35th IASP World Conference

on Science Parks and Areas of Innovation 2018

Isfahan, Iran

Accelerator Programs in Canada

Past, Present and Future

Parallel session 4:

Entrepreneurship for growth and sustainability

Authors:

Yaser Kerachian

Hamid Noori

Hosted by:

ISFAHAN SCIENCE & TECHNOLOGY TOWN (ISTT)

ISBN: 978-84-09-17612-0

Accelerator Programs in Canada

Past, Present and Future

Yaser Kerachian[1], Hamid Noori[2]
[1]Commercialization Manager, Innovation York, York University, Toronto, ON, Canada
[2] Laurier Chair Professor in Enterprise Integration and Technology Management, Wilfrid Laurier University, Waterloo, ON, Canada

1. Executive Summary

Accelerators are a new model of business incubators[1] that focus on intense mentoring and business support to start-up companies for a defined period. Since 1994 the first accelerator program, YCombinator, was founded in the Silicon Valley, several hundred accelerators have started all around the world. Around 2010, the first accelerators started in Canada, following a model similar to the YCombinator. In this paper, we studied the Canadian accelerator industry at its inception, and again at present time. The evolution of this industry has been investigated and emerging trends have been identified. The paper is concluded with a set of recommendations for accelerator programs.

2. Methodology

This research paper consists of two different studies. The first study looks at the first leading Canadian accelerator programs that launched between 2010 and 2012. We looked at different attributes of their programs, and collected data from different sources including interviews with management at a selected number of accelerators. The list of interviewees includes Ian Jeffrey, the General Manager of FounderFuel in Montreal, Andy Yang, Managing Director of Extreme Startups in Toronto, and Steve Currie, VP Venture Services at Communitech, which formerly managed the HyperDrive program in Waterloo in 2012. The second study investigates the current state of accelerators in Canada including the first leading accelerators. By looking at the commonalities of current accelerator programs, we have identified emerging trends in the Canadian accelerator industry.

[1] Technically, seed accelerators are not necessarily a type of business incubator as they may not provide space to start-up companies. However, in this report, we use the term "incubator" in a broader sense which may not provide physical space and therefore include accelerators.

3. Introduction to business incubation

Business incubators facilitate the development of start-up companies, helping them survive and grow during the start-up period when they are most vulnerable[2]. These incubators typically provide business support to their client companies in addition to some physical space. Business incubators are categorized based on different criteria such as theme and business model. Many of which focus on technology companies, however there are a smaller proportion that focus on other industries such as the service industry; some incubators can even serve niche markets such as mobile and web application. In terms of the business model, there are two types of incubators, not-for-profit or for-profit.

3.1 Business models of the incubators

In 2006, about 94% of North American incubators were not-for-profit compared to 6% for-profit incubators[3]. The not-for-profit incubators are usually sponsored by economic development organizations, academic institutions, government entities, or a hybrid of them. The primary objectives of these incubators are job creation and economic growth of their communities whereas the for-profit incubators are created to give financial return to their shareholders. The difference between these two models of incubation is not limited to the source of operating funding. When financial profit is the primary objective of a for-profit incubator, it dictates a different atmosphere and relationship between client companies and incubator management.

3.2 Rise of accelerator programs in the World

Many for-profit incubators tend to diversify their revenue when compared to the not-for-profit incubators, though their supports and services to their client companies may stay similar. The for-profit incubators usually own an investment arm which has the advantage of access to a great deal of cash flow. An example of a for-profit incubator is the Plug and Play Centre in Silicon Valley. This incubator structure includes different divisions such as the real estate division, the venture capitalist division, the data centre and the events division[4]. In order for the incubator to fulfil its profitability objective, the financial goal of each division is to be cash flow positive or at least cash flow neutral with the venture capital division expected to provide the largest financial return. Though the Plug and Play Centre has a specific educational program for a limited number of companies, the main support model that it provides to its clients is similar to that of other traditional incubators.

One emerging type of for-profit incubators is the seed accelerators, hereinafter accelerators. Accelerators are usually known for their educational programs rather than their contribution to innovation. In fact, there are accelerators that do not offer incubation space to their client companies at all. Although accelerators have evolved over the years, the most common characteristics of the accelerators are, intense educational program for a defined period, and providing seed funding in exchange for equity ownership in the company.

An accelerator typically accepts a certain number of companies for every cohort through an application process. These companies receive intensive mentoring and business support for the period of the program. They may also receive a small amount of funding whether as a grant or in exchange for a percentage of the equity in the company. These accelerators usually accept companies that have certain focus which is usually mobile and web application. The reason for this is that the main development of a product in this space can be done within a short period of time, and does not require significant capital. It is expected that accelerator companies take the opportunity of the program and develop their product for the stage where it can be presented to investors at the end of the program in a day usually known as Demo Day.

---

[2] Association, N. B. (n.d.). *Business Incubation FAQ*. Retrieved 03 29, 2012, from http://www.nbia.org/resource_library/faq/#1

[3] Knopp, L. (2007). *2006 State of the Business Incubation Industry.* Athens, Ohio: National Business Incubation Association.

[4] Masrour, A. (2012, Febrauary). (Y. Kerachian, Interviewer)

The first accelerator that offered its program to start-up companies is YCombinator which launched in March 2004 by Paul Graham in Silicon Valley. Since the start of the YCombinator, arguably one of the most successful accelerator programs in the world, many new accelerators have been established with having YCombinator as a standard model. In Canada, the first accelerator programs were established in 2010.

4. Canadian accelerator programs: Past

4.1 Rise of accelerator programs in Canada

With the continued success of accelerator programs across the United States and Europe over the last decade, Canadian programs have been on the rise, seeing several established since 2010 across the nation. As part of this paper, we studied the evolution of the first several accelerator programs that were established in Canada between 2010 and 2012. Out of these accelerators, two ceased or failed not long after their creation. The major ones operating in 2012 were FounderFuel in Montreal, GrowLab in Vancouver and Extreme Startup in Toronto. The Next 36 was another accelerator program founded by the University of Toronto with similar structure to other accelerators, but only available to undergraduate students. Waterloo region hosted HyperDrive, an accelerator program launching in April 2012 which accepted its first cohort in June of that year. Alternatively, Mercury Launch which was scheduled to launch in September 2011, was grounded after the loss of a key investor. Bootup labs was another accelerator program launched in Vancouver in 2009 which invested in 8 companies but later ceased their activities in 2010.

Founders and investors

Canadian accelerators are mostly backed by strong Venture Capitalists (VCs) or angel investors. FounderFuel was funded by the investment team behind Montreal Start Up which also manages the $50 million seed-stage fund of Real Ventures. These VCs initially committed over $2 million dollars to FounderFuel in June 2011 for its launch.

Extreme Startups received $7 million in funding from investors, Extreme Venture Partners, OMERS Ventures, RHO Canada Ventures, BlackBerry Partners Fund, and Business Development Bank of Canada (BDC). Extreme Venture partner had its own accelerator program since 2009 which was then rebranded and expanded under the name of Extreme Startups after attracting investment from other venture capital firms.

GrowLab raised money from angel and venture investors including lead partner's BDC, iNovia Capital and the Blackberry Partners Fund, along with Rho Canada, Mohr Davidow Ventures, Growthworks, Yaletown Venture Partners, Chris Albinson, and Mike Edwards. The four founders of GrowLab are superangel[5].

HyperDrive functions differently from many accelerators in a sense that it is founded by a not-for-profit association in Waterloo Region, Communitech. The operating cost of the HyperDrive will come from Communitech while investments made in the companies associated with Communitech are provided separately by independent investors. In the case of The Next 36, seed funding for the program was donated by a group of entrepreneurs, business leaders and national partners.

Seed funding and the exchanged equity

The accelerator programs studied were similar in both the initial seed funding invested and the equity that they received in exchange. The key difference was the subsequent funding provided which was usually in terms of a loan or convertible debt. Table I shows the value of the initial funding, subsequent funding and the share of the equity.

[5] The term Superangel refers to highly sophisticated and well-connected angel investors who have been uniquely successful as individual angels and who have earned access to superior deal flow.

Accelerator	Initial seed funding	Additional funding	Equity
FounderFuel	$10K + $5K per founder		6%
Extreme Startup	$50K	$150K	10%
GrowLab	$25K	$150K	5-10%
Next36	$50K		25%
HyperDrive	$25K + $15K loan	$150K	5%

Table I: Funding provided by the accelerators and the equity that they take

Cohort size

The Canadian accelerators that were interviewed all took ten or less companies per cohort (See table II). They all had no intention of increasing the number of companies significantly as they believe it is difficult to manage high number of companies.

Accelerator	FounderFuel	Extreme Startup	GrowLab	Next36	HyperDrive
Cohort size	10	5	5	10	10

Table II: Cohort size of the accelerators

Objective of the program founders

We asked the interviewees about the objectives of founders in creating the accelerator program, whether it is the direct financial return from the equity they take, deal flow for investors, or building the entrepreneurial ecosystem. Extreme Startups considered the main objective to be the deal flow for investors, as 10% equity in the client companies is not much. For the FounderFuel founders, not only was the return from equity ownership important, they also hoped to have impact on the entrepreneurial ecosystem in Montreal. In the case of the HyperDrive, the ecosystem aspect was considered very important, but they also believed their program would satisfy the financial objective of the program investors.

Location

Great entrepreneurial ecosystems are one of the key factors in attracting good start-up companies to an accelerator program. Since having a good supply of companies is crucial, an accelerator has to be built in a location that is attractive to start-up companies. Currently the three major Canadian accelerators are in Toronto, Montreal and Vancouver, which are the three Canadian cities among the world's top 25 technology startup ecosystems. In our interviews, we were told that accelerators do not expect the companies to stay after the program, as they think the companies should move to where it is best for them.

Profiles of the entrepreneurs

When asked about the profiles of the company founders, the interviewees stressed the diversity of the entrepreneurs, highlighting that the experience of founders was not important when selecting the companies. The main criteria were that the founders must be 'tenacious entrepreneurs', therefore keen on starting their company, and should also be technical. The accelerators believe that the program helps companies in the business aspect, and therefore it is important that the company founders have enough technical knowledge to pursue their business. The accelerators also emphasized on how important the founders themselves are compared to their idea or technology. The accelerator investment is basically on people and not the business.

Compelling factors

Companies applying to different accelerators are similar to people applying to different universities. There is a tough competition among different accelerator programs to attract the best start-up companies. Therefore every accelerator needs to emphasize its key selling features. Extreme Startup considered its financial support from some well-known venture capitalist as its compelling factor. Their program also gave a great opportunity to their client companies to collaborate with major industry leaders such as Google and LinkedIn. For the FounderFuel, the ecosystem and abundance of the technology companies in certain sectors (such as ecommerce) were the key factors that can be attractive to start-up companies. HyperDrive emphasized its long-term view of program, where they plan to support their client companies for a year or two, until they are able to raise series A financing[6]. Moreover, HyperDrive was planning to provide significant in-kind support to its companies through working with law or accounting firms.

4.2 Discussion

Founders and investors

Out of the five accelerator programs studied in this report, two of them are founded by not-for-profit organizations whose primary objective is building a stronger entrepreneurial ecosystem. This is very different than what is seen in the US where a founders' motivation is chiefly financial benefit. On the other hand, all the accelerator programs were backed by VCs, including those founded by not-for-profit organizations. The accelerators with non-for-profit organizations as founders will have different internal dynamics as their stakeholders have different objectives.

The financial backing of an accelerator program with strong VCs is critical since it takes a significant amount of time for an accelerator to become profitable. Therefore, it is necessary for an accelerator to have access to sufficient funding to be able to withstand this period without profit. The failure of the two accelerator programs in Canada in recent years both were related to lack of financial support.

Funding and equity

A survey amongst start-up companies in accelerator programs indicates that the amount of seed funding is not one of the main motivators for a company to join a program[7]. The accelerator programs in Canada gave similar initial seed funding (between $10K and $50K) with the newer companies in the top range. The same survey states that one of the main motivations for start-up companies to join an accelerator program is to raise follow-on investment at the end of the program. Therefore several of the Canadian programs have managed to add additional funding support into their package, usually in the form of a convertible note.

The Canadian accelerators studied in this paper took between 5% and 10% equity in the client companies. In principle, this percentage should be low enough to not discourage the companies for joining a program, considering that the primary objective of an accelerator program is usually not having the direct financial benefit from its ownership in the companies. In 2012, the only Canadian accelerator program that took more than 10% equity was The Next 36, which is because of the University of Toronto Intellectual Property Policy. However, their main objective is training young entrepreneurs who will not likely pursue their business without a major support from The Next 36 or elsewhere.

Objective of the program founders

Founders of accelerator programs have different objectives. When the founders are also investors, the primary objective is the direct return on investment from the equity they take from their client

[6] Series A financing is the first round of financing given to a new business once seed capital has already been provided.
[7] Christiansen, J. D. (2009). *COPYING Y COMBINATOR.*

companies. Since successful companies would likely receive subsequent funding after accelerator program completion, the share ownership of the founders gets diluted. Unless a company has a very successful exit, this diluted share will not have much value for the accelerator founders. A very successful exit will likely happen when the cohort size is large, such as the case of YCombinator.

Another motivation for the founders is to have the accelerator as a source of deal flow. The accelerator programs provide great opportunities for the investors to find the top companies with bright futures. They will then make follow-on investments to these companies which will result in larger equity ownership of the companies compared to the original ownership that they had at the beginning of the program. For the accelerators with small cohort size, this objective is more viable than the financial return from the original investment. This is why VCs and angel investors are eager to invest in the accelerator programs.

Cohort size

There are tradeoffs with the number of start-up companies that a program should accept. The more companies accelerator programs accept, the more likely they fund a company that could make a very successful exit and result in a high return on investment for the accelerator. On the other hand, it is more difficult to manage a high number of companies. Moreover there has to be enough supply of great start-up companies to accept into programs. It is recommended that at the early years of the program where a successful brand has not been achieved and there are fewer applications from great start-up companies, an accelerator should accept a smaller number of companies, somewhere between 5 and 10. As an accelerator grows, and its successful alumni help it to promote its brand, it should plan to increase the number of client companies.

5. Canadian accelerator programs: Present

5.1 Where the first five accelerator programs are today

In 2012, as we reviewed in the first part of this paper, there were five major accelerators in Canada: GrowLab, Extreme Startup, FounderFuel, Next 36 and Hyperdrive. The first three were for profit programs, whereas the last two were programs run by non-profit organizations. To understand the evolution of accelerators over the last several years and the current trends in this industry, we investigate where these five accelerators stand today in 2018.

FounderFuel is currently active, and recruited its last cohort in 2017 and has accelerated more than 80 companies over the last 6 years. However, there is no indication that it has grown over the years since its cohort size has remained relatively the same.

Hyperdrive ceased its operation after three years, in 2015, and underwent a massive transformation. The new program, Rev, that replaced Hyperdrive is a sales-focused program with the objective of helping more mature startups to scale up. This is contrary to Hyperdrive which targeted early stage companies. Communitech, the nonprofit organization behind Hyperdrive, claimed that the need for supporting early stage companies through an accelerator program in Waterloo Region was no longer felt, while sales and revenue growth seemed to be the challenge for Waterloo Region startups.

GrowLab and Extreme Startup merged in 2014 into a new accelerator program called HIGHLINE. This new accelerator moved away from the conventional style of programming, by providing specialized acceleration services rather than the one common programs for all the companies in the cohort. It also provided the founders with up to $200,000 in financing but not upon entry or exit, rather at targeted stages. As opposed to attracting startups still in the idea phase, HIGHLINE attracted companies that were in later stages, with revenue or traction in the market, and were looking to grow internationally. HIGHLINE gradually transformed into more of a pre-seed investor for digital startups, and today, they are no longer investing in new ventures. In 2016, the HIGHLINE founders started a new and very different initiative called HIGHLINE beta that works with large corporations to create new startups.

Next36, is the most successful accelerator among the five. It grew significantly to what is now known as Next Canada, and the original accelerator, Next36, became one of the three programs of Next Canada. The other two programs are Next Founders and Next AI. Next36 continues to be a cohort-based program for students and recent graduates, whereas Next Founders is a more flexible program targeting ventures in seed/growth stage. NextAI is also a cohort-based program targeting the ventures that have innovation in the artificial intelligence sector.

5.2 New Accelerator programs

In addition to reviewing the current state of the first five major accelerators of Canada, we studied the new accelerators that have been established in the last several years. By 2018, there are more than two dozen accelerator programs across Canada. In the process of identifying current Canadian accelerator programs, we realized that the border line between accelerators and incubators has become blurry, and some programs that call themselves an accelerator may not be one depending on what definition one uses for accelerators. The minimum requirement for an accelerator would be having an intensive training program for their companies. Accelerator programs are not necessarily cohort-based, and may not provide seed funding for equity. Here we study some of the notable accelerator programs in Canada, and try to investigate other trends in this industry.

Creative Destruction Lab (CDL)

The Creative Destruction Lab is a seed-stage program for scalable, science-based companies. It was launched in 2012 at the Rotman School of Management at the University of Toronto, and the program has now expanded nationally with locations in Vancouver, Calgary, Montreal, and Halifax as well as internationally, in New York. The CDL program involves intensive full-day sessions with mentors every eight weeks with the purpose of assessing progress and setting new short-term objectives. The main value CDL provides is the opportunities to raise capital, as there are regular meetings attended by a selected group of angel investors, and partners from leading venture capital firms. CDL also has specialized programs such as Artificial Intelligence/Machine Learning, and Quantum Machine Learning in Toronto, BioMedTech in Vancouver, and Blue-Green Tech in Halifax.

Ryerson Futures

Ryerson Futures is an accelerator program founded in 2012 in Downtown Toronto with connection to Ryerson University's Incubator, DMZ. Ryerson Futures claims that it is not a "traditional accelerator" as it does not have cohorts or demo days. Instead, it delivers customized programming based on each startup's needs. It can also invest up to $100,000 in seed capital and support future fundraising activities. Ryerson Futures currently operates accelerators in Toronto (Zone Startups Sports & Media), Calgary (a partnership with GE Canada) and India, a joint venture in Mumbai with the Bombay Stock Exchange and a partnership with Barclays in Bangalore.

DMZ

DMZ is an incubator program of Ryerson University in Toronto. It was launched in 2010, and has grown significantly since then. It currently runs many different programs and services, among them four cohort-based accelerator programs: DMZ Playbook, DMZ-BMO Fintech Accelerator, Women Founders Accelerator, and Insurtech. DMZ Playbook is an intensive six- month sales execution program for revenue-generating tech startups looking to infuse growth into their companies. This program accepts six companies in every cohort. DMZ-BMO Fintech Accelerator is a partnership between DMZ and Bank of Montreal to provide 4-month intensive programs to Fintech companies. It provides cash prizes of $50,000, $35,000 and $15,000 for three winners of the program. Women Founders is a four-month accelerator program, in partnership with a financial institution, to help Canada's top women-led startups grow by achieving their product market fit and securing early revenue. Similar to the Fintech Accelerator, this program provides cash prizes for winners of the programs as opposed to providing seed funding to all the companies in the cohort. DMZ Insurtech program is another program that is sponsored by Aviva Canada, a leading insurance company. It takes six companies, that are in the insurance sector, in every cohort. These companies will get the opportunity to pilot with Aviva and pitch to its UK-based venture fund.

DMZ has recently announced another accelerator program in partnership with Facebook Journalism Project. It is open to companies at different stages, from an idea to a product, and provides up to $100,000 in seed funding on completion of milestones, in addition to $50,000 in Facebook marketing budget. This five-month program accepts five companies into its cohort, and ends with a demo day.

The Big Push

The Big Push is an accelerator program that focuses on female founders. It is an equity-for-service program designed for companies that already have a product in the market with the revenues of $10K or greater. This accelerator invests a minimum of $10K in the companies and its program is delivered over a four to six-month period to about ten companies.

Techstars Toronto

The Techstars Toronto Accelerator is Techstars' first Canadian accelerator program. It has a horizontal focus and operates similar to its programs in other cities. This accelerator program has started early this year, 2018, and will end with a demo day. Techstars Toronto managing director is Sunil Sharma who used to run the Extreme Startups, one of the first accelerator programs in Canada. Techstars has very recently announced that it will start another program later this year in Montreal with the focus on artificial intelligence.

Founder Institute

Founder Institute a global business incubator with headquarter in Silicon Valley has several chapters in Canada. This accelerator is more targeted for idea-stage entrepreneurs and startups, and charge a course fee for its programs. They launched in Toronto and Montreal in 2014 and have successfully grown to other cities.

5.3 Discussion

We first studied the evolution of the first five accelerators since inception to learn about the current trends in this industry. Apart from the FounderFuel, other accelerators have become more flexible in their programming, and moved away from the one-size-fits-all approach. The transformation of HyperDrive to Rev, Merger of GrowLab and Extreme Startup into HIGHLINE, and the creation of Next Founders are indication of this trend. In a structured cohort-based accelerator, companies joining a cohort are usually in different stages of business with different needs. Presenting one program to all these companies introduces challenges which the new accelerator programs try to avoid. In addition to the programs becoming more flexible, funding support provided by the accelerators are changing. Rather than providing same seed funding to all the companies at the beginning of the acceleration program, accelerators are now trying to provide funding based on achieved milestones at different stages. This approach was observed in HIGHLINE and some other programs.

Another interesting observation is that some accelerators are now working more with the companies at sales and growth stages, as opposed to the traditional approach of accepting early stage startups. This trend is followed by Communitech Rev, HIGHLINE and NEXT Founders and can be explained by the high risk associated with investing in early stage companies particularly when finding and attracting high potential startups is a challenge.

Specialization is another approach that can be seen in one of the accelerators. NEXT Canada has created an accelerator program dedicated to the companies in artificial intelligence. Accelerators are finding it important to specialize in an industry to create more value for the companies.

Next, we identify common features among the accelerator programs, where many of them were not present at the first five accelerators.

Partnership between accelerators and corporations

The first few accelerator programs in Canada had partnership with venture funds, such as FounderFuel which was and still is supported by Real Ventures, a leading venture fund in Canada. However, since these accelerators did not specialize in specific industries, they were not supported by corporations.

Recently, as accelerators are becoming more specialized, they are building partnership with corporations. Table III shows several accelerator programs and the corporation that supports them with the industry that the accelerator program is specialized in.

Accelerator	Corporation Partner	Industry Specialization
DMZ	Aviva Canada	Insurance
DMZ	BMO	Fintech
DMZ	Facebook	Digital Media
Ryerson Futures	GE Canada	Industrial Internet
CDL	Rigetti Computing	Quantum Computation
TEC Edmonton	Merc Canada	Pharmaceutical

Table III: Accelerator programs with their corporation partners

Industry Specialization

Industry specialization is one of the most notable trends in the Canadian Accelerator space. Many new accelerator programs started with selecting one or couple of industry specialization, among them Artificial Intelligence, Digital Media and Fintech. Artificial Intelligence is the most attractive specialization among accelerators, with CDL, Next Canada and Techstars having programs for it. There is less interest in programs focused on life sciences which can be explained by the long development time. We only identified two programs, TEC Edmonton and Calgary's District Ventures accelerator that are in pharmaceutical, and food and health sector. Table IV shows a list of accelerator programs with the industry they are specialized in.

Accelerator	Industry Specialization
B.C. Tech Cube	3D development (Virtual Reality, Augmented Reality, Mixed Reality)
CDL Montreal	Data
CDL	Artificial Intelligence/Machine Learning
NextAI	Artificial Intelligence
Infiniti Lab Canada	Internet of Things (IoT)
Calgary's District Ventures accelerator	Consumer packaged goods, in the food and health sector
DMZ-BMO Fintech Accelerator	Fintech
CDL	Quantum Computation
TEC Edmonton	Pharmaceutical
Flightpath	Software and Digital Media
Techstars	Artificial Intelligence

Table IV: Accelerator programs and the industry they are specialized in

Other Specializations

Other than specializing in an industry, accelerator programs have selected other ways of specializations. There has been at two programs that are designed for female founders. Some programs also only take companies with existing revenue with the goal of focusing on sales. It is understood that accelerator programs have chosen to lower their risks by not investing on early stage companies. There are also some programs that are connected to the universities, and only take companies where founders are students or early graduates. Table V shows the several programs that have selected a specialization.

Accelerator	Specialization
The Big Push, DMZ Women Founders	For female founders
Next36, UTEST	For students or recent graduates
DMZ Playbook, Communitech Rev	Sales-focused programs

Table V: Accelerator programs and their specialization

Expansion

Accelerator programs that have reached a certain level of maturity have looked at expansion and growth. Two different forms of growth are observed among the accelerators. Some, like CDL and Ryerson Futures, have launched their programs in other cities, and have even gone international. Some accelerators have also created programs in new specializations. It can be noted that there are couple of accelerators with high potential that have pursued both methods of expansion.

Accelerator	Geographical expansion	Expansion to other specializations
CDL	Toronto, Montreal, Calgary, Halifax and New York	Data science, Quantum Computation, Machine Learning
Ryerson Futures	Toronto, Calgary, India	Industrial Internet, Sports & Media
Techstars	US, Toronto, Montreal	Artificial Intelligence
DMZ		Insurance, Digital Media, Fintech

Table VI: Accelerator programs and their expansion

Flexible programs

Another visible trend among accelerator programs is moving toward more flexible programs. Traditional programs have always been cohort-based with the demo day at the end of the program, and provided small seed funding in return for equity. In the recent years, we have seen accelerators that take new companies continuously, and do not have a demo day as they see the traditional model of one-size-fits-all not working well. The funding model has also changed. Rather than providing equal amount of funding to all the companies in the cohort, accelerators now provide funding during the program based on the companies achieving certain milestones. Many of these funding models are also grant money, and accelerators do not take equity in the companies. Table VII compares different accelerators on different attributes of their program.

Accelerator Program	Cohort-based	Funding	Equity ownership
Ryerson Futures	✗	Up to $100K	convertible note and founder's equity
DMZ Accelerator	✓	Cash prizes of $50K, $35K and $15K	✗
CDL	✓	✗	✗
Next36	✓	Up to $80K	4.7% for NEXT Canada + up to 6$ for venture funding
Next Founders	✗	Up to $30K in non-dilutive grant	✗
Next AI	✓	$50K + up to $150K	Safe[8]
The Big Push	✓	$50K to $100K in professional services	3% to 5%
UTEST	✓	Up to $50K	Safe
Communitech Rev	✓	Cash prize of $100K	✗
Techstars	✓	$20K + up to $100K convertible debt	6%
Founder Institute	✓	Course fee of ~$2K	4% equity into a Shared Liquidity Pool
FounderFuel	✓	$20K	5%

Table VII: Accelerator programs and their program attributes

Business model

The early accelerator programs were mostly for-profit entities with links to venture capital firms. In later years, both federal and provincial governments realized the important role of accelerator programs for the startup community, and they started to support and fund new and existing accelerator programs. Therefore, several programs also started out of universities and colleges which followed the not-for-profit model. That has changed the landscape of accelerator programs in Canada. This has had an impact on how the programs are run, and whether they provide funding to the companies in the program, as well as if they take equity in the companies. Table VIII lists many of the accelerator programs and their business model.

Business Model	Accelerator Programs
For Profit	Ryerson Futures, FounderFuel, Founder Institute, The Big Push, Techstars, B.C. Tech Cube
Not-for-profit	DMZ, Next Canada, CDL, UTEST, Communitech Rev

Table VIII: Accelerator programs and their business model

Merger

[8] The safe (simple agreement for future equity) is an investment instrument as an alternative to convertible debt. https://www.ycombinator.com/documents/

Despite anticipation for mergers between different accelerator programs, there has only been one case where Extreme Startups merged with GrowLab to from HIGHLINE. This merger, itself, cannot be considered a success since HIGHLINE ceased its operation as an accelerator. Therefore, our conclusion is that the accelerator programs that were looking for expansion did not pursue merger, and instead they create new operations.

5. Conclusion

Canadian accelerator programs have evolved over the years since their inception in 2010. At the beginning, they were offering cohort-based training programs for startup companies in addition to providing them with a small seed funding in return for equity. These accelerator programs typically took early stage companies and had no industry specialization. Our review of the first major accelerator programs shed doubt on the viability of this 'traditional' model of acceleration. We believe that the little success of the traditional accelerators has resulted in accelerator program model changing in different ways. Our study of the more recent accelerator programs has discovered several emerging trends in the accelerator model. Partnership between accelerators and corporations, and industry specialization are the two most important trends that differentiate the more recent accelerators from the old ones. Of lesser importance, we have observed the creation of accelerator programs with other specializations such as taking companies with female founders. The most successful accelerators have also pursued expansion geographically or to other specializations. More flexibility in training program is another trend among the accelerator programs. This way they can better address different needs of their companies.

Despite the challenges that the early accelerators have faced, the number of accelerator programs in Canada has increased significantly from a few in 2010-11 to few dozens in 2018. We believe this is the result of the new accelerator programs changing their model to increase the success rate of their companies. We recommend that the new accelerators review carefully the trends in accelerator industry in North America, and try to apply them to their startup environment after considering the differences. In particular, they should look into the possibility of partnering with corporations and specializing in an industry. This could help them attract the best founders, and make investments in promising companies.