
Startup Ecosystems

*Study of the ecosystems around
the world; Focusing on Silicon
Valley, Toronto and Moscow*

Prepared by:

Eisa ALEISA

Academic Supervisor:

Prof. Jan Recker

Project Supervisors:

Ryan Liddle

Thomas Brown

Summer, 2012-2013



Executive Summary

“CO | PACITY” is an environment of open collaboration that will promote the process of taking an idea through to prototype. The report is aiming to support organizational innovation management at Woolworths in the development of “CO | PACITY”. Studying the startup ecosystems around the world was essential, since “CO | PACITY” will be one of the contributor in Sydney startup ecosystem. The study observes other ecosystems focusing mainly on Silicon Valley, Toronto and Moscow.

The report provides an overview of the top 20 ecosystems around the world. Then it provides a comparative analysis on Silicon Valley’s, Moscow’s and Toronto’s ecosystems by describing the differences in the entrepreneurs, market and fund in these ecosystems.

The report concludes by identifying the characteristics of a good ecosystem and providing recommendations to “CO | PACITY”. The report states that establishing startups incubators an important factor to success. It is also recommended for “CO | PACITY” to attracts the best entrepreneurs with unique ideas; the young and highly educated. Best students in the top universities could be targeted as potential entrepreneurs. The startup should target both consumer and SME (small & medium enterprise). Finally it can attract talented entrepreneurs by providing generous funding.

Table of contents

1. Introduction.....	5
2. Background.....	6
3. The startup ecosystems around the Worlds	9
4. The startup ecosystem in Silicon Valley, Toronto & Moscow	15
4.1 Entrepreneurs	15
4.2 Market and Fund.....	16
4.2.1 Start-up and Exit Opportunities	16
4.2.2 Business Models	18
4.2.3 Funding and Policy Regulations	19
4.2.4 Market Size	20
4.2.5 Level of Technology	21
4.3 Comparison Conclusion	22
5. Info-Graphic for the startup ecosystem in Silicon Valley & Moscow	24
6. The characteristics of a good ecosystem.....	27
7. Findings.....	29
8. Conclusion	30
References	31
Appendices.....	35
Appendix A: A comparative analysis	35
Appendix B: Top 20 cities rankings table:	37
Appendix C: Component Index for Silicon Valley, Toronto & Moscow:	38

List of Figures

Figure 1 Maps of the startup ecosystems around the world	14
Figure 2 Funding per stage in Silicon Valley, Toronto and Moscow	20
Figure 3 Tackled market in Silicon Valley ,Toronto & Moscow (new vs. niche)	21
Figure 4 Info-Graphic the startup ecosystem in Silicon Valley vs. Moscow (Part 1)	24
Figure 5 Info-Graphic the startup ecosystem in Silicon Valley vs. Moscow (Part 2)	25
Figure 6 Info-Graphic the startup ecosystem in Silicon Valley vs. Moscow (Part 3)	26
Figure 7 Top 20 startup ecosystem rankings table	37
Figure 8 Component Index for Silicon Valley, Toronto & Moscow	38

List of Table

Table 1 Comparison table of Silicon Valley , Toronto & Moscow	23
---	----

1. Introduction

Startup Ecosystems around the world have witnessed an increased burst of entrepreneurship that has seen new ones founded and existing ones experiencing maturity. Recent surveys identify more than 20 startup systems globally that shows their different endowments and strong points from entrepreneurship, market size, funding and perspectives from key players including policy makers and investors. The report provides statistics and comparison of other ecosystems to Silicon Valley, which has experienced tremendous development since fifty years ago.

The phenomenon of startup ecosystems has been around for years, with its early developed on areas such as Silicon Valley and New York City. When thinking about the development of Startups, it is better to do so in terms of decades (Klein, 2009). In the first decade entrepreneurs are likely to copy what is working elsewhere; the entrepreneurs are first timers and have a mix of success and failures. This was true for Silicon Valley from 1965-1975 (Klein, 2009). In the second decade, entrepreneurs are more confident and attempting for another round while there is a significant development infrastructure. In the third decade, the ecosystem is fully developed and producing formidable companies and is the present Silicon Valley from the 1980s.

This report seeks to identify the characteristics of a good ecosystem, what entails an ecosystem and a deeper insight into the top startup ecosystems and their unique characteristics. The report will further seek to investigate how the findings on the existing ecosystem will be essential in “CO | PACITY”, an environment of an open collaboration and its importance in supporting organizational innovation.

The report start by defining the “startup ecosystem” also known as “entrepreneurial ecosystem” as the environment affecting the entrepreneurship by a group of companies, including startups, and one or more coordination entities shares similar goals. Then, the report gives a general background about the startups ecosystems. A Literature review follows that. It discusses the most 20 effective ecosystems around the world.

A comparative analysis on Silicon Valley's, Moscow's and Toronto's ecosystems was conducted, starts by giving justifications regards criteria used in the comparative analysis and the reasons of selecting these ecosystems. The comparison provided by describing the differences in the entrepreneurs, market and fund in these ecosystems.

The report then concludes the research by giving the characteristics of a good ecosystem. The report also consider the implications and conclusions of the research in terms of "CO | PACITY" actions. In term of entrepreneurs, "CO | PACITY" can benefit by adopting the startups incubator.

It is also recommended for "CO | PACITY" to attracts the young and highly educated entrepreneurs. Best students in the top universities could be targeted as potential entrepreneurs; considering targeting both male and female entrepreneur-to-be. Leading the best entrepreneurs with unique ideas, to success with all the support needed. In term of the market and fund, "CO | PACITY" can succeed by making sure that the startups idea target both consumer and business (SME) with also considering the market size in the targeted ecosystem. "CO | PACITY" can attract talented entrepreneurs by providing generous funding, considering the average funding (per stage) in Sydney.

2. Background

A startup ecosystem is defined as a society of founders with ideas and skills, young companies at early stages with talent, incubators with mentors and capital, early adopters and the media. These elements or entities link, interact and assist each other, strengthening the ecosystem while increasing their own value. The goal for any startup ecosystem is to develop a self-sustaining network of talent and resources that seek to solve issues affecting the wider community. Early period startups are set to explore for market/product fit under circumstances of tremendous ambiguity. Alternatively, late stage startups are deigned to look for cyclical and scalable business model(s) and then move into bigger companies designed to execute under conditions of high certainty (Shane, 2012).

Entrepreneurship stakeholders may Integrate with schools, universities, government, private sector, investors, banks, family businesses, labour representatives, military, research centres, private foundations, students, lawyers, and more. Never the less, the ecosystem is made of its entrepreneurial stakeholders. These stakeholders are Members, Startups and Service Providers. Members are such as Entrepreneurs, private investors and advisors. Service providers are such as B2B (Business to Business) product & service providers, funding providers, entrepreneurial associations, knowledge institutions, and government agencies. However, the three main members in the ecosystem that are crucial for its success are entrepreneurs, private investors & advisors.

An entrepreneur is any an individual who possesses the courage to exploit new venture, has keen observation skills to determine whether ideas work, to identify opportunities and processes information quickly and accurately to draw correct conclusions. An entrepreneur has the foresight to predict how trends and available information fuse to disrupt the existing market and the vision to create new markets. An entrepreneur is essential in a startup ecosystem as he/she provides the focus for the company in terms of ideas and business skills alike and ensures overall growth. Advisors are individuals who provide mentorship to upcoming entrepreneurs to polish and assist them in becoming incredible entrepreneurs. They include VCs, angels, professors, business people and fellow entrepreneurs. They are usually honest, well read and analytical and support entrepreneurs identify the correct demography, and offer advice on finances. In so doing, smaller amount mistakes are undertaken by entrepreneurs paving the way for more successes and transforming a community to an actual Ecosystem. Private investors provide exit opportunities to a startup. This means they assist in liquidate a company and making it profitable. In addition, private investors provide funds to entrepreneurs and give their startups an opportunity to expand internationally (Dimopoulos, 2011).

Startup ecosystems have the ability to innovate, build exceptional companies, create jobs and open businesses. Entrepreneurial success is dependent on three contributing factors. They include economy, geography and sociology. These elements are crucial and introduce the dimension of aggregate startup entrepreneurial. 'Aggregating startup entrepreneurial' refers to an intrinsic set of qualities that entrepreneurs lean toward. These qualities include commitment, inclusivity and must be proactive. These traits could clarify

why startups create clusters, that is, entrepreneurs are productive, create industries and draw others to their ecosystems. Two concepts can explain aggregating startup ecosystems; entrepreneurial density and entrepreneurial proximity. Entrepreneurial density refers to the quantity of entrepreneurs, quantity of people working for startups or high growth companies over the overall adult population (Feld, 2012). Entrepreneurial proximity on the other hand refers to qualitative measure describing a dense area within a city, or quantitative measure circumscribing cities into a hub.

Startup ecosystems go through six stages of development throughout their lifecycle. The first stage is discovery where the purpose is to validate whether a startup is solving a fundamental difficulty and if anyone can theoretically be involved in the solution. This stage involves team formation, conducting customer interviews, creation of viable products, joining an incubator, financing from family and friends and bringing mentors and advisors on board. This process takes between 5-7 months. The second stage is validation where startups seek to get early validation that people are interested in their products through attention or actual purchase. This stage involves alteration of main features of their products, growth of users, metrics and analytics implementation, seed funding and ensuring product fit. The third stage is efficiency where the rationale of a startup is to improve their business structure and improve competence of their customer acquisition process. Startups should be able to obtain efficiently clients in order to evade scaling with a hole-filled bucket. The stage goes through 5-6 months. The fourth stage is scale where startups endeavour to steer growth insistently. Activities include massive customer acquirement, establishment of departments, employ executives and enhance scalability (Blank, Eesley, 2012). The fifth stage is the profit maximization stage. At this stage, the customer has a commendable customer base and products are moving, constituting a favourable profit margin. Startups at this stage are sustainable and are easy to move the next stage, which is renewal. The startup is mature enough to sustain itself and an entrepreneur is a position to start a new project without much supervision on the existing one (Startup Genome, 2011).

Entrepreneurs need to find and validate a scalable customer acquisition strategy in order to make their startups viable business ventures. Many entrepreneurs however encounter confusion when they receive contradictory feedback on many decisions they face. This is because an individual who normally give the advice base it on personal

experience and does not consider whether the entrepreneur has a different type of startup. In this regard, there are about three different startup personality types: the atomizer, the integrator, and the challenger. Type 1 the Atomizer features self-service customer acquisition, product centric, fast execution, and involve atomized processes. The second type, the integrator has several characteristics that include high level of certainty; startups focus on SMEs, the entrepreneurs target smaller markets and their products are centric. Entrepreneurs under type-2 focus on startups meant for transactional sale. Type 3 is the challenger. This type of entrepreneur focus on enterprise sales, have high customer dependency, tackle complex and rigid markets and experience repeatable sales process (Startup Genome, 2011).

3. The startup ecosystems around the Worlds

There are a lot of ecosystems around the world, but only about 20 ecosystems that have been thriving under different circumstances and endowments. The diversity in each provides it an edge in their own way, given the various stakeholders. Silicon Valley is still the world's largest and most prominent startup ecosystem but it is receiving significant competition from existing and upcoming startups. The startup genome report 2012, suggests that countries are moving from service-based economies and embracing fast-paced software and expertise. The United States is a host of some of the biggest startup ecosystem including New York, Los Angeles, Boston and Chicago. Facebook is one of the most successful startups in the United States and its ecosystem supports 20 times jobs in the United States (Swift, 2012). New York is a fresh ecosystem that grew from a few successful technology firms in Silicon Valley. It has seen numerous companies invest in New York especially at the seed stage, which is unusual for most corporate ventures (McGlade, 2013). New York continues to cut a niche for itself with the highest number of women tech entrepreneurs who are twice as many as other ecosystems globally.

Chicago ranks tenth in the startup genome report it is estimated that startups in the area have raised about \$654 million in venture capital dealing (Fletcher, Middleman 2012).

It is fast becoming a good area for good scalable technology businesses a crucial element in the success of their startups such as Groupon. It faces a significant challenge in finding talent department as it has fewer engineers than Silicon Valley or New York City. Boston was top ranking sixth with deep-rooted angels and venture capital landscape. It has highly educated entrepreneurs with many having masters and PhD certificates. Boston entrepreneurs are passionate about creating products that provide new solutions to customers and establishing connections with local enterprise companies. Boston enjoys a benefit over Silicon Valley and other startups in the United States in that creates startups that trade technology to companies and government alike (cohan,2013). This is important in the stability of a startup and the eventual growth of an ecosystem. Seattle received a boost in the Startup genome report ranking fourth, behind the largest and influential ecosystems.

Silicon Valley is receiving immense competition from Tel Aviv, which ranks second and it is highly advanced. Tel Aviv entrepreneurs are deemed to have a hard time adopting new technology trends and use the traditional programming languages such as php and Java. London Produces a third of Silicon Valleys' output but is the largest startup ecosystem in Europe. London entrepreneurs are highly motivated to create new products and tackle new markets, although they are risk averse. They prefer tackling small markets that are valued between \$1 billion and \$10 billion, with a tendency towards shared workspaces and incubators (Solon, 2012). However, is still the largest in Europe ranking seventh globally with motivation to build exciting products.

Some of the biggest ecosystems in Europe are Paris and Berlin, which compete competitively given their diverse products. Paris's startup ecosystem is vibrant and has a vigorous blend of startups focusing on consumers and enterprises. It ranks number eleven globally and creates products that are likely to monetize and are highly likely to target new markets. It however faces an enormous funding gap especially in late stages of startups inhibiting the scale of startups to billion dollar companies. This is because non-French VC investment level in Paris is significantly low since there are no foreign VC offices established here. Berlin is an open and connected ecosystem that enjoys support from outside investors and identified as the new startup hotspot in Europe. It would appear therefore, Paris is a closed ecosystem without outside participation and thus the startup community abroad is not aware of the business opportunities available in Paris (Metzke, 2012). However, Berlin

entrepreneurs lack significant support from mentors and advisors and heavily rely on each other's experiences. The cost of living in Berlin is cheap and provides a good area to start a company but will have to consider moving to other ecosystem if the company is looking to scale. Berlin's startups are likely to employ more people who are not necessarily entrepreneurs but ordinary employees and encourage other startups to do so (Metzke, 2012). Moscow ranks number fourteen in the startup genome report and its greatest asset is the number of highly skilled entrepreneurs who have more Masters Degree than Silicon Valley entrepreneurs. They create products that offer solutions, as they are not so keen on changing the world.

Canada is home for three of the greatest startup ecosystems in the world, Toronto, Vancouver and Waterloo. They rank number eight, nine and sixteen respectively. They have a growing population of startup talent and venture capital assisting it to expand beyond Silicon Valley. Established Canadian entrepreneurs are laying the ground for Canadian Startups. For Example, 'C100' is a new networking organization in which Silicon Valley venture funds are setting up offices search for deals in Canada (Mazurkewich, 2010).

Vancouver has some of the best startups in the world such as Flickr, MediaCore, and Unbounce that are quite popular among its users. Although Vancouver's entrepreneurs are less likely to tackle new markets, they are more likely to tackle niche markets, a significant factor that has contributed to its success. Waterloo, same as Toronto experiences a massive funding gap to scale start-ups in a successful manner, into large companies. Its strength however, lies in its close proximity to and density of universities, which assist talent to fuse into Waterloo's startups. Schools have recognized the importance of entrepreneurial work and have been creating resources for student entrepreneurs to access. Largely, the ecosystems consist of the business community, the government and are supportive of the entrepreneurial culture. Communitech Hub has been instrumental in raising Waterloo's startup level globally, as it offers support mechanisms, education, leadership developmental tools for budding entrepreneurs contributing to their success in startup business (Fairey, 2012).

Similarly, Australia is home to ecosystems, Melbourne and Sydney. It competes well with those of Canada as witnessed with Sydney, which ranks number twelve. Sydney entrepreneurs are highly educated with about 37% having masters and 42% PhD holders. The entrepreneurs are highly motivated working long hours and have fantastic mentors who assist early stage startups in terms of advice and financially. Sydney entrepreneurs are likely to build exceptional products but they are not likely to change the world or monetize as quickly in Silicon Valley due to limited market size (Hurley, 2012).

Melbourne entrepreneurs are more focused on providing products to offer solutions rather than change the world. It is home to some of the entrepreneurs such as Rob ward and Chris Peters who are instrumental in creating products for iPhone, which include Opena Case and Quad Lock. This shows that Melbourne will create a niche for itself and be a strong phenomenon as its counterpart Sydney. Los Angeles, miles ahead of Melbourne ranks number seven and provides an insight on where Melbourne is heading. Los Angeles has a network of experienced entrepreneurs who work constantly with early-stage startups. However, their entrepreneurs are not high risk tolerant, preferring to work fewer full times. In any case, Melbourne has early stage funds, vibrant Angel Investment community, and a legitimate start-up accelerator. It is also experiencing a wave of successful entrepreneurs reinvesting in Melbourne's startup community with notable startups such as Bugherd and 99designs (Hammond, 2012).

Another Significant ecosystem is Sao Paulo is the largest in Brazil with highly educated entrepreneurs. They tackle new markets rather than niche markets that concentrate on a large scale on creating mobile products. The Brazilian tax system is heavy proving a key problem in the Brazilian ecosystem and its development. In addition, there is a limited supply of venture capital preventing upcoming entrepreneurs to engage in capital-intensive businesses such as ecommerce (Carthy, 2012). Accelerators such as 21212 are filling the knowledge gap in Sao Paulo's startup as they help educate entrepreneurs. Santiago's startup ecosystem enjoys strong support from the government program, Startup Chile, which is the reason behind it's thriving success The Chilean government gave \$40,000 free capital to 22 startups brought from 12 countries. It has the highest ration of female to male entrepreneurs (Business wire, 2012).

Singapore is unique due to its infrastructure and policies that are favourable for a thriving ecosystem. Startups enjoy financial support in their early stages; global companies can identify companies to invest in at this stage. It ranks seventeenth globally, and it enjoys a strategic position geographically in Asia thus a favourite for entrepreneurs to start, grow and scale their businesses outside Asia. Bangalore is also part of the Asian ecosystem but focuses more on non-web products and most of the startups are venturing into the world of gaming. Venture capital firms are avoiding investing in Singapore, due to its small market size. Exit opportunities are few and VCs are looking at nations such as India, which has a larger domestic market than Bangalore. The government assists in the early stages but there is an overall gap in the growth stage. Singapore is also focusing more on creating new ways to apply existing technologies for business benefits (Kurup, 2012).

Startup ecosystems

The following map is designed to show the distribution of the 20 most important startup ecosystems covered in the report



Figure 1 Maps of the startup ecosystems around the world

4. The startup ecosystem in Silicon Valley, Toronto & Moscow

Silicon Valley can be regarded as the mother of all technology start-ups, but the title and the trend are reversing rapidly. As high growth technology start-ups appear to be the key growth engine of the new information economy, the latest expansion of start-up ecosystems springing globally has immense consequences for the outlook of the world market. The start-up network index paints a shinningly positive image of the state of entrepreneurship just about the world. The global start-up revolution is going burly over the last few years in the developmental of the ecosystem in a remarkably lively way to the economic status (Silva, 2012).

Moscow startup ecosystem exhibits a step in its efforts to build a competitive market environment in its economic status and the build-up of globally viable companies (Joffe, 2012). Moscow has approximately only half of the funding potential and technological growth of Silicon Valley. “Moscow has 89% less startups than Silicon Valley”. In comparison, Toronto start-up ecosystems generate 85% less start-ups than Silicon Valley although it has a healthy channel of start-ups in its lifecycle. Toronto start-up ecosystem is the largest in Canada, ranking eighth among the world’s top 20. It has a suitable mix as start-ups targeting customers, venture and SME’s as customers, comparable to Silicon Valley. The start-ups in Toronto perform well in terms of numbers and performance due to availability of mentors and outstanding support from other start-ups.

4.1 Entrepreneurs

The demographic patterns in terms of the population around these cities depict an immense importance in the success of the business ventures around the ecosystems. The demographic for Silicon Valley consists of a 90% male entrepreneurial work force with the average age of 34.12. The demographic of Moscow workers consists of 93% male entrepreneurs with the average age of 26.9. Toronto’s demography conversely has the entrepreneurial working force age at 35.63, 82% male entrepreneurs and 18% of females compared to Silicon Valley’s 10%. (Startup Genome, 2012)

In Moscow, the number of the young and the skilled entrepreneurs is rapidly increasing, encouraging upcoming entrepreneurs to come up with innovative products that will contribute positively on the developmental processes in the economy. According to Startup Genome talent index, Moscow is currently, ranked eleventh as opposed to Silicon Valley ranks first while Toronto ranks tenth. Moscow's ranking is encouraging compared to Moscow and Toronto given their different endowments. Moscow' entrepreneurs have a higher level of education compared to other start-up ecosystems with many having Masters Degree. They however, face political restrictions that prevent them from expanding their entrepreneurial ventures. They are quite skilled in product development but do not have as many market opportunities compared to Silicon Valley. In comparison, Toronto entrepreneurs are quite ambitious, with a commitment to work full time to ensure product fit in the market. Their start-ups mainly focus on customer acquisition, building product, funding and team building, similar to Silicon Valley. Funding however, is an enormous problem in Toronto start-up with about 71% of the entrepreneurs doing consulting jobs on the side (Startup Genome, 2012). Overall, in Moscow, the diverse talents and ideas focused on innovations have been pooled up together as just another method that elevates the economy.

4.2 Market and Fund

4.2.1 Start-up and Exit Opportunities

The focus of Moscow start-up ecosystem is to solve their economic problems, through their entrepreneurial skills, to create products helping to solve these problems (Startup Genome, 2012). They achieve this by expanding their customer base internationally and using updated technology to keep up with the global market. This has not been smooth sailing since they mostly copy successful western practices without fully understanding reasons behind their success. In this regard, most of the Moscow start-ups involve localizing established western business that helps in enlarging their customer base. In addition, they are updating their technology in line with global market that will help break their technology and financial slump, and encourage growth. In Toronto, an energetic start-up activity faces capital deficiency. This will pave the way for a wave of investors who will be willing to be part of a growing ecosystem. Compared to Moscow's entrepreneurs, Toronto entrepreneurs chase after tremendous opportunities, inspire confidence, are relentless,

focusing on building successful companies, while staying close to their customers and competitors alike. The entrepreneurs however, face a funding problem that pushes them to work elsewhere. According to a survey conducted in 2012, most employers cited a shortage of talent in all level of development as the biggest challenge (Clarke, 2013). A strong financial backing is especially crucial for Toronto businesses to flourish, but many times the entrepreneurs fail to satisfy the bank's collateral requirements. This forces them to rely heavily on venture capital, which is essential in earlier stages of a start-up. Accessing venture capital will enable to change innovative ideas and technologies, into the market place successes, and drive productivity and growth in Toronto.

Silicon Valley's landscape gives it a significant edge over the other start-ups. This is because it has the ability to produce unique products, relevant to a wide audience around the world. This gives investors the confidence to invest in Silicon Valley's entrepreneurs and is willing to fund many of the start-ups emanating from there. It is then obvious then that Silicon Valley is the centre of all start-up ecosystems globally in terms of business and technology. Toronto's landscape is acutely much similar to Silicon Valley. They have similar start-ups that are data driven, fast technology adoption rate, and the same level of tutor support. This means that Toronto creates products for the global market to create solutions for the business and technology world and a favourite with investors. They rank third in the company performance index compared to Silicon Valley, which is first, meaning they are as every bit competitive and ambitious as their counterparts.

Investors have a chance to act as shareholders in Moscow start-ups in the form of, exit opportunities (Zobrist, 2012). It allows for new opportunities for the start-up and those who work for these companies whether it is sporadic events or flow of deals. This trend is catching up fast with in the form of acquisitions of technologies and even teams. These exit opportunities, however, are yet to create any significant growth, given their unreliability in Moscow with only 8 deals qualifying, with two as partial exits. For example, Groupon acquired Darberry and Skype acquired Qik proving to be the only successful liquidity events in Moscow. Silicon Valley in comparison has had 18 stories qualified as "Big Exit" just in 2010 (Hudak, 2011). Toronto has had several triumphant exits. They include Toronto's Sriptlance that was taken over by freelancer.com Sortable acquired by Rebellion Media, OneDesk acquired by Ryma Technology among others. In 2010-2011, foreign companies acquired

seventy-seven Canadian tech firms. According to a 2008 survey, Toronto ranks 22nd in venture capital, showing a tremendous interest by investors in their start-up ecosystem.

Moscow's ecosystem does not display a healthy portion in the four developmental stages of its program. These include, "the growth in government funding for accelerators and incubators; dramatically increased amounts of seed capital; scarcity of later stage financing rounds; and limited exit opportunities" (Startup Genome, 2012). In retrospect, Toronto's start-ups ecosystem greatest challenge is the lack of sufficient quantity in all kinds of start-up capital sources. Toronto start-ups obtain 71% less financial support compared to Silicon Valley and thus rely on self-funding, family and friends. According to the start-up Genome report 2012, if Toronto does not improve on its funding patterns, it will push entrepreneurs to other Start-up Ecosystems such as New York, Boston and Waterloo who are as competitive as Silicon Valley.

Despite the fore mentioned characteristics and the hindrances exhibited, Moscow ecosystem is moving forward to form a first-rate and healthy mix of customers, in an effort to make out and serve the dissimilar types of end customers. Often, these customers are individual business ventures not large corporations as often seen as the Silicon Valley customer base. This is backed up by Startup Genome statement "They are 18% less likely to tackle markets with sizes between \$1 Billion and \$10 Billion, and 74% less likely to tackle markets larger than \$10 Billion" (Startup Genome, 2012). This implies that Moscow startups gear towards individuals and consumer. In comparison to Silicon Valley, the start-ups lean towards enterprises. Toronto start-ups consider building a fantastic product and assisting to change the world as their main motivation. The start-ups focus on reaching new niche markets and ensure product fit.

4.2.2 Business Models

Moscow's ecosystem has also focused on the accomplishment of the new business models of today's market. Its new business models should make it easier to limit political restriction on globalization that the traditional model faced. It would also allow for more technological based business than in the past. The commerce models standouts focus also on the spread of the healthy culture in between the startup lifecycle. This new business model offers a hopeful future for Moscow's startups. The country is working to reach more

international and larger scale customers, and investors to ensure their growth than in previous years. On the other hand, Toronto's web-based startups are ailing because they lack business plans or even physical products. This is because they lack the finesse to brand their products and promote with the aggression and agility as of their Silicon Valley counterparts (James, 2012). The numbers of start-ups however are increasing at an encouraging rate and there is hope of continuous growth. There is additional capital slowly trickling into the market such as Communitech's new "Hyper drive" fund and MaRS's new \$30-million clean-tech fund (Evans, 2012).

4.2.3 Funding and Policy Regulations

Government regulations play a significant role in the growth of these ecosystems. This refers to the availability of financial services and low taxes for employees working within the ecosystem. In this regard, Moscow needs to embrace such regulation, if it seeks to reach the level of success as Silicon Valley. It can achieve this by relaxing legislation and taxation on internationally exported goods to improve their customer base. Silicon Valley and other world markets have already realized this and use this international marketing to their advantage. This driving force drives the government to allocate the funds to the ecosystems, which makes the capital flow pivotal in achieving success of the businesses (Silva, 2012). Conversely, the government of Toronto provides incentives to small business start-ups by providing funding (small business funding, 2010). For example, Goodyear Canada's Tire plant received \$170,000 to finance a solar energy pilot project from the government as incentives. Although Toronto's ecosystem is mostly self-sufficient, policymaker's, i.e. the government can help in closing the financial gap by including tax breaks and creating investor-friendly policies (Start-up Genome, 2012). Moscow, however, is benefiting from producing their own goods and services without relying on other markets. This allows them to maximize profits, benefit from taxes, and provide a self-sufficient economy.

The figure below shows the differences in funding per stage between Silicon Valley, Toronto and Moscow.

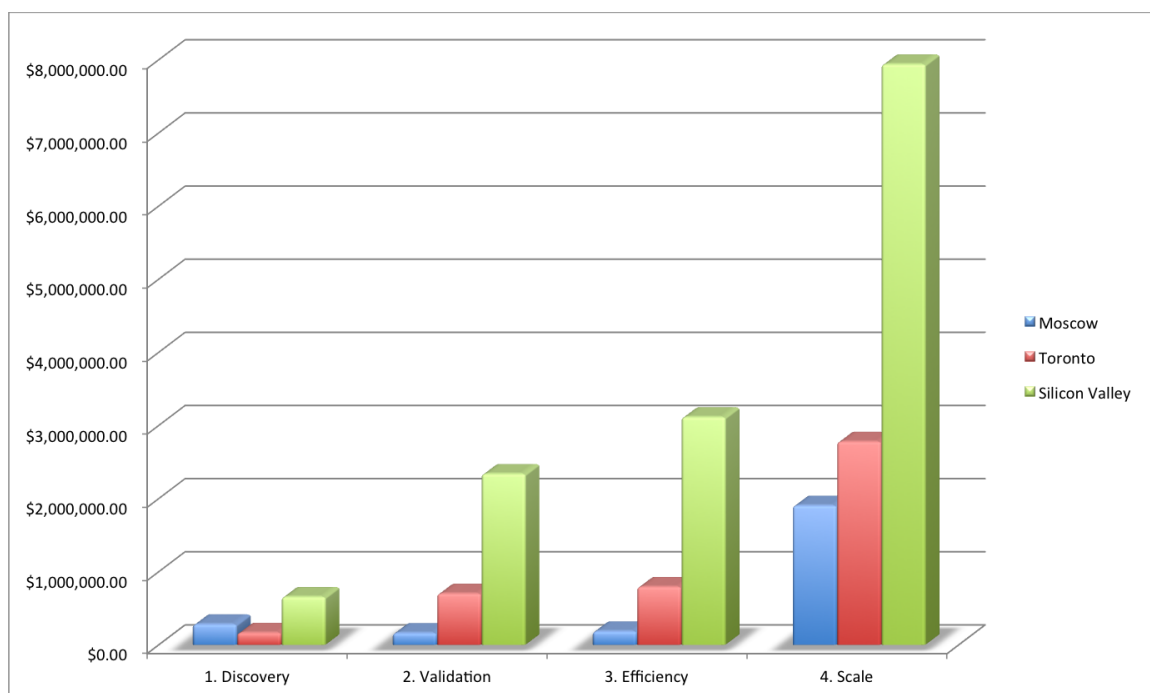


Figure 2 Funding per stage in Silicon Valley, Toronto and Moscow

4.2.4 Market Size

Start-ups in Moscow and Silicon Valley are extremely different. Moscow's Internet sectors mainly fall into three categories. They include search, consumer web and e-Commerce. Silicon's strongest sector is the Internet sector due to the popularity of search engines such as Google. Moscow's largest sector in monetary terms is the e-Commerce sector. According to Fast lane Ventures, Moscow has an \$11bn e-commerce market size but does not have nearly the distribution diversity of Silicon Valley. Moscow's specialization is in localized products, which are likely to monetize, while silicon's valley products reach a global audience. In addition, Moscow ranks low in the funding index thus making it difficult to receive funding in the crucial stages of development thus inhibiting growth prospects. In comparison, Toronto start-ups depend majorly on advertising and secondly, on license fee than other start-ups in Silicon Valley (Start-up Genome, 2012). This is because undercapitalization is a serious problem for most of Toronto's start-ups, which are forced to employ fewer individuals compared to Silicon Valley. They are however, able to reach a

global audience since they focus on new and niche markets during product creation, unlike in Moscow. The start-ups also subcontract approximately twice as much of their development in order to remain competitive and generate more revenue.



Figure 3 Tackled market in Silicon Valley ,Toronto & Moscow (new vs. niche)

Despite the above challenges, Moscow is learning to remain relevant by targeting niche markets and competing with data driven marketing (Startup Genome, 2012). Moscow cleverly does this by providing quality products that address a specific instead of creating ‘hype’, a phenomenon common in Silicon Valley. Silicon Valley often displays the need to impress other ecosystems with their business acumen, which is not always good business practice as Moscow demonstrates. Their products (Moscow) always yield positive fruits, progressing steadily in solving real problems over the years. Toronto’s start-ups are similar to Silicon’s Valley targeting consumers, enterprises and SMEs and thus every bit as aggressive. Its cutting edge is that, it is able to attract a diverse group of people all over the world bringing in more talent and reaching a global audience far more easily (start-up Genome, 2012).

4.2.5 Level of Technology

In the development of cities such as Moscow and Toronto, technology plays a significant role. In terms of adoption of new technology, Toronto is performing fairly well in comparison to Silicon Valley as well as trendsetting. In Silicon Valley, the rate of technology adoption is much slower in comparison to Moscow. Moscow’s software engineers heavily depend on php, Python, .Net while silicon uses Java and Ruby. While php and Python are easy to learn, they are more suitable for lesser projects but they do not manage dependencies. In comparison, Toronto start-ups have related adoption intensity as Silicon Valley, that is, it is fast and diverse. The entrepreneurs are more ambitious and are willing to experiment to build new products.

4.3 Comparison Conclusion

In conclusion, Moscow startup ecosystems are facing some obstructions and limitations have come a long way in startup development and driven growth especially their domestic market over the course of the last few years. Within the next year, Moscow is already in talks to obtain many potential IPO's (initial public offerings). Moscow's ability to procure these IPO's within 2013 will demonstrate its business process in international markets. One recent report identified the growth of Moscow over the last 12 years by stating that Moscow needs to immensely step-up its efforts in building viable global companies. This comes when Russia's Internet economy started a declining trend in 2010, due to localization of western Internet business models. Despite these models driving market growth, the effects are not long lasting and thus creating an immediate need to redefine its business models. It is therefore; possible for Moscow to venture into international markets given it is young and reasonably experienced entrepreneurs, vast group of talent and their ease in assimilating new technologies. This will undoubtedly be an excellent starting point in efforts to tap international market secure new funding. It is the time for start-ups there to target the international market and increase their efforts to build globally practical companies.

Toronto's start-up ecosystem has a strong education, finance, IT, research institutions that will propel it to a higher position regardless of it funding hiccup. The number and performance of start-ups are impressive given the support it receives from mentors. The talent index is at the middle despite having a dedicated resource of engineers. This is due the presence of serial entrepreneurs and individuals with previous start-up experience, which unfortunately brings the grade down (Zimmerman, 2012). In general, Toronto is doing the proper things but needs continuous depth to reach the top.

Startup ecosystems

This table summarise some of the important findings mention in the analysis between the tree ecosystems

	Silicon Valley	Toronto	Moscow
Entrepreneurs			
Average age	34.12	35.63	26.9
Gender	90% Male 10% Female	82% Male 18% Female	93% Male 7% Female
Education <i>Dropout vs. High education</i> <i>(Master + PhD)</i>	1 : 2.5	1 : 1.4	1 : 2.3
Working hours per day	9.95	8.69	8.76
Market and Fund			
Customer <i>(B2B vs. B2C)</i>	2 : 1	3 : 1	1 : 2.5
Startup Funding	Comparing to S.V.	71% less funding than SV	80% less funding than SV
Market <i>(Niche vs. New)</i>	1 : 4	1 : 3.2	1 : 1.25

Table 1 Comparison table of Silicon Valley , Toronto & Moscow

5. Info-Graphic for the startup ecosystem in Silicon Valley & Moscow

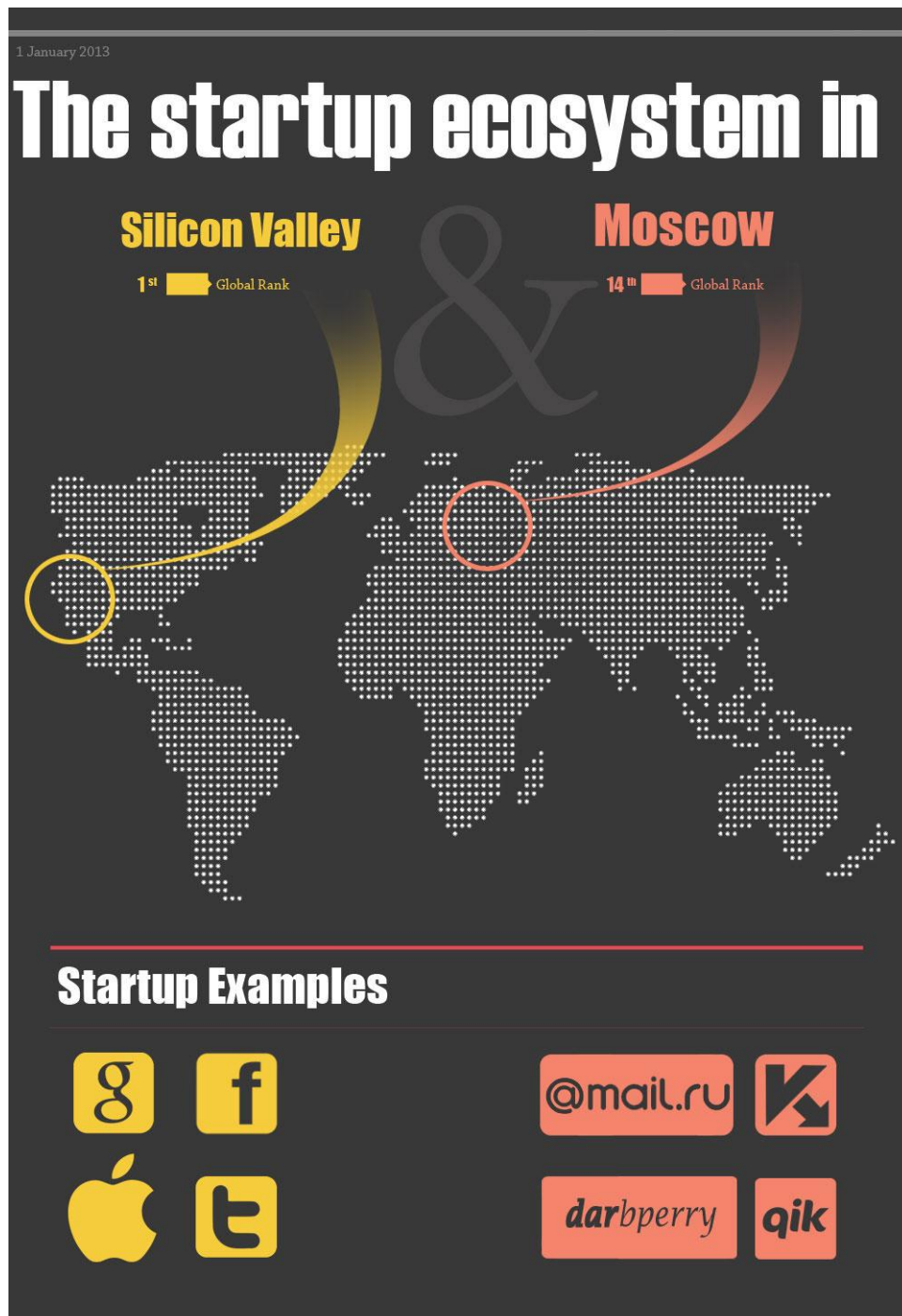


Figure 4 Info-Graphic the startup ecosystem in Silicon Valley vs. Moscow (Part 1)

The info-graphic show the differences between Silicon Valley's and Moscow's Startups ecosystem. First, it starts by showing their location in the map, and giving their global ranking according to startup Genome report. Then, the info-graphic shows some startups examples in both ecosystems.

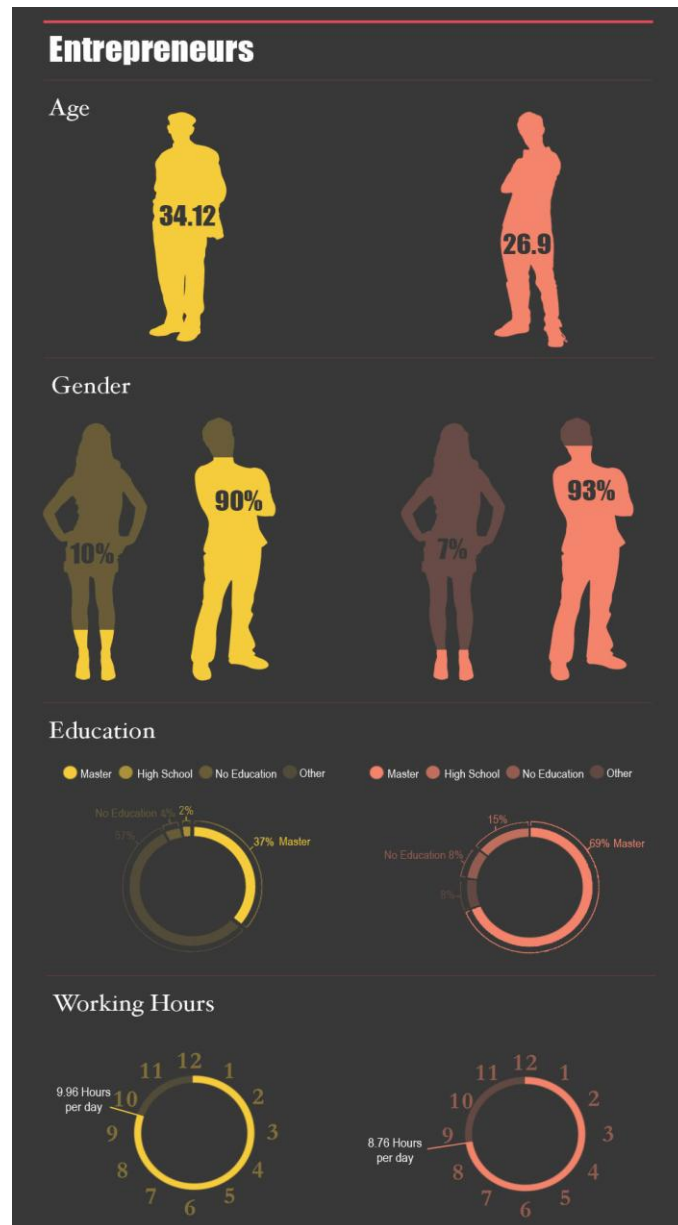


Figure 5 Info-Graphic the startup ecosystem in Silicon Valley vs. Moscow (Part 2)

Next, the info-graphic compares the entrepreneurs in both ecosystems starting by the average age 34.12 in Silicon Valley to 26.9 in Moscow. After that, compares the percentage for male entrepreneurs to the female entrepreneurs 90% male, 10% female in Silicon Valley comparing to Moscow with 93% male. After, the info-graphic comparing the educations show 37% of entrepreneurs in Silicon Valley have master degree to 69% in Moscow; 4% of them in Silicon Valley have no education to 8% in Moscow. Then, the info-graphic show the average working hours for the entrepreneurs in Silicon Valley, 9.96 hours per day; compares to Moscow with an average of 8.76 hours per day.

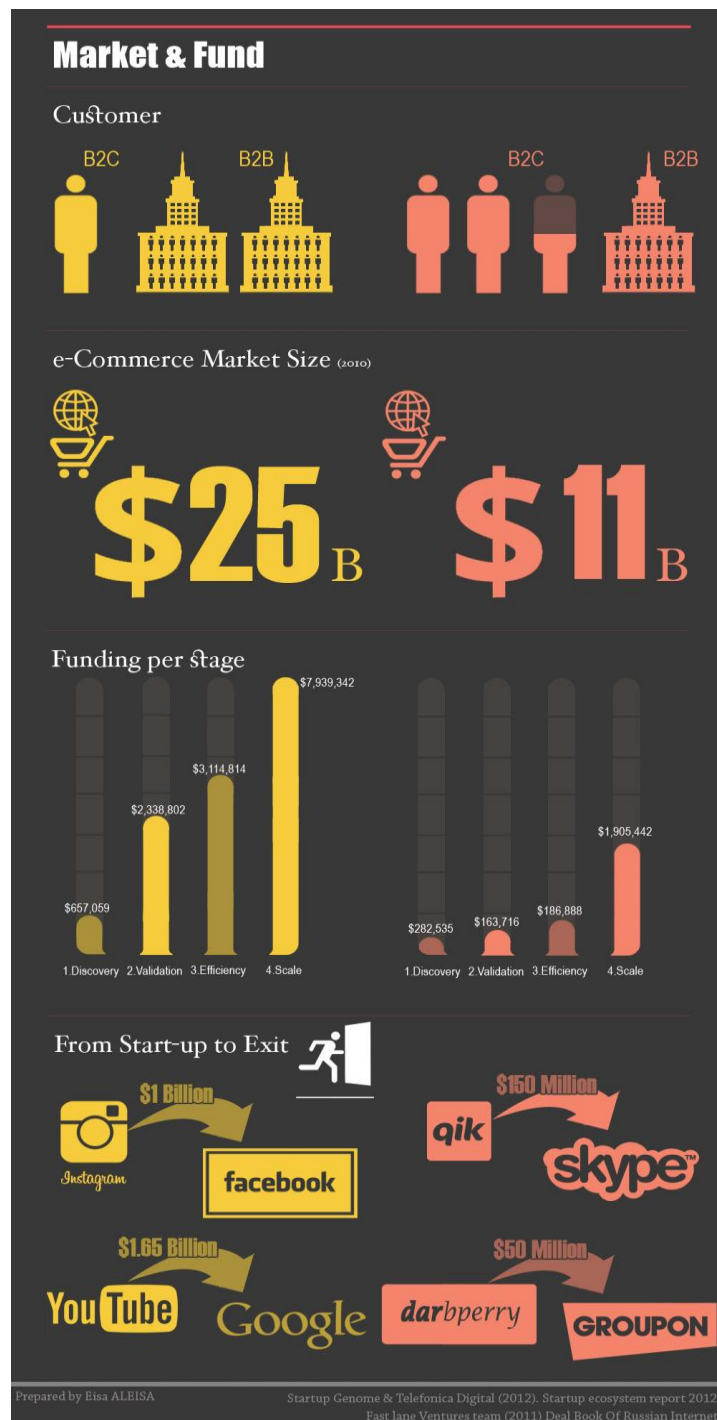


Figure 6 Info-Graphic the startup ecosystem in Silicon Valley vs. Moscow (Part 3)

The info-graphic then shows the differences in the market and fund in both ecosystems. Starting by comparing the target customer in the ecosystems and the info-graphic show that for every three customers Silicon Valley targets one consumer and two businesses; Meanwhile, Moscow target two and half consumer and one business for every three and half customers.

The e-Commerce market size in Silicon Valley is \$25 Billion to \$11 Billion in Moscow. Finally at the end after comparing funding per stage, the info-graphic shows some examples to startups that get exit. In Silicon Valley, Facebook closed the deal in September 2012 and purchase Instagram (with its 13 employees) for one billion US dollar, and In November 2006 Google bought YouTube for US\$1.65 billion. On the other hand, Moscow had smaller deals to Silicon Valley. Two examples mentions for Moscow's startups that exit. When "Skype" bought "Qik" for \$150 Million and when "Groupon" bought "darberry" for \$50 Million.

6. The characteristics of a good ecosystem

The essence of most startup ecosystems is to solve immediate problems affecting the community in business, households, technology and other areas. The efforts of such startups evolve to create jobs for the community, contributing into the growth of the economy, and ultimately making life easier.

However, much goes into making a startup ecosystem successful and perhaps a stronger edge over other startups. A thriving startup ecosystem needs entrepreneurs with technical skills such as coding, as it is basic requirement in the technology development world. Business skills are also fundamental requirements, as startups need to deal with investors. In addition, since exit is crucial to investors as it enables them invest in a startup, entrepreneurs must understand the consequences of an exit either when creating a cycle of company growth creating value or when selling that startup, which strengthens the need for the business skills.

Entrepreneurs are an essential component in any ecosystem since without them; startups would be non-existent. Entrepreneurs breathe life into a startup through their ambitions and aggressive nature. Their commitments to work long hours daily, with the intention of creating products to revolutionize the world, are ingredients to developing a great ecosystem. Startup Genome report indicates that about 19% of the entrepreneurs are most likely find the motivation in changing the world, rather than providing a 'new' product in Silicon Valley. Many of the startups around the world, are not only a product of hard

work, but also indicate great education skills. In many startups around the world, there are well-educated individuals who are degree and masters holders. Moscow is a great example since it created a niche for itself from great entrepreneurial skills in technology. Most of the entrepreneurs in Moscow startups hold masters degree hence are skilled and efficient in creating products. For Example, Moscow now has the largest Internet and mobile market in Europe, given its move from innovative software to nanotechnology, as well as clean tech to biotechnology (Henni, 2012).

Availability of funding is an important element in a good startup ecosystem for innovative ideas. Funding for startups has become more accessible from the growth of angel investing and through the opening of services that bring together investors and entrepreneur. Angel Investing is where a well off person provides capital for a startup in exchange for equity ownership or become a shareholder. Additional sources of funding include friends and family, banks, government grants among others. For Example, Silicon Valley receives 25% funding from Angel investors compared to other sources of funding such as friends and family (22%), Venture capital (VC) (16%), Incubator (6%) etc. Moscow's funding sources are high on family and friends and sometimes self-funding. It has fewer vehicles for high risk capital such as accelerators angels, incubators and Venture Capitalists. A good startup ecosystem will have variety sources of generous funding aiming for a high funding index.

A government regulation in any startup country is important in determining the success of upcoming and existing startups. Government regulations are in terms of taxations, support, funding, incentives, education and training. Funding and incentives ease the cost of starting a startup and operating it and provides it an opportunity to expand to other countries. Toronto's startup strength is demonstrated in its government regulations, in the form of incentives and grants to entrepreneurs. This has enabled them to boost numerous venture startups among upcoming entrepreneurs, giving them an opportunity to reach global markets and thus expand their business and investment opportunities. In term of taxations, policy makers should try to reduce payroll tax to support high head count low returns tech companies; which is the aim of Silicon Valley's policy makers.

7. Findings

The comparison analysis and literature review provide a picture of what a good ecosystem entails, and diversity goes a long way in the growth and development of any startup ecosystem. First, entrepreneurs are the heart and soul of any startup and in the advancement of an ecosystem. They provide the skills, talent, ambition and commitment that is essential in building products for new or niche markets. They are visionaries of great companies; provide mentorship and finances once companies are able to provide exit opportunities. They become angel investors assisting other startups to make headways and contributing to growth of ecosystems. “CO | PACITY” will benefit tremendously with the inclusion of entrepreneurs that nurture a culture of adopting startups incubator. In addition, it will attract students who are young and educated, ideal characteristics for entrepreneurs in an ecosystem. Leading or contributing in global conferences such as TED and Ignite can be beneficial in terms of finding potential entrepreneurs. “CO | PACITY” should consider targeting both male and female entrepreneurs who will be able to make ideas into reality and a prototype, so to speak.

Secondly, funding is of utmost importance in any startup ecosystem. Silicon Valley enjoys increasing funding in all the stages of a startup ecosystem i.e. from discovery to scale. This is true for the top ecosystems such as Tel Aviv, Los Angeles, and London who do not have a funding gap but have a healthy capital funnel throughout the startup lifecycle, consistent with the literature review. Funding of top ecosystems is mainly from angel investors and VCs who are mainly interested in the business viability of a startup. Moscow and Toronto ecosystems experience significant funding gaps and rely heavily on family, friends, self-funding, and government incentives making it hard for startups to become billion dollar companies. It will be crucial for “CO | PACITY” to seek investors that believe in their idea of supporting organizational innovation and development of products that address this need.

Market size of any startup ecosystem is important as it determines the scope of success of any startup. The literature review and comparison are consistent in that they suggest ecosystems such as Silicon Valley, Toronto are successful as they target larger markets, which include consumers, enterprise and SMEs, compared to Moscow, which only produces localized products. Sydney has a healthy diversity of targeted customers and

markets therefore; “CO | PACITY” is bound to capture a wider audience if it succeeds in reaching the prototype stage. This means that it will be ideal for CO | PACITY’s startups to target both consumers and SMEs.

8. Conclusion

The presence of startup ecosystems around the world shows the fast pace at which ecosystems are developing and more are bound to come up. The presence of entrepreneurs, funding, investors and all the major stakeholders make this a possible feat and it is crucial for government to address this need. Government should be instrumental in providing the right legislation in terms of taxes, incentives and grants in order to create conducive environment for startups.

The report indeed covers what entails to be an entrepreneur who is a crucial component in any startup ecosystem. The presence of advisors and investors ensure a startup community is possible that manifests to an ecosystem. The existence of the top ecosystems in the world is a reflection of how thriving startups operate and how they create a niche for themselves. Deeper investigation into three ecosystems namely, Silicon Valley, Toronto and Moscow reveals their different endowments and characteristics. Silicon Valley is the Mecca of all startups and provides a benchmark for other startups around the world. They have good funding channels that enable their projects to scale. This is true as evidenced from our findings in the report. Toronto on the other hand enjoys government support that has been instrumental in Toronto’s thriving ecosystem. In comparison, Moscow has a highly skilled entrepreneurial sector that, whose products mainly focus on solving problems, than changing the world? As it is evident from the findings, funding, entrepreneurs and funding are most crucial in the success of any startup.

This report identifies the characteristics of a good ecosystem, what entails an ecosystem and a deeper insight into the top startup ecosystems and their unique characteristics. The report has further demonstrated how the findings on the existing ecosystem will be essential in “CO | PACITY”, an environment of open collaboration and its importance in supporting organizational innovation.

References

- Ayako, M (2012). Silicon startup success wants to return favour. Tribune Business News. Retrieved from <http://gateway.library.qut.edu.au/login?url=http://search.proquest.com/docview/1265612650?accountid=13380>
- Blank, S., Eesley, B. (2012). Stages of the Startup Lifecycle. Startup Genome. Retrieved from <http://blog.startupcompass.co/pages/marmer-stages>
- Business Wire (2012). Startup Ecosystems Around the World Fast Challenging Silicon Valley. Retrieved from <http://gateway.library.qut.edu.au/login?url=http://search.proquest.com/docview/1208671703?accountid=13380>
- Clarke, V. (2013) Canada Has Some of the World's Best Startup Ecosystems. Here's How to Make Them Even Better. Tech Vibes. Retrieved from <http://www.techvibes.com/blog/canada-startup-ecosystems-better-2013-01-11>
- Cohan, P (2013). *Will Boston Beat Silicon Valley in the Startup Game?* Forbes. Retrieved from <http://www.forbes.com/sites/petercohan/2013/01/29/will-boston-beat-silicon-valley-in-the-start-up-game/>
- Dimopoulos, T (2011). *3 key Elements of a Healthy Startup Ecosystem*. The Neighborhood Entrepreneur. Retrieved from <http://theneighborhoodentrepreneur.com/3-key-elements-of-a-healthy-startup-ecosystem/>
- Empson, R. (2012, November 20). Startup genome ranks the world's top startup ecosystems: Silicon Valley, Tel Aviv & L.A. lead the way. Retrieved from <http://techcrunch.com/2012/11/20/startup-genome-ranks-the-worlds-top-startup-ecosystems-silicon-valley-tel-aviv-l-a-lead-the-way/>
- Evans, M (2012) Toronto's Startup Ecosystem Ranks Fourth Globally, Mark Evans Tech. Retrieved from <http://www.markevanstech.com/2012/04/11/toronto-ecosystem/>

Fastlane Ventures team (2011) Deal Book Of Russian Internet retrieve from

<http://www.slideshare.net/AndreyKulikov/deal-book-of-russian-internet-fast-lane-ventures-13445807>

Feld, B (2012). Entrepreneurial Density. FeldThoughts. Retrieved from

<http://www.feld.com/wp/archives/2010/08/entrepreneurial-density.html>

Government of Canada Investment Connects Toronto Area Investors With Southern Ontario Start-Up Businesses (2013) Invest Toronto. Retrieved from

<http://www.investtoronto.ca/News-and-Reports.aspx>

Hammond, M (2012). Making Waves in Mature Melbourne. HomeBizConect. Retrieved from

<http://www.startupsmart.com.au/success-stories/making-waves-in-mature-melbourne/201204025909.html>

Henni, Adrien. (2011). The Guide to Investing in Russian Startups. Ehip News. Retrieved from

<https://www.ehipnews.com/posts/the-guide-to-investing-in-russian-startup>

Hudak, J (2011) Life Science On The Rebound, But Device Is A Little Flat retrieve from

<http://medtechwomen.org/blog/life-science-on-the-rebound-but-device-is-a-little-flat/>

Hurley, B (2012). Sydney a Haven for Startups. BRW. Retrieved from

http://www.brw.com.au/p/entrepreneurs/sydney_haven_for_start_ups_sUe3be7qOt1keViYvHExRP

Investment Weekly News (2011). The Silicon Valley Association of Startup Entrepreneurs; Silicon Valley of Startup Entrepreneurs Releases June Date for the Valley's Annual Startup Showcase, Launch: Silicon Valley 2011. Retrieved from

<http://search.proquest.com.ezp01.library.qut.edu.au/docview/856109789?accountid=13380>

Joffe, B. (2012, September 1). Ecosystem 101: The six necessary categories to build the next

Silicon Valley. Retrieved from <http://techcrunch.com/2012/09/01/ecosystem-101-the-six-necessary-categories-to-build-the-next-silicon-valley/>

- Klein, S (2009). Startup Ecosystems Take Time. AVC. Retrieved from http://www.avc.com/a_vc/2009/11/startup-ecosystems-take-time.html
- Kurup, D (2012). Bangalore Provides the Right Ecosystem for Startups. The Hindu. Retrieved from <http://www.thehindu.com/sci-tech/technology/bangalore-provides-the-right-ecosystem-for-startups/article4130729.ece>
- Martin, (2011). How to build a successful startup ecosystem. Mgs. Retrieved from <http://www.martingsaunders.com/2011/12/how-to-build-a-successful-start-up-ecosystem-in-the-uk/>
- Mazurkewich, K (2010). Canadians in Silicon Valley helping home grown startups. CanWest News. Retrieved from <http://gateway.library.qut.edu.au/login?url=http://search.proquest.com/docview/356816060?accountid=13380>
- Metzke, N.(2012).Paris and Berlin-The Tale of Two Cities(Part 2: The Startup Ecosystem). The Rude baguette. Retrieved from <http://www.rudebaguette.com/2012/05/24/paris-v-berlin-the-ecosystem/>
- Shane (2012). *How do you Define a Startup?* Startup Genome. Retrieved From <http://blog.startupgenome.com/how-do-you-define-a-startup/>
- Silva, I. (2012, November 20). Startup ecosystem report 2012. Retrieved from <http://inessilva.org/startup-ecosystem-report-2012>
- Startup Genome & Telefonica Digital (2012). Startup ecosystem report 2012. Retrieved from <http://blog.digital.telefonica.com/?press-release=startup-ecosystem-report-2012>
- Swift, M. (2012, May 09). Facebook spawns ecosystem of startups. San Jose Mercury News. Retrieved from <http://search.proquest.com/docview/1011919354?accountid=13380>
- The world's best cities for startups - Times Union. (n.d.). Albany, Troy, Schenectady, Saratoga News, Weather, Sports, Capitol | timesunion.com - Times Union. Retrieved December 30, 2012, from <http://www.timesunion.com/business/tech/slideshow/The-world-s-best-cities-for-startups-52737.php#photo-3768848>

What is wrong with python. (n.d.). Association for computers and humanity. Retrieved December 30, 2012, from digitalhumanities.org/answers/topic/whats---wrong---with---python

Zimmerman, M (2012). Toronto and the Startup Ecosystem Report. MARS. Retrieved from <http://www.marsdd.com/2012/11/28/toronto-and-the-startup-ecosystem-report>

ZOBRIST, C (2012, October 24) Exits in Vietnam? Retrieve from <http://talk.onevietnam.org/exits-in-vietnam/>

Appendices

Appendix A: A comparative analysis

Silicon Valley's, Moscow's and Toronto's ecosystems were included in the comparative analysis. The choice of these cities is to identify whether entrepreneurship is possible in upcoming ecosystems besides Silicon Valley, which provides a benchmark of comparison. This is crucial given that this report seeks to provide evidence and to support organizational innovation at a large Australian retailer in the development of "CO | PACITY" in Sydney. "CO | PACITY" is an environment of open collaboration that will promote the process of taking an idea through to prototype. The criteria used in the comparative analysis is clear; the ability of an ecosystem to create a niche for its itself domestically and internationally in terms of trend setting and differentiation. In so doing, it will be possible to show what "CO | PACITY" can borrow to encourage continuous growth.

To begin with, Silicon Valley is the biggest, influential and most successful startup ecosystem, acts a stepping-stone for many entrepreneurs, and provides a baseline in which other ecosystems bear comparison. Silicon Valley has produced billion dollar companies due to its abundant risk capital, tremendous talent, an intense support ecosystem, and an open-minded culture that seeks to change the world. Its entrepreneurs freely share ideas and enjoy factors that assist in its execution including a high concentration of VCs, dynamic schools that produce innovative graduates each year, VC backed companies, highest concentration of tech entrepreneurs and engineers from around the world, attitude of collaboration to create incredible products and above all strong commitment and hard work (Startup Genome, 2012). Therefore, because of these great characteristics, Silicon Valley has been included for benchmarking.

The choice of Moscow is primarily due to its diversity culturally, politically and conducive climate for business. Moscow's volume of young, experienced entrepreneurs, general pool of talent, its affinity for new technologies and quick adoption of new business models stands out. It has highly educated entrepreneurs where majority of them has Masters Degree. In addition, investments opportunities in Moscow are growing tremendously from the activities of local serial entrepreneurs. Russian and European

Internet entrepreneurs are investing in fresh projects, using their skill in constructing Internet firms, accessible Internet flow and cash.

Toronto's ecosystem is self-sufficient given its strong education, IT, creative industries and research institutions. It also attracts a wide variety of individuals providing it an edge in war and in taking products to a global market. Its government regulations have been crucial in elevating Toronto due to the provision of funds, grants and tax incentives. In many ways, Toronto's ecosystem is similar to Sydney's Ecosystem in that they both suffer a funding gap given both of their ecosystems is young. However, Toronto is addressing this problem by creating products target largely new market than 'niche' markets which has worked favourably on its favour, hence the need to highlight it in this report.

Appendix B: Top 20 cities rankings table:

Provided by “Startup Genome” and “Telefónica Digital”



Startup Ecosystem Report 2012

Ecosystem	Ranking	Startup Output Index	Funding Index	Performance Index	Talent Index	Support Index	Mindset Index	Trendsetter Index	Differentiation from SV Index
Silicon Valley	1	1	1	1	1	1	1	1	1
Tel Aviv	2	2	1	12	5	5	9	17	18
Los Angeles	3	4	6	2	3	13	11	4	11
Seattle	4	19	7	6	2	4	6	11	14
New York City	5	3	4	8	12	9	8	7	8
Boston	6	10	1	7	7	8	7	5	20
London	7	7	5	10	9	2	3	14	17
Toronto	8	6	9	3	10	3	15	12	5
Vancouver	9	13	12	9	4	14	2	9	19
Chicago	10	8	15	5	14	7	13	18	9
Paris	11	14	13	4	17	6	12	15	6
Sydney	12	5	14	16	6	12	16	1	3
Sao Paulo	13	9	10	15	19	11	5	16	4
Moscow	14	16	19	18	11	10	14	8	2
Berlin	15	15	11	13	13	20	18	5	16
Waterloo	16	11	16	14	16	17	17	10	13
Singapore	17	18	8	19	8	16	20	19	12
Melbourne	18	12	17	20	15	18	19	3	15
Bangalore	19	17	18	17	18	15	10	20	10
Santiago	20	20	20	11	20	19	4	13	7

Startup Genome *Telefónica*
CREATING THE CODE OF TOMORROW
 Digital

Figure 7 Top 20 startup ecosystem rankings table

Retrieve from <http://blog.digital.telefonica.com/?press-release=infographic-startup-ecosystem-report>

Appendix C: Component Index for Silicon Valley, Toronto & Moscow:

Provided by “Startup Genome” and “Telefónica Digital” in the startup ecosystem report 2012

Component Index



Figure 8 Component Index for Silicon Valley, Toronto & Moscow