2017. Mycodev is progressing with its production of chitosan and its spinoff, Chinova Bioworks, was accepted into the IndieBio accelerator in Ireland. Fredericton's BioPolynet won a technology competition held by Statoil and GE Oil & Gas in August 2015 with a prize worth as much as US\$400,000. And Castaway Golf, which won the 2015 Breakthru competition, continues to make headway, striking partnerships and increasing revenues.

The result is greater diversity in the New Brunswick startup grouping. IT is still dominant, but other sectors are making headway.

Finally, one of the encouraging developments of 2015 has been the evolution of incubators in the southern parts of the province, especially Moncton. The Venn Centre in Moncton has become a key hub of mentorship and incubation, and was working with about 15 teams of entrepreneurs in the spring of 2016. Venn is also providing programing to the Connexion Works in Saint John.

8.3 Newfoundland and Labrador

The two key trends in the Newfoundland startup community – funding and hardware.

The funding trend is by far the more obvious of the two and is having a huge impact in the St. John's community. And the increased funding is taking place because of the confluence of two events.

The first was the wish of governments to improve the funding situation in the province. Government officials for several years said they were impressed by the amounts of money that Innovacorp and New Brunswick Innovation Foundation channeled into companies in their jurisdictions. Nothing comparable existed in St. John's. What's more, the Newfoundland and Labrador Angel Network was having trouble gaining traction because of a lack of an experienced investment manager.

To solve all these problems, the Newfoundland and Labrador government teamed up with several parties to form the Venture Newfoundland and Labrador fund,

which is managed by Pelorus Venture Capital. The provincial government and BDC Capital both put in money, and local angels also contributed capital.

Meanwhile, the only private St. John's-based investment fund, Killick Capital, was riding a wave of good fortune. In 2014, Killick successfully exited its investment in financial software company Verafin when California private equity company Spectrum Equity invested \$60 million in the St. John's company, buying out several early investors including Killick. And then the fund's Texas-based unit Killick Aerospace sold four of its six divisions to Alexandria, Va.-based transport support company VSE Corp. The sale grossed the Newfoundland investment firm about US\$229 million.

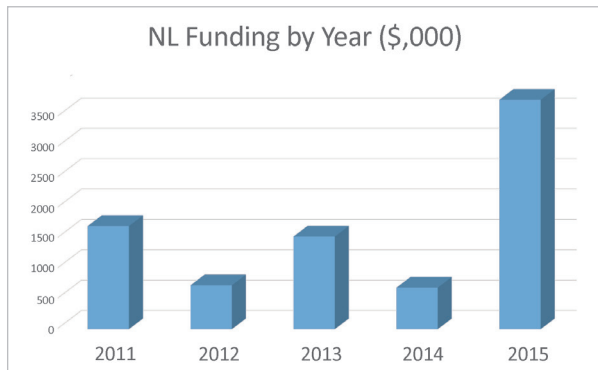
By the middle of 2015, both Killick and Venture NL were ready to invest, and the community produced several opportunities they judged to be venture-ready. The result was a \$3.2 million investment spree in the following companies:

- **Sequence Bio**, \$1 million, co-founded by Tyler Wish and Chris Gardner. The St. John's company that analyzes genetic data to improve medical outcomes received \$500,000 in equity funding from both Killick and Venture NL. Founded in 2013, Sequence works with partners to analyze vast sets of data from gene pools to get a deeper understanding of which people are at the greatest risk of contracting a disease.
- **Clockwork Fox**, \$1 million, founded by Ed Martin. The educational game producer landed \$750,000 in new investment from Killick and Venture NL. It also received funding from Pluto Investments, Petten Holdings, and Joe Antle. The company's flagship product is Zorbit's Math Adventure, a game-based learning system for early math that aims to improve K-3 learning outcomes.
- **HeyOrca!**, \$625,000, co-founded by Teo and Sahand Seifi. HeyOrca! is an online platform that helps marketers collaborate on social media content. The company, which operates out of the Genesis Centre, is a graduate of the PropelICT Build program, allowing it to tap into a \$150,000 convertible note from BDC Capital. The other investors in this round are Venture NL and Killick.
- **Sentinel Alert**, \$525,000, co-founded by Sarah Murphy and Jason Janes. Sentinel produces software that can detect when a worker has had an accident or may soon have one. The software is originally being used on

devices like smartphones, but the company hopes to eventually partner with a hardware company to produce a wearable device. The company received investment from Killick, Venture NL and a private angel investor.

These four deals formed the cornerstone of equity funding for Newfoundland in 2015, accounting for 90 percent of the \$3.8 million total. The 2015 total was not a record for the St. John's startup community, but it was the first time there was such significant seed funding in so many companies. In 2014, Verafin raised \$60 million and film industry software maker Celtx raised \$3.3 million from Build Ventures and Killick. If those two deals are stripped out, the funding for NL startups in the past five years looks like this:

Chart 8.2



Dataset: All NL companies reporting in each year, excluding Verafin and Celtx in 2014.

Excluding the two outlying financings of 2014, the funding in 2015 was more than twice the level of any previous year. And the companies that received the funding are progressing nicely. Sequence had a good buzz about it at the time of writing. Sentinel completed a week in Kitchener-Waterloo working with experts from Deloitte on business development. HeyOrca! presented at the Atlantic Venture Forum in June 2016, and CEO Joseph Teo reported strong sales growth – monthly recurring revenue was on track to increase from \$1,500 in December 2015 to \$30,000 a year later.

Meanwhile, interesting things are happening in St. John's in the growth of advanced manufacturing – especially as it pertains to ocean industries. This has always been a strength for the local community as it grows out of the capacity created by Memorial University, the Genesis Centre, the College of the North

Atlantic and the Marine Institute. St. John's is home to a growing community of hardware producers that follow this tradition, such as Seaformatics Systems and Agile Systems. But there are a range of other companies that are using hardware in their solutions, including Vish Solutions and Empowered Homes.

One final element to note about the Newfoundland startup community is that it may finally be ready to expand beyond the Avalon Peninsula. The seeds are being planted for a startup community in Corner Brook and the West Coast of Newfoundland. In May, the first Startup Weekend was held in Corner Brook. Startup Weekends are common events, but this one was different. The event included support personnel not only from St. John's but also from Ireland. And it galvanized the entrepreneurship community at the Memorial University Grenfell Campus and the College of the North Atlantic. It shone a spotlight on the work being carried out at the institutions' Navigate Startup House, which has already graduated more than 70 enterprises. It's a sign of growth on the West Coast.

8.4 Prince Edward Island

P.E.I. has long been thought of in startup circles as a hotbed of life sciences. In 2015-16, it moved to enhance that reputation, but the Island has also improved its ecosystem in other segments, most notably IT.

The growth of digital entrepreneurship on P.E.I. manifested itself when Propel ICT held its applications for its spring 2016 cohort. The accelerator received a record 168 applications and P.E.I. (which has about 6 percent of the region's population) accounted for 18 percent of the entries.

Charlottetown and environs possess a unique ecosystem in the region for life sciences companies, which has produced leading success stories like BioVectra, Abbey Island Foods and Neurodyn. The PEI BioAlliance serves as a hub for a range of partners from the private and public sectors and academia, including the veterinary school at University of PEI and the National Research Council's Institute for Nutrisciences and Health. In late 2014, the ecosystem grew richer with the creation of Emergence, an incubator for life sciences startups. Then in early 2016, the federal government announced funding for Natural Product Canada, a partnership between life sciences organizations across Canada. NPC is based in Charlottetown.



While the life sciences ecosystem evolved, the support network for IT companies was revolutionized. The big developments were the move by the regional accelerator to host a cohort in Charlottetown and the opening of the Startup Zone in Charlottetown, both in early 2016. This has led to strong company formation in the IT space. Most of these companies are just beginning, very much at the pre-revenue stage. At the end of 2015, Entrevestor was following 24 IT companies based on P.E.I. and 14 of them were less than three years old. But the experience of other jurisdictions shows that strong company formation leads to growth of a few successful companies. And the Island's veteran IT companies are progressing well. Screenscape Networks continued to grow strongly in 2015 following the 2014 launch of its Screenscape Connect product in partnership with Dell Computers. And archival software company discoverygarden launched a partnership with a new P.E.I. startup, Retrieivium, to apply machine learning to chemistry.

In the cleantech space, several interesting companies are moving forward, such as Island Water Technology, which is rolling out its remote septic systems across the country.

PART 9 - EXITS

For the second year in a row, there was a series of small, profitable exits in the region, but not a massive sale like Radian6 or Ocean Nutrition Canada. Though a big exit would certainly add some momentum to regional growth, these smaller deals are providing economic growth and bringing larger companies into the region.

There were four exits in 2014, and then seven deals in 2015. These 11 acquisitions have mostly been seven-figure deals, though the purchases of Brovada and Compilr are known to be worth more than \$10 million. Eight of these deals have resulted in expanded teams based in Atlantic Canada. And several of the exits, such as Compilr and Ascenta Health, have already resulted in the founders moving on to new companies.

Here are the exits in 2015:

Ascenta Health

Target Company: Ascenta Health, Dartmouth
Acquirer: Nature's Way, an affiliate of Dr. Willmar

Schwabe Pharmaceuticals, Germany
Value: Unknown

Ascenta Health, whose NutraSea brand of nutritional products are made naturally from omega-3 fatty acids, was purchased by the German company in May, 2015. The company is now Nature's Way Canada and has expanded its team in Dartmouth since the acquisition. Ascenta Founder and CEO Marc St-Onge retained the ownership of Ascenta Skin, the company's more recent high-end skincare brand. Though the financial details of the sale to Nature's Way were not disclosed, St-Onge said there was no earn-out, and he was free to develop Ascenta Skin as a new business. It is now known as Bend Beauty.

Brovada

Target Company: Brovada, Rothesay, N.B.
Acquirer: Towers Watson, Arlington, Va.
Value: US\$15 million

Publicly listed Towers Watson, a global professional services company, said it bought the insurance technology business to enhance its position as a leading insurance software provider. Founded in 2003, Brovada focuses on streamlining the communications between insurance agents and brokers, and property and casualty insurance carriers, and provides a connectivity platform easily integrated with both modern and legacy policy administration systems to allow for seamless transactions. The company was part of the East Valley Ventures Portfolio.

Clarity

Target Company: Clarity, Moncton
Acquirer: Fundable, Columbus, Ohio
Value: Unknown

Founded by acclaimed tech entrepreneur Dan Martell, Clarity connects entrepreneurs and others with a network of mentors around the world. It sold out to Fundable to become one of the platforms in the buyer's new startup launch platform, startups.co. It was the third exit for Martell and was a reward for the investors who sank \$1.6 million into the company two years previously.

The company assembled a network of 50,000 mentors from around the world and allowed entrepreneurs to book calls with them at a certain price per hour. Martell himself took thousands of these calls. There were more than 150,000 such sessions in 2014 alone.

AIA

Target Company: Internetworking Atlantic Inc., Halifax
Acquirer: Rogers Communications
Value: Unknown

Rogers Communications announced the acquisition in December to gain a data centre and provide enhanced tech solutions to its Atlantic Canada clients. The Toronto communications company said the acquisition enabled it to offer greater local expertise to private and public sector clients in cloud computing, data centre services, fibre networking and professional services. Founded in 2002 by President Bruce MacDougall, Internetworking employed 25 people and continued to operate in Halifax under its current management.

SecureReset

Target Company: SecureReset, Halifax
Acquirer: Courion, Atlanta
Value: Unknown

Courion, which helps identify users online, paid an undisclosed price to buy Halifax's SecureReset, which developed two products for simplifying user passwords and authentication. SecureReset was owned by the entrepreneurial duo of CEO Andy Osburn and chief technical officer Mark Boyle, better known as the founders of Equals6, a career-focused social network for students. Courion refers to itself as a market leader in "identity governance and administration," meaning its technology helps large organizations authenticate the identity of online customers with as little annoyance as possible. It has offices in the United States, Europe, the Middle East and Asia, and its clients include many of the world's largest enterprises and organizations.

Shift Energy

Target Company: Shift Energy, Saint John
Acquirer: Mariner, Saint John
Value: Unknown

This is a bit of an outlier, as the purchaser is also the founder of the target company. Mariner and its founders incubated Shift Energy and backed the startup as it found its product-market fit. They developed it into a company that offered an Internet of Things solution to assist with energy conservation in large facilities. Mariner continued to fund Shift until its larger company's board finally decided to buy out other investors and just make it

a wholly owned subsidiary. The price was unknown, but Mariner is obviously placing great hope on the unit, which it labels as one of its four cornerstone businesses.

Twisted Oak Studios

Target Company: Twisted Oak Studios, Halifax
Acquirer: River Studios, San Francisco
Value: More than \$1 million

Twisted Oak Studios, a Halifax gaming studio specializing in virtual reality, agreed in August 2015, to be taken over by River Studios. The deal allowed Twisted Oak, now named River Canada, to remain in Halifax, grow its development team and sharpen its focus on the growing business of virtual reality, said Co-Founder Devin Horsman. Horsman and co-founder Matthew Jewkes provided few details, other than to say the deal was worth seven figures. River Studios, which is backed by seed-stage venture capital fund Rothenberg Ventures of San Francisco, initiated the deal to buy the engineering team, as well as Twisted Oak's intellectual property.

PART 10 - FAILURES

There was relative stability in the Atlantic Canadian startup community in 2015, with only three companies leaving the region and fewer failures than the previous year. We have counted 36 failures in 2015, down 20 percent from 2014. If we consider that 105 entered the databank in 2015, it's a surprisingly small number of failures. The 36 companies that failed in 2015 represented about 13 percent of the community at the end of 2014; In 2014 the failures amounted to about 16 percent of the previous year's databank.

Nevertheless, failures create hardships. Most of the companies that failed employed one or two people, or had yet to hire their first employee. But the failed companies at their respective peaks employed more than 120 people. Many of these people found employment at other Atlantic Canadian tech companies, though some were forced to leave the region.

At least nine of the failed companies had taken on investment, including three from the BDC program that funds companies from the Propel ICT Build Program (or formerly Launch36).

Aside from the companies that failed, we removed six other companies from the databank for other reasons. Three moved out of the region, and three we assessed to be service companies rather than startups.

Some of the higher profile companies that collapsed in 2015 were:

Techlink Entertainment

Sydney-based Techlink suspended operations in June and laid off about 60 employees. The company produced VLT games that accepted prepaid cards rather than cash with the goal of alerting players when they'd spent a certain amount. Techlink had received financial backing from Nova Scotia Business Inc., which had approved equity investments and loans to the company totaling \$13 million, though not all of those funds had been paid to the company.

Origin Biomed

Halifax's Origin BioMed, which made a natural pain relief for diabetes sufferers, was placed in receivership in March. The company had received venture capital funding from Nova Scotia Business Inc., GrowthWorks Atlantic and Avrio Ventures of Calgary. NSBI's venture capital arm, which no longer makes new investments, invested a total of \$7.9 million in the company. GrowthWorks Atlantic invested \$2.6 million in Origin BioMed in 2009 and an additional \$500,000 in 2013. Other investors included members of the First Angel Network.

Atlantic Hydrogen

Atlantic Hydrogen Inc., the Fredericton company whose technology extracted carbon from natural gas, filed for voluntary bankruptcy in September. AHI was more than a decade old and had a large complex for an Atlantic Canadian startup. Its Fredericton headquarters housed one of the largest private R&D labs in the region, and it employed 30 people as of 2012, including 21 engineers and three PhDs. As of late 2012, the company had raised \$32 million in funding, including \$4.7 million from the government of New Brunswick. Early in 2012, Atlantic Hydrogen signed an agreement to build a facility at Emera's Bayside electrical generating station near Saint John. The deal as announced included an equity investment worth more than \$5 million from Halifax-based Emera. The facility never went into production and in February 2014, Emera said it would write off its investment in AHI, which had grown to \$8.8 million.

PART 11 - MENTORSHIP PROGRAMS AND INCUBATORS

There are three pillars that support the Atlantic Canadian startup community: first, a lot of affordable talent; second, capital efficiency; and third, a unique mentorship network. We have discussed the first two elsewhere in this report, and in this section we will examine the mentorship network. Unique is not too strong a word to describe it. In short it is a network of local offices that draw on pan-regional resources to build companies aiming for global markets.

Iain Klugman, the founder of the Communitech tech hub in Kitchener, Ont., likes to say that if there is another facility like Communitech anywhere in the world, he'd like to hear about it. The same could be said of the Atlantic Canadian support system, especially as it pertains to the IT and advanced manufacturing segments.

Aside from all the economic challenges, the community covers a vast geographic expanse. We are accustomed to thinking of Atlantic Canada as a little place. But even if we strip out Labrador, the area covered by the Maritimes and Newfoundland is comparable to combining France and Germany. For someone in Fredericton, it is far quicker to fly or drive to Toronto than to St. John's. And this swath of territory is under-populated and overseen by four different governments. And yet, in the summer of 2016, the pieces were falling into place for an extraordinary support network in the digital industries. The mentorship piece is buttressed by programming and/or physical spaces at four universities.

At the top of the pyramid is Propel ICT – conceived and operated by entrepreneurs and dedicated to channeling resources from around the region and beyond into each startup that needs them, regardless of its location. What's new is that it now operates with a network of six local community partners – the local community-run incubators or co-working spaces that have popped up over the last four years. Propel offers its advanced Build program at the Venn Centre in Moncton, while the Launch program for novices is being offered at Common Ground in St. John's, Planet Hatch in Fredericton and Volta Labs in Halifax. If all goes according to plan, it will offer Launch in the Startup Zone in Charlottetown in the fall of 2016 and the Navigate Startup House in the fall of 2017. (The number of local partners would be seven if we



included Connexion Works in Saint John, which has not yet offered a Propel program.)

Here is an overview of the mentorship network in the region (Programs affiliated with universities can be found in Part 7):

11.1 Mentoring Groups

The NextPhase
Nova Scotia
thenextphase.ca
Toon Nagtegaal

The NextPhase is a four-day workshop that uses proprietary software to force entrepreneurs to assess their clients' pain and plot how to make money by solving it. The workshops have been held for several years and are now led by Toon Nagtegaal, a former VC executive from the Netherlands, and David Crow, former Evangelist-in-Residence at OMERS Ventures. The sessions are known for their blunt assessment of the candidates' business prospects and providing a roadmap for each company to reach the market. This is the only program that accommodates companies in all sectors and all four provinces. The program has graduated more than 200 companies, including Entrevestor.

PropelICT
Pan-regional
Propelict.com
Anita Punamiya

The regional accelerator has evolved dramatically in the past two years. Under its Launch36 model, it accommodated six to 12 companies at a time in Moncton. In the autumn of 2016, it will probably hold a Build cohort for growth-stage companies in Moncton and Launch cohorts for seed-stage companies in Fredericton, Halifax, Charlottetown and St. John's. It will soon launch a Grow program, designed to help growth-stage companies accelerate sales. Roughly 70 companies a year pass through the program. With full-time personnel in Saint John, Halifax and St. John's, it now has a budget of several million dollars. Its ambitions keep growing. The organization used to say its goal was to develop Atlantic Canada's first tech company with a billion-dollar valuation, then co-founder Gerry Pond in 2015 began talking about building "billion-dollar companies" – plural. In the spring of 2016, Chair Dave Grebenc said Propel ICT aims to build

a few publicly listed companies. The organization appears to be back on track after a rocky patch in 2015, in which it dismissed its CEO and an entrepreneur-in-residence.

The Aboriginal Business Accelerator
(Affiliated with The Joint Economic Development Initiative, or JEDI)
Fredericton
www.jedinb.ca
Mark Taylor

The country's first tech accelerator for Aboriginal entrepreneurs was launched in New Brunswick in 2016, and it immediately witnessed great progress from the five teams enrolled. The inaugural Aboriginal Business Accelerator is operated by the Joint Economic Development Initiative, or JEDI, a not-for-profit that supports Aboriginal participation in the New Brunswick economy. It works closely with the federal and New Brunswick governments. The four tribal councils of New Brunswick and the New Brunswick Business Council govern JEDI. JEDI started its 10-week accelerator on Jan. 22 to get more Aboriginal entrepreneurs into major industry supply chains and help them with fundraising for their businesses. With JEDI's vast network in New Brunswick, it can connect Aboriginal entrepreneurs with angel investors and venture capitalists.

Spark and Ignite
(Affiliated with Mashup Lab)
Rural Nova Scotia
www.mashuplab.ca
Andrew Button

Following the successful launch of his virtual Spark accelerator for fledgling rural entrepreneurs, Andrew Button, CEO and Founder of Mashup Lab, announced in Spring 2016 he would launch Ignite, a virtual program for more advanced rural startups. Button, who is based in Wileville on Nova Scotia's South Shore, began Spark in September 2015 to assist entrepreneurs who don't have easy physical access to programs and mentors. Ignite is for people who have validated their ideas and are in the early stages of launching and looking for their first clients. Both programs feature two three-hour online seminars per week for six weeks.

We should add here that one mentoring group fell by the wayside in early 2016. Entrepreneurs 3.0, commonly known by its original name Entrepreneurs' Forum, closed its doors due to funding cuts in one province.

11.2 Local Incubators or Co-Working Spaces

Planet Hatch
Fredericton, NB
Planethatch.com
Lisa Kinney

Planet Hatch is a co-working space in Fredericton's Knowledge Park, and has established itself as the hub of startups in the New Brunswick capital. It is the base for PropelCT sessions in the city and also features a range of services and events. The organization changed direction in 2015 and decided to focus less on tech startups and more on a broad-based support model for all kinds of entrepreneurship. It parted ways with the original CEO and programing is now overseen by Entrepreneurial Services Coordinator Lisa Kinney.

Venn Innovation
Moncton
Venncentre.ca
Doug Robertson

Formerly Tech SouthEast, Venn has established its Main Street office as the hub for innovation in the greater Moncton area. Its Vennture Garage has begun to turn out some interesting companies, such as Ongoza, which made it into the Propel Build program in the summer of 2015. There are now about 15 companies working out of Venn at any given time, and it hosts the Propel Launch program. The Vennture Garage program is also offered at Connexion Works in Saint John.

Volta
Halifax
www.voltaeffect.com
Jesse Rodgers

The startup house in Halifax opened in May 2013 on Spring Garden Road, and moved into two floors in the Maritime Centre on Barrington Street in 2015. It is interested in moving into the former Central Library at Spring Garden and Grafton, though press reports recently said the province may sell the lot to a private developer. Volta has a stable of 10 to 12 startups working in its facilities at any given time. It is also the home of Build Ventures, the region's venture capital fund. The facility is the Halifax base for PropelICT. In the spring of 2016, Volta announced it had hired Jesse Rodgers, an entrepreneur and tech evangelist from Kitchener, Ont., to be the group's new CEO. He works in tandem with COO Melody Pardoe, who had been overseeing the facility for two years.

Navigate Startup House
Sydney
navigatestartup.com
Ardelle Reynolds

Tech enthusiasts Ardelle Reynolds and co-founder Lindsay Uhma set up Navigate in late 2015 as a base for the growing tech community in the second-largest metro area in Nova Scotia. It offers co-working space, subsidized offices for as many as four startups and a range of mentoring sessions. The outfit has now outgrown its space, and it is in the process of raising \$1.19 million to expand. It received about \$325,000 each from Invest Nova Scotia and the Atlantic Canada Opportunities Agency. The organization has tapped Arkansas mentor Jeff Amerine to provide mentorship for the next year, and hopes to host its first Propel Launch cohort in late 2017.

Startup Zone
Charlottetown
www.startupzone.ca
Christina MacLeod

Supported by Innovation PEI and various community groups, the Startup Zone is a 3,600-square-foot facility at Water and Queen streets that opened in July 2016. It has enough space for about 16 companies and will be a work zone for tech and innovation startups as well as other entrepreneurial pursuits. It will also be the P.E.I. base for Propel ICT, the regional tech accelerator. Executive Director Christina MacLeod was the founder of Fusion Charlottetown and a member of the first Prince Edward Island cohort for the 21 Inc Emerging Leaders program.

Common Ground
St. John's
workatcommonground.com
Peter Gifford

Common Ground, the 4,000-square-foot co-working space in St. John's, is now three years old, which makes it one of the oldest community incubators in the region. The facility is the Newfoundland and Labrador base of Propel and the accelerator's Entrepreneur-in-Residence Peter Gifford. Common Ground has become home to many of the province's most promising startups, such as Sequence Bioinnovations and Sentinel Alert.

Connexion Works
Saint John
connexionworks.ca
Joanna Killen

The co-working space on Germain Street opened in 2014. It offers space for small companies and hosts regular events. Joanna Killen offers Vennture Garage programing to startups at the location. The organization behind it works closely with Enterprise Saint John and other community groups.

11.3 Life Sciences Organizations

Emergence
Charlottetown
emergencebioincubator.com
Rory Francis

Launched in late 2014, Emergence is a virtual business incubator focused on life sciences businesses in the food, nutraceutical and pharma segments. Companies receive comprehensive support customized to their needs and benefit from experienced mentorship, specialist services and established networks. Emergence is affiliated with the PEI BioAlliance, which coordinates programing for life sciences companies on the Island.

BioNova
Halifax
www.bionova.ca
Scott Moffitt

BioNova is a not-for-profit that represents life sciences companies in Nova Scotia. It has about 60 members, many of which are life sciences startups in the province. The organization's big event each year is BioPort Atlantic, an annual conference held each autumn. And the highlight of BioPort is the BioInnovation Challenge, a pitching event for life sciences companies in the three Maritime provinces. By entering BIC, novice companies receive a range of mentoring sessions that culminate with the pitch at the competition.

BioNB
Fredericton
Bionb.org
Meaghan Seagrave

BioNB is the bioscience authority in New Brunswick for government, industry, and media, translating and communicating the business opportunities behind the science in a highly technical sector. BioNB builds and enhances new and existing businesses, supports technology transfer from public institutions and the private sector, and works to build a community and enhance collaboration among sector stakeholders.

PART 12

THE ENTREVESTOR DATABANK

Company	City	Market Segment
NOVA SCOTIA		
4Deep Inwater	Halifax	Manufacturing
ABK Biomedical	Halifax	Life Sciences
Abridean	Halifax	IT
Acadian Seaplants	Dartmouth	Life Sciences
Addo	Halifax	IT
Advanced Glazing	Sydney	Cleantech
Affinio	Halifax	IT
Afri-Sea	Halifax	Cleantech



Company	City	Market Segment
Agada	Halifax	Life Sciences
AgSeed Technologies	Bible Hill	Life Sciences
aioTV	Halifax	IT
Airline Employee Travel	Elmsdale	IT
Alentic Microscience	Halifax	Life Sciences
Alpha Dog Games	Bedford	IT
Analyze Re	Halifax	IT
Appili Therapeutics	Halifax	Life Sciences
Aramax IP Services	Halifax	IT
Artisync Technologies	Sydney	IT
Ascenta Skin	Dartmouth	Life Sciences
Athletigen Health Solutions	Halifax	IT
Athlyst	Halifax	IT
Atlantic Motor	Halifax	Manufacturing
Avive Naturals	Halifax	Life Sciences
Azorus	Halifax	IT
B4Checkin	Halifax	IT
Backdrop	Halifax	IT
BAMS Systems	Sydney	IT
BioMedica Diagnostics	Windsor	Life Sciences
Bitness	Halifax	IT
B-Line	Halifax	IT
BlueLight Analytics	Halifax	Life Sciences
BoomersWork	Halifax	IT
Breton SmarTek	Sydney	IT
Brownie Points	Halifax	IT
BuyMyLemonade	Halifax	IT
CarbonCure	Halifax	Cleantech
Cellufuel	Halifax	Cleantech
Chatsubo Heavy Industries	Sydney	IT
Chelation Partners	Halifax	Life Sciences
Clean Simple	Halifax	IT
Clinical Logistics	Dartmouth	Life Sciences
Coccicorp	Halifax	Life Sciences
CogPro	Halifax	IT
Colibri	Wolfville	IT

Company	City	Market Segment
Collegio	Sydney	IT
Conceptualiz	Halifax	IT
ConsumeAPI	Halifax	IT
Covina BioMedical	Halifax	Life Sciences
Crate	Halifax	IT
Current Studios	Dartmouth	IT
Dadavan	Waverly	IT
Dartmouth Medical Research	Halifax	Life Sciences
Dash Hudson	Halifax	IT
Daxonics Ultrasound Inc	Halifax	Life Sciences
DC2Go	Dartmouth	IT
DeCell Technologies	Halifax	Life Sciences
Delicious Brains	Milford Station	IT
DeNovaMed Inc	Halifax	Life Sciences
Densitas	Halifax	Life Sciences
DGI Clinical	Halifax	Life Sciences
Dingbot	Halifax	IT
DMF Medical	Halifax	Life Sciences
DocMaster	Sydney	IT
Dominion Biologicals	Dartmouth	Life Sciences
Dystillr	Halifax	IT
Efficiency Properties	Halifax	IT
Email Opened	Dartmouth	IT
FIVAMED	Halifax	Life Sciences
Eosense	Dartmouth	Cleantech
Exodo	Halifax	IT
Extrify	New Glasgow	IT
Eyeball	Bedford	IT
EyeRead	Halifax	IT
Fourth Monkey	Lunenburg	IT
Free2Charge	Halifax	Manufacturing
Functional Beverage	Halifax	IT
FundMetric	Halifax	IT
GenCan Bio	Dartmouth	Life Sciences
Genus	Sydney	IT
GMS Surface Tech	Antigonish	Manufacturing

Company	City	Market Segment
Goalline	Halifax	IT
Graph Reactor	Halifax	IT
Green Power Labs	Dartmouth	Cleantech
Halifax Biomedical	Mabou	Life Sciences
HB Studios	Lunenburg	IT
Health Outcomes Worldwide	New Waterford	Life Sciences
Health QR	New Glasgow	Life Sciences
Help Method	Annapolis Royal	Life Sciences
HomeSnippets	Sydney	IT
Hoops Innovation	New Minas	Manufacturing
Imagine That Technologies	Bedford	IT
Immunio	Halifax/Toronto	IT
Impath Networks	Halifax	IT
InNetwork	Halifax	IT
Insitu Core Labs	Port Hawkesbury	IT
Instrument Concepts	Great Village	Manufacturing
Intelligent Dynamics Canada	Halifax	IT
InTheSpot Technologies	Wolfville	IT
Karma Gaming	Halifax	IT
Keyin	Halifax	IT
Kinduct	Halifax	IT
Layers	Sydney	IT
Leadsift	Halifax	IT
Lean MVNO	Sydney	IT
LED Roadway Lighting	Halifax	Cleantech
LifeRaft	Halifax	IT
Livelenz Inc.	Bedford	IT
Lokol.me	Sydney	IT
LREV	Halifax	Cleantech
Lootbag	Antigonish	IT
Lux Wind Turbines	Halifax	Cleantech
MacCormick	Sydney	IT
Manzer Apiary	Digby	Life Sciences
Map Master Technologies	Sydney	IT
Mara Renewables	Bedford	Cleantech
Marcato Digital	Sydney	IT

Company	City	Market Segment
MediaSpark	Sydney	IT
Medusa Medical Technologies	Halifax	Life Sciences
Metamaterial Technologies	Halifax	Manufacturing
Mimir Networks	Sydney	IT
Mindful Scientific	Halifax	Life Sciences
Modest Tree Media	Halifax	IT
MouseStats	Halifax	IT
Myconnex	Bedford	IT
Neothermal Energy Storage	Halifax	Cleantech
Neuroquest	Halifax	Life Sciences
NewAE	Halifax	IT
Norex	Halifax	IT
NovaSight	Halifax	Life Sciences
On It App	Halifax/Moncton	IT
Ocean Executive	Bridgewater	IT
OHS Data	Halifax	IT
OpenBlue Global Services	Bedford	Manufacturing
Open Ocean Systems	Halifax	Life Sciences
Orenda Software Solutions	Sydney	IT
Orpheus Interactive	Halifax	IT
OrthoMX	Halifax	Life Sciences
PACTA	Halifax	IT
Panag Pharmaceuticals	Halifax	Life Sciences
Performance Genomics	Truro	Life Sciences
Phased.io	Sydney	IT
PhotoDynamic Inc.	Halifax	Life Sciences
Pitch Play	Halifax	IT
PizzaGo	Sydney	IT
Precision Biologic	Dartmouth	Life Sciences
Proposify	Halifax	IT
Punk Science Studios Inc.	Halifax	IT
Quicklink	Halifax	IT
QRA Corp.	Halifax	IT
Rent Buddy	Sydney	IT
ResMed	Halifax	Life Sciences
RetiCAD	Halifax	Life Sciences



Company	City	Market Segment
SABRTech	Halifax	CleanTech
SageCrowd	Halifax	IT
Sandcastle Application	Sydney	IT
Satteligent Telemetry Solutions	Bedford	CleanTech
SeeMePly	Halifax	IT
SGS Solutions	Dartmouth	Manufacturing
SimplyCast	Dartmouth	IT
Singular	Mahone Bay	IT
Site 2020	Halifax	IT
Sky Squirrel	Halifax	Manufacturing
Project Disruption	Sydney	IT
Solid State Pharma	Halifax	Life Sciences
SONA NanoTech	Sydney	Life Sciences
Spiri	Halifax	Manufacturing
Spring Loaded	Halifax	Manufacturing
STI	Halifax	Life Sciences
Stomp Labs	Sydney	Manufacturing
Steamlyne	Dartmouth	IT
SupplyStream	Halifax	IT
Sustane Technologies	Chester	Cleantech
Swell Advantage	Halifax	IT
Tenacity Tech Innovations	Sydney	IT
The Rounds	Halifax	IT
Thinking Robot Studios	Halifax	Manufacturing
Tileographer	Sydney	IT
TrackPAD	Halifax	Cleantech
Treventis Diagnostics	Halifax	Life Sciences
TruLeaf	Halifax	Life Sciences
Turbulent Research	Dartmouth	Manufacturing
Ubique Networks	Sydney	IT
Unified Software	Wolfville	IT
Unique Solutions	Dartmouth	IT
Upcycle Waste	Halifax	Cleantech
UpMyGame (Granite Media)	Halifax	IT
UpTime Management	Sydney	IT
Velsoft	New Glasgow	IT

Company	City	Market Segment
Vendeve	Halifax	IT
Vesuvius Media	Halifax	IT
VidSnippets	Halifax	IT
WoodsCamp Technologies	Mahone Bay	IT
Xona Games	Yarmouth	IT
Yomes	Halifax	IT
znanja	New Glasgow	IT
Zora	Halifax	IT

NEW BRUNSWICK

360 Hockey Training	Dieppe	IT
Advanced Publishing	Saint John	IT
Agora Mobile	Moncton	IT
AirVM	Saint John	IT
Be Ready	Sussex	IT
Biomolecules for life	Moncton	Life Sciences
Biopolynet Inc	Fredericton	Cleantech
Bonkk	Fredericton	IT
Braveno	Fredericton	IT
Castaway Golf	Fredericton	Manufacturing
Chatham Biotec	Riverview	Life Sciences
ChemGreen Innovations	Sackville	Life Sciences
Cirrus9 Technology Partners	Saint John	IT
Cloudlinx	Fredericton	IT
Corruven	Kedgwick	Manufacturing
CyberPsync	Fredericton	IT
DealerMine	Saint John	IT
Doorval	Moncton	IT
Dovico	Moncton	IT
Eggroll Digital	Miramichi	IT
Eigen Innovations	Fredericton	IT
Elandas	Saint John	IT
Elevate Atlantic	Moncton	IT
Ella	Saint John	IT
Encore Interactive	Saint John	IT
Featured	Fredericton	IT



Company	City	Market Segment
Fiddlehead Technology	Moncton	IT
FoodTender	Shediac	IT
Foursum Golf	Moncton	IT
Full Pint Development	Fredericton	IT
Garago Software	Moncton	IT
Gemba Software Solutions	Saint John	IT
Geode Technology	Fredericton	IT
Ginglelive.com	Moncton	IT
Gogii Games	Moncton	IT
Green Imaging Technologies	Fredericton	IT
HotSpot Merchant Solutions	Fredericton	IT
iCubemedia	Dieppe	IT
Introhive	Fredericton	IT
Inversa Systems	Fredericton	IT
IPSNP	Saint John	IT
IQ Evolve	Moncton	IT
iTacit	Fredericton	IT
Itavio	Moncton	IT
KnowCharge	Fredericton	Manufacturing
Liv9	Fredericton	IT
Loft1 Media	Fredericton	IT
LuminUltra Technologies	Fredericton	IT
Lymbix (Measurely)	Moncton	IT
Mariner Partners	Saint John	IT
Masitek Instruments	Moncton	IT
MotiFIT	Moncton	IT
Mycodev	Fredericton	Life Sciences
NB-Biomatrix	Saint John	Cleantech
Oasis Farmery	Fredericton	Life Sciences
Ongozah	Moncton	IT
Patchell Brook Equity	Miramichi	IT
Pilotalk	Fredericton	IT
Populus Global Solutions	Fredericton	IT
Presenter's Podium	Saint John	IT
Provincial Pack	Saint John	IT
Qimple	Moncton	IT

Company	City	Market Segment
Ready Pass Services	Fredericton	IT
Repable	Moncton	IT
Remarketeers	Hillsborough	IT
Resson Technologies	Fredericton	IT
Rise	Fredericton	IT
Rising Tide Technologies	Fredericton	IT
RtTech	Moncton	IT
Scene Sharp Technologies	Fredericton	IT
Screening Devices Canada	Hatfield Point	Life Sciences
Search2go	Saint John	IT
Sentrant Security	Fredericton	IT
Shift Energy	Saint John	Cleantech
Simptek	Fredericton	IT
Smart NBS Solutions	Fredericton	IT
Smart Skin Technologies	Fredericton	IT
Smartpods	Moncton	IT
Soricimed Biopharma	Sackville	Life Science
Spinzo Corporation	Saint John	IT
The Farmers' Truck	Moncton	IT
Timbre Cases	Fredericton	Manufacturing
TotalPave	Fredericton	IT
VeroSource	Fredericton	IT
Vidcruiter	Moncton	IT
Vintelligence Digital Solutions	Moncton	IT
Wear Your Label	Fredericton	Manufacturing
WEnTech Solutions	Fredericton	Cleantech
Xiplinx	Fredericton	IT
Yimbie	Saint John	IT
ZapTap	Fredericton	IT

NEWFOUNDLAND

Adfinitum	St. John's	IT
Agile Sensors	St. John's	Manufacturing
Andes VR	St. John's	IT
Arc Instruments	St. John's	Manufacturing
AS Works	St. John's	IT

Company	City	Market Segment
BlueLine Innovations	St. John's	Manufacturing
CalibreFour Technologies	St. John's	IT
Celsius Games Studios	St. John's	IT
Celtx	St. John's	IT
ClearRisk	St. John's	IT
Clockwork Fox Studios	St. John's	IT
CSlpix	St. John's	IT
DashAll	St. John's	IT
DuJour	St. John's	IT
Empowered Homes	St. John's	IT
EMSAT	St. John's	Cleantech
Grey Island Energy	St. John's	Manufacturing
GRR Systems	St. John's	IT
HeyOrca!	St. John's	IT
miniChic	St. John's	IT
MusicEdZone	St. John's	IT
Nocland Solutions	St. John's	IT
ParcelCloud	Mount Pearl	IT
Power HV	St. John's	Cleantech
Red Meat Games	St. John's	IT
RentChek	St. John's	IT
Seaformatics Systems	St. John's	IT
Sentinel Alert	St. John's	IT
Sequence Bioinformatics	St. John's	Life Sciences
Solace Power	Mount Pearl	Manufacturing
Sweeft	St. John's	IT
Verafin	St. John's	IT
Virtual Marine Technologies	St. John's	IT
Vish Solutions	St. John's	IT
Whitecap Scientific	St. John's	IT

PRINCE EDWARD ISLAND

Airbly	Argyle Shore	Manufacturing
ARK Bio	Charlottetown	Life Sciences
BamText Corp	Charlottetown	IT



Company	City	Market Segment
Be Your Own Bartender	Charlottetown	Manufacturing
Discovery Garden	Charlottetown	IT
Engineering Technologies Canada	Stratford PEI	Cleantech
Extemporal	Charlottetown	IT
CrowdFound	Charlottetown	IT
GradPeek	Charlottetown	IT
Icejam	Charlottetown	IT
Island Abbey Foods	Charlottetown	Life Sciences
Island Water Technologies	Charlottetown	Cleantech
JKN	Charlottetown	IT
Jobsite to Go	Charlottetown	IT
Litesprout	Charlottetown	IT
Mighty Pebble Games	Charlottetown	IT
Nautilus Biosciences Canada	Charlottetown	Life Sciences
NetLegal	Charlottetown	IT
Neurodyn	Charlottetown	Life Sciences
Onset Communication	Charlottetown	IT
Ooka Island	Charlottetown	IT
Origins Xtractions	Charlottetown	Life Sciences
Precise.ai	Kensington	Life Sciences
Quannessence	Summerside	Life Sciences
Queen Bee Games	Charlottetown	IT
RevIQ	Charlottetown	IT
Retrievium	Charlottetown	IT
R-Form	Charlottetown	IT
ScreenScape Networks	Charlottetown	IT
skipthewaitingroom	Charlottetown	IT
Somru Bioscience	Charlottetown	Life Sciences
Spotful	Charlottetown	IT
Strue	Charlottetown	IT
Timeless Technologies	Charlottetown	IT
TimeShift	Charlottetown	IT
Virtual Tourguide	Charlottetown	IT
Vitrak	Charlottetown	Manufacturing
Zengo Innovations	Charlottetown	Manufacturing

ABOUT ENTREVESTOR

Entrevestor was founded in 2011 by Nova Scotia-based writers Peter and Carol Moreira as a portal to unite and inform the startup community in Atlantic Canada. It posts daily news on Atlantic Canadian startups on its website, www.entrevestor.com, and its articles appear three times weekly in the Chronicle-Herald. Entrevestor produces four free Entrevestor Intelligence reports annually to provide a more in-depth examination of the startup community in Atlantic Canada. The company expanded into Kitchener-Waterloo in autumn, 2015.

ABOUT THE AUTHOR

Peter Moreira spent more than 30 years in journalism in Asia, Europe and North America. He worked with The Deal of New York, covering M&A, private equity and VC markets in the U.S. and Canada for six years and serving four years as London Bureau Chief. At Bloomberg, he covered European and U.K. banking and finance. He previously worked for the South China Morning Post in Hong Kong, Knight-Ridder Financial in Hong Kong and Seoul, and the Canadian Press's parliamentary bureau in Ottawa. His writing has appeared in USA Today, the Globe and Mail, The Toronto Star, National Post, the Chronicle-Herald and the Independent on Sunday (London). Peter is a graduate of the Canadian Securities Course. He is the author of *Hemingway on the China Front* (Potomac, 2006) and *Backwater: Nova Scotia's Economic Decline* (Nimbus 2009). His latest book, *The Jew Who Defeated Hitler*, the story of Henry Morgenthau Jr.'s work in financing the Allied effort in WWII, was published in autumn 2014.

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