



THE INNOVATION ECOSYSTEM IN JAPAN

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Abstract

This paper will examine the status quo of the startup world, innovation systems and venture capital in Japan. Historically, Japan has always been special, and that seems to be the case even today. Whereas many European countries are plagued by high unemployment, driving people to entrepreneurship, Japan is experiencing a labour force shortage. Moreover, what is known about Japanese companies is that they constantly invested in in-house R&D for continuous innovation and new products, thus keeping one step ahead of the competition. This does not seem to be the case anymore – many Japanese companies are having trouble competing with Korean and Chinese corporations. So what drives entrepreneurial innovation in Japan today, what form does it take, in which fields? What is the role of venture capital, if any? These are some of the questions explored by this paper.

Keywords: Innovation ecosystem, Japan, Start-up, Venture capital

1. INTRODUCTION

Ever since the inception of the Internet, our transition to a globalized society has kicked into a higher gear. The ability to transmit large amounts of digital data to virtually any location on Earth in real time has opened up previously unimaginable opportunities for individuals and businesses alike. The business world has grown closer and closer together, even if its political counterpart seems to have lagged behind, if not taken a different path altogether. This is becoming increasingly true at an exponential rate in the 21st century – in the developed world, it has now become rare for an individual not to have a presence on online social media. According to Statista.com, the global leader in the social media industry, Facebook, had an astounding 1.59 billion active users in April 2016. A giant in mobile games, Finnish-founded and until very recently Japanese-owned (Osawa & Needleman, 2016) Supercell boasted 100 million

monthly active users in March 2016, with revenues surpassing €2 billion out of an estimated total market revenue of €30 billion worldwide in 2015 (Needleman, 2016). Electric automobile producer Tesla Motors received a staggering 325,000 reservations for its upcoming new Model 3 in the first week alone, arguably making it the biggest product launch week in terms of implied sales of any product. All of these companies were founded after the year 2003¹. It is unfathomable to imagine such fast growth in the past. All of these companies, though they have now grown into large multinational companies, were actually founded as startups.

This paper will examine the status quo of the startup world, innovation systems and venture cap-

¹ Facebook, Supercell and Tesla Motors were founded in 2004, 2010 and 2003 respectively (Facebook, n.d.; Supercell, n.d.; Tesla Motors, n.d.;).

ital in Japan. Historically, Japan has always been special, and that seems to be the case even today. Whereas many European countries are plagued by high unemployment, driving people to entrepreneurship, Japan is experiencing a labour force shortage (Martin, 2015). Moreover, what is known about Japanese companies is that they constantly invested in in-house R&D for continuous innovation and new products, thus keeping one step ahead of the competition. This does not seem to be the case anymore – many Japanese companies are having trouble competing with Korean and Chinese corporations (Wakabayashi, 2012; Cheng, 2012). So what drives entrepreneurial innovation in Japan today, what form does it take, in which fields? What is the role of venture capital, if any? These are some of the questions explored by this paper.

Additionally, the paper will attempt to explain the insights gained by industry data using the known characteristics and features of Japanese business culture. Many scholars from various fields of business sciences have stipulated that traditional Japanese values and character have influenced the development of its organisational behaviour and stakeholder relations (Wolf, 2013; Nishiyama, 2000; Haghirian, 2009). How are the concepts of risk aversion and group-oriented behaviour reflected in the image of contemporary entrepreneurship? What kind of problems have been spawned by this? Moreover, to turn the tables - are there any practices specific to the entrepreneurial culture of Japan that may be worth looking into by the Western business culture? Finally, the paper will conclude with a critical reflection on the status quo, implications as to the future and potential for exchange and improvement.

2. KEY CONCEPTS IN INNOVATION ECOSYSTEMS

Like many other sectors and industries, the world of startups has developed a kind of jargon to refer to the new concepts, relationships and institutions it has introduced. There is a stark difference between a startup and a small business, perhaps best explained by the purpose behind their business models – whereas the small business is looking to

establish itself independently on the local market, the startup's intent is to disrupt the market with a scalable model and fast growth and become a large company and market leader (Pope, 2014).

On the other hand, even startups in the contemporary sense of the word have a number of definitions which vary depending on the viewpoint of the user, and they are still widely debated (Robehmed, 2013). Even governments use different requirements in policies targeting startups. For example, in 2015, India unveiled its new Startup India, Standup India policy, defining a startup in terms of age (up to 5 years), turnover, and technology sector (Bhushan Dwivedi, 2016); on the other hand, the government-sponsored Start:up of the year² competition in Slovenia defined a startup in terms of age (up to 3 years), ownership structure, investment to date, innovativeness and market potential (Start:up Slovenia, 2015). To be sure, the trendiness of the term itself attracts usage, diluting its meaning. In the context of this research, a startup is best defined as a company under 5 years old with a revenue run rate³ under \$50 million for 12 months, less than 100 employees, and a valuation below \$500 million (Wilhelm, 2014).

A technology business incubator (TBI) is defined as an initiative providing its members (either existing or soon-to-be startups) support infrastructure, including business services, networking, access to professional services, university resources and capital (Mian, Lamine, & Fayolle, 2016). TBIs vary according to scope of function and location, and include institutions such as technology/business incubators, innovation centres, science/research/technology parks, co-working spaces and business accelerators.

The accelerator is a relatively recent incubation model aiming to speed up the growth of new businesses by providing incubation services to startups in intensive, cohort-based programs with a fixed duration (Pauwels, Clarysse, Wright, & Van Hove,

² Translated from the original: 'Start:up leta'.

³ The term 'revenue run rate' is used to forecast future revenue by extrapolating short term revenues over a longer period of time.

2016). Typically, accelerators will provide a small amount of seed capital in exchange for equity in the startup, office infrastructure, and a number of networking, educational and mentorship opportunities. The acceleration programs can last from 3 to 6 months, and often end in a large pitching event or “demo day” (Cohen & Hochberg, 2014).

One of the key roles in the lifetime of a startup are played by venture capital (henceforth VC), a segment of private equity investing in high-risk early-stage businesses. VCs provide capital funding for innovative ideas with high business potential who cannot obtain financing from banks due to lack of credit (Teker, Teker, & Teraman, 2016). Funding is done through an equity investment, where VCs become stockholders in the startup. VC is also considered a high-risk investment because it is illiquid – until the company matures enough and is acquired or publicly listed, the shares are essentially worthless. To protect their investment, VCs tend to be more involved in management (what is referred to as the hands-on approach), providing additional benefits such as networking and experience. The primary goal of a VC are financial returns gained by exiting investments, either by selling their share to an acquiring company or new investor, or through an initial public offering (henceforth IPO) (Metrick & Yasuda, 2010).

Naturally, all of the listed entities do not operate in isolation of each other, but in mutual cooperation, complementation and support. The various stakeholders form the innovation ecosystem, traditionally defined as “the complex relationships that are formed between actors or entities whose functional goal is to enable development and innovation” (Jackson, 2011). It includes both material and human resources that make up the entities who participate in the ecosystem, and comprises of the fundamentally research-driven research economy and the marketplace-driven commercial economy. Innovation ecosystems support and foster open innovation through the high social interconnectedness of the many innovation actors. Recently, digitalisation and public media interest have also been key features influencing the development of innovation ecosystems (Oh, Phillips, Park, & Lee, 2016).

3. ENTREPRENEURSHIP IN JAPAN

When we look at the state of economic development in Japan today, it is easy to forget how strikingly different life and trade here were just 150 years ago. The intangible cultural heritage has shaped the island nation’s laws, policies, business and relations, enabling it to become the world’s third-largest economy, and second-largest developed economy (as defined by OECD membership).

3.1. History of entrepreneurship in Japan

Like many other medieval societies, Japan had a feudal system of government. In 1603, after centuries of civil war, conflict and struggle for power among local and regional feudal lords (a period dubbed Sengoku after the Chinese Warring States period by Japanese historians), the Tokugawa period began with the appointment of Ieyasu Tokugawa as shogun. In the following centuries, Japan enjoyed a peaceful, but isolated period as its borders were closed and foreign trade limited to partners from China, Korea and the Dutch East India Company. The port city of Nagasaki on the southern island of Kyushu was designated as the only area where merchants from overseas were allowed to enter. The shoguns enforced strict control of Japanese trade, both external and internal (Sansom, 1974).

The political system of feudal Japan was heavily influenced by and based on Confucian philosophy. Agriculture was perceived to be the most important and morally pure source of wealth and prosperity, while the moral responsibility and obligation of the ruler was to govern in a way that would ensure stability and security for the people of the domain. Under the Tokugawa peace, commerce eventually blossomed as peasants started producing a larger variety of crops to avoid the crushingly high tax on rice. Farmers engaged in additional activities with a higher added value, including the production of paper and writing materials, woven cloth, lacquerware etc. Merchants and artisans contributed to the urbanisation process of castle towns as they flocked there to service the needs of the garrisoned samurai and the lavish lifestyles of the daimyo. While wealth of the merchant class increased, the daimyo’s strained budgets forced them to borrow from the

former to supplement tax revenue. It was clear that the economic policy had not evolved with the times, and pressure began to build on the ruler to become more involved in trade and commerce on a regional and, later on, a national level (Sagers, 2006).

To understand the role entrepreneurship played in Japan's impressive economic growth, we need to fast forward to the 19th century, to the time of the Meiji Restoration. In 1853, a chain of events was triggered which led to the dissolution of the shogunate. Although some Western technology and knowledge, particularly medical sciences, did enter Japan in the previous centuries, in general, Japan lagged far behind the wealthy European empires, which had vast colonial resources at their disposal, and the vast, resource-rich United States. One of the key measures implemented by the Meiji government to promote entrepreneurship and industrialisation is the establishment of private property rights (Sagers, 2006) and the introduction of the joint stock company, or *kabushiki kaisha* (Fujimori & Nozawa, 1992), in the 1870s. As the domestic accumulation of capital was quite low due to restrictions of the feudal system, the joint stock company represented an important means of gathering numerous sources of capital, enabling the high-risk ventures of importing industrial technology from the West. They also allowed the separate functions of ownership and management. For the first time in Japanese history, it became possible to found large-scale industrial enterprises such as the *Osaka Bouseki Kaisha*, a cotton spinning corporation founded by business pioneer Eiichi Shibusawa with funds he had collected from about 30 noblemen and former samurai. The company would go on to become a successful industry leader both domestically and abroad, while Shibusawa – the son of a farmer - continued to play a big role in Japanese economic reform. He participated in over 500 ventures, founded the First National Bank - the first modern bank with joint stock ownership in Japan – Japan's first business association, the *Takuzenkai*, and helped set up the Commercial School, predecessor of the prestigious Hitotsubashi University (Clark, 1979). The rise of joint stock companies soon created an active equities market, as indicated by the founding of the Tokyo Stock Exchange as early as 1878.

From the turbulent early decades of Meiji and all the way through to the mid-20th century, many forces drove both economic and political change in Japan. One of those forces took the form of the *zaibatsu*, an organisation not unlike a modern-day holding company, combining large numbers of industrial companies and private financial institutions under an umbrella organisation usually owned by a single family (Clark, 1979). In order to drive industrial development, the Meiji government offered subsidies and materials to start new enterprises as well as favourable tax exemptions. These policies enabled early entrepreneurs like Yasuda, Iwasaki of Mitsubishi and Minomura of Mitsui to found a number of companies in different industries, linked by ownership and supplied with money from the same bank. The *zaibatsu* enjoyed high growth and exponential capital accumulation due to the fact that its member companies had the advantage of preferential trade amongst each other as well as the privilege of access to capital channelled from public deposits in the *zaibatsu* banks (Clark, 1979). As discussed previously, access to the high level of accumulated capital gave the *zaibatsu* a competitive edge as they took the lead in the development of capital-intensive industries, like engineering and chemicals.

The Japanese “post-war economic miracle” can be at least partially attributed to a number of capable entrepreneurs (Haghirian, 2009). One of the measures taken by the Occupation Forces under General MacArthur with the goal of “the democratisation of the economy” was the dissolution of the *zaibatsu* groups (Clark, 1979). This was done by the compulsory dispersion of the stocks and shares held by the corporate groups, effectively ending their monopolies on the enormous amounts of capital, promoting competition and lowering the barriers of entry for newcomer companies.

A well-known example of a post-war newcomer success story is global electronics giant Sony, founded in 1946 by Akio Morita and Masaru Ibuka. The story of Sony, as reported by Morita in his excellent autobiography, *Made in Japan* (1987), is a classic example of entrepreneurship, and many parallels can be drawn between it and the startups of today. The fledgling Sony faced a number of issues in its early years, including a lack of adequate infras-

structure (their first headquarters were in a wooden shack with a leaky roof in war-torn Tokyo), a lack of funding (they often relied on Morita's father to loan them money), and the unavailability of raw materials and components. Their advantage was that both founders had an innovative spirit and ambition, and they as well as their employees were technology-oriented and highly educated (Morita et al., 1987). Sony would go on to become a multinational corporation and create a number of disruptive new products, for example the Walkman portable music player, the Betamax video recording system, and the PlayStation video game and multimedia system.

The path to success was hardly clear cut for small companies like Sony, who faced government regulation and institutions favouring "large producers over smaller ones, limiting 'wasteful' competition and channelling key resources like capital and labour to chosen sectors" (Haghirian, 2009, p. 251). The purpose of such interventions was to promote industrial growth by nurturing the selected industries, thereby allowing domestic producers to develop the competencies needed to compete on an international level (Y.-I. Lee & Trim, 2008). In light of this, some of the long-term effectiveness of the anti-monopoly measures taken by the Occupation Forces was lost, and would eventually lead to the decline in new business activity (Century et al., 2009).

The accumulation of capital from previous decades nevertheless ushered in a boom of venture companies in the period from 1970 to 1973, when economic growth slowed down. One of the trends from this period was the *datsu-sara*, or "corporate dropout", which was the slang term coined to counter the *sarariman*, or corporate employee. It was used to describe Japanese managers who decided to leave their companies, escape the *sarariman* life and go elsewhere (Solt, 2014). The flourish of venture companies was cut short by the oil crisis of 1973, and unfortunately, many venture businesses went bankrupt. The next boom took place from 1983 to 1986 as new companies were founded, inspired by the oil shock, to create new energy-saving solutions.

Electronics R&D, new materials, and biotechnology were some of the fields that would be the focus of new business at the time. Due to the credit

relaxation of November 1983, access to capital was greatly facilitated for venture companies, which led to excessive investment and lending. When the high-yen recession hit in 1985, even powerful venture companies were forced to close down. The continued monetary easing policy of the late 1980s drove the Japanese economy into an asset price bubble, which culminated in its collapse in 1991 and introduced a period of stagnation known as the "Lost Decade". A third boom of venture companies began in 1993, when it was thought that entrepreneurs could overcome the economic slump, and efforts to support entrepreneurship began from both the government and the private sector (Haghirian, 2009).

3.2. Entrepreneurship in Japanese Culture

The attitude toward entrepreneurship in Japan is strongly influenced by the peculiarities of its culture, historical circumstances, and economic policies which have shaped business and labour practices. As discussed in this section, some of the main issues affecting the development of Japanese entrepreneurship include a general aversion to risk and fear of failure, the high importance of seniority and corporate loyalty, and the group-oriented nature of society.

Despite the success and renown of post-war entrepreneurs, entrepreneurship is still not seen as a good career choice. In 2014, the Global Entrepreneurship Monitor (GEM) report found that only 31% of the active population perceived entrepreneurship as a good career choice, slightly up from 28% in 2009. This is the lowest percentage in the region and less than half of the regional unweighted average, which is 63.4%. The reason is that the idea of going to a good school in order to get into a good university and secure a job at a good company is still prevalent among the Japanese (Haghirian, 2009). Corporations offer the highest salaries and perks that simply cannot be provided by small companies, let alone start-ups. Feedback from interviews conducted with entrepreneurs and VC representatives also shows that employment mobility is an issue, since a failed venture would be seen as disgraceful rather than a valuable learning experience, as it is in the West.

Perceptions of status and media attention for entrepreneurs are also below average: according to the GEM report, 55.8% felt that successful entrepreneurs enjoy high status compared to a regional average of 69.8%, while 58.7% felt that media coverage of successful business ventures contributes to the development of the entrepreneurial culture in Japan, as opposed to the regional average of 74.4%. The discrepancy in the perception of status between Japan and other Asian countries is not as great as in the perception of entrepreneurship as a career choice. More than half of the Japanese seem to understand the social and economic benefits of entrepreneurship. However, the aforementioned risk aversion and fear of failure traits kick in, showing once again that people are generally not willing to bear the cost of entrepreneurship. The best students prefer to choose the safer corporate career over joining a start-up, and are encouraged to do so by their parents. This phenomenon is described as “not in my backyard” entrepreneurship by Stanford University’s William Miller (Haghirian, 2009).

4. INNOVATION ECOSYSTEM IN JAPAN

This Chapter examines the characteristics of Japanese innovation ecosystem and what sets them apart from their counterparts elsewhere in the world. Having in mind the following research questions: What drives entrepreneurial innovation in Japan today, what form does it take, in which fields? The questions were explored using the results of established research institutions and statistical data from official sources. The empirical part of the research was conducted in the form of one on one interviews with two venture capital firm partners, one entrepreneur and one academic researcher. In addition, we attended several industry events in Japan, discussing the topic with several participants from different fields of profession. The findings from the interviews were also supplemented by industry media reports and podcasts featuring interviews with startup entrepreneurs and other stakeholders of the innovation ecosystem.

4.1. Japanese unicorns

In 2013, the term “unicorn” was introduced to distinguish startups valued at over \$1 billion by public or private market investors (A. Lee, 2013). Does Japan have unicorn startups? Compared to the boom of highly valued startups hailing from the US and, increasingly, China, Japanese startups have gotten off on a slow start. In Japan, venture capital is more conservative. Only in March 2016 did the first Japanese startup, Mercari Inc., a C2C mobile e-commerce company, reach the landmark valuation. The company raised ¥8.4 billion in its latest funding round from a number of investors, including major corporate groups as well as independent venture capital (Alpeyev & Amano, 2016). More recently, Line Corporation, the company providing the popular messaging service, also joined the unicorn party after the year’s largest tech IPO on July 15th 2016. After listing on both the Tokyo and New York stock exchanges, Line’s valuation skyrocketed to \$8.6 billion in the same day (Reuters, 2016).

Based on an annual survey performed by Venture Enterprise Center Japan, 53.9% of all VC investments in 2014 were captured by startups in IT-related industries. The biotech, health and medical care industries accounted for 16.2%, the industrial and energy sectors received 15.3%, and the remaining 14.6% of investments went into products or service industries (Venture Enterprise Center, 2015). According to data available on Entrepedia.jp, an online database platform connecting startups with investors, the largest number of listed startups were in the HealthTech industry, followed by FinTech, CleanTech and EdTech. There is an underlying trend of traditional industries being disrupted by new technologies. Other important industries include biotechnology, software and hardware development, video games, consumer goods and services, and the global trend, Internet of Things.

4.2. Private Equity Venture Capital

In terms of funding, banks have always had a very important role in the Japanese economy. Banks were at the heart of every zaibatsu conglomerate, pumping money into as well as exercising control over the interconnected companies in the so-called

main bank system (Sheard, 1989). While the main source of capital funding for US companies is equity, in Japan, businesses have traditionally been financed through bank loans based on the close, long-term relationship with the bank. This is consistent with the aforementioned risk-averse culture of Japan, since loans are generally speaking less risky than equity investments. Despite this, the Japanese financial industry today boasts a growing VC sector driven both by private capital firms, dedicated VC organisations, and corporate VC funds.

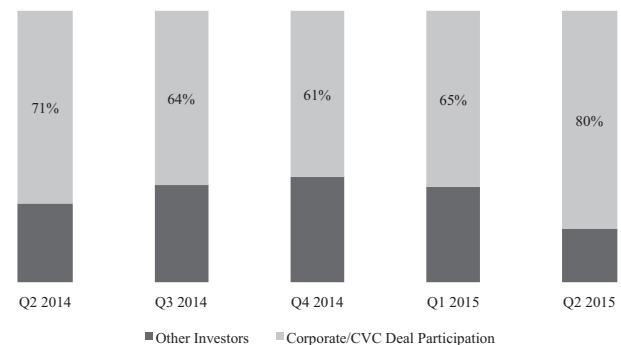
In 2002, the Japan Venture Capital Association (JVCA) was established as the country's "first and only organisation" aiming to assist VC firms and to support venture businesses. JVCA focuses on three major initiatives, with three groups of stakeholders in mind: the development of the venture ecosystem to aid the creation and growth of venture businesses or start-ups, the development of the fundraising and management ecosystem to help VC firms, and the promotion of open innovation, which benefits society as a whole. As part of these initiatives, JVCA conducts independent research and analysis of the VC industry, hosts lectures, symposiums and other events to foster knowledge and skills, conducts its own testing and awards qualification certificates, collaborates with government agencies and represents the interests of the venture industry by making policy recommendations, and cooperates with various other stakeholders of the venture industry. As of July 2016, JVCA was composed of 59 VC members and 19 corporate VC members (Japan Venture Capital Association, 2016). In comparison, the National Venture Capital Association, a similar organisation based in the United States, was founded as far back as 1973 and has nearly 400 members (National Venture Capital Association, 2016).

Large investment deals are uncommon for the venture industry in Japan. While it is true that each VC has a unique investment style, most VCs tend to invest in the seed or early stages, with individual deals, or tickets, spanning from ¥5 million to ¥30 million. Indeed, seed and early stage investments accounted for over one half of the total amount invested by VC in 2014, 13.9% and 43.3%, respectively (Venture Enterprise Center, 2015).

4.3. Corporate Venture Capital

As already discussed corporations play a large role in the venture business. Besides providing in-house opportunities for innovation and new business development, many corporations also invest in external start-ups (Anokhin, Wincent, & Oghazi, 2016). While this is not unique to Japan, the impact of corporate investments on the venture ecosystem is substantial. A possible reason for this could be to the aforementioned risk-averse attitude of Japanese capital owners. Since the number of VCs as well as the amount of capital available from them is lower, the relative share of corporate-backed venture investments is higher than in other countries. For example, 80% of investment deals made in the second quarter (Q2) of the 2015 fiscal year in Japan were made with corporate VC participation (see Figure 1). In North America, their share in the same time period was only 23% (see Figure 2). It should be noted, of course, that the total volume of investment deals is much higher in the US than it is in Japan.

Figure 1: CVC participation in funding deals to VC-backed companies in Japan.

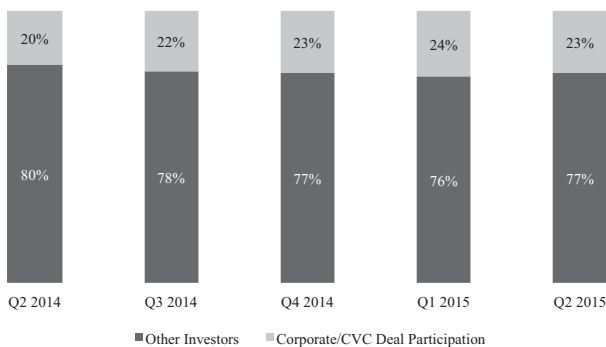


Source: J. Riney, *Corporate Venture Capital Is King In Japan*, TechCrunch.com, 2015.

The reasons for corporate investment in Japan are not unlike those elsewhere. The main purpose is not capital gain and financial returns, as is the case with investors from the financial industry; instead, the function of corporate venture capital is seen more in terms of R&D and corporate development (Riney, 2015). It is a means of gauging industry trends to protect and develop their own core businesses, as well as building business relationships

with potential acquisition candidates or important long-term business partners. Seen from the perspective of traditional Japanese business values, where long-term stability and close relationships between business partners are favoured over short-term advantages and profits, the prevalence of corporate venture capital is even more understandable (Haghirian, 2009). Securing funding from an established company can also be advantageous for startups, which can benefit from the good reputation and stability of the corporation as well as the access to its business network distribution channels.

Figure 2: CVC participation in funding deals to VC-backed companies in North America.



Source: J. Riney, *Corporate Venture Capital Is King In Japan*, TechCrunch.com, 2015.

4.4. Exit Strategy

The relative strength of corporate VC discussed in the previous chapter might suggest that the most common exit scenarios are corporate acquisitions. However, this does not seem to be the case. According to James Riney, head of 500 Startups Japan venture fund: “Despite having a lot of cash on their balance sheets, Japanese companies historically have not been very active domestic acquirers. In most cases, they strongly prefer to build products and services in-house rather [than] buying.” (Riney, 2016) Riney adds that Japanese startups tend to go public with an IPO at a much earlier stage and lower market capitalisation than US startups. Indeed, the median IPO offer amount of venture-backed Japanese companies in 2014 was ¥2,273 million (a little under \$19 million) (Japan Venture Research, 2015), while the average IPO offer amount for ven-

ture-backed companies in the US was \$133 million in the same year (Thomson Reuters, 2015).

While some of these figures are not directly comparable, they do offer some insight. They are consistent with the main paradigms of Japanese business culture described in earlier chapters: being risk-averse, the Japanese capital owner prefers to make smaller and diversified investments to lower the risk factor, as discussed in previous chapters. VCs and other investors are not prepared to give large sums of money to young companies composed of teams and managers they have yet to establish a relationship with. When startups seek to raise a certain amount of funding, they have no choice but to opt for a public offering in order to secure a sufficient number of smaller investors.

5. KEY FINDINGS

5.1. Key issues of Japanese startups

The paper presents the effect that Japanese culture has on the state of entrepreneurship in Japan. It has been shown that it is risk-averse and that the Japanese are generally not inclined to start a company because they fear failure. This attitude reflects in all aspects that have been discussed, from the source of venture capital to the manner in which startups are founded. How do the characteristics of the Japanese innovation ecosystem shape the issues that are faced by startups?

Lack of experience: Japanese employees do not have the skills, knowledge or experience to start up and run a company. Often, they also do not know about the various support institutions available to them within the innovation ecosystem. They are too focused on the technical/technological aspects of the company, so they make mistakes in their business decisions. According to insights gained from interviewed VC representatives, many startup founders are former employees of banks and other financial institutions. The awareness of the lack of knowledge may also impact the fear of failure and reluctance to start up.

Lack of talent: Japanese startups have a hard time finding and hiring employees because their reimbursement offer can never compete with an offer

from a corporation. Startups have very limited resources, so they often offer stock options in place of a higher salary. But the best talents would rather work for a large corporation, because the payoff is so much higher. Not only that, perspective entrepreneurs can be discouraged by their parents or life partners, who may desire a lifestyle with a secure income. This issue differentiates Japanese startups from startups based in other countries.

Lack of capital: Banks are still the primary source of capital for Japanese companies as a whole, and startups do not have the credit to obtain funding from banks. VC activity also focuses on tech hubs like Tokyo, Osaka, Nagoya and Fukuoka, so availability in smaller Japanese cities is low. While there are alternative funding options, for example the no-collateral Startup Loan Program, potential entrepreneurs might not know about it.

5.2. Future perspectives

We have demonstrated that Japan has fallen behind many of its competitors when it comes to entrepreneurship. The government has spent decades implementing government policy aimed at promoting entrepreneurship. Many large Japanese companies are in trouble because they have ceased to be competitive. In spite of the decade-long post-bubble recession in Japan, a major paradigm shift in the Japanese attitude toward venture business has not occurred. Can Japan regain its former status as a high-tech manufacturing leader, or find a contemporary niche for global success?

The truth is that Japan faces issues on a structural level. Its demographic structure is headed for an unsustainable situation in the future, and problems with elderly caregiving are already emerging. The shortage of labour promises to lead into a decline in output levels, which will hinder the economy. And yet, an optimistic mind will take these issues and look for a technological solution. For the labour shortage, at least, Japan has reserves in women, foreign workers, and robots.

Above all, what Japan needs is a clear strategic policy. The questions of labour shortage and aging population need to be addressed, and who better to find a solution than entrepreneurs? Prime Minis-

ter Shinzo Abe might have objectionable qualities, but he does seem to understand that Japan will not survive as a leading country without improving its entrepreneurial culture. The past year has seen a number of newcomers and new developments in the Japanese innovation ecosystem. At this point, it is really hard to judge whether the recent trends are enough for a turnaround – certainly, many long-term residents in Japan have given up hope. All the more reason to pay attention to Japan in the coming years.

5.3. Suggestions for further research

There are many interesting aspects of the Japanese innovation ecosystem that may merit being the subject of further research. Some possible questions to explore in the future are:

- How does Japan compare to the culturally similar Republic of Korea, or Taiwan?
- How does Japan compare to European countries?
- What is the impact of Fukuoka Startup City policies on the city's economic growth? On the success of hosted startups?
- What is the real scope of incubator activities and their impact on rural entrepreneurial development?
- Is there evidence of a multiplier effect in founder post-exit investment activity?
- What is the difference between entrepreneurially inclined Japanese and those who are not interested in new business?

Due to the lack of resources in English, further research should be done in partnership with a member of a Japanese university or research institution. Some quantitative data may be obtained from official sources, or there may already exist some research in Japanese covering some of the topics mentioned. New insights could be gained by using well-planned questionnaires. However, due to the nature of the startup industry, it could be easier to gain data individually. Some of the topics mentioned are sensitive, for example founders' investment activity, and would therefore be best investigated through qualitative individual interviews.

6. CONCLUSION

Over a century has passed since Japan opened its borders to foreigners in the latter half of the 19th century. The years of isolation as an island nation have shaped Japan firmly, and even today, it remains a society with perhaps one of the most distinct sets of rules and cultural peculiarities. The same pattern is true for business culture, organisational behaviour, innovation and entrepreneurship in Japan, as this thesis has demonstrated.

The ideas of risk-aversion and fear of failure permeate the Japanese society. While the first could be understood by outsiders as a natural development of an island-bound and disaster-plagued nation, the fear of failure is more complex, perhaps drawing influence from the past times of Japan's wartime glory and the bushido philosophy of medieval samurai warriors. In practice, these ideas manifest into concrete phenomena. A young graduate decides on a corporate career rather than starting their own business, to the approval of their parents. An inspired individual with a great idea struggles to find like-minded as well as competent co-founders. A startup company with no track record faces problems when trying to find an investor to fund their growth.

In spite of these issues, empirical research has shown that although it is relatively smaller and less developed than its US counterpart, a fast-growing innovation ecosystem has nevertheless emerged. It is made up of varied stakeholders ranging from private equity, corporate R&D initiatives, foreign VC ventures, and specialised media outlets, to public universities, state-funded incubation and support programs, and campaigns on a local and national level. In combination with influence and inspiration from abroad, the ecosystem acts as the breeding ground for Japanese startups.

There is good reason to believe that the innovation ecosystem will continue to develop, and that we can expect a boom of Japanese startups in the coming years. Perhaps the most telling evidence for this is the fact that the Japanese government itself sees the need for a better-developed entrepreneurial environment and is actively implementing policies and actions to stimulate and support startup activity. If history is any indication, Japan will once again absorb the best practices from the global innovation ecosystem and cultivate a new generation of successful entrepreneurs.

EXTENDED SUMMARY / IZVLEČEK

Ta članek pod drobnogled postavi trenutno stanje v svetu zagonskih podjetij, inovacijskega sistema in tveganega kapitala na Japonskem. Zgodovinsko gledano je bila Japonska od nekdaj nekoliko posebna, kar drži še danes. V nasprotju z razvitimi evropskimi državami, ki se v zadnjih letih soočajo z visoko stopnjo brezposelnosti, ki ljudi spodbuja k iskanju uspehov v podjetništvu, na Japonskem doživljajo pomanjkanje delovne sile. Ob tem so japonska podjetja znana po stalnem vlaganju v raziskave in razvoj, kar jim omogoča trajnosten razvoj inovacij ter ohranjanje konkurenčne prednosti. Kaže, da slednje ne drži več – marsikatero japonsko podjetje danes le stežka konkurira korejskim in kitajskim tekmečem. Kaj torej poganja podjetniško inovativnost na Japonskem, v kakšni obliki ta poteka in v katerih panogah? Kakšna je vloga tveganega kapitala? To je le nekaj vprašanj, na katera odgovarjamo v tej raziskavi.

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