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WHY ARE THERE SO FEW UNICORNS IN JAPAN?

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ABSTRACT

A “unicorn company” is a company with a cooperate value more than one billion USD. The company should be less than ten years old and an unlisted technology start-up (Lee, 2013). Despite its economic scale and image of having globally competitive companies, Japan only has a few unicorns to date in 2018 (CB Insights, 2018a). The purpose of this paper is to determine the reasons for this by understanding current start-ups’ circumstances and most influential factors. These factors will determine what should be changed for improve Japanese start-up success. Another objective is to convince more Japanese people to start their own business by detailing the key factors for Japanese leading start-ups under current circumstance, which will benefit future entrepreneurs.

The paper is based on qualitative research conducted in Japan in the summer of 2018. The interviewees were eight “next unicorn companies” (from Nihon Keizai News Paper) and one venture capitalist. The analysis involved determining success factors for start-ups (Karis & Rungi, 2015) analyzed both in the macro- and micro-environment.

One key finding is that the number of unicorns in Japan is not the primary problem. Since becoming listed is easier in Japan than in countries that produce large numbers of unicorns, it is easy to understand why Japan has fewer unicorns. The study reveals that the original Japanese start-up ecosystem prevented start-ups from growing rapidly to become large-scale. The most significant factors were the Japanese stock market, the number of startups, start-up support, and entrepreneurial mindset. To improve circumstances for entrepreneurs, enhancing synergies among stakeholders, increasing the number of supporters in the early stages, and having more business successes and expert supporters are the essentials. However, despite these problems, the entrepreneurial situation has been changing and the future is not pessimistic.

Keywords: Unicorns, Start-ups, Micro-environment, Macro-environment

*Next unicorns: The start-up companies that were selected from Nikon Keizai Shinbun.

INTRODUCTION

Nine years ago, there was no Uber. Seven years ago, the now ubiquitous service was only available in San Francisco. Today, the company is valued of 72 billion USD, providing services in over 70 countries. A consulting company in Silicon Valley, working with venture-capital-(VC)-backed start-ups, confirmed that companies are now growing extremely quickly in terms of market capitalization (Vigrass, 2016).

The term “unicorn,” used as a strong representation of success, was coined by American venture capitalist Aileen Lee, who defined unicorns as unlisted American technology start-ups valued at over one billion USD and less than ten years old (Lee, 2013).

The number of unicorns globally has been increasing since 2013. The ease with which companies can spread and share information is a key contributory factor. Globalization and digitalization have undoubtedly accelerated the rate at which companies can grow in the short term (Butuzova, 2018).

However, becoming a unicorn is still akin to a miracle. Only a small percentage of start-ups can become unicorns. When the concept was introduced, there was only a 0.07% probability that a software firm would become a unicorn (Lee, 2013). In 2017, a survey suggested that the probability of becoming a unicorn was 1.07% (CB Insights, 2018b). It is very hard for start-ups to become unicorns because it requires dramatic growth in short time period, without going public, and certain conditions are needed for companies to meet all requirements.

Japan as a nation is enthusiastic about supporting start-ups to grow faster and bigger. In June 2018, the Japanese government launched the “Future Investment Strategy 2018” (Ministry of Economy, Trade and Industry [METI], 2018), aiming to create 20 companies (listed or unlisted) with a corporate value or market capitalization of over one billion USD by 2023 through a supporting program called “J-Startup” (J-Startup, 2018). The program is supported by the government, the private sectors, and financial supporters; selected start-ups receive financial incentives,

professional advice, and overseas expansion information and support. Additionally, the level of investment for start-ups has been increasing for the past six years in Japan. In 2017, the procurement amount was 279.1 billion yen, a 21.7% increase from previous year and the highest amount in past ten years (Entrepedia, 2018). There is, therefore, a need to take into an account that the situation has been changing.

Since “unicorn” is new term, defined in 2013, there are few scientific papers about unicorns and their numbers. Also, the environment surrounding start-ups has been rapidly changing; this paper delivers fresh information about current entrepreneurial situation in Japan.

Research Objectives

The aim of this paper is to understand why there are so few unicorns in Japan. By closely examining the influential factors in both the micro- and macro-environment, this paper details the current situation for Japanese start-ups. It also highlights differences between Japan, a minimal unicorn producer, and the US, a mass unicorn producer. The results further understanding of the start-up situation in Japan and determine what needs to change. Another objective is to convince more Japanese people to start their own business by detailing the key factors for current Japanese leading start-ups.

Research Problem and Questions

Unicorns have great economic influence and reputation and have become widely known in last five years. The Japanese government launched a program to support more start-ups to grow faster and bigger. Furthermore, the amount of investment has been increasing and is now at its highest amount in the past ten years (The Global Report, 2018). However, the number of unicorns is still small, which leads us to consider what the most influential factors are in entrepreneurial situations and environments?

The main question for research is “why are there so few unicorns in Japan?” This question can be broken down into three key issues:

1. What are the differences between the start-up ecosystem in Japan and the US?
2. What are the current conditions for those already doing business in Japan?
3. What factors would help to support Japanese entrepreneurs?

Research Approach

This paper uses a qualitative approach to develop ideas regarding a complex problem (Creswell, 2013). This research uses several case analyses in a variety of industries. Interviews were conducted with eight companies and one venture capitalist. All interviewees occupied managerial positions in companies with high growth potential.

The eight Japanese start-up companies were chosen from a list of the “next unicorn companies.” “Next unicorns” are defined as start-ups with a corporate value of more than three billion yen and expected to display considerable future growth. The list was published by the Nihon Keizai Newspaper (2017), the largest business newspaper in Japan. The corporate value was estimated based on interviews with each company and venture capitalists.

The research framework (Figure 1) is based on a start-up creation model that illustrates influential factors for creating start-ups (Karis & Rungi, 2015) The micro-environment comprises two parts: entrepreneurs’ characteristics (motivations, previous experiences, and personal traits); and start-up’s characteristics (the organizations’ key activities and alliance partners). The macro-environment comprises five parts: “political environment,” based on governmental policies, tax systems, and acts that support and influence start-ups; “economic environment,” i.e. economic and market conditions, key financial supporters, and their conditions; “social environment,” e.g. labor mobility; “Technology environment,” including R&D and patents, based on synergy with stakeholders such as government and big firms; and “culture.”

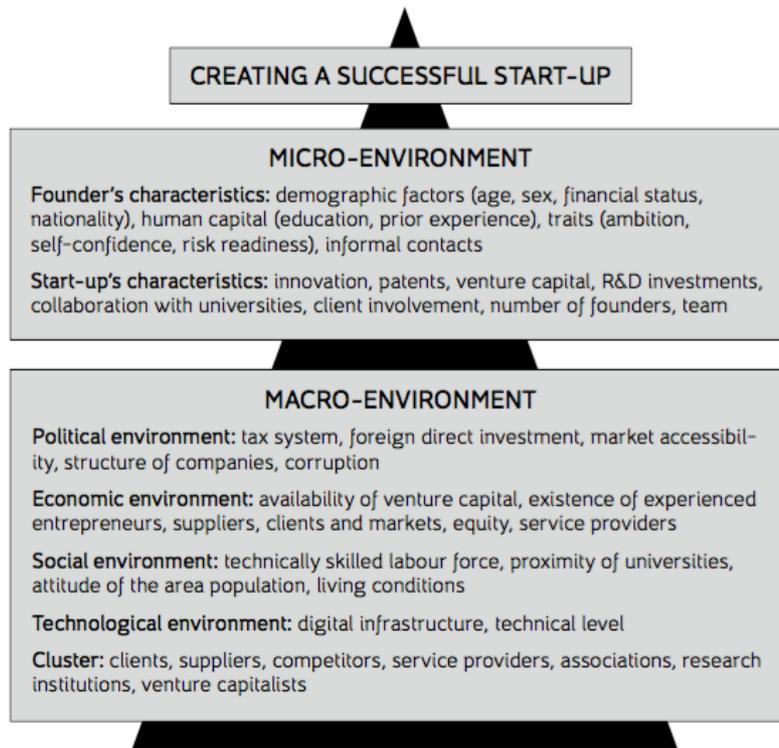


Figure 1: A start-up Creation Model
 Source: Karis and Rungi (2015, p. 55).

1. THORETICAL FOUNDATION

This section analyses the key stakeholders for start-ups and unicorns, based on secondary sources and qualitative materials.

1.1. Start-ups

Generating more start-ups is one of the essential aims for every country. No matter the location, size or industry, start-ups are important in improving our economy and lives (Knowlton & Motoyama, 2014). One theory of industrial evolution suggests a relationship between start-ups and economic growth, increasing a nation's competitiveness (Jovanovic, 1982). First, more start-ups lead to more competition. By increasing the number of firms, the quality and efficiency of products and services will naturally improve (Burns, 2007). Second, start-ups have a significant impact on job creation. Research suggests that start-up five years old or less make a strong contribution to the job market in the US (Stangler & Litan, 2009).

Start-ups, by their very nature, are innovators. They are flexible, nimble, and facilitate the transfer of knowledge in the marketplace (Burns, 2007). Moreover, start-ups can take opportunities that would be more difficult for larger companies while also maintaining closer a relationship with customers. In uncertain markets, they can sense change and adapt quicker, allowing them to be creative.

The twenty-first century has been a start-up era. Many surprising, disruptive ideas and cutting-edge technologies have been developed by tech start-ups. However, becoming a unicorn is still a challenge. Indeed, only 1.07% of successful start-ups become unicorns (CB Insights, 2018b). Becoming a unicorn is extremely hard start-ups need to have dramatic growth and huge market impact.

1.1.1. The Definition of Start-ups

Steve Blank, a famous entrepreneur in Silicon Valley, saw start-ups as short-term organizations that seek both new and existing big opportunities. He emphasized start-ups were unique businesses, different from big corporations (Burns, 2007).

Start-ups can be defined by growth. The UK-based innovation foundation Nesta defined start-ups as a new, unique, fast-growing, and scalable companies (Dee & Gill, 2015). Creativity and innovation represent other perspectives from which start-ups can be defined. Eric Ries, the author of the best-selling book *The Lean Startup*, defined start-ups as organizations with new ideas that have founded new businesses under uncertainty conditions (Ries, 2011). He also emphasized that disruptive innovations should be managed. In uncertain environments, successful entrepreneurs are always predicting risks and trying to decrease them.

The word “start-up” can be divided into six different sub-categories, based on their individual traits, attributes, and motives (Blank, 2013):

1. Lifestyle start-ups: based around the passions of the entrepreneur (Renault, 2014). At their peak, these businesses allowed individuals to make a living by doing what they love. Success, in this case, is based on the entrepreneur’s own aims rather than market scale or excessive profit (Burns, 2007).
2. Small-business start-ups: entrepreneurs are not motivated by excessive profits and do not prioritize scaling. Instead, they aim to generate enough income to meet their basic needs. Small businesses usually hire people from local communities, positively contributing towards job creation (Drucker, 2014).
3. Scalable start-ups: motivated by wide-reaching global impact. They are very ambitious, rarely satisfied with the current situation, and always seeking to scale up their business (Renault, 2014). If it may have a large impact on societies and markets, they do not hesitate to take risks. Mostly, the capital comes from VC (Blank & Dorf, 2012).
4. Buyable start-ups: entrepreneurs are eager to sell their companies for profit. The advantage of buyable start-ups is the reduction of product-building costs and the time taken to reach the market. Capital for buyable start-ups is mostly collected from “angels” (Blank & Dorf, 2012).
5. Large-company start-ups: the company’s main purpose is to achieve stability to survive in the market or industry (Renault, 2014). The lifecycle has been getting shorter, due to digitalization and innovation in technology (Blank & Dorf, 2012). For innovation, size and

culture could be an obstacle for large corporations because, as their market share increases, large corporations often get more conservative and defensive (Utterback, 1996).

6. Social start-ups: Entrepreneurs are concerned more with changing society than personal achievement (Blank, 2013).

These characteristics needs to be considered, especially when doing business with start-ups.

1.1.2. The Number of Start-ups by Country

Since population is different in each country, this paper uses the founding ratio to enable comparisons. A survey by the Japanese government regarding enterprise-founding rates compared Japan, the US, the UK, Germany, and France (Figure 2), revealing significant differences in these rates (The Small and Medium Enterprise Agency Report, 2017). It has been low in Japan for over 15 years. From 2001 to 2015, Japan’s enterprise-founding was around 5% while in the UK and France it was 12% or more. In 2011, it was 9.3% in the US, twice that of Japan.

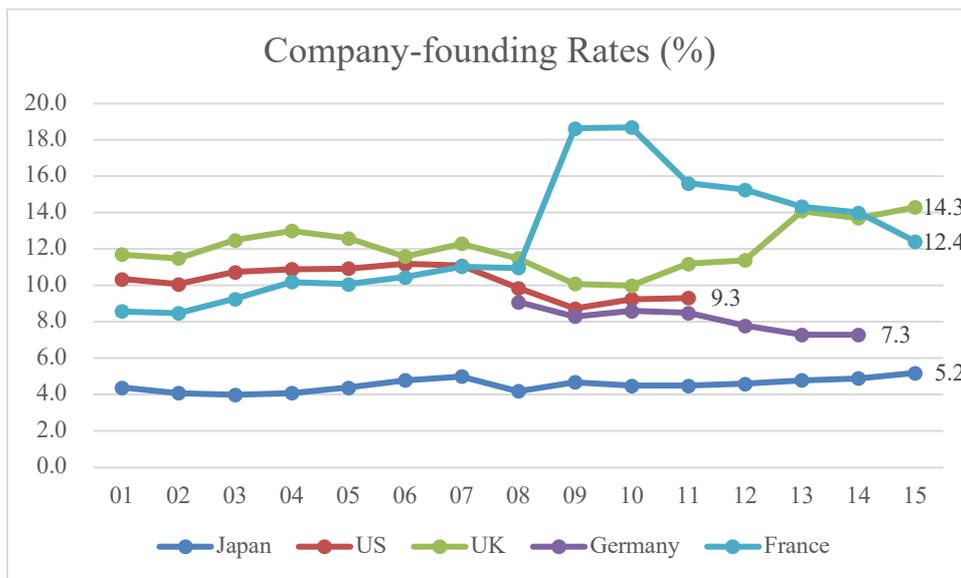


Figure 2: Company-founding Rates

Source: The Small and Medium Enterprise Agency Report (2017, p. 1).

Notes:

1. Although the data only cover up to 2015, the data were released in 2017.
2. Each period starts from April to next March (i.e. 1 April 2001–31 March 2012).
3. Since the original data were taken from the statistics of each country, the companion is not the absolute number.

1.2. Social Evolution Theory

Innovation is a tool to expand opportunities for entrepreneurs (Drucker, 2014). Innovation can create changes and opportunities while making profits (Burns, 2007). More specifically, innovation can extend both companies' products and services in a variety of ways (Yusuf et al., 2008). However, innovation is not merely uncertainty and random ideas; entrepreneurs can analyze innovation opportunities and reduce risks while taking on challenges (Drucker, 2014).

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Not only enterprises, but also innovation, contribute to the economy (Romer, 1986). Renault (2014) showed that innovation brought new ideas to the market and contributed to 80% of economic growth.

To create and promote innovation in organizations, organizational ecology is often key. Early studies on organizational theory focused on organizations themselves. For example, Darwin's theory of evolution by natural selection, formulated in the 1830s, is a biological concept regarding the survival of the fittest. The theory emphasizes the natural circulation and replacement of the existing with the new. The theory has since been applied to other fields, including sociology, politics, business, and so-called Darwinism. The idea of Darwinism in a business context is that new organizations are born through the accumulation of change in organizations (Leonard, 2009).

Recent studies have proved that organizations are not only affected by the organizations themselves. By identifying the factors that influence organizations ("formation", "change," and "mortality"), the theory posits that organizations are influenced both internally and externally. Organizations' formulation is not only influenced by personal traits but also by the economic and political environment. For example, accessibility to resources and the nature of the surrounding environment have an effect on entrepreneurs founding organizations. While high mortality rates have been observed more in young and small organizations (Singh, 1990), organizations that survive and grow can be classified by social-system structures (Hawley, 1992).

Even if a company is successfully launched, maintaining the company can be extremely hard. The rate of firm birth and death are nearly equal. Every year, 300 million people attempt to launch 150 million firms globally but 50 million firms are founded; of these 137,000 new business are created every day, 120,000 do not survive (Mason, 2016). Even in Silicon Valley, the survival rate for companies is 0.3% and most companies leave the market within average of three years (Ugajin, 2012). Continually creating innovation is, therefore, tough in real business.

1.3. Entrepreneurs

Entrepreneurs, i.e. the developers and designers of new businesses, play a significant role in start-ups. Furthermore, they take risks and step out of their comfort zone. While creating businesses, entrepreneurs find solutions and improve efficiency for existing systems to improve our lives (Global Entrepreneurship and Development Institute [GEDI], 2017).

Entrepreneurship has become a regional culture in certain places. According to prior research, the entrepreneurship rate has a correlation with geographical location (Acs & Armington, 2006). Silicon Valley is recognized as one of the “incubator regions” for successful entrepreneurs and start-ups in which networking takes place between high-potential start-ups and venture capitalists, big corporations, and research institutions (Kenney, 2000).

The Definition of Entrepreneurs

The concept of entrepreneurs was developed in 1755 and entrepreneurs have played a crucial role in economic development since this time. No matter how big or small their companies, entrepreneurs have always sought the discovery, creation, and expansion of opportunities (Garud & Karnøe, 2003).

The GEDI defined entrepreneurs as innovators who can bring innovation to the market. This definition can be broken down into two parts. First, anyone can become an entrepreneur as long as they have a strong desire to start a business. The second part concerns the level of technology (GEDI, 2017). Schumpeter also saw innovation as important key factor; in this context, the entrepreneur can provide tomorrow something new that does not exist today (Śledzik, 2013). Innovation can involve both finding new things or improving or adding value to existing things.

Personal Traits

Entrepreneurs are always self-motivated to try new things in new ways and seek opportunities (Burns, 2007). Regarding the requirements for being a successful entrepreneur, the study of entrepreneurship has a long history. For many years, entrepreneurialism was thought to be influenced by personal characteristics (Van de Ven, 1993). Personal traits have both positive and negative influences and can be changed over time (Rungi, forthcoming). In leadership theories, personal traits are considered the essence of successful entrepreneurs (Rabstojnek, 2015). The US business magazine, *Forbes*, identified five common personal traits of entrepreneurs: “passion,” resilience,” “self-confidence,” “flexibility,” and “vision” (Rampton, 2014). “Passion” is a commitment to devote one’s life to the business. “Resilience” helps people overcome challenges. “Self-confidence” is a key to maintaining motivation that they have good idea and that they are “on the right track.” It also reduces fear of risk and failure. “Flexibility” allows people to adjust to changes in rapidly changing business environments. “Vision” is a statement regarding long-term accomplishment. Rungi (forthcoming) showed that core entrepreneur values can be created through education: a value research conducted among Estonian students with different university degrees found that students majoring in social science and medicine had that strongest relationship with entrepreneurial traits.

Personal traits have strong influence not only when launching the business, but also for the company’s survival. Evans and Leighton (1990) also asserted that education and enterprise survival have a strong correlation: businesses run by entrepreneurs with higher levels of education tends to last longer.

More recently, researchers have considered the macro-environment and how the external environment effects entrepreneurial behavior. Much past research has shown that people are significantly influenced by their surroundings (Gartner, 1989). Zafar and Kahn (2013) demonstrated that social factors have a strong influence on entrepreneurs’ motivation, especially family, friends, and community. Stanworth et al. (1989) found that, among those who have parents who own a business, 30–47% consider starting their own business in the future. Entrepreneurs’ personality can also be influenced by geographic location. Suzuki et al. (2002) compared entrepreneurship in Japan and Silicon Valley and found different characteristics and goals in each region. From the economic perspective, there is a connection between companies’ market-entry rate and the national unemployment rate. In general, the higher unemployment rate, the higher the

number of entrepreneurs (Storey, 1994). Government policy and market and financial conditions are also often considered as influencing factors (Abramson, 2018).

Entrepreneurial Intention

Entrepreneurial intention is often referred to in terms of “motivation.” Motivation is important because it is the starting point of a new business and it also determines entrepreneurs’ development process (Suzuki et al., 2002).

Entrepreneurial intention in Japan is extremely low. Figure 3 shows entrepreneurial indifference in Japan, the US, the UK, Germany, and France (a higher percentage means less interest in entrepreneurship). While entrepreneurial indifference is below 40% in the US, the UK, Germany, and France, it is 77.3% in Japan (The Small and Medium Enterprise Agency, 2017). More importantly, value difference may have an effect. Regarding self-motivation, the Japanese are motivated to do things with groups and society. Being different is not always appreciated and people tend to “follow the crowd,” which may prevent ideas of becoming innovators, pioneers, or entrepreneurs. In contrast, US citizens have strong characteristics of pursuing their own interest, achievement, and returns (Suzuki et al., 2002). Indeed, US citizens encourage people to have their own ideas and place value in something that is their own and unique, which makes it easier to create and grow more innovation and entrepreneurs. These different cultural characteristics have also been explained by Greet Hofstede, the world-famous social psychologist: the Japanese tend to be collectivistic and group-oriented (a “We” culture); in contrast, US citizens tend to be individualistic and self-oriented (an “I” culture) (Hofstede Insights, 2018).

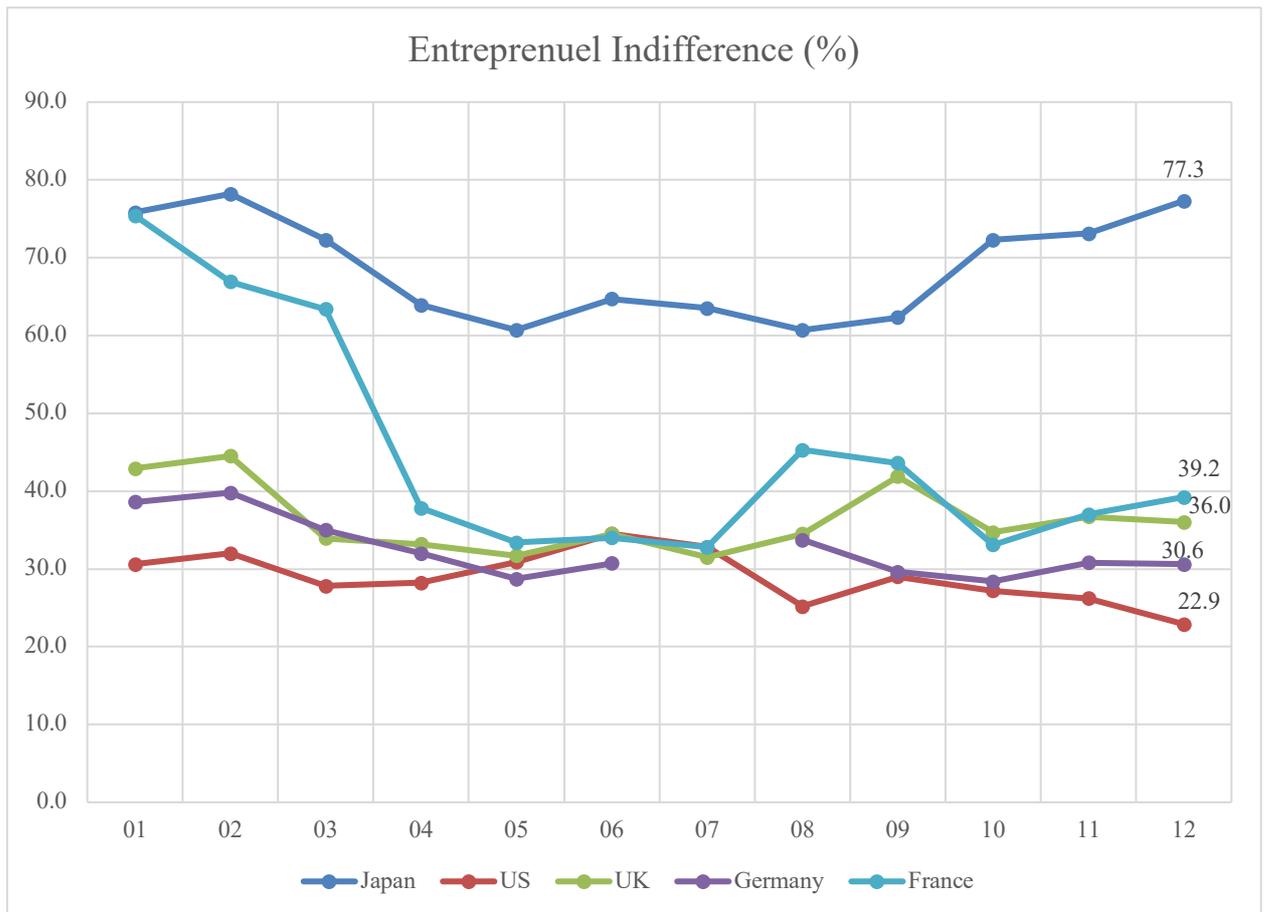


Figure 3: Entrepreneurial Indifference

Source: The Small and Medium Enterprise Agency Report (2017, p. 1).

Note: Although the data only cover up to 2012, the data was released in 2017.

Entrepreneurial Activities

Entrepreneurial activities are actions involving the “*pursuit of the generation of value through the creation or expansion of economic activity by identifying and exploiting new products, processes or services in markets*” (Ahmad & Seymour, 2008, p. 14). Entrepreneurial activities are affected by the business environment and customs, including market condition and social credit for entrepreneurs (Suzuki et al., 2002).

The Global Entrepreneurship Monitor (GEM, 2018) measured the level of entrepreneurial activities in different countries by year. By measuring “demography,” “education,” “economic infrastructure,” and “culture,” it identified entrepreneurial opportunity and capacity. As a global trend, entrepreneurship activities have been increasing and continue to grow. Following this global trend, the number of entrepreneurs has been improving in Japan. However, positive perceptions for new entrepreneurs in Japan was 7.4% (the lowest among all 54 countries), compared with 63.6% in the US. Early-stage activity in Japan was also one-third of that in the US (GEM, 2018). Business

customs may discourage people from engaging in entrepreneurial activities. Hall and Hall (1990) examined this phenomenon from a culture perspective: there are two context levels, either high or low, and Japanese culture is categorized as a high-context culture and US culture as a low-context culture. People from high-context cultures pay much more respect to large, stable organizations than those from low-context cultures. This is further evidenced by the fact that the best career for top-tier individuals in Japan is seen as life-long employment in a large corporation (Yoshikawa et al., 2007) while, in the US, the best career is seen as becoming a first person to create something new (Suzuki et al., 2002).

1.4. Financial Supporters

Financial support is essential for start-ups to grow. Early-stage supporters help potential start-ups to expand market share by providing money and giving advice. The capital would be derived from outside private equity. The amount of funds required depends on the industry. For example, the amount tends to be smaller in information and communication technology but larger in the biotech industry (Rungi et al., 2016).

In the Japanese start-up market, the amount of investment per company has been slightly increasing since 2014, with 2017 being the record high (Entrepedia, 2018). The number of companies that received more than one hundred million yen has also increased by 1% since 2012. The largest contributor was banks and independent VC. The investment trend is that Japanese traditional banks and independent VC tend to invest smaller amounts of money to 40–80 firms. Large corporations' VC follow the same trend. In contrast, foreign-based VC and governmental VC tends to raise larger amounts but for fewer companies (Entrepedia, 2018).

1.4.1. Venture Capitals (VC)

VC is most the well-known private equity globally. It is an organization of experts. Only high-growth potential companies that have undergone strict screening process receive such funds. The criteria for screening include the uniqueness of the products or service, potential market size, and competitors (Florida & Kenney, 1987). In addition to financial support, VC offers networking, trend information, know-how, and managerial expertise, which maximizes a company's business potential (Gompers & Lerner, 1999). Through accumulated data and experience, VC provides intangible value. Start-ups' activities are monitored by VC companies that have a right to intervene in the decision-making process if it necessary (Drover et al., 2017). In order to obtain funders'

agreement, VC is more logical and data-driven than other types of financial support because the funding for VC comes from others (Florida & Kenney, 1987) and VC has a responsibility to pay back in ten years. Start-ups need to choose either mergers and acquisitions (M&A) or initial public offering (IPO) when the agreed period has passed (Drover et al., 2017).

The total amount of VC received by Japanese start-ups was 279.1 billion yen in 2017, 3.34 times more than in 2013. Also, it is a highest amount in recent decades. Despite this increase, however, the number of start-up companies raising such funds between 2016 and 2017 decreased from 1,383 to 1,101. Most investments were made in healthcare, fintech, robotics, artificial intelligence (AI), and the Internet of things (IOT) (Entrepedia, 2018; Japan Venture Capital Association, 2017) Moreover, start-up funds raised in January–June 2018 amounted to 173.2 billion yen, a 40% increase from the same period in the previous year. The amount is estimated to be 400 billion yen in 2018 (Nihon Keizai Newspaper, 2018c).

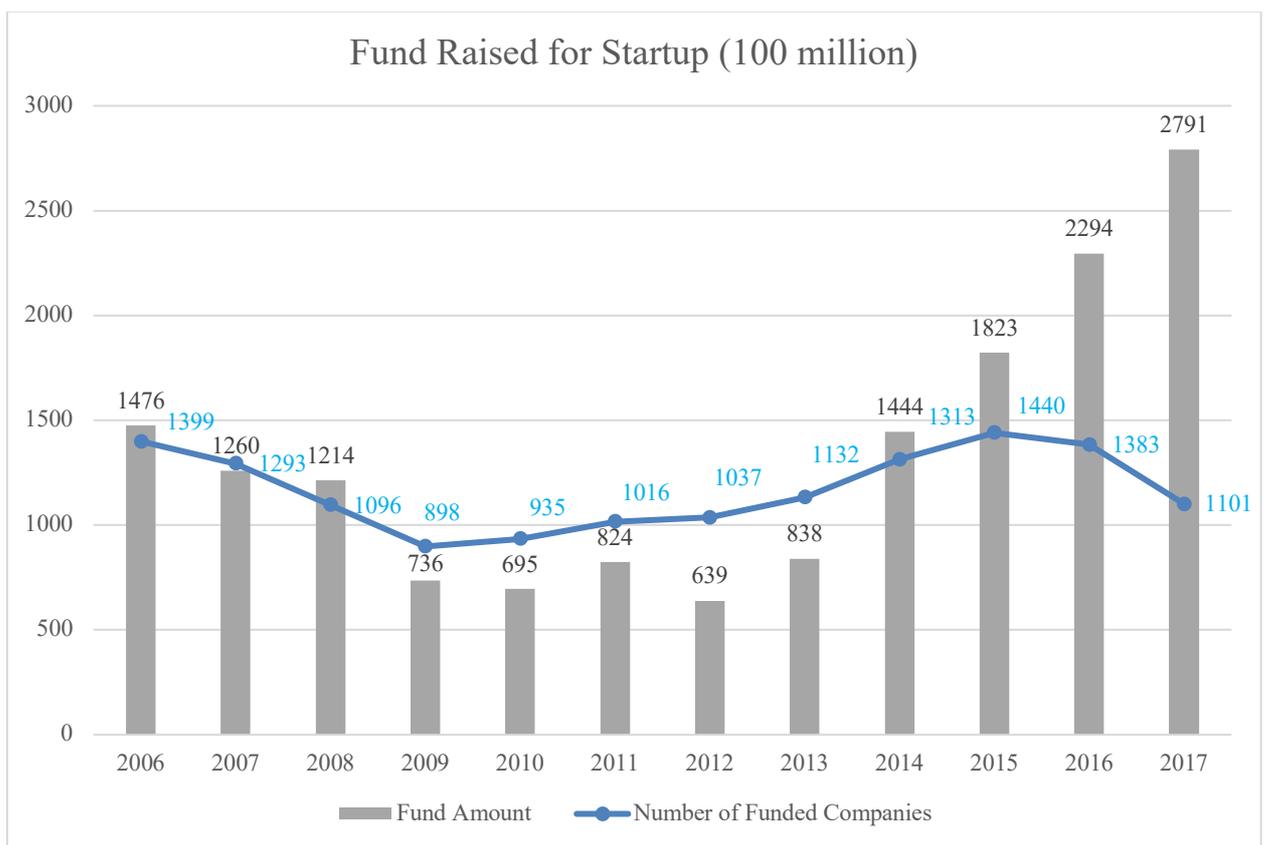


Figure 4: Funds Raised for Start-ups

Source: Entrepedia (2018, p. 8).

Note: The research is conducted based on the definition of “start-ups” in Entrepedia (2018); it does not include all unlisted companies

In the US, the National Venture Capital Association (NVCA) reported that 333 billion USD were invested by 898 VC companies in 2016: the US has the largest VC market in the world and the amounts have been increasing (NVCA, 2017). The average fund per company was around millions of USD (Brunner & Feigenbaum, 2002). US start-up investment is estimated to exceed 100 billion USD in 2018, nearly 30 times that of Japan (Nihon Keizai Newspaper, 2018c).

1.4.2. Angel Investors

Angel investors can be either individuals or groups. The big difference between VC and angel investors is that angel investors use their own money. For many investments, angel investors provide funds once every two years, while VC invests five to ten times per year (Morrissette, 2007). Angel investment is for very early-stage, small start-ups, while VC is for more mature stages (Hill and Power, 2002). It is the angel investor's job to invest to support entrepreneurship and innovation before anyone else. VC comes into play when investment from angel investors has resulted in a viable company (Farrell, 2010). Angel investors are mostly successful company owners willing to share money, knowledge, and experience (Osnabrugge, 2000). Most are company-oriented and motivated by contributing to industry. However, the precise purpose and motivations depend on individual angel investors. The expectation for return is also different between the two parties. According to the survey results of this study, the expectation for return by angels is 20–30%, which is lower than the 30–50% expected by VC. When they carefully screen companies, an extremely important point is the quality of the entrepreneurs (Morrissette, 2007). Early research showed that angels have specific characteristics and behaviors in common. Personal traits include being wealthy men aged 35–54 with strong experience and knowledge of the industry in which they are investing, while their behaviors are long-term oriented (Morrissette, 2007). As they are already successful in the business area, angels can transfer the accumulated knowledge and experience they possess.

Many well-known US companies have received investment from angel investors. For example, Apple received an investment of 9.1 million USD from an executive officer in Intel. Jeffrey Bezos, the CEO of Amazon.com, refused VC investment but received 1.2 million USD in early growth stages of start-ups (Farrell, 2010). There is no definitive number for angel investors either in Japan or the US. However, prior research has confirmed that the number of angels is significantly less in Japan (Asakura, 2017).

1.5. Unicorns

1.5.1 The Definition of Unicorns

Unicorns are well-known as mythical animals. However, the term “unicorn” has a different meaning in the business world. In the business context, a unicorn company is a company with a company value of one billion USD or more. Furthermore, the company should be younger than ten years old and an unlisted technology start-up (Lee, 2013). When the term “unicorn” was first used, there were only 39 unicorns (Lee, 2013). The number of start-ups, however, is growing quickly. A study published by Harvard Business Review showed that the number of start-ups launched between 2012 and 2015 was twice the number founded between 2000 and 2013 (Vigrass, 2016). Not only has the number of start-ups launched increased; the number of unicorns has also been increasing (CB Insights, 2018b). One significant advantage of being a unicorn is to generate more return in investment both for entrepreneurs and venture capitalists. The larger it is, the better the return on investment, so a unicorn is often seen as a successful company (Lee, 2013). Also, staying private in the growth stage gives companies more chance of being successful (Vigrass, 2016).

1.5.2 Number of Unicorns per Country in 2018

Unicorns are listed, with their value, every year by CB Insights. The total number of unicorns was 261 with the corporate value of 839 billion USD in 2018. The US had the most unicorns with 121, followed by China with 76 (see Table 1). Notably, the number of unicorn-producing countries is growing. The share of unicorns in the US has decreased its from 75% in 2013 to 46% 2018 (CB Insights, 2018b). Preferred Networks, Inc., with value of 2 billion USD was the only unicorn in Japan in 2018. A young, rapidly growing company with strengths in deep learning, it was founded by six students at the University of Tokyo in 2014. It focuses on AI in manufacturing industries and has received billions of yen in funding from Toyota from its very early stages (Preferred Networks, Inc., 2018).

Table 1: Number of Unicorns in Each Country (as of July 2018)

Country	Total Number	Total Value	GDP Growth	GDP, Current Prices	GDP per Capita, Current Prices	Big Mac Index	GEI
Unit		(US\$)	(%)	(US\$ B)	(US\$ K)		
Australia	1	1	3.2	1.43K	56.7	4.52	75
Brazil	1	2	1.4	1.91K	9.13	4.4	20

Canada	1	1	2.1	1.73K	46.73	5,07	79
China	76	287	6.6	13.46K	9.63	3.1	41
Colombia	1	115	2.8	336.94	6.76	4.14	38
Estonia	1	1	3.7	29.53	2242	*4.74	55
France	2	270	1.6	2.79K	42.93	*4.74	66
Germany	6	1,289	1.9	4.03K	48.67	*4.74	66
Hong Kong	1	1	3.8	360.32	48.23	2.55	67
India	11	2,615	7.3	2.69K	2.02	2.51	28
Indonesia	2	380	5.1	1.01K	3.79	2.19	21
Israel	4	550	3.6	365.6	41.18	4.68	65
Japan	1	2	1.1	507K	40.11	3.51	52
Luxembourg	1	110	4	68.99	113.95	*4.74	58
Malta	1	250	5.7	14.27	30.56	*4.74	-
Netherlands	1	1	2.8	909.89	52.93	*4.74	68
Nigeria	1	104	1.9	397.47	2.05	-	20
Philippines	1	1	6.5	331.68	31	2.62	24
Portugal	1	1	2.3	237.96	23.18	*4.74	49
Singapore	1	11	2.9	346.62	61.23	4.28	53
South Africa	2	258	0.8	376.68	6.56	2.32	33
South Korea	3	1,078	2.8	1.66K	32.05	4.03	54
Sweden	1	250	2.4	554.66	53.87	5.83	73
Switzerland	2	201	3	709.12	83.58	6.54	80
United Arab Emirates	1	120	2.9	432.61	41.48	3.81	53
United Kingdom	15	3,435	1.4	2.81K	42.26	*4.74	78
United States	121	41,979	2.9	20.51K	62.52	5.51	84

Source: CB Insights (2018b, p. 1), International Monetary Fund (2018, p. 1), Statista (2018, p. 1). Global Entrepreneurship and Development Institute [GEDI] (2017, p. 37).

Note: GEI: The Global Entrepreneurship Index

Some have argued that Japan has more than one billion-dollar-valued company. Corbin (2014) asserted that more one billion-dollar company exists, but that the speed of growth required more than ten years for them to be valued at one billion USD or more. His research demonstrated that, from 1997 to 2000, there were eight unicorns founded in Japan, five of which were gaming companies. Taking this into account, there is no need for Japan to be pessimistic. However, there is cause for concern regarding why companies cannot see dramatic growth within ten years.

1.6. Listing Environment

Listing is an efficient way for companies to earn money and trust and every stock market has its own terms and conditions. This section compares the small-cap markets in Japan and the US. The small-cap market is a stock-exchange platform for high-potential, small companies.

The Nasdaq stock market is the US stock exchange. The first transaction was made in 1971 and it is well-known as the first electronic stock market (Terrell, 2012). The Nasdaq comprises three stock markets: The Nasdaq Global Select Market; The Nasdaq Global Market; and The Nasdaq Capital Market. The difference between them concerns the financial and liquidity figures: the Nasdaq Global Market requires the highest amount and the Nasdaq Capital Market, for small, growing companies, requires the least. Regarding corporate governance, requirements for all three markets are the same (Nasdaq, 2018).

Japan has stock market for start-ups called Mothers (Market of High-growth and Emerging Stocks), which is operated by the Tokyo Stock Exchange. The stock exchange was established in November 1999 to promote and increase the number of more financial channels for small companies (Kushida, 2017). Since it is a market for start-ups, the terms of conditions for listing are less strict compared to other markets and the cost for listing is lower. If the company is expected to grow, it can be listed with only small profits or even while in the red. The deficit is allowed due to the upfront investment (Asakura, 2017). Instead, company information disclosure is strictly required.

A comparison of amounts raised in Mothers and Nasdaq shows that the average company value is much lower in Mothers (Table 2). This means that it is easier to list companies at an earlier stage. The average period for Japanese companies before going public is about six years (Riney, 2018), which is five years shorter than companies in the US (Wright, 2018). Since Japanese companies go public earlier, the size of these companies is closer to the size of middle- or early-stage of Silicon Valley companies (Asakura, 2017). In fact, the average size of start-ups that can be listed is 11.5 times smaller than that of companies in the US. Kushida (2017) warned that companies listed on Mothers could be immature, leading to risks for Japanese individual investors. Not only is there risk for investors, but this also removes high-growth opportunities for companies as there is no way for companies to avoid IPO to achieve further growth (Asakura, 2017).

Table 2: Comparison of Japanese and US Small-Caps Markets

	Average (million \$)		Median (million \$)	
	Japan (Mothers/JQ)	US NASDAQ	Japan (Mothers/JQ)	US NASDAQ
2015	7.6	116	3.5	75
2014	8.7	121.6	5.7	65

Source: Asakura (2017, p. 11).

Note: Amount raised in IPO (median).

There is a specific reason that the listing terms and regulations are less strict in Japan. One of the problems Japan had historically was a lack of opportunities in terms of M&A and IPO. In particular, IPO conditions were very strict and it took decades for Japanese companies to be listed. In 1997, the Japanese government decided to promote financial “big-bang” reform and part of this reform included deregulation of the establishment of stock exchanges to help finance small firms. The result of easing regulations was that two new stock markets were created (Kushida, 2017).

The positive side of the Japanese current listing system is that it allows more companies to access more financial channels. However, the down side is that listing from the early stage may limit companies’ further rapid growth because companies need to reflect stakeholders’ concerns and cannot take big risks, which is the primary reason that listed start-ups cannot grow rapidly.

1.7. Ecosystem

The ecosystem is essential for companies to be born and grow. Economics, regulations, society, and technologies are tightly related and a lack in any of them prevents a good ecosystem from being achieved.

Everything does not, however, have to be perfect from the beginning. Although there are many influential hard-core factors, the ecosystem can be changed. Garud and Karn e (2003) compared Danish and US companies, highlighting that the path success can be followed by incrementally accumulating and utilizing tools, practices, rules, and knowledge. This movement is called “social progress.” Several studies have substantiated that certain elements of this contribute to creating a successful entrepreneurship environment. Washington, DC, for example, is a state that succeeded in creating an entrepreneurial culture from scratch (Feldman, 2001). Furthermore, Japan was ranked 28th out of 137 countries in terms of the health of its entrepreneur ecosystem, which is quite good (GEDI, 2017).

This section compares the ecosystems of Japan and the US. Seven criteria are used: “founder’s characteristics;” “start-up’s characteristics;” “political environment;” “economic environment;” “social environment;” “technological environment;” and culture (Karis & Rungi, 2015).

1.7.1. The Silicon Valley Start-ups Ecosystem

Silicon Valley is well known for its high-tech, innovative culture and dynamic start-up economy. Since the 1990s, it has been a symbol of rapidly growing start-ups (Suzuki et al., 2002). Nowadays, start-ups are led by giants that emerged in Silicon Valley. The history of Silicon Valley started with the establishing of Hewlett Packard (HP) in the 1960s, based on being a center of the semiconductor industry (Kenney, 2000). Since then, Silicon Valley has gradually developed its own unique culture and structures to produce entrepreneurs and supportive organizations. The movement of social progress was opened to diverse networks, interactions, and knowledge transfer and this helped to create the best place for start-ups to grow (Florida & Kenney, 1992).

Founder’s Characteristics

Entrepreneurs pursue personal goals, such as how much money they want earn and what they want to achieve (Kegal, 2016). They are always looking to establish large-scale businesses and seeking new opportunities. Once entrepreneurs have succeeded in their own business, there are highly likely to start another business or become an investor (Brunner & Feigenbaum, 2002).

Start-up Characteristics

Silicon Valley has succeeded in innovation because of its multiple industrial clustering. Multiple industrial clustering helps start-ups to be born and grow. The common ground for start-ups allows for the production of more expertise in diversified fields such as law and accounting. Furthermore, diversified industrial clustering creates a more innovative environment (Kenney, 2000).

Political Environment

The national government and industries are well-connected, and this may make it easier for start-ups to operate. In the US, there are many lobbyists from companies who have a great impact on policy-making in the US government. Regarding the cost for lobbying activities, Silicon Valley tech companies are ranked first among all industries. Furthermore, the lobbying-activity costs for 2017 increased from 2016 (Google, 18 million USD; Facebook, 11.5 million USD; and Apple, 7 million USD). Lately, Silicon Valley companies are spending more of this money on online regulations, security, and labor protections (Abramson, 2018).

Silicon Valley is not a region created by the government (Dasher et al., 2015); however the government is supportive of start-up companies. There are two government policies that have helped Silicon Valley to grow. First, the US government cut pension funds and more than 10% of capital gains tax in 1978. Subsequently, the “Jumpstart Our Business Start-ups Act” was enacted in 2012. The purpose of these policies was to encourage investment in start-ups by waving certain taxes. The government eased prior strict regulations so start-ups could go to public and raise funds more easily (Wright, 2018). The second policy increased the number of visas issued for non-immigrants; it let more high-skilled, talented people work in the US (Dasher et al., 2015). After the change in government, immigration was again restricted, but still the number of immigrants is huge. Although not through laws, local government also heavily involved in entrepreneurship support. For example, local government provided “incubators” and “ombudsmen” to assist local start-ups in Silicon Valley (Dasher et al., 2015).

Economic Environment

Silicon Valley is now facing the largest tech bubble since 2000 (Wright, 2018). California has around 40 million people and its GDP rose to 2.7 trillion USD in 2017. According to USA TODAY, California has the fifth largest economy in the world. The unemployment rate is only 3.9% (Cooper, 2018). California has also been doing well under the Trump administration.

Silicon Valley is the largest VC city in the world. Early investment has been increasing and going public has not recently been a popular choice. The average age for start-ups choosing IPO was four years in 1999. In 2018, the average age is 11 years, due to the increase in early-stage support (Wright, 2018). Moreover, large corporations are more actively buying start-ups (Dasher et al., 2015). Another strength of Silicon Valley is the large number of successful people in terms of business and investment. Financial support and strategic reviews are mostly provided by VC and angels. Angel investors, such as the Sand Hill Angels and Bank of Angels, contribute in the very early stages of the business (Dasher et al., 2015). The community helps investors to share information and trends. Thus, start-ups can quickly obtain investment and information.

Social Environment

One of the Silicon Valley’s important assets is human resources. The mobility of labor markets is high and is essential for companies to achieve rapid growth. To keep mobility high, firms can also maintain global competitiveness. Highly skilled workers come from all around the world to work in various industries (Kushida, 2017). The number of foreign-born residents in Silicon Valley is

38% and 51% people speak a foreign language at home (NVCA, 2018). In the US, society's perception of switching jobs is mostly positive because people usually change jobs to further their careers (Fujimoto, 2012).

Technological Environment

Silicon Valley has advantages for start-ups because of its wealth of networking opportunities among stakeholders and, as this networking is organization-to-organization, it is effective and sustainable. This synergy has supported continual innovation and helped maintain Silicon Valley's competitiveness, especially in terms of R&D and its cost efficiency (Yusuf et al., 2008). Regarding technology, Silicon Valley has the world's best R&D institutions, such as Stanford University and the University of California, Berkeley. From conducting research to filing patents, all these processes can be performed by universities (Dasher et al., 2015). By using these institutions, R&D cost can be reduced and companies can also provide practical lectures and fund universities to ensure high levels of education. Government support through R&D tax credits for collaborating companies provides opportunities to efficiently create faster-growing start-ups (Renault, 2014). Large corporations are often open to collaboration with start-ups if they have useful technologies and great ideas. Even if the industry is not the same as that of the large corporation, they often cooperate and may later buy the start-up. This collaboration can also pay off through M&A (Dasher et al., 2015).

Culture

People accept failures and even people who have failed will always get another chance (Kegal, 2016). Culturally, US thinking is that failure is a necessary step to go through for success: people learn from mistakes (Pfanner, 2014). This encourages both individuals and organizations to take risks and face challenges.

1.7.2. Japanese Start-up Ecosystem (1970–1990s)

The Japanese economy grew annually by an average of 10% from 1955 to 1970. Even in late 1970s and 1980s, the economy was growing by 5% until the bubble burst (Harari, 2013). The symbol of New York, the Rockefeller Center, was even bought by a large Japanese real-estate firm, Mitsubishi Estate, in 1989 (Tachikawa, 2011). After that, Japan faced “the lost decade” (now little more than a memory); companies grew very quickly at this time. The world market capitalization rankings of 1989 showed that 32 Japanese companies were ranked in the top 50, more than double the number of US companies (Diamond online, 2018). Most rapidly growing firms were not start-

ups, however, but traditional companies such as NEC, Toyota, and Hitachi. Entrepreneurship was not popular at that time and the enterprise-founding rate was only 7% in the 1970s. During rapid economic growth, the enterprise-founding rate dropped to 4% in the 1990s, one-third of the US rate. In 1999, while the US had 10% of people involved in entrepreneurial activities, Japan had only 1% (Brunner & Feigenbaum, 2002).

Start-ups were already being created in the US in the 1950s but the first time that start-ups were officially recognized by the Japanese government was in the 1970s (Nakano, 2017). After the official announcement, there were several short-term start-up booms, but still the number of start-ups was comparably low.

Founder's Characteristics

Most of the companies in this period time were founded by individuals or families (Nakano, 2017). Entrepreneurs tended to avoid risks, preferred stable management, and were affected by a lack of financial support (Brunner & Feigenbaum, 2002).

Start-up Characteristics

During this period, start-ups were more like subcontractors to big corporations (Okamoto, 2003). Similar to Silicon Valley, Japan had industrial clusters from a very early on; the oldest cluster can be seen even before the Edo period in the 1600s. Through government policy, industrial clusters and natural networks also made a big contribution for the Japanese. However, the big difference between Japan and Silicon Valley is that the Japanese industrial clusters were mono-industrial cluster and also had division of work. Jobs were divided between each company and each company was supposed to play its role. During this period, start-ups had less autonomy under large corporations (Okamoto, 2003). It was hard, therefore, for start-ups to lead innovation. In the early stage, companies were based on technologies from overseas, developed countries but, later, start-ups developed unique advanced technologies (Nakano, 2017).

Political Environment

While big corporations were doing well, start-ups' autonomous management was weak (Okamoto, 2003). Questions remain, however, regarding why Japanese manufacturing companies could grow so fast. There were many factors involved; one of the major factors was "backwardness," meaning that Japan had earned a reputation for cutting-edge technology in developed countries (Okazaki, 2015). It led the Japanese economy to grow faster and develop new technologies. Another reason is large corporations' success in applying and expanding those new technologies to foreign

markets. Another reason could be the 1985 Plaza Accord. Due to this agreement, the yen appreciated significantly, and local production became advantageous. Moreover, the low-interest-rate policy let the yen appreciation create bubbles in Japan. These opportunities pushed Japanese large corporations to look abroad and make alliances with local companies, including capital alliances, which helped companies to increase distribution of their products and expand their markets (Tachikawa, 2011). However, still no special policies were introduced aimed specifically at start-ups.

Economic Environment

Many large Japanese manufacturing companies had success from the 1970s until the bubble burst. Before and after 1990, the average GDP growth was 4.5%.

Unlike conditions for economic growth, conditions were hard for start-ups. “Bank loans” and “government financial support” were common way of receiving financial support (Suzuki et al., 2002). There were few private choices for companies who sought investment of over 20 million yen (Riney, 2018). Besides investing money, banks also had the role of monitoring the companies and banks sometimes intervened if it necessary. Until the 1980s, foreign-currency exchange was restricted and financial channels for companies were limited. Thus, the lack of foreign investment and owned assets led to less chance of taking out bonds and equities; most had to take out bank loans (Kushida, 2018). The total loan share for investment was 81% in 1988 and the financial situation was extremally tough (Brunner & Feigenbaum, 2002). To secure loans, banks sometimes required collateral, which discouraged people from starting their own business. Since the small stock market was created in 1999, financial support has been diversified and increased. The loan ratio for investment decreased from 81% in 1988 to 18% in 1998 (Brunner & Feigenbaum, 2002).

Social Environment

Labor mobility was low compared with other countries (Kushida, 2017). To graduate from a top university and get into a large corporation or governmental institution was the golden path for most top-tier individuals (Yoshikawa et al., 2007). Harmony is also valued and the Japanese have loyalty to their company. Furthermore, changing jobs often gives a negative impression in Japan and people tended to stay in one company until retirement (Fujimoto, 2012).

Since large corporations were leading the economy, many people payed much respect to these companies (Kegal, 2016). Additionally, the terms and conditions of large companies were attractive. Lifetime employment, a seniority wage system, good welfare and salary; such a stable

environment attracted many employees. It was a common strategy for large corporation to use human resources for competitive advantage (Yoshikawa et al., 2007).

While large corporations were popular, start-ups were seen as low prestige by society; they had a small professional ecosystem. Start-ups cared about employees as much as large corporations did but, especially in 1970s, their working terms and conditions did not match those of large corporations (Nakano, 2017). Joining start-ups was, therefore, not popular.

Technological Environment

The university–company–government relationship was close, but the links was person-to-person, unlike in Silicon Valley. Too much dependence on individuals led to less, and less long-lasting, impact compared to organization-to-organization relationships (Dasher et al., 2015).

Although open to internal innovation in general (either internally or through joint ventures, large corporations tend to be opposed to cooperative innovation with start-ups (Tachikawa, 2011). Since large corporations had capital, data, and human resources, large corporations were not eager to cooperate or do business with start-ups. Moreover, M&A was not popular among large corporations; only 225 companies were involved in M&A compared to 7,203 companies in the US in 1995 (Brunner & Feigenbaum, 2002). Due to good economic conditions, large corporations became more interested in new opportunities such as R&D. However, large corporations preferred joint-venture capital within large corporations for R&D and entering new markets (Mansumittrchai et al., 1999).

Culture

Failure is not fully accepted in Japanese culture. It tends to be negative and people try to avoid making mistakes and not aggressively taking challenges (Kegal, 2016). People prefer staying in a stable environment to being in an uncertain environment, which may reduce opportunities for innovation and innovators.

1.7.3. Japanese Start-ups Ecosystem (Recent)

Since late 1990s, the start-up ecosystem has been gradually changing. The problem that many Japanese start-ups faced came from the economic model during Japan's high-growth, post-war era. Since the economy was led by giants and their offer was good, people developed great respect for large corporations and the good working conditions of large corporations deterred people from setting up on their own. From a cultural perspective, high-context and collectivistic culture may

induce people to stay “inside the box” and prefer stability (Hall & Hall, 1990) As time has passed, the Japanese political economy has been developed, including rebuilding the legal framework and business environment. The results brought new opportunities for Japanese start-ups. In 2018, Japanese start-ups are entering a new ear. Mercari, a recent ex-unicorn, has grown rapidly and succeeded post-IPO. The success of Mercari has encouraged and motivated all stakeholders to move forward.

Founder’s Characteristics

Entrepreneurs pursue social recognition rather than achievement of personal aims (Suzuki et al., 2002). Also, entrepreneurs value R&D as a key driver of business (Kegal, 2016). Increasingly, educated, experienced, and skilled people have begun to start their own business. The number of entrepreneurs who understand large corporations has also increased and this has facilitated negotiations with large corporations (Kotozaka, 2017).

Start-ups Characteristics

Start-ups include technological industries in this era as well, but more commonly in the industries of health care, fintech, robotics, AI, and IOT (Entrepedia, 2018). The distinction between Japanese traditional manufacturing firms and start-ups has become more visible. The number of start-ups that exceeded 10 billion yen in corporate value (estimated) increased to from 22 in 2017 to 47 companies in 2018; as a driving force for innovation, the movement to boost the growth of emerging companies with innovative technologies and ideas has spread rapidly (Nihon Keizai Newspaper, 2018c).

Political Environment

In June 2018, the Japanese government announced the “Future Investment Strategy 2018” (METI, 2018). The aim of this strategy is to create 20 companies whose corporate value or market capitalization will be over one billion yen by 2030. Companies here include both listed and unlisted companies and the government, the private sector, and VC are gathering together to provide support for chosen startups (J-Startup, 2018). Although the number of start-ups that can receive supports is limited, this represents a great opportunity for Japan to encourage cooperation, synergy, and support among stakeholders.

As part of these new efforts, the local governments in Tokyo and Fukuoka decided to provide six-month start-up visas for foreign entrepreneurs to do business in Japan. In Fukuoka, the local government paid 50% of rent, waived taxes, and offered only 1.3%-interest bank loans (Kaverina, 2018). This may motivate more experienced and successful entrepreneur to come to Japan.

Economic Environment

Economic conditions are one of the most important factors that encourage entrepreneurship. Japan has a GDP of 4,330,1 billion yen and employment rate of 2.4% (Organisation for Economic Co-operation and Development, 2017). Economic growth, however, is under 1% (very low). In terms of the ease of doing business, Japan was ranked 34th out of 190 countries and, in global competitiveness ratings, was ranked 8th out of 138 countries, which is good (GEM, 2018 & The World Bank, 2018).

Financial activity has been improving in Japan. The total amount is currently 279.1 billion yen (+21.7% year on year) and there have been five years of consecutive growth. While the number of companies receiving investment decreased by 20.3%, start-ups worth more than billion yen increased in 2017. The overall trend is that the size of large investments has increased, with investment being focused on companies in the growth stage. Compared to a decade ago, the median market capitalization has also increased threefold (Entrepedia, 2018). Furthermore, funds raised from January to June 2018 reached 173.2 billion yen, a 40% increase from the same period in 2017. The total amount is estimated to be 400 billion yen for 2018 (Nihon Keizai Newspaper, 2018c).

Financial support is also more diversified. When considering the total amount money, however, the largest contributors are banks and independent VC (Entrepedia, 2018). These tend to invest smaller amounts of money and expect short-term returns, which may limit start-up's capabilities (Brunner & Feigenbaum, 2002). VC from large corporations also tends to make small investments in a large number of companies. Foreign-based VC and governmental VC raise more money for fewer start-ups (Entrepedia, 2018). The total foreign direct investment (FDI) has been also increasing. In 2005, FDI was 101 billion USD and this doubled in the following ten years. The largest contributors are the US, Netherlands, and France (Kondo, 2018).

However, there is still little early-stage support, not only from VC but also from angel investors who support the very early stages of innovators by evaluating and have an overview of the business scheme. There are very few angel investors, even though around 30% of Japanese have the potential to be an angel investor in terms of their wealth (Tashiro, 1999). Furthermore, Japan has had an attractive tax-waiver system since 2008. Japan now has a 40% tax waiver to a maximum amount of 10 million yen, while the world average tax-waiver rate is around 10–30% (Suzuki, 2011). However, the number of angel investor is still low. The reason could be lack of information

and knowledge for individual investors. If angel investors were to increase in numbers and undertake the role, this could support more opportunities for Japanese start-ups.

Large corporations are becoming more interested in open innovation and have been increasing investment in start-up companies. The amount of large companies investing through their funds in 2017 reached a record high of 68.1 billion yen, 27 times more than in 2012 (Nihon Keizai Newspaper, 2018a). The latest case concerns Japan's largest mobile carrier KDDI acquiring the IOT company Soracom for an estimated price of 20 billion yen (Horikoshi, 2017). This collaboration could lead to a virtuous circle that also creates innovation.

Social Environment

Labor mobility is still low but has been improving, especially in the IT sector and foreign firms (Fujimoto, 2012). One reason is the current generation of entrepreneurs having a lot of momentum in creating a new culture. Through digitalization, people can more easily access information and see the success of start-ups.

Another factor is that several giant firms have run into financial trouble recently, e.g. the Toshiba accounting-fraud scandal in 2015, which severely decreased trust in the company (The Economist, 2016). A year Later, Sharp, owing to a financial crisis, was sold to a Taiwanese company, Hon Hai (Katsuki, 2017). Studying at a top-tier university and being employed by a large company is no longer a guarantee for the future. This has led to lower prestige for large corporations and fewer people seeking employment in them.

However, society still remains fairly conservative. In a survey, less than 30% of Japanese parents would support their children becoming entrepreneurs, compared to 80% of US parents (Brunner & Feigenbaum, 2002).

Technological Environment

Cooperation between start-ups and large corporation has increased compared to recent decades. Start-ups' advantages lie in high creativity and flexibility, though they are short on resources. Conversely, large corporations have high productivity based on know-how, such as quality control, mass production, and business management knowledge. However, rigid organizations are less creative (Kotozaka, 2017).

Similar to universities in Silicon Valley, “technology licensing offices” can be found in universities, but companies’ dependency on research institutions is limited (Rowen & Toyoda, 2002). In terms of R&D budget, Japan had the fourth largest budget for universities in 2018, but most were from the government and Japanese universities’ research range and budget are limited (Nihon Keizai Newspaper, 2018b). Funds from companies account for only 2.5% of total funds in Japan, which is very low compared to other countries. The average fund per university is two million yen, one-fifth of foreign companies’ investment per university (Science Council of Japan, 2015). Since universities are also seeking to widen funding and research range, this relation should be reconsidered.

Culture

Many professionals have pointed out that the cultural barrier is a major reason for Japanese to ignore entrepreneurship. Otherwise, Japan would have a huge potential for innovation. A Silicon Valley investor, Matt Wilsey, suggested that the Japanese would do better putting aside fairness and instead taking risks and making mistakes; he also added that changes in financial and social exclusiveness could help to give more opportunities to entrepreneurs (Pfanner, 2014). These characteristics can be seen as far back as the 1970s; culture may not change easily.

2. METHODOLOGY AND DATA COLLECTION

2.1. Qualitative Research

This paper applied a qualitative-research approach to understand the underlying reasons for there being so few unicorns in Japan. This approach enables the exploration and development of ideas (Creswell, 2013). It explains why and how in depth, so it is suitable for new research topics (Rungi et al., 2016). Another advantage of the qualitative research is its flexibility as the interviewer can observe interviewees' expression and gestures to enrich the research (Bogdan & Biklen, 2007). Qualitative research can be broken down into three categories: "structured;" "semi-structured;" and "in-depth." Which is chosen depends on the situation, e.g. what the interviewer wants to ask, and how. The author used semi-structured interviews to keep questions open. By removing the structure, it enabled both interviewees and interviewers to pursue specific ideas in depth (Britten, 1995).

Before formulating the questions, key philosophical ideas were considered. First, for conceptual beliefs, the "constructivist paradigm" was chosen, since the purpose of the research is to identify factors based on interpreting entrepreneurs' opinions about the current situation. For interpretation, an advocacy theory was used because the interview concludes with asking for suggestions for improvements in the current entrepreneurial situation in Japan. For methodology, this paper used a start-up-creation model that illustrates influential factors for creating start-ups. Interviews were concerned as the best way to collect the data.

To form the semi-structured interview questions, multiple steps were taken. First, research questions were defined based on a literature review and then broken down into sub-questions. Sub-questions were based on: founder's characteristics; organization's characteristics; political environment; economic environment; social environment; technical environment; and cultural environment (Karis & Rungi, 2015). To ascertain reasons, the questions used interrogative

pronouns how and why. Questions were categorized into general questions, personal questions, and confidential questions and this order was followed during the interviews.

2.2 Multiple-Case Study

There are two ways to analyze qualitative case studies: single analysis; and multiple analysis. This paper used a multiple-case-study approach to compare several cases at once. The advantages of a multiple-case analysis are that it allows for comparison of similarities and differences across the cases (Baxter & Jack, 2008) and allows authors to understand the research questions, in a deeper and wider sense, to ensure accuracy (Gustafsson, 2017). Some previous researchers have argued that it is expensive and time-consuming research (Baxter & Jack, 2008) but, to ensure the research questions were fully answered, the author chose multiple analysis.

2.3. Sample and Data Gathering

Interviews were conducted in Japan in the summer of 2018. The interviewees were founders, CEOs, CFOs, and executive officers, i.e. those who know about the organizations and the running of them. To find high-potential-growth companies, the author used a list of “next unicorn” companies. Face-to-face interviews were conducted for eight companies and one venture capitalist. Since the appropriate number for a multiple-case study is four to ten (Eisenhardt, 2014), this number is appropriate. Interviewees were approached in various industries companies to avoid information bias for a specific industry. In each industry, the companies were chosen based on the author’s personal interest, i.e. through “purposeful sampling” (Bolderson, 2012).

There were several possibilities for contacting the companies. However, after carefully considering Japanese business culture, the author first sent a Q&A e-mail to each company. The venture capitalist, Mr. Kato, was introduced by an interviewee.

2.4. Interview Framework

Interviews lasted around one hour and comprised two parts: reviewing information; and asking questions. In the first ten minutes, statistical information and prior studies were shared. The statistical information concerned unicorn size and numbers of three countries: the US; China; and

Japan. The opinions of previous researches were also shared. To avoid bias (Bolderson, 2012), the studies both supported and denied the current Japanese situation. Questions are open-ended so that interviewees could share their thoughts and ideas freely (Eisenhardt, 2014). All questions were kept short to respect the interviewees' answers. All interviews were recorded during the interviews and transcribed after the interviews.

2.5. Analysis

This paper used cross-case analysis, which helps compare answers from each company to the same question. Keywords were picked from of a summary of scripts and companies were listed in alphabetical order. A content analysis (hereafter word cloud) helped highlight frequently used keywords during the interviews. By comparing cross-case and word-cloud results, a deeper understanding of the keywords can be achieved (Yin, 2009).

3. ANALYSIS AND DISCUSSION

The chapter has two parts: cross-case analysis (see Appendices A–I and K); and word clouds (Appendices L–M). Both are based on the interviews.

3.1. Cross-case Analysis

The analysis was made based on the interview and published materials to supplement the interview.

3.1.3 Personal Traits

For many years, entrepreneurship has been thought to be influenced by personal characteristics (Van de Ven, 1993) In leadership theories, personal traits are considered the essence of successful entrepreneurs (Rabstajnek, 2015). According to Rampton (2014), there are five characteristics commonly seen as entrepreneurial characteristics: “passion;” “resilience;” “self-confidence;” “flexibility;” and “vision.” These characteristics were observed during the interviews. All interviewees had a passionate, clear and, legitimate vision and mission. Although Japanese entrepreneurs are often said to be inward-looking, all were outward-looking and had a wide perspective. While they were self-confident, interviewees were also profoundly grateful for their surroundings and opportunities.

Regarding entrepreneurial intentions, six out of eight interviewees said they developed the idea to start own business when they were university or graduate-school students, or younger. Regarding prior experience, all went to top universities and experienced work in large corporations before launching their own business. Five out of eight had overseas experiences, including study abroad. As previous studies have mentioned, “education” may be a key success factor (e.g. Evans & Leighton, 1990). Their business ideas tended to match their previous experience, but not always. From a theoretical perspective, Zafar and Khan (2013) demonstrated that social factors also have strong influence on entrepreneurs’ motivation, especially family, friends, and community. Two interviewees had an entrepreneur father and two of them had an entrepreneur close relative.

Regarding what convinced interviewees to start the business, some were inspired by something that they had not known or experienced before. Two patterns of entrepreneurs were observed. One involved a prior definite idea of what they wanted to do while the other involved first being interested in entrepreneurship and only launching a business once they had developed an idea and were sufficiently prepared. Both have in common the core values of pursuing a goal and self-motivation.

Q1: Why are there so few unicorns in Japan?

Since the number of start-ups is small, it may affect the number of unicorns. For growth factors, internal and external factors affect one another.

Since the number of start-ups is small in Japan, some mentioned that it may be inevitable for Japan to have few unicorns and that social image and culture may be critical and strongly impact starting a business. Another critical problem concerns growth. Regarding growth, there were two opinions. One was that Japanese companies have strong potential for growth but supporting environments are weak and limit the growth of start-ups, especially the lack of organizations that support start-ups' growth stage. From the financial perspective, the number of venture capitalists and the amount of capital were not enough. Also, the way of thinking of VC could be influential. In the US venture capitalists see market potential and sales as a first priority. US venture capitalists do not require short-term profit while Japanese venture capitalists focus on short-term profit as a minimum requirement for investment, which leads to fewer and less ambitious core business. A lack of expertise to grow start-ups was also highlighted by several interviewees. Regarding collaboration, large corporations are critical, but conservative, in collaborative projects with start-ups: *“Japanese large corporations have a strong desire to develop products and services on their own rather than revitalizing what is already produced in the Japanese economy”* (Appendix 1). In some industries, government regulations also limit start-ups attempting to test their ideas.

The second opinion was opposite of the first. The reasons concerned more entrepreneurs and their business ideas: *“Many Japanese companies are not aiming to climb Mt. Everest [the world's highest mountain], instead aiming to climb Mt. Fuji [Japan's highest mountain]”* (Appendix 5). Regarding entrepreneurial mindset, three interviewees pointed out that Japanese entrepreneurship ideology is low, which demotivates people from starting their own business. Also, even people who do launch a business tend to aim for achievable goals and are satisfied with small achievements; thus, *“investors may also struggle to find where to invest”* (Appendix 2). Japanese culture may influence entrepreneurs to be satisfied with small ideas since, in Japanese culture,

harmony is valued rather than thinking outside the box; making mistakes is not allowed and avoiding failure is preferred.

From a different point of view, target markets are small compared to start-ups in the US and China. It is natural that companies target markets they are more familiar with. Other suggested that the language barrier would limiting Japanese start-ups aiming to sell abroad. Regarding first-language speaking populations, 1,299 million speak Chinese, 378 million speak English, and 128 million speak Japanese (Ethnologue, 2018). If we include second-language speakers, figures for Chinese and English would be much greater. Japanese start-ups cannot therefore help targeting small market, which leads to VC investment foreign start-ups that target larger markets.

Since these external and internal factors are interconnected, there is not one solution. These networks are tightly connected, and this chicken-and-egg situation could be called an ecosystem. The ecosystem as a whole needs to improve in order for things to get better.

Q2: What do you think about the fact that Japan has so few unicorns? Is having few Unicorns in Japan good or bad?

There were variety of opinions but most agreed that current situation should be changed.

There were various discussions regarding whether more unicorns are needed in Japan or not. Some interviewees saw having more unicorns as a positive thing: “*The more successful cases there are, the more the interest in entrepreneurship will increase*” (Appendix 8). Success stories may convince people to start businesses and motivate people to grow them faster and larger. Some said they could judge whether the current situation was good or bad, given uncertainty over for whom exactly the situation would be good or bad. Since going public presents different difficulties, as each company is in a different situation and under different conditions, this may hard to judge. However, most interviewees agreed that the current Japanese situation should change.

Q3: How can the situation be improved?

The situation could be improved by cooperating with large corporations and reducing risks to support potential entrepreneurs.

The most highlighted topic was cooperation with large corporations. Financially and strategically, large corporations should be more assertive in making concessions for start-ups. Most “next unicorn companies” already receive some investment from large corporations from an early stage (Nihon Keizai Newspaper, 2018c). Two interviewees mentioned that what start-ups can do and what large corporations can do are different. To survive in competitive world and sustain growth,

large corporations should take this advantage. Especially when considering the speed of growth, sharing experience and data among companies would be much more efficient and productive than doing everything on their own. Creating “synergy” among stakeholders would be key. Collaborating with start-up companies does not have to involve start-ups in the same industry. (Appendix 8) Since Japan used to be an industrial cluster (Okamoto, 2003), collaboration with different industries would open up new innovation opportunities.

“Increasing number of companies” was another theme often highlighted during the interviews. From 2001 to 2015, Japan had an enterprise-founding rate of c. 5%, lower than those of the US, the UK, Germany, and France (The Small and Medium Enterprise Agency, 2017) Mr. Nakamura, Loop Inc. CEO, asserted that, to increase the number of companies, people’s mindset has to change. Not being satisfied with current situation and having a sense of crisis are key.

To encourage more people to launch a business, reducing risks for entrepreneurs is important (Appendix 8). Japanese tends avoid making mistakes and the culture cannot be easily changed (Pfanner, 2014). However, minimizing risks could be achievable. More success stories are also greatly needed to increase both the number of entrepreneurs and of organizations that support start-ups’ growth stage by providing constant evaluation and feedback. Once people get to know more about start-ups, it will solve the problem of the lack of knowledge about starting your own business.

Q4: What is the current situation for start-up companies?

Overall, the condition is getting better, but still needs to be improved.

All interviewees responded that the situation for start-ups is getting better, which is positive. The comparison period depended on the interviewees; some compared with ten years ago, some five years ago. Three companies specifically mentioned that recruiting is getting better. More top-tier, highly skilled people are interested in start-ups. Especially following the 3.11 big earthquake in 2011, people may change. One interviewee stated that, following the tragedy, people may become more honest about doing what they want to do (Appendix 6). Seth Stain, a seismologist at Northwestern University supported the idea by explaining: “We now realize that things are much more variable in space and time than we would like to believe. That in turn creates a deep uncertainty in our ability to forecast the future” (Oskin, 2013). Overall, what was observed here was that more people are willing to pursue what they want to do.

Environment improvement was mentioned by four interviewees. Large corporations proactively cooperate with start-ups, but not enough. The main reason is that start-ups became more diversified,

especially in high-tech fields that large corporations do not cover. Also, more entrepreneurs with knowledge of large corporations' characteristics have joined start-ups. This makes collaboration easier (Kotozaka, 2017). Although we had mostly positive views, this does not mean that the current situation is perfect. Some mentioned that financing is still challenging. Japan is still improving its start-up ecosystem.

Q5: What are factors brought your company to this stage?

Clear vision/mission and predictive talents helped companies to be at this stage.

The question initially posed was "What are the success factors for your company?" However, the author changed this to "What factors brought your company to this stage?" because several responded that they had not succeeded yet. From the responses, it was clear that each entrepreneur had a crystal-clear aim about what the company wants to be. Interviewees were aiming high and were passionate.

Q6: What would help start-ups be more successful?

The government and large corporations are the keys to growing faster.

The question was asked of only a few companies, so the sample size here is smaller compared to the other questions. The help of large organizations was mentioned, such as the government and large corporations; not only financial and strategic help, but help also in gaining trust. In certain industries, partnership with "giants" makes things much easier. Three companies stated that the key factor is a good company mission and vision. Many stated that, if the mission and vision are legitimate by any measure, the business will be long-lasting. With a good mission and vision, talented people will join, enabling the creation of a strong and sustainable organization. Most interviewees also mentioned employees; how good they are and how enthusiastic they are. From the observation, many companies value people and teams. In start-up companies, "*daily life is riding on a rollercoaster*" (Appendix 5), so especially people with flexibility, optimism, and specialties are preferred and hired.

Q7: What barriers have you faced? What are the barriers for start-ups?

Social image towards start-ups and financial support.

Three interviewees mentioned how critical social image is for start-ups and entrepreneurs. Although more talent is joining start-ups, the social image of start-ups can still be critical, especially for hiring; a candidate's family may be critical of a person joining a start-up, even if the candidate has a strong motivation to work there. This anxiety may come from a lack of information. Compared to large-scale companies, start-ups have less information. One of the countermeasures

that ExaWizards Inc. employed was increased media exposure (Appendix 4). This let more people work there without anxiety from their families due to a lack of information. Financial difficulties were also mentioned, especially in technology-driven industries the cost and time needed to research and develop products and services would be much greater (Rungi et al., 2016).

Q8: What are your future plans?

All had clear goals; going public was frequently mentioned to reach these aims.

Each interviewee had clear vision and strong motivation regarding the next steps and were positive about business expansion. Seven out of eight companies mentioned IPO as one option that gives credibility and financial support in achieving their mission. Many of companies seems uninterested in M&A. Interviewees seemed to see the company as something invaluable, as well its employees, so they did not want to give up the company for money.

3.2. Content Analysis (Word Clouds)

Content analysis (hereafter word clouds) provides a clear picture of each question's feature points. The more often a word is used, the larger the word. Word clouds also ensure the accuracy of the cross-case context since cross-case analyses were analyzed based on the author's interpretations.

3.2.1 Word Clouds Compared with Cross-Case Analysis

Eight-word clouds were created, one for each question. The main script was based on excerpts from the original interview transcripts. These were translated and summarized in English and interview questions were removed. The online tool used to create the word clouds is available at wordclouds.com.

The word clouds clearly revealed the most-used words in each question. Different colors were used for each category of the model: founder's characteristics; start-up's characteristics; political environment; economic environment; social environment; technological environment; and others (Karis & Rungi, 2015). This made it easy to compare the results with cross-case analysis and find any similarities or differences.

Q1: Why are there so few unicorns in Japan?

Size of target market and investment is small.

The most frequently used word was “**Japan**,” followed by “**Market**.” The context analysis thus revealed that many interviewees had mentioned the target market and its size, supporting the cross-case analysis. The frequently used “**Money**” was new insight. The financial aspect was often highlighted when interviewees talked about the US and China.

Q2: What do you think about the fact that Japan has so few unicorns? Is having few Unicorns in Japan good or bad?

Companies could have more potential with large corporations’ support and the amount of start-up should also be increased.

The first impression from the cross-case analysis was negative rather than positive; however, positive words were often seen. For example, “**Can**”, “**Increase**,” and “**Potential**”. The key player here would be “**Big companies**”, which could enable Japan to move to the next step.

Q3: How can the situation be improved?

The economic and social environments should be improved.

The color coordination showed most of the problems concerned the economic and social environments. For the economic environment, the words “**Market**” and “**Investment**” were often used. Also, cooperation with “**Big companies**” was often mentioned.

Q4: What is the current situation for start-up companies?

Hiring is good, more talented people are joining start-ups.

Things have changed, as was seen in the cross-case analysis. The top-ranked word was “**People**.” During the cross-case analysis, many interviewees mentioned that the hiring situation is good. Investment has been also improved compared to past decades. The success of “**Mercari**” as post-unicorn company was often mentioned as the latest big, successful start-up.

Q5: What factors brought your company to this stage?

People are top-ranked. Technology, network, and luck follows.

Resource-related terms were frequently seen. Regarding resources, “**Person**” was the top-ranked term, supporting the cross-case analysis. Strong vision was also at the core of companies, always leading company in the right direction. Being strong in “**Technology**” and “**Network**” supports the business to be more competitive than others and expand its market share. Many interviewees expressed appreciation to others and states that what had brought them to this stage was not only their own effort.

Q6: What would help start-ups be more successful?

Big companies may help start-ups to be more successful.

“**Big companies**” was especially highlighted in word cloud. Cooperation between start-ups and big companies was often mentioned, including investment.

Q7: What barriers have you faced? What are the barriers for start-ups?

Family members are often concerned about a person being in a start-up.

“**Family**” and “**Block**” were the top-ranked words. Through not only family, but also friends, many interviewees felt that the credibility and social status of start-ups and entrepreneurs were low. This has been changing but still old ideas of large-corporation worship remain. “Finance” was another barrier often mentioned.

Q8: What are your future plans?

Expansion is a common theme.

The word clouds clarified that many entrepreneurs have strong desire to achieve since “**Want**” came out top. “**Grow**” and “**World**” were also frequently used, reflecting that entrepreneurs are passionate about growing and expand further. “**IPO**” was also frequently mentioned, but the context here was IPO as one way to grow further; it was not one of their goals.

Based initially on the literature and theories, this paper uncovered differences between a producer of few unicorns (Japan) and a producer of many unicorns (the US). First, it is much easier to be listed on Japanese stock exchange markets, both regarding terms and condition and listing costs. Since there were only two major choices before 1999 (either starting a business with your own assets or borrowing from banks), the system helped companies to expand financial channels (Kushida, 2017). The downside is that early listing not only reduces the possibility that companies to become unicorns but, more importantly, may also limit the speed of growth of companies since companies cannot take risks under the supervision of stockholders. Even when companies were listed, it took more than ten years for companies to grown to more than one billion USD (Corbin, 2014).

The second reason concerns the maturity of start-up formation and their growth. When only considering the numbers, such as enterprise-founding ratio, entrepreneurial intentions, and entrepreneurial activities, the situation seems pessimistic compared to the US. The critical factor, however, is small number of entrepreneurs and start-ups (The Small and Medium Enterprise Agency, 2018). The discouraging factors are influenced by the economic and social environments

and culture. Regarding the economic environment, financial support is increasing but still not enough, possibly may dissuading entrepreneurs from pursuing big innovative ideas. Major financial support still comes from traditional banks and independent venture capitalists, which tend to invest smaller amounts of money and expect short-term returns (Brunner & Feigenbaum, 2002). The scale of the business idea itself is, therefore, limited. Regarding the social environment, the traditional image (unstable, low salary, and subcontractors of big companies) of start-ups discourages people from starting new businesses and having scalable ideas. The collectivistic and high-context culture also demotivates people to be innovative and do different things from others.

Even when a company is launched successfully, there is a lack of supporting organizations and circumstances, especially in the early stages, so companies cannot grow rapidly. The early stage is very important for start-ups to evaluate the company's strategy for further growth further but the ecosystem itself limits these opportunities. The big difference between Japan's and Silicon Valley's ecosystem is that the Japanese ecosystem has little synergy among stakeholders. By working individually, innovation opportunities are missed.

The interviews' purpose was to get hear the real voice of entrepreneurs and understand the current situation. There were many discussions regarding whether few unicorns in Japan is good or bad, but most agreed the current situation needs to change for start-ups to grow further. Since Japan has no recently launched high-speed-growth globally competitive companies, the lack of growth will become more problematic:

“If the situation continues, Japan cannot earn foreign currency and that will be a serious problem. Not earning foreign currency means that the national power will be decreased and the global position of Japan will be lower.” (Appendix 7)

Several interviewees mentioned that the small number of start-ups may be responsible for the small number of unicorns. Two perspectives are commonly mentioned regarding start-up growth. One was that Japanese companies have strong growth potential supporting environments are weak and limit start-up growth. Also, financial support is insufficient and often requires short-term profit, inhibiting entrepreneurs from taking on big challenges. Moreover, few alliances with large corporations, little expert supporters, and strict government regulations are critical problems. Another perspective concerned the micro-environment, such as entrepreneurs' mindset and the size of business ideas and target markets. Conservative culture and social image might also deter people from aiming higher or being innovative. If more ambitious entrepreneurs appear, the investment available may increase.

To make things change and enable start-ups to grow faster, cooperation with large corporations are the necessary:

“The things that startups can do and what large corporations can do are different. While large corporations have a large corporation’s strengths, new ventures have breakthrough strengths/disruptive power at certain points, so each should do business by using their respective strengths.” (Appendix 6)

Increasing the number of start-ups is also key. To encourage more people to be more ambitious and think big, more success stories should be promoted and the risks for entrepreneurs should be reduced. To promote rapid-success start-ups, more experts and successful entrepreneurs are needed to look after new entrepreneurs, share knowledge, and evaluate their business ideas.

Despite the difficult condition, the next unicorn companies are doing well. The key factors that brought them to this stage are different for each company, but all interviewees had a passionate, clear, and legitimate vision and mission. Although Japanese entrepreneurs tend to be seen as inward-looking, all were outward-looking and had a wide perspective. While they were self-confident, the interviewees were also profoundly grateful to their surroundings and opportunities.

Most agreed that conditions for entrepreneurs are improving but could be better. Positives include more young talent joining start-ups. All the interviewees, both employees and entrepreneurs, had graduated from top universities and had experience in big, well-known companies. However, financial and social support can improve further. Technology- and sharing-economy-related industries have been missing opportunities due to the strict regulations in Japan. They cannot test their ideas like in the US and China. Easing regulations for particular industries would, therefore, be another suggestion. As seen in the example of Silicon Valley’s growth, it does not have to be perfect from the beginning, but it needs to be improved for outstanding companies, such as those interviewed, and for future entrepreneurs.

It was also revealed that a company’s existence is not based only on scale and growth. What the company wants to achieve and how rapidly and how far it wants to grow are defined by entrepreneurs and based on market conditions. Therefore, without knowing the situation for each company, presenting one unified aim would be dangerous. Either way, Japan needs to respect different type of companies.

From the interview with the venture capitalist, Mr. Kato, the most curious finding was that unicorns are not always welcomed, including start-ups, by VC. The mission of venture capital is to generate returns for funders. Despite the mission, unicorns many not pay off by the exit time. The current market capitalization might be overestimated and there is a risk that venture capitalists cannot earn what they expected from a company's IPO. Or the company may be too expensive to buy through M&A. There is research concerning the overestimation of unicorns from the University of British Columbia and Sandford University stating 65 out of 135 unicorns are the valued under one billion USD (Wright, 2018). Who gets the profits from unicorns, it seems, is a gray area.

Despite the pessimistic situation, this paper found many positives for Japanese start-ups. First, the role of start-ups is becoming more clear and many stakeholders have already noticed the importance of innovations and are changing accordingly. As many interviewees mentioned, the situation is improving: the Japanese government has announced a strategy for supporting entrepreneurs; local governments are willing to welcome successful foreign entrepreneurs; large corporations are more proactive in cooperation with start-ups; venture capitalists are diversifying, creating more opportunities for start-ups; younger generations are more inspired by doing new things. Collaboration with universities is still missing, but such synergy would encourage more entrepreneurs see the bigger picture of the business without the limitations of support. Also, culture can be a power for Japanese start-ups to grow. Since Japan is collectivistic country (Hofstede Insights, 2018), affection can change quickly. So, if entrepreneurialism became more common, it would spread quickly.

Second, the world is now shifting towards sustainability. The utilization of the internet, AI, and robotics the key terms for the web5.0 generation (Entrepedia, 2018). Those are things Japan is good at and that start-ups are good at. In recent years, the distinction between traditional companies and start-ups has become clearer. Moreover, due to rapid technological changes, product and service cycles have been shortened and innovation is becoming key in every company. Innovation is the area in which start-ups are expected to take the lead

CONCLUSION

The purpose of this paper was to understand why there are so few unicorns in Japan. Based initially on the literature and theories, this paper uncovered differences between a producer of few unicorns (Japan) and a producer of many unicorns (the US). Two major differences were found. First, it is much easier to be listed on Japanese stock exchange markets, so more companies are listed earlier in Japan. Second, start-up formation and the growth ecosystem are still immature in Japan. Based on the literature review, the purpose of interviews was to clarify the current situation for entrepreneurs in Japan. regarding critical factors for growth, many agreed on increasing the number of start-ups, improving the support system, and developing entrepreneurial mindset. However, becoming a unicorn was not the first priority for entrepreneurs and unicorns were not positive things from the VC points of view. Since Japan has no recently launched high-speed-growth, globally competitive companies, this is a big concern.

In terms of methodology, this paper used qualitative research to find the underlying reasons for why there are so few unicorns in Japan. The interviews were conducted with eight next unicorn companies and one venture capitalist. To compare similarities and differences across the cases, multiple-case analysis was used. Also, to ensure the accuracy of the cross-case context, content analysis was performed.

The analysis was based on a start-up-creation model that illustrates influential factors for creating start-ups in both micro- and macro-environments. Seven criteria were used: “founder’s characteristics;” “start-up’s characteristics;” “political environment;” “economic environment;” “social environment;” “technological environment;” and culture.

Interviews were conducted to clarify the current situation of the entrepreneurs. Regarding the critical factors, many interviewees considered them to be number of start-ups, the supporting system, and entrepreneurial intentions, all of which should be improved for a better Japanese future. Notably, being a unicorn was not the first priority for entrepreneurs; neither were unicorns viewed as positive things from the venture capitalist’s points of view. Since Japan does not have any high-

speed-growth globally competitive companies launched in latest years, this is particularly concerning.

Most interviewees mentioned that the situation for start-ups is getting better compared to the past. In particular, hiring has been good, and more talented people tend to join start-ups. The financial support has been also improved; however, the support is not sufficient.

The major finding of this paper is that the real problem is not the actual number of unicorns Japan has. Rather, the problem is why are there so few short-term, high-growth companies. To promote company growth, the ecosystem needs to be change. To the conclude the paper, three suggestions are made to provide better conditions for entrepreneurs in the future:

1. To create an ecosystem that strengthens synergies among stakeholders, including large corporations and the government. Currently, each stakeholder thinks and acts individually, but cooperation and coordination are the key to creating synergy. By creating synergy, each stakeholder can work more efficiently and productively. It also helps to create more innovation. Many future decisions should be made together to improve the ecosystem.
2. To increase amount of support in start-ups' early stages to reduce the risk of entrepreneurs failing. Japanese culture does not easily tolerate mistakes and cannot change easily, but early support can help entrepreneurs minimize risks as a first step to increasing the number of start-ups. Starting a business does not mean jumping off the cliff.
3. To have more successful entrepreneurs (and promoted success stories) and expertise. Since Japanese entrepreneurial history is relatively new, to affect this change, one option is let more successful entrepreneurs into Japan or perhaps even to encourage more potential entrepreneurs to look for opportunities overseas. More venture capitalists and angel investors could also be invited to Japan to share their knowledge and accumulated experiences from abroad.

The situation has been changing and the exciting journey has just started. The author is looking forward to seeing Japanese start-ups' success in future decades.

Further Research

There are several avenues for potential future research. This paper compared one producer of a small number of unicorns (Japan) primarily with one producer of many unicorns (the US). Future research could compare Japan with other countries such as Germany and France. Also, research

could be conducted from the opposite view, such as why are there are so many unicorns in certain countries.

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APPENDICES

Note: Appendices 1–9 are extracts and summaries of original transcripts.

Appendix 1: Interview with Company X, CEO

Company overview

Company name: Company X

Interviewees: CEO

Summary

Why are there so few unicorns in Japan?

- Japan tends to be comparatively conservative regarding new companies with no past records. However, the success of Mercari* (listed in June, 2018) will make a big change. Before and after the success of Mercari, the situation would be very different. In the future, the number of companies with high market capitalization will increase. [*Mercari is a company that was a unicorn company in 2017 and was listed in June 2018].
- Compared with other countries, the number of startups founded is small.
- I do not know everything about overseas companies but, comparing Japan with the United States, Japanese large firms have a strong desire to develop products and services on their own rather than revitalizing what is already produced in the Japanese economy. That explains why large firms are not fully committed to startups. Unlike Google in the United States, Japanese large firms do not think of combining existing services, like puzzles, to make the company bigger.
- The policies of the Japanese government have a huge impact. There are too many constraints in Japan, and new innovations are hard to discover. In particular, it has had a strong influence on the sharing economy, such as drone and ride sharing. Even if

Commented [RH1]: (1) Conservative culture

Commented [RH2]: (4) Changes following Mercari's success.

Commented [RH3]: (1) Fewer startups

Commented [RH4]: (1) Large corporations try to do everything individually

Commented [RH5]: (1) Lack of aggressiveness regarding existing services

Commented [RH6]: (1)(7) Strict government regulations

companies come up with good products and ideas, companies cannot proceed further due to strict regulations. China is certainly more flexible. Strict regulations are a barrier to progress.

What do you think about the fact that Japan has so few unicorns? Is having few Unicorns in Japan good or bad?

- I think Japan needs to change. In the process of human society evolving, sharing experiences and data leads to must faster evolution. So, it is better to share knowledge, know-how, and data more openly rather than working individually and internally.
- I think that large corporations could be more proactive regarding acquisitions and alliances. Since companies try to do everything on their own, the results turn out to be only small. Currently, companies start with these really small results, and I do not think there is any concept of how to improve this (market share/scale of the market).

Commented [RH7]: (2) Japan needs to change.

Commented [RH8]: (3) Large corporations can be more aggressive in terms of M&As and alliances

What is the current situation for start-up companies?

- An overall trend is that recruiting is getting better. No matter the size of the company, talented people join.
- One trend concerns financial investment being difficult to procure. The amount of two-digit billion-yen investment has been increasing and it is getting significantly better. However, I do not think the amount is enough. In Japan, financial problems often become barrier for companies. Due to lack of financial support, businesses that companies can continue to run are extremely limited and small. When we compare Japan with China, the amount of investment in Japanese startups is one digit smaller than Chinese investment.

Commented [RH9]: (4) Recruiting is getting better

Commented [RH10]: (4) Getting investment is challenging

What opportunities convinced you to start your own company?

- I had been thinking of starting a business for a long time. On the other hand, I had decided to launch a business when I got into a certain stage. When I was sufficiently prepared, I founded a business with two people who used to be my team member when I was working for a consulting company.

Commented [RH11]: Choosing the optimal time to launch

What factors brought your company to this stage?

- Whether your life is successful or not cannot be judged until the moment of death. I think it is the same for a company. I think that there is no specific moment of company

success. However, even though there is no specific moment of success, it is important to accumulate experience of small successes. No matter what happens, I would like to have a team that keeps asking what next.

Commented [RH12]: (5) Accumulation of small successes.

- The reason we have social influence now is that there was no similar service that existed in the market before. Also, we were able to sympathize with customers.

Commented [RH13]: (5) New in the market

Commented [RH14]: (5) Sympathize with customers

What are your future plans?

- Being a serial entrepreneur is one of my options.
- I have not succeeded yet, but I am looking into IPO right now. I would like to expand businesses in three ways. (Expand in items, target and courtiers.)

Commented [RH15]: (8) Being a serial entrepreneur

Commented [RH16]: (8) IPO

Commented [RH17]: (8) Expand businesses in three ways. (Expand in items, target and courtiers.)

What are advantages of being listed?

- I think that there are two advantages of going public: buying funding; and buying trust. As a company that does business like B2C, B2B, we believe that IPO is a simple and quick way of buying trust. Also, comparing Japan with the United States, the status of executives of unlisted companies in Japan is overwhelmingly low, so I believe that IPO is one ways of winning trust.

Commented [RH18]: Trust > funding

Commented [RH19]: Simple and quick way to earning trust

Appendix 2: Interview with Coiney, Inc., Director Shinnosuke Io

Company overview

Company name: Coiney, Inc. (<https://coiney.com>)

Interviewees: Shinnosuke Io (Director); also present, Shinya Matsunaga (Business Development)

Founded: February 2018

Capital: 75 million yen

Number of employees: 50 (as of October 2018)

Business: Payment Service

About the main interviewee

Shinnosuke Io (Director): After experiencing marketing and corporate branding in Fujitsu and Microsoft Japan Corporation, he engaged in marketing and business development at a Finnish IT startup company in 2005. From 2008, he was involved in the management of a Japanese corporation as a country manager. He engaged in launching a Japanese subsidiary of PayPal in 2009 and Tesla Motors in 2010. He began participation in Coiney in October, 2013 and became a director in March 2016.

(Source: Coiney's official home page; <https://coiney.com/corp/about/index.html>)

Summary

Why there are there so few unicorns in Japan?

- If we include listed companies, I think the number of companies with market capitalization of over 100 billion yen would be higher.
- Although it has become better in the last ten years, Japan has significantly fewer people and companies providing funding than the United States, China, and Europe. It seems Japan is not a fertile place for companies to grow.
- The passive personality and environment are causing Japan to have small numbers of entrepreneurs. Even when people do come up with really good ideas, they do not have sense of management.
- Even though there may be very good business ideas, high-potential ideas do not have room to grow, because there is a lack of professional CEOs and mentors. In particular,

Commented [RH20]: (1) The companies are not few if we included listed companies.

Commented [RH21]: (1) Less investors, entrepreneurs and professional CEOs

Commented [RH22]: (1) A lack of growth environment for startups

Commented [RH23]: (1) Less investors, entrepreneurs and professional CEOs

Commented [RH24]: (1) Less investors, entrepreneurs and professional CEOs

cooperate venture capital (CVC) will not invest if a startup is not mature enough and they cannot anticipate synergy effects through partnership. (It seems net investment is very low). Hence, investors may also struggle to find where to invest.

Commented [RH25]: (1) Few startups are deemed worthy of investment

- If a company is targeting only the Japanese market, I wonder what type of business can raise more than ten billion yen. The United States has strength in language and companies are considering global expansion from the beginning when they launch a business. China has a large internal market so, domestically, it is possible to raise more funds and expand more. These would be the main reasons for more unicorns in China and the United States.

Commented [RH26]: (1) Many startups target the domestic market

- It is not a bad thing, but Japan has many startups of a small scale. As society itself still has a feudal old tradition and there are markets in which one cannot expand without working under a large firm. Ideology and social structure could be also be a barrier to the growth of Japanese startups.

Commented [RH27]: (1) A feudal old tradition

Commented [RH28]: (1) Original ideology and structure

- In Japan, the listed market is immature. Although the number of cases has been getting smaller, it is still possible for companies to go public while in the red. In addition, there is a phrase “Going public is a goal” and few companies go public fraudulently. It creates a negative image for those few startups, and also leads to overall image degradation of startup companies as a whole. I feel the startup image in general is not good. (especially in rural areas).

Commented [RH29]: (1) Easy to be listed

Commented [RH30]: (1) Critical social image

Commented [RH31]: (1) Critical social image

- In Japan, there is still a persistent social culture that failure is not acceptable. Also, people lack knowledge about entrepreneurship. So, serial entrepreneurs do emerge easily. Moreover, Japanese people like stability.

Commented [RH32]: (1) Mistakes are not allowed

Commented [RH33]: (1) Lack of knowledge about entrepreneurship

Commented [RH34]: (1) People like stability

What do you think about the fact that Japan has so few unicorns? Is having few

Unicorns in Japan good or bad?

- Since there are particular circumstance in Japan, I cannot say either positive or negative things about the number of unicorns being small. However, as I am working in startups, I hope Japan will have more unicorn companies in the future.
- Recently, the government has announced efforts to make more globally competitive startups. However, we need to carefully consider the situation of each company and

Commented [RH35]: (2) Neither positive or negative, but hope to have more unicorns

market in terms of whether the company needs to go global or not. I am not sure the startup-supporting policy is heading in the right direction and optimizing the situation.

Commented [RH36]: (2) Expansion depends on company's choice

What is the current situation for start-up companies?

- Regarding financial investment, we raised funds twice in 2013 and 2017, but getting financial support is significantly easier than 5–10 years ago.
- Regarding human resources, we hired about 20 new people in the past few months. However, it is difficult to secure talent because people are low in liquidity, especially for financial services. Coiney has been hiring more talent with Internet-service background rather than talent with financial background though.

Commented [RH37]: (4) Getting investment is becoming easier

Commented [RH38]: (4) Recruiting is challenging

What opportunities convinced the CEO to start her own company?

- The founder and representative director, Mrs. Samata, came up with the idea to eliminate inefficiencies regarding payment while she was a university student and working as an intern at PayPal. By eliminating complicated payment methods, she would like to support people to spend more time on their own business.

Commented [RH39]: University student

What factors brought your company to this stage?

- We have not listed yet, so I cannot judge myself whether it is successful or not. However, the first reason we have maintained our business so far is that we have been able to raise funds from well-known companies such as the Industrial Innovation Organization and Credit Saison. It was great that we were able to foster a sense of security in the market as well as raising funds. The second reason is that we recommended employees to work in accordance with our growth model. (stock-type of growth model). The third reason is avoiding competition with large firms as much as possible. The strategy is, rather than making enemies, becoming partners of large firms.

Commented [RH40]: (5) Funding from trustable VC

Commented [RH41]: (5) Working style follows by company's growth model

Commented [RH42]: (5) No competitors

What are your future plans?

- We will continue to challenge in new markets. We would like to develop business in the future for those who ambitiously sell their own brands and stories in a certain community called "Rising seller" (run by "hey," a company joint-owned by Coiney and another company). Regarding venture-capital exit strategy, we are considering IPO.

Commented [RH43]: (8) Continue to challenge in new markets

Commented [RH44]: (8) IPO

Appendix 3: Company Y, CEO

Company overview

Company name: Company Y

Interviewee: CEO

Summary

Why are there are so few unicorns in Japan?

- The companies are not few if we included listed companies. The biggest issue is language. For Japanese companies, people who speak Japanese become the main customers, so the market size and company size would inevitably be small. In other words, if a company with a market capitalization of 1 billion dollars in Japan goes to English-speaking countries, the value would be 10 billion dollars.
- Compared with Japan and the United States, entrepreneurs' mindsets are different. A big difference between these countries is the way of thinking in terms of whether they are positive about M&As or not. American entrepreneurs are strongly motivated to earn money and expand market share, even if they lose management rights. They see how reasonable it is, based on the terms and conditions of IPO and M&As. For this reason, many people continuously engage in entrepreneurship and sell their companies. Japanese entrepreneurs place more emphasis on their own management rather than raising capital by acquisition.
- I do not think the quality is very different, but the ideas come faster in the USA.

Commented [RH45]: (1) The companies are not few if we included listed companies.

Commented [RH46]: (1) Language barrier

Commented [RH47]: (1) Many startups target the domestic market

Commented [RH48]: (1) Startup potential is the same

Commented [RH49]: (1) CEO mindset is different

Commented [RH50]: (1) Idea quality is the same, but ideas come faster in the US

What do you think about the fact that Japan has so few unicorns? Is having few Unicorns in Japan good or bad?

- I wonder whether it is a problem that there are not many unicorns. It is important to create a big growing company, but it is hard to say if this is a negative thing. It depends on which path each company wants to take. The timing of going public is not so much a problem.

Commented [RH51]: (2) Not a negative thing

Commented [RH52]: (2) If company is aiming to be worth

Commented [RH53]: (2) Listing timing depends on company's choice

What are the advantages of being listed?

- Although it is said that funds and trust are obtained when a company is listed, the biggest advantage of IPO is having huge investment. The key reason for going public is having

Commented [RH54]: Funding > Trust

huge investment. By using this lever, it enables a company to expand its maximum reach.

Commented [RH55]: Expanding business

What opportunities convinced you to start your own company?

- When I was 23, I had the opportunity to meet a person. He is an entrepreneur and his words raised my consciousness of entrepreneurship.

Commented [RH56]: At the age of 23

Commented [RH57]: Met an entrepreneur

What are factors brought your company to this stage?

- The key success factors vary depending on the phase. Most recently, the decisive factor was great effort to create in the market with a sense of crisis and a high level of perspective. At one time, there were about 40 companies, including major companies, but we competed and survived because we had these principles.

Commented [RH58]: (5) Get things done mind

Commented [RH59]: (5) A sense of crises

Commented [RH60]: (5) Higher perspective

What are your future plans?

- I think that it is necessary to create an atmosphere in which talented people and those who work hard are fairly evaluated. We will continue to properly support them. On the other hand, I still think that we have a lot of unhappy people in the world, so I want to try various projects that lead to the greatest number of people in the world being happy and energetic. IPO is once of options.

Commented [RH61]: (8) Continuing to support creativity, trying various projects to make greatest number of people happy

Commented [RH62]: (8) IPO

Appendix 4: ExaWizards Inc., CEO Ko Ishiyama

Company overview

Company name: ExaWizards Inc. (<https://exawizards.com/en/>)

Interviewee: Ko Ishiyama (President and CEO)

Founded: February 2016

Capital: 522.46 million yen

Number of employees: 100 (as of October 2018)

Business: Developing AI-enabled services for industrial innovation and solutions to social problems

About the interviewee

The company's predecessor, Exaintelligence Inc., was a venture founded in February 2016 with former DeNA Chairman Makoyo Haruta with engineers from Kyoto University and Osaka University. In October 2017, Mr. Ishiyama took up his new post at ExaWizards. He also established Recruit's AI Institute, RIT (Recruit Institute of Technology). (Source: Interview from Dream Gate; <https://www.dreamgate.gr.jp/contents/case/company/29248>)

Commented [RH63]: Working experience in Recruit
Had experience of running a company before

Summary

Why are there so few unicorns in Japan?

- The market size companies are targeting is small compared to other countries. In Japan, many companies consider the domestic market first. After IPO, companies go global in general. Unlike Japanese companies, American companies are targeting the global market from the very beginning. For Chinese companies, the domestic market is large, so even companies focusing only on the domestic market have the potential to be unicorns.

Commented [RH64]: (3) Many startups targeting domestic (small) market at first
A global expansion would be after IPO

What do you think about the fact that Japan has so few unicorns? Is having few

Unicorns in Japan good or bad?

- Japanese companies have potential. Companies can succeed if companies can maximize the potential. Rather than having few unicorns, the problem is that Japanese companies do not fully use the potential for growth.

Commented [RH65]: (2) Startups have potential

Commented [RH66]: (2) Not maximizing startups' potential to grow is a problem

How can the situation be improved?

- Considering the total amount of R&D budget of Japanese large corporations and the amount of money sleeping inside the large corporations, the investment potential from large corporations for startups is quite large compared with the US and China. I think it will be easier to create startups in Japan if they can address the problems that large corporations cannot solve alone.
- While large corporations are becoming more enthusiastic about investing to startups, the real challenge would be whether they are competitive enough globally, in terms of their technology level. Startups would have more opportunity to grow by not just being subcontractors for large corporations.

Commented [RH67]: (3) Funding from large corporations

Commented [RH68]: (3) start-ups play roles that large corporations cannot play

What is the current situation for start-up companies?

- More large corporations are becoming more motivated to raise funds for startups.

Commented [RH69]: (4) Large corporations becoming investing more

What barriers have you faced? What are the barriers for startups?

- Being unlisted is not a bottleneck in terms of hiring. Rather, stock options are advantageous. While a company is small, the company need to break through the “family block” barrier. When it comes to domestic hiring, families are skeptical of small companies and what we do to overcome the problem is to increase exposure in the media.

Commented [RH70]: (7) Critical social image

What opportunities convinced you to start own company?

- I had the desire to solve social problems and wrote 18 papers with the theme of “applying AI to solve social problems” during my studies in graduate school. However, when I was writing a paper, I realized that the world will not be changed by writing papers and decided to move from the academic world to the business world. (An interview from Dream Gate: <https://www.dreamgate.gr.jp/contents/case/company/29248>)

Commented [RH71]: When writing papers

What factors brought your company to this stage?

- A good vision gathers good wizards (HR).
- We are aiming to do business not only in the existing market but also seeking new markets. The difficulty of solving problems is great; however, a challenging environment is worth challenging.

Commented [RH72]: (5) Good vision
(5) Diversified talents

Commented [RH73]: (8) Creating new markets

What are your future plans?

- IPO and being a serial entrepreneur could be one of the choices.
- I want ExaWizards Inc. to become a company that keeps increasing its scope and increasing the quantity of solvable social problems. Our current focus is the super-aged society but, in the future, we would like to be a company that can solve all 17 SDGs.

Commented [RH74]: (8) IPO

Commented [RH75]: (8) Dealing with unmet needs under every theme of SDGs

Appendix 5: Interview with giftee Inc., Mutusumi Ota

Company overview

Company name: giftee Inc. (<https://giftee.co/>)

Interviewee: Mutusumi Ota (CEO)

Founded: August, 2010

Capital: 1,016.7 million (including capital reserve)

Number of employees: 46 (as of August, 2018)

Business: Internet Service: Social gift platform

About the interviewee

Mutusumi Ota (CEO): After graduating from university, he engaged in large-scale development work for the public sector in Accenture Corporation. In 2010, he established giftee Co., Ltd. and work as a representative director.

Summary

Why are there so few unicorns in Japan?

- I feel that the way PER [price-to-earnings ratio] is calculated is different in Japan than overseas. In Japan, there is consensus that market capitalization is several tens of billion yen or several billion yen. There is a premise that there is little understanding that PER would be dozens of times bigger in Japan. The reason is the target market of Japanese companies is smaller than the target market of other countries. Many Japanese companies are not aiming to climb Mt. Everest [the world's highest mountain], instead aiming to climb Mt. Fuji [Japan's highest mountain]; this is the reason why there are few unicorns in Japan.
- Language matters and it could be a big barrier.

Commented [RH76]: (1) May have differences in calculating PER

Commented [RH77]: (1) Many startups target only the domestic (small) market

Commented [RH78]: (3) Language barrier

What do you think about the fact that Japan has so few unicorns? Is having few Unicorns in Japan good or bad?

- It depends on each person. Personally, I feel sad about the fact that Japan is lagging behind other countries and more unicorn companies should be founded in Japan. On the other hand, it is difficult to think of who could increase the number of unicorns.

Commented [RH79]: (2) The number of unicorn depends on people

How can the situation be improved?

- It depends on the service, but I think there are competitors for those that have highly demanded products/services worldwide. Therefore, it is necessary for companies to customize services in each country by understanding the culture and language there properly. To carry on the business and create satisfactory service for each country, it is necessary for people from each country to join the team.

Commented [RH80]: (3) Depends on service

Commented [RH81]: (3) Understanding local culture and language properly

What opportunities convinced you to start your own company?

- I started to think about having my own business when I was in the junior year of university. The book called *Web Evolution Theory* was a trigger to developing my mind to become an entrepreneur. In the book, various startups were attempting to improve and update society in the United States. Once I knew of these attempts to move society forward, I wanted to do the same thing in Japan, but there were no such companies to consider when I was doing job hunting.
- While working in Accenture, I came up with a specific business idea. When my birthday notification was about to appear on Facebook, I thought that the communication could be further improved. Without knowing the address of the receiver or having to meet him/her directly, I thought that a physical gift would be good idea to deliver warm greetings. I came up with the idea of converting a warm greeting into a hot drink such as a coffee gift instead of a digital gift.
- When I talked over the idea with a senior entrepreneur from my university, the entrepreneur initially suggested that I “double job”, which convinced me to start a business. At first, I made a prototype while continuing to work in the consulting firm.

Commented [RH82]: Inspired by a book

Commented [RH83]: Talked with a senior entrepreneur

What factors brought your company to this stage?

- One of the reasons is networking effect. Firstly, alliances with Starbucks were confirmed. Because of the alliance with Starbucks, we were able to negotiate a contract with “LINE,” a major Japanese SNS company. Because of the contract with LINE, we could cooperate with the big sweets chains “31” and “Mr. Donuts.” There was a difficult initial phase, such as negotiating a contract with Starbucks and the sudden entry of LINE, but now these have turned out to be positives.
- People are also important. I have three core areas when I recruit people. I seek people who attract luck, who value encounters, or who care about their intuition. In startups,

Commented [RH84]: Networking effect

Commented [RH85]: (7) HR

Commented [RH86]:

there are always many good things and bad things that happen; the feeling is like a riding on a roller-coaster. In such unstable circumstance, it's good to have people with those three values because those people have an optimistic and stable mind. Regarding luck and encounters, there are many studies that have been done, although some say we have the same amount of luck. Stanford University conducted a research about luck and encounters. First, they divided people into two groups, one group with people who thought they were lucky, another group with people who thought they were unlucky. They were then presented with a café situation. Once people entered the café, there was a \$100 bill on the ground. Also, people were asked to share a table because the café was full. The interesting fact is that people who thought they were lucky were more likely to noticed about \$100 bill and also more likely to say yes to sharing a table. I think the willingness to share a table explains that people who consider themselves lucky tend to invest more of their time in small possibilities. So, the accumulation of investment leads to great outcomes.

What are your future plans?

- I cannot think about the way of exit and being a serial entrepreneur for now. The definition of our success is giftee becoming a part of the culture. The strongest point about this service is letting people move on and explore new things that they had never done before. Just by buying a cup of coffee, a person may pass a different street and find a beautiful flower shop and, from that opportunity, he/she may want to become a florist. A cup of coffee is just a one-coin gift but, when it adds a little experience, it may widen the focus of a person's life. I expect giftee to play such a role.

Commented [RH87]: (8) Not thinking about the future or being a serial entrepreneur

Commented [RH88]: (8) Wants to the service to be culture of people

Appendix 6: Interview with Integrity Healthcare Co.,Ltd., CFO/Director Shojiro Mitsuzawa

Company overview

Company name: Integrity Healthcare Co., Ltd. (<https://www.integrity-healthcare.co.jp>)

Interviewees: Shojiro Mitsuzawa (CFO/Director); also present, Aika Matsuoka (Corporate PR Department)

Founded: October 2009

Capital:1,159 billion (including capital reserve)

Number of employees: 50 (as of September 2018)

Business: Providing solutions for doctors' medical support by using technology

About the main interviewee

Shojiro Mitsuzawa (CEO): Participated in Integrity Healthcare Co., Ltd. through the Nippon Credit Bank, Accenture Inc., and Mitsui & Co., Ltd. During his work in Mitsui & Co., he establishes a new business in New York in 2011 and served as the president. (Source: Interview from official company website; <https://www.integrity-healthcare.co.jp/member/>)

Summary

Why are there so few unicorns in Japan?

- In Japan, not only is the number of unicorns small, but the number of startup companies is also extremely small in terms of economic scale.
- The situation has been changing; however, Japanese investors from the financial industry tend to be more conservative and investments tend to be smaller than in the United States. It is also true that short-term investor-exit strategies and profits are required.
- This also has been changing, but the number of Japanese large corporations that actively use startup technologies and services is much less than in the United States. Using start-up technologies and services is considered as risk.

Commented [RH89]: (1) Fewer companies

Commented [RH90]: (1) Conservative investors

Commented [RH91]: (1) Small amount of investment

Commented [RH92]: (1) A lack of large corporation's support (in the past)

What do you think about the fact that Japan has so few unicorns? Is having few Unicorns in Japan good or bad?

- I wish the number of startups companies would increase and the number should increase. The things that startups can do and what large corporations can do are different. While large corporations have a large corporation's strengths and new ventures have breakthrough strengths/disruptive power at certain points, so each should do business by using their respective strengths.
- Since in Japan it is particularly difficult to create new ideas, it is important for startups to create new ideas. Also, startups are more flexible about what people toned to do. For the Japanese, it is good to have such a place that can carry through their ideas to reality. Moreover, increasing the number of startups is also good for the economy.

Commented [RH93]: (2) Better to have more start-ups

Commented [RH94]: (2) Division of work with large corporations

What is the current situation for start-up companies?

- The Situation is getting better. The idea of investments for Japanese investors, the posture and support of large firms, and the mindset of people joining start-up companies (managers and employees) have all changed and are heading in a good direction. There have been several start-up booms and busts in the past, but I think this time it will not wither. After the tragedy of the East Japan Earthquake in 2011, people have become more honest about what they think it is important, and more talented people are likely to join startups.
- The number of top-tier people who start their own business has been increasing. Large corporations even allow people failed in business to return, so I think that the number will increase more in the future. As same time, successful people and companies will increase rapidly, such as the case of Mercari. It will bring about a good cycle.
- On the other hand, the social image of startups is still not completely positive. Parents and wives block future possibilities at the time of changing jobs.

Commented [RH95]: (4) Getting better (investors, large corporations and HR)

Commented [RH96]: (7) Critical social image

Does unlisting become a bottleneck for doing business?

- There is no influence on hiring. Regarding money, if the company has grown enough, there is equity, so there is not much trouble. However, companies cannot take out loans, so there could be restrictions for unlisted companies.

Commented [RH97]: Loans

What opportunities convinced you to take up your current position?

- When I was working for Mitsui & Co., Ltd. I launched and ran a company. Then I felt that, rather than taking actions based on instructions, taking my own initiative was much more fun. Before I turned 40, running a business became my dream. Running a business here does not mean a business involved in moving money through investment, but a business that involves service provision.

What factors brought your company to this stage?

- The most important thing is sympathetic “vision” and “people.” With good vision, talented people follow. Also, unlike large corporations, startups are not viable unless all employees maximize their potential. In terms of management, speed and a sense of integrity are also important criteria.

Commented [RH98]: (5) Good vision

Commented [RH99]: (5) HR

Commented [RH100]: (5) Speed and Integrity for management

What are your future plans?

- Generally, companies that succeed in Japan expand their business overseas. However, we started the business in China at the same time as in Japan and we are about to run the business in China. I talked with the CEO about going global from the beginning. On the other hand, I have never thought about much being a unicorn. In terms of investor-exit strategy, IPO is one of the options we have. The reason for IPO is that we would like to return stock-option profits to employees. It is important to prioritize the best way to grow the business, whether that means going public or not.
- With the declining birthrate and the aging of society, social security expenses exert great pressure on the national finances. The current medical care and nursing-care system is approaching its limit. Also, fatigue of families and care workers who are supporting them is becoming a big social problem. Through technology and social innovation, we want to realize a better medical system and a sustainable social medical system. (Source: <https://www.integrity-healthcare.co.jp/company/>)

Commented [RH101]: (8) Expand globally

Commented [RH102]: (8) IPO

Commented [RH103]: (8) Making a sustainable health care system and social system.

Appendix 7: Loop Inc., CEO Souichiro Nakamura

Company overview

Company name: Loop Inc. (<https://loop.co.jp>)

Interviewees: Souichiro Nakamura (President); also present, Naoko Yoshikawa (Marketing Division)

Founded: April, 2011

Capital: 2,251 million yen (capital reserve 1,930 million yen) (as of September, 2018)

Number of employees: 250 (as of September 2018)

Business:

- Development, sales, installation, construction, management, maintenance of photovoltaic power plant system
- Installation and management of photovoltaic power plant
- Internet sales of independent solar power generation system and peripheral equipment
- Planning, development and sale of products using natural energy
- General insurance agency business
- Electricity retailing business
- Outsourcing business related to power retailing business

About the main interviewee

Souichiro Nakamura (President): He launched an Internet business when he was a university student in China. The business involved selling Chinese products in Japan. After graduating from university, he worked in two companies. In April 2011, the Great East Japan Earthquake occurred. The trigger to start his own business was the experience of working in the areas affected by the earthquake. Through the installation of photovoltaic power stations, he helped locals. The sales in the first half of 2018 exceeded 45 billion yen.

(Source: Dream Gate; <https://www.dreamgate.gr.jp/contents/case/interview/35262>)

Summary

Why are there so few unicorns in Japan?

- There is a rich market in Japan and it is possible to sell to a certain extent, so people are satisfied with the current situation. I think the main problem is that entrepreneurs get immediately satisfied, and their ambition is small. The Japanese education system could be influenced to change such a characteristic.

Commented [RH104]: Had working experience

Commented [RH105]: (1) People satisfied with current situation

- The ecosystem in Japan to make unicorns is incomplete. In the United States, there is a sense that angel investors play an important role in nurturing unicorns and they have strong feeling that they should make unicorns. In Japan, there are few angel investors; banks usually lend money. If banks lend you money, companies do not need angel investors. There is a large market so, if you sell in this market you can manage to survive. Indeed, if companies borrow money, companies are required to make profit by lenders. So, companies need to create a business that make sales and has returns in a short term.

Commented [RH106]: (3) Ecosystem (profit-oriented system and low mindset CEOs)

What do you think about the fact that Japan has so few unicorns? Is having few Unicorns in Japan good or bad?

- Before thinking about the number of unicorns, there are many more problems that you need to think of first. The real problem is there have been no global companies launched since the 1980s that compete globally. If the situation continues, Japan cannot earn foreign currency and that will be a serious problem. Not earning foreign currency means that the national power will be decrease and the global position of Japan will be lower.

Commented [RH107]: (1) Only few global competitive companies launched after 1980

Commented [RH108]: (1) Japan cannot earn foreign currency

How can the situation be improved?

- Everyone should have a sense of crisis and companies should have the will to become the only company. In addition, they should not be satisfied with their current situation and be more serious about trying things globally.

Commented [RH109]: (3) Having a sense of crisis

Commented [RH110]: (3) Have a will to become only one company

Commented [RH111]: (3) Change in mindset of CEO
Not being satisfied with current situation

What opportunities convinced you to start your own company?

- The opportunity for our foundation was volunteering with solar panels installed after the Great East Japan Earthquake. We established an independent photovoltaic power generation system for those whose power supply had been discontinued by the earthquake. We were appreciated by many victims and that is how we developed the idea of having our own business.

Commented [RH112]: After he visited Tohoku, right after the 311 earthquakes

What factors brought your company to this stage?

- What brought us this stage was good luck and the good talents of those were convinced of the company's direction. I do not think we have not succeeded yet. I would like to do my best so that the company is told that the work should be done by Loop.

Commented [RH113]: (5) Company's vision and challenging environment attract talented HR
(5) Luck

What are your future plans?

The aim to be the best electric power company in Japan, at least. I would like to be a company that is competitive globally, whether a unicorn or not. I would like Looop to be a company that will continue to grow even after 50 years, 100 years, or more.

Commented [RH114]: (8) Keep business growing

In the future, I would like to make the company function so well that it makes me say “this has to be done by Looop.” Specifically, I would like to design a scheme through which the company can offer electricity more efficiently at a cheaper price by using digital technology. In addition, we are looking for overseas expansion in the near future.

Commented [RH115]: (8) To be only one company

Commented [RH116]: (8) Global expansion

IPO is one of the options. However, there are disadvantages, such as not being able to develop business freely. So, we are planning to go public, but only when we think it is necessary.

Commented [RH117]: (14) IPO is one of the options

Appendix 8: NEXT-e Solutions Inc., President & CEO Makoto Inoue and Director Takeshi Yasui

Company overview

Company name: NEXT-e Solutions Inc. (<https://www.nextes.jp/en/>)

Interviewees: Makoto Inoue (President & CEO); Takeshi Yasui (Director)

Founded: May 2008

Capital: 602,770 thousand yen (as of March 2018)

Number of employees: 23 (as of March,2018)

Business

- The development, manufacture and sales of the next generation battery management systems (BMS) and battery systems
- The development, manufacture and sales of IC for BMS
- Technical solutions for lithium-ion battery reuse
- Electric vehicle R&D, support and consulting services for vehicle development and manufacture
- The development, manufacture and sales of core components for electric vehicles

About the interviewees

Mr. Inoue (CEO): Had work experience at Sumitomo Mitsui Banking Corporation and the Japan Research Institute, Ltd, then Established NEXT-e Solutions Co., Ltd. in 2008.

Commented [RH118]: Had working experiences in Japanese big bank and a research firm.

Mr. Yasui (Director): Worked at Honda Motor Co., Ltd. He has been involved with NEXT-e Solutions Co., Ltd for two years. When he was working at Honda Motor Co., Ltd., he had 11 years of work experience in Silicon Valley.

Summary

Why are there so few unicorns in Japan?

- In Japan, culturally, failure is not allowed and there is too much risk for startups. Unlike in Japan, there is no such risk attached to failure in the United States. Moreover, if there are good ideas or technologies, then funding comes easily in the United States.
- Large corporations in Japan are not actively adopting new things. In contrast, China and the United States are active in adopting new things; additionally, they have big internal market. So, companies can grow by themselves.

Commented [RH119]: (1) Conservative culture

Commented [RH120]: (1) Too much risks for startups

Commented [RH121]: (1) Large corporations are not adapting new things

Commented [RH122]: (3) Open innovation of large corporations

- The balance between demand and supply for entrepreneurs and investors, and the surrounding environments, are greatly affected. Before starting my own business, I had thought that startups would not grow because of less investment in Japan but, in fact, the problem is not only about investment. Rather, there are no entrepreneurs who can paint the big picture. Entrepreneurs tends to think small, so investment size cannot not increase. For increased investment size, investors are investing abroad. However, this is something that cannot be helped, because companies can be only be grown through the leadership of experienced people. The situation needs to be change.

Commented [RH123]: (1) The balance of supply and demand

Commented [RH124]: (1) Original ecosystem

Commented [RH125]: Japan needs to change

How can the situation be improved?

- Increasing the number of startups is the key. It is important to reduce risks and increase the number of entrepreneurs. Furthermore, the more successful cases there are, the more the interest in entrepreneurship will increase.
- The perception that both China and America have is that failure is acceptable. Additionally, risks are reduced as there are more lenders, so companies can speed up and test more easily. The tests can be performed in their own country, so startups can get the data right away.
- Since sellers and creators are different in Japan, it may take time and costs may become high. That would also be a reason why companies are not launched in Japan

Commented [RH126]: (3) Increasing the number of startups

Commented [RH127]: (3) Reducing risks for start-ups

Commented [RH128]: (3) Having more success stories

Commented [RH129]: (5) Accepting failure

Commented [RH130]: (5) More investment in startups

Commented [RH131]: (5) Ease regulations

What is the current situation for start-up companies?

- Although the environment has been improving, the structure of large, conservative corporations is taking root. In the domestic environment, companies are difficult to grow. Big Japanese companies must make investments and be open to innovation more actively. Equally important is that the market environment is very severe in the beginning and society is tough on failures. So, it is difficult to collect money and the environment is hard for startups.
- In terms of goal setting, many Japanese startups think of forecasting in terms of what companies can do by using existing things. When it starts from what they already have, ideas tend to be small and it is hard to become a unicorn.

Commented [RH132]: (6) Getting better

Commented [RH133]: (6) but still challenging

Commented [RH134]: (7) Cooperation of large corporations

Commented [RH135]: (7) Financing

What opportunities convinced you to start your own company?

- I had a desire to start own business since I was in university. Since then, I have kept working to achieve my dream. The turning point was when I was chosen as UTEC entrepreneur in residence.

Commented [RH136]: University student

Commented [RH137]: Accepted as UTEC Entrepreneur in Residence

What factors brought your company to this stage?

- Having a clear vision that is globally legitimate for everyone. Believe in the vision and proceed without wavering. In order to carry on, technologies and people are also important factors in pursuing the vision.

Commented [RH138]: (5) Legitimate goal setting

Commented [RH139]: (5) Technology

Commented [RH140]: (5) HR

What are your future plans?

- IPO is being considered. Thus, shareholders who have supported us can gain capital gains and we will be able to generate funding for further growth, and the management team and employees who have worked hard can continue to operate the company in the future. So, it will be win-win situation for everyone.

Commented [RH141]: (8) IPO

Commented [RH142]: (15) Win-win

Appendix 9: NEC Capital Solutions Limited, Partner Harumi Kato

About the interviewees

Harumi Kato (Partner, NEC Solutions Limited (Venture Capitalists)): Joined NEC Corporation in 1974. While head of NEC USA's Corporate Planning Department, he set up a joint-venture company, called "Convergence Ventures," with Sumitomo Bank in Silicon Valley. He also participated in the Intel 64 Fund, which was founded by Intel and its partner companies, and, after that, became a General Partner at Key Note Ventures. Currently, he is an Adjunct Researcher at Tokyo University's Industry–Academia Collaboration Center and a partner at the consulting company AZCA Partners. (Source: NEC official web page; <http://www.necap.co.jp/english/service/innovative/team.html>)

Mr. Yasui (Director, NEXT-e Solutions Inc.; effected the introduction to Mr. Kato and participated in the interview): Worked at Honda Motor Co., Ltd. He has been involved with NEXT-e Solutions Co., Ltd for two years. When he was working in Honda Motor Co., Ltd., he had 11 years of work experience in Silicon Valley.

Summary

Why are there so few unicorns in Japan?

- There are two main factors. Firstly, there are differences in listing requirements between Japan and the United States. They depend on the type of industry and other factors but, generally speaking, to be listed on the NASDAQ is more difficult than to be listed on Mothers. The sales requirement is around 10 billion yen on the NASDAQ, while companies can be listed around sales of 1 billion yen on Mothers. The second reason would be the lack of motivation to make the company big.
- There are various differences in the environment. One thing is that Japanese venture capital is obviously different from that in the United States. There are only a few venture capitalists that can support the growth period of startup companies. From the viewpoint of fund size, experience, and ability, there are only a few venture capitalists that can sufficiently support and nurture startups.
- It is hard for startups to have full financial support. When it comes to the size of the investments, if a company wants to raise funds of between 1 billion and 3 billion yen, that is available from venture capitals. But, if raising the money from venture capital is

Commented [RH143]: (1) Different listing system

Commented [RH144]: (1) Lack of motivation to grow the companies big

Commented [RH145]: (1) Fund size, experiences and abilities are different in VC

Commented [RH146]: (3) Small amount of investment

hard, it convinces more companies to go public. Therefore, companies can be listed with a small amount of money on the Japanese stock market.

- In terms of listing age, Japanese companies are very young. If a company has sales of around 1 billion yen, it can be listed. Indeed, the environment is hard for companies to raise funds, so companies rush into listing. M&As in Japan have been increasing, but still the number of strategic acquisitions is fewer compared with the United States, in which the majority of companies choose M&As for their investor exit strategy. From the venture capitalists' perspective, if companies cannot exit by M&A, it encourages early listing. The variety of these factors, combined, creates a phenomenon in which it is difficult for Japan to have unicorns.
- You have to be careful in comparisons with China because China is a special phenomenon that it is bringing American business to a closed big market.

Commented [RH147]: (1) Different Ecosystem

What do you think about the fact that Japan has so few unicorns? Is having few Unicorns in Japan good or bad?

- Rather than the small numbers of unicorns in Japan, the lack of motivation to make the company big is more problematic. It is hard to say whether it is good or bad about there being so few unicorns in Japan, because the reason unicorns do not grow is greatly affected by the regulatory restriction for startups.
- Unicorns are not a positive phenomenon from the view point from American venture capitalists. The top venture capitalists were most successful around the year 2000 and the bubble has been one of the triggers for venture capitalists to invest a lot. However, venture capitalists have the proper size. The number of investing companies in one fund is 10–20 companies (portfolio investment). I think the investment amount would be a minimum of 20 billion yen and the maximum 50 billion yen. Generally, top venture capitalists create a new fund every three years if they succeed and the fund grows bigger and bigger. It is possible that one fund may invest 100 billion yen. It became a temporary debate that top-tier funds raised too much money and said they want to quit. Why? Because if it collected too much money, it makes it difficult to achieve IRR figures for a huge amount of funding. In other words, even if venture capitalists collected money, they cannot use part of the fund. Once venture capitalists collect the

Commented [RH148]: (2) Few unicorn is not a problem. The lack of motivation is more problematic

Commented [RH149]: (2) Neither good or bad

Commented [RH150]: (2) Unicorns are not always welcomed

money, they must return it for that total amount of money they received. So, there is a big difference between returning 10 billion yen at 20 billion yen and returning 100 billion yen at 200 billion yen. For venture capitalists, it is difficult to increase the number of people, so venture capitals cannot increase the number of companies to invest and, as a result, the size of each investment increases.

- Let's assume that we will invest 10 billion yen in 10 companies. When it becomes ten times more funding, it means that venture capitalists have to invest 10 billion yen at a time. To invest 10 billion, the venture capitalists need to collect a huge amount money and this does not come from just one company. It means that venture capitalists cannot find this much money unless it becomes a special situation and venture capital is no longer venture capital. Also, even if the startup continues to grow, the original numbers could be good, but it would not increase the returns soon. It is impossible for the company to go public halfway into the investment, but it falls into a situation where are not too many people wanting to buy because it is too big and expensive. It seems ostensibly successful on the surface but, actually, it is a headache for venture capitalists, because venture capitals cannot return enough IRR to investors. Venture capitalists cannot ask a startup to be listed, as it could not be acquired within venture capitalist's expected price. So, unicorns have not had a positive evaluation by venture capitalists, at least for several years. So, we need to deal with unicorns carefully.

Why corporates are not growing in Japan?

- Problems exist in various parts of the current ecosystem. This problem includes issues on the startup ecosystem, entrepreneurs' mindset, and cultural problems. There are so many factors, but the main factor is that so few people are aiming to launch a business and this should be the first concern.
- In Japan, entrepreneurship is not rooted in the culture. Top-tier people tend to go to large corporations. In the United States, is the opposite is true and top-tier people think big. For example, there is a book called *If You Want to Really Change the World*, written by SRI International's top executive officer Norman Winarsky and executive officer Henry Kressel. It is a guide book that outlines best practices for creating startups that change the world. "Change the world" is rarely seen in a book title in Japan. It shows the difference in mindset between Americans and Japanese. The startups' excitement of aiming big is not penetrating Japan.

Commented [RH151]: (1) Different ecosystem

Commented [RH152]: (1) Different entrepreneurs' mindset

Commented [RH153]: (1) Cultural problems

- Start-up thinking (culture) has long been rooted in the United States. For example, the company Netscape was created by James Clark and Mark Andreessen in 1994 and listed in 1995. At a conference in which Netscape was involved, both before and after listing, there was a person who asked whether the acquisition of talent should be a critical issue. The question was asked because Netscape was still new at that time and there was little recognition of its name. However, Mark stated, “*Human resources are no problem at all, talented people come and join us.*” Even in the mid-1990s, there were already young talents joining startups.
- From my own experience of venture capital in the US, the projects coming to Silicon Valley are high in quality. Also, I think entrepreneurs themselves are very ambitious. In the case of Japan, ideas are small, and entrepreneurs are less motivated. The reason behind this is, if a company tries to do something big, it has to raise a large amount of funds in Japan. In Japan, it is very difficult to raise a large amount of funds. Meanwhile, in the United States, venture capitals are large and numerous. In the funding environment, it differs by a factor of 60–70 in Japan and the United States. In other words, since the United States has about three times as large a population as Japan, it differs by several dozen times from this. Many entrepreneurs try desperately but cannot collect the money, ending up being demotivated.
- When investing, the criteria and mindset of venture capitalists also differs between the United States and Japan. In venture capital, we call sales the top line and profit the bottom line. In the United States, extending the top line, the market size (how much the market has potential), is very important. If it is a first-class venture capital, it may not invest if the market potential is less than 100 billion yen. In addition, there are many companies that actually do not make profit in the United States, even if billions of yen of sales are raised. On the other hand, Japanese venture capital is more concerned with the bottom line and the question “when profit be made?” is asked when 100 or 200 million yen of sales have been made. The reason behind is that Japanese venture capital emphasizes that companies can be listed when the company’s sales reach one billion yen. In other words, if we think about ten percent of ten billion, accounting for one billion yen, the original market size could be less than ten billion. [Usually, companies raise 10% of funding of projected sales.] The strategy is to achieve sales of one billion

yen then go public to grow further, but there is the possibility that the original market is under 10 billion yen. This might be putting the cart before the horse.

- In the venture capital industry, to “pass” means “not to invest.” The decision is correct most of time, but a few companies “passed” do occasionally become successful. When this happens, we have a reflection meeting to see what mistakes we made. There are various reasons but, according to venture capitalists, there is almost no successful companies that is “passed” to the market size. The market size is that important. We also value management quality and capability to make sure when companies faced a problem, the management layer can overcome with problem.

What is the current situation for start-up companies?

- The number of people who start a business is increasing compared to the past.

What is the difference between the role of angel investors and venture capitalists?

- There are not many statements demonstrating the number of angel investors, but I think the United States has more angels. There are also many successful people with great success and they actively invest money in startup companies. Regarding Japan, there are not many such people yet.
- Angel investors are also valuable in the sense of investing in startups at a very early stage. At that time, venture capitalists do not generally invest. For venture capitalists, investment starts from the first institutional round after the company has been running for a while. At this time, the angels do not invest. venture capital is very strict in terms of review since the funds come from others. Regarding angels, they are using their own money, so there is a variety of people. Some investigate very strictly, but some invest based on their prior experiences, values, and feelings.
- The advantages of getting money from venture capital is not only about funding. Companies can receive various kinds of support as well as having money coming in. For example, venture capitalists introduce personal networks. Within venture capitalism, capability and performance are different for each venture capitalist, but it is better to look at it not only for the purpose of borrowing money but also for how much value can be added.

About venture capital

- The duration of venture capital investment is 10 years in both America and Japan. Each fund is finite and usually 12 years maximum because it can be extended for two years. As an exception, there are venture capital funds that are not in that form. The first two years are for new investment and, after that, money is put in according to the business conditions of the company. If venture capital is invested up to three years, it has seven more years remaining. If the extension period is included, it will be nine years. Exit is required for startups during this time. It is very important whether or not the company can exit in a limited time.
- From my own experience, even in top-tier venture capital, one out of ten are home runs (return larger than investment is obtained), 2–3 are hits (about the same return as investment), and the others return almost zero. Even if we examine carefully and after investing, entering the board and supporting in various ways, venture funds obtain these results. It is a very difficult thing for even venture capitalists to get a return.

Appendix 10: Cross-Case Analysis Table

(A)

Company X	Coiney, Inc.	Company Y	ExaWizards Inc.	giftee Inc.
Q1: Why are there so few unicorns in Japan?				
<ul style="list-style-type: none"> -Conservative culture -Large corporations do everything individually -Fewer start-ups -Lack of aggressiveness regarding existing services -Strict government regulations 	<ul style="list-style-type: none"> -The companies are not few if we included listed companies. -Less investors, entrepreneurs and professional CEOs -A lack of growth environment for start-ups -Few start-ups are deemed worthy of investment -Many start-ups target the domestic market -A feudal old tradition -Original ideology and structure -Easy to be listed -Critical social image -Lack of knowledge about entrepreneurship -Mistakes are not allowed -People like stability 	<ul style="list-style-type: none"> -The companies are not few if we included listed companies. -Language barrier -Start-up potentials is the same -Many start-ups aiming domestic market -CEO mindset is different -Idea quality is same, but faster in the U.S. 	<ul style="list-style-type: none"> -Many start-ups aiming domestic (small) market at first -A global expansion would be after IPO 	<ul style="list-style-type: none"> -May have difference in calculating PER -Many start-ups target only the domestic (small) market -Language barrier -Village consciousness

Q2: What do you think about the fact that Japan has so few unicorns? Is having few Unicorns in Japan good or bad?				
Japan needs change	-Neither positive or negative, but hope to have more unicorns -Expansion depends on company's choice	-Not a negative thing. -If company is aiming to be worth -Listing timing depends on company's choice	-Start-ups have potentials. -Not maximizing start-ups' potential to grow is a problem	-The number of Unicorn depends on people
Q3: How can the situation be improved?				
-Sharing knowledge and know-how -Large corporation can be more aggressive in terms of M&A and alliance -Having a concept of getting surface		-	-Funding from large corporations - Start-ups play roles that large corporations cannot play	-Depends on service -Understanding local culture and language properly
Q4: How is the circumstance for start-up companies?				
-Changing following Merukari's success - Recruiting is getting better -Getting investment is challenging	-Getting investment is becoming easier -Recruiting is challenging	-	-Large corporations becoming investing more	-
Q5: What are factors brought your company on this stage?				
-Accumulation of small successes. -New in the market -Sympathize with customers	-Funding from trustable VC -Working style follows by company's growth model -No competitor	-Get things done mind -A sense of crises -Higher perspective	-Good visions - Diversified talents	-Networking effect -Luck -HR

Q6: What would help start-ups be more successful?				
-	-		Large corporations and government	-
Q7: What barriers have you faced? What are the barriers for start-ups?				
Strict government regulations	Critical social image	-	Critical social image	-
Q8: What are your future plans?				
-Being a serial entrepreneur -IPO -Expanding business in 3 ways (expand in items, target and countries)	-IPO -Continue to challenge in new markets	-IPO -Continuing support creativity, trying various projects to make greatest number of people happy	-IPO - Creating new markets - Dealing with unmet needs under every theme of SDGs	-Not thinking about exist and IPO. -Wants to the service to be culture of people

(B)

Integrity Healthcare, Co., Ltd.	Loop Inc	NEXT-e Solutions Inc.	NEC Capital Solutions Limited, Mr.Kato
Q1: Why are there so few unicorns in Japan?			
<ul style="list-style-type: none">-Fewer companies-Conservative investors-Small amount of investment-A lack of large corporation's support (in the past)	<ul style="list-style-type: none">-People satisfied with current situation-Ecosystem (profit-oriented system, low mindset CEOs)	<ul style="list-style-type: none">- Conservative culture-Too much risks for start-ups-Large companies are not adapt new things-The balance of supply and demand-Original Ecosystem	<ul style="list-style-type: none">-Different listing system-Lack of motivation to grow the companies big-Fund size, experiences, abilities are different in VC-Small amount of investment-Different ecosystem-Different entrepreneurs' mindset-Cultural Problems
Q2: What do you think about the fact that Japan has so few unicorns? Is having few Unicorns in Japan good or bad?			
<ul style="list-style-type: none">-Better to have more start-ups-Division of work with large corporations	<ul style="list-style-type: none">- Only few global competitive companies launched after 1980-Not good-Japan cannot earn foreign currency	Japan needs to change	<ul style="list-style-type: none">-Neither good or bad-Unicorns are not always welcomed-Few unicorn is not a problem. The lack of motivation is more problematic

Q3: How can the situation be improved?			
-	-Change in mindset of CEOs -Not being satisfied with current situation -Having a sense of crisis -Having a will to become only one company	-Increasing number of start-ups -Reducing risks for start-ups -Having more success stories -Open innovation of large corporations	
Q4: What is the current situation for start-up companies?			
Getting better (investors, large corporations and HR)	-	-Getting better but still challenging	-Getting better
Q5: What are factors brought your company to this stage?			
-Good vision -HR -Speed and integrity for management	-Company's vision and challenging environment attract talented HR -Luck	-Legitimate goal setting -Technologies -HR	-
Q6: What would help start-ups be more successful?			
Large corporations	-	-	-

Q7: What barriers have you faced? What are the barriers for start-ups?			
Critical social image	Financing (Deferred payment)	-Cooperation of large corporations -Financing	-
Q8: What are your future plans?			
Expending globally -IPO -Making a sustainable health care system and social system (*)	-Global expansion -IPO is one of options -Compete in global and keep business growing -To be only one company	-IPO -Win-Win -Expending more globally. By using technology, willing to solve environmental problem. (*)	-

(*) Had not mentioned in the interview, but from literature review

Q3: How can the situation be improved?



Q4: What is the current situation for start-up companies?



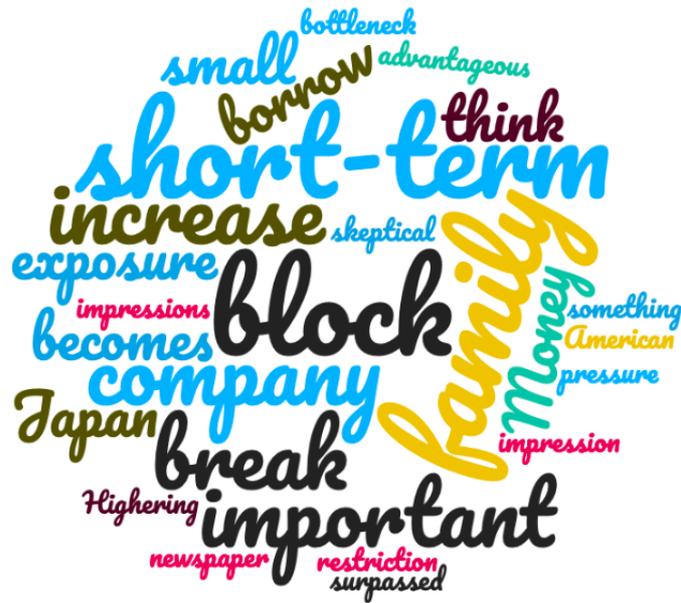
Q5: What are factors brought your company to this stage?



Q6: What would help start-ups be more successful?



Q7: What barriers have you faced? What are the barriers for start-ups?



Q8: What are your future plans?



Appendix 12: Interview's Most Used Words

Word Clouds List (I)

Q1: Why are there so few unicorns in Japan?

Q2: What do you think about the fact that Japan has so few unicorns? Is having few Unicorns in Japan good or bad?

Q3: How can the situation be improved?

Q4: What is the current situation for start-up companies?

Q1		Q2		Q3		Q4	
32	Japan	112	think	54	think	56	Japan
28	market	96	Japan	36	Japan	48	think
28	think	72	can	26	will	36	companies
24	business	72	increase	20	market	36	people
20	companies	64	company	16	can	32	environment
20	money	64	will	16	big	32	investors
16	good	64	startups	14	big-companies	32	changing
16	United States	56	start-up	14	startups	28	system
12	China	56	big-company	14	number	28	conservative
12	also	56	important	14	China	28	investment
12	people	40	processes	12	investment	20	financial
12	small	40	potential	12	company	20	recently
12	idea	40	companies	12	people	20	investor
12	size	32	unicorn	10	environment	16	Moreover
12	investment	32	problem	10	increase	16	startup
12	different	32	also	10	business	16	changed
12	startups	32	come	10	Silicon Valley	16	support
8	unicorns	24	enterprise	10	level	12	Mercari

Founder's characteristics

Startups characteristics

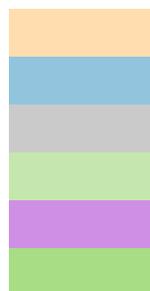
Political environment

Economic environment

Social environment

Technological environment

Culture or Cannot be clustered



Word Clouds List (II)

Q5: What are factors brought your company to this stage?

Q6: What would help start-ups be more successful?

Q7: What barriers have you faced? What are the barriers for start-ups?

Q8: What are your future plans?

Q5		Q6		Q7		Q8	
24	person	5	large	12	block	28	company
16	good	3	Big-companies	8	family	24	want
12	vision	3	companies	6	short-term	18	think
12	people	3	think	6	company	18	Japan
12	think	2	investment	6	break	16	business
10	technology	2	satisfied	4	important	16	grow
8	important	2	startups	4	increase	16	IPO
8	like	2	service	4	exposure	14	social
8	can	2	country	4	becomes	14	also
6	resources	2	amount	4	borrow	14	can
6	network	2	will	4	Money	10	system
6	thing	2	can	4	think	10	world
6	human	1	understanding	4	Japan	10	now
6	easy	1	enthusiastic	4	small	8	employees
6	luck	1	subcontract	2	advantageous	8	medical
6	edge	1	enterprises	2	impressions	8	China
4	Hiring	1	Considering	2	restriction	8	able
4	intuition	1	technology	2	bottleneck	6	development

- Founder`s characteristics
- Startups characteristics
- Political environment
- Economic environment
- Social environment
- Technological environment
- Culture or Cannot be clustered

