

PREFACE

This guide gives you a brief introduction to the Japanese innovation ecosystem, with special focus on Tokyo, where most of the startups and stakeholders are based, and Fukuoka, which is an upcoming ecosystem with a strong international profile.

The guide presents the main business opportunities, the most important leads, and most interesting stakeholders, as seen from a Danish perspective. We give you a realistic and level-headed understanding of the local startup scene based on first-hand experience and on-the-spot dialogues.

This publication has been developed by Asia House and TechBBQ as part of a series of guides to innovation ecosystems in the China Bay Area and Taiwan, India, Japan, Korea, and Singapore.

The series is published as part of the non-profit initiative **Innovation Lab Asia** to improve and enhance cooperation between Danish and Asian innovation ecosystems. The project is supported by the Danish Industry Foundation.

For further information and guidance, contact:

ASIA HOUSE

Peter Johansen, Project Manager

TECHBBQ

Lisa Mallner, Lead Consultant

MAIL

hello@innovationlabasia.dk

WHY JAPAN?

Japan is Denmark's second largest export market in Asia, and the world's third largest economy. By all accounts, Japan will remain a key market for Denmark in the years to come.

First, Japan is one of Asia's wealthiest countries. After years of economic stagnation, the Japanese economy is now showing signs of recovery. Complement this with a consumer base of 127 million people, a highly advanced society and a well-educated population, Japan will most likely remain an economic powerhouse of Asia.

Second, Danish products carry a strong brand value in Japan. There is a high demand for premium products, and many Japanese share the Danish liking for minimalism.

Third, Japan and the EU have recently agreed on an Economic Partnership Agreement (EPA) reducing trade barriers between the two economic zones. The majority of import duties and tariffs will be removed, as well as non-tariff barriers. Perhaps most notably, the agreement will seek to harmonize international product standards. Experts expect the EU-Japan Economic Partnership Agreement to boost trade between Denmark and Japan by 30-50%.

Finally, Japanese megatrends may give Danish startups a certain advantage. With a rapidly aging population, Japanese demand for welfare technology is increasing dramatically, providing opportunities for strong Danish startups within Healthtech, Life Science, and Al.

Market opportunities for Danish companies looking to Japan are enormous.

JAPAN AT A GLANCE

- 52 of the world's 500 largest companies are Japanese, with Toyota and Softbank topping the list
- At USD 100 billion, Softbank's Vision Fund is the world's largest technology investor
- Yet, Japan has only produced three unicorns. The government has launched a plan to raise this number to 20 by 2023
- The Economic Partnership Agreement is expected to boost trade between Denmark and Japan by 30-50%
- The Japanese population is aging rapidly: 27% of the population is now above
 65 years, while 14% are below 14 years
- It is estimated that the Japanese population will shrink by a third from 127 million in 2010 to 87 million in 2060
- The Japanese government is betting heavily on robotics, both industrial and service, on account of this shrinking population and workforce



MAIN ECOSYSTEM OVERVIEW

OSAKA

 Osaka is Japan's second largest city, and home to some of Japan's largest corporations: Panasonic, Sharp, Suntory, and Capcom. Osaka is also a Strategic Special Zone, providing incentives and support systems for aspiring entrepreneurs, including tax breaks and lenient visa regulations.

FUKUOKA

 Fukuoka is Japan's upcoming international startup hub. With only 2½ million people,
 Fukuoka is relatively small, but emerging fast as a dynamic startup hub based on sound policies and government support programs. Fukuoka has the highest growth of internationals living in the area.

TOKYO

Tokyo is home to Japan's greatest innovation ecosystem, with the largest number of startups, investors, financial institutions, universities, and corporations, both foreign and domestic. It's also the world's most populous metropolitan area, with 38 million inhabitants.

KOBE

 Kobe is home to Japan's newest innovation hub, centered around Port Island. Driven forth by a visionary and entrepreneurial city authority, Kobe has established itself as Japan's biomedical cluster, with a large concentration of hospitals and research institutions.

TOKYO

THE ECOSYSTEM AT A GLANCE

Tokyo is the undisputed center of the Japanese innovation ecosystem; it has the highest number of startups and attracts the greatest amount of funding. In 2018, 77% of all Japanese VC investments went to Tokyo-based enterprises.

Japan is often considered a risk-averse society; employment in large corporations, with a high level of security and stability, remains a popular choice with many young Japanese. Thus, Japan has relatively few startups, and most innovation comes from established corporations.

But times are changing. Several decades of economic recession have forced millions of employees to work on short-term and project-based contracts, reshaping the Japanese labor market and changing the mindset of the young generation in particular. Considering a career as a startup entrepreneur is no longer quite so controversial.

The Japanese government has invested heavily in creating a startup ecosystem and now claims that Japan has more than 10,000 startups (unofficial estimates are less generous). However, considering Japan's long tradition for sophisticated technologies, strong universities and research institutions, and highly skilled talent, the Japanese startup scene will continue to evolve in a positive direction.

A FEW FACTS ON TOKYO

- The Greater Tokyo Area is the most populous metropolitan area in the world, with a population of 38 million people.
- Tokyo is the main financial center of Asia, along with Hong Kong and Singapore.
- Tokyo ranks amongst the top 12 upcoming ecosystems (Startup Genome 2019).
- As a consequence of the sarin gas attack in the Tokyo subway in 1995 by Aum Shinrikyo, there are no more trash cans on the streets in Tokyo. People throw their trash away in Seven Elevens and Lawsons instead.
- Shinjuku train station in Tokyo is the busiest train station in the world.





MAIN LEADS

The Japanese innovation ecosystem is presently experiencing a boost in investments, especially from Corporate VCs. However, the Japanese innovation ecosystem is still relatively weak (though improving), and there is a growing interest amongst Japanese investors for opportunities in the Nordics. Some are already LPs in Nordic VC funds - mainly Finland and Estonia - others are accessible in Tokyo. Danish startups should consider Japan for funding opportunities.

- NordicNinja VC is a joint venture between the Japan Bank for International Cooperation (JBIC) and BaltCap. Nordic Ninja VC is the first Nordic/Baltic focused fund from Japan. The USD 110 million fund is backed by three large Japanese tech corporates: Honda, Panasonic and Omron, and was launched at Slush 2018 in Finland. The team's stated focus is on matching novel Nordic ideas with Japanese industrial powerhouses. Their target sectors are enterprise software, robotics, Al, cybersecurity, digital health, and mobility.
- startup event in Japan. Of the 700 startups and 200 investors attending in 2018, more than half were international, and the conference content is in English. Many prominent investors from the ASEAN region also attend. The event included two pitch contests, one for investors and one for startups, and an advisory program, where successful entrepreneurs provide mentorship for early-stage startups.

 <u>Digital Garage</u> is a heavyweight in the startup ecosystem and was responsible for bringing both Twitter and LinkedIn to the Japanese market. The firm is also an original LP in the Nordic VC byFounders.

With a focus on Fintech and Data, this company is especially interested in the rapid development of Nordic societies toward cashless economies and the Nordic approach to public data. While not a traditional accelerator, Digital Garage looks to nurture businesses moving into the Japanese market through a collaborative partnership.

 Mistletoe is a VC focusing on "world changing startups in deeptech" and is run by Taizo Son, the youngest brother of Softbank's Chief Executive Masayoshi Son. Mistletoe has invested in several Northern European companies, including Funderbeam and Lift99, and is an investor in the Helsinki-based early stage fund Maki.VC and the Estonian VC Tera Ventures.

14





OTHER LEADS

Innovation Lab Asia has established contacts with several interesting organizations in Tokyo that might prove relevant for Danish startups. We can facilitate further contact if needed.

- Marubeni is a major Japanese business conglomerate that has been increasing their interest in Nordic and Baltic solutions. Marubeni is not a VC but collaborates with start-ups through investments in innovations that serve their core business. The company's 2019 focus areas are Nordic strongholds, including Blockchain, Gaming, and Wellbeing, and they have recently opened an office in Tallinn.
- The Nomura Research Institute (NRI) is one of Japan's leading companies in business consulting and IT, as well as a think tank. They provide startups with three types of IPO-related support services: IPO research, business consulting, and venture capital. NRI is a global partner of both the Copenhagen Fintech and Copenhagen Welfare Tech clusters and is keen to bring Scandinavian strengths in the healthcare industry and smart cities into the Japanese market.
- Plug and Play is a global innovation platform working as a VC and a corporate accelerator. Headquartered in Silicon Valley but with 26 locations worldwide Plug and Play provide a three-month program twice per year focused on scaling. Plug and Play Japan is focused specifically on scaling startups into Japan and East Asia. The program covers business matchmaking, where domestic and international startups can network and interact with corporates in Plug and Plays' network and qualify for funding.



OTHER GATEWAYS & ACCESS POINTS

- **Softbank**'s Vision Fund is the largest VC in the world, with USD 100 billion in capital. In 2019, Softbank announced plans to raise a second USD 100 billion fund, as well as a USD 55 million fund for early stage VC focused on early stage Al. So far, Softbank has only had a few investments in Nordic companies, though they famously bought a stake in Supercell in 2013 (which was later sold to Tencent). However, partners have been present at Nordic events like Slush and TechBBQ to connect with deep tech startups.
- **Docomo Innovation Village** is a startup accelerator branch of Japan's predominant mobile phone operator, NTT Docomo. The primary focus in NTT Docomo is to promote and foster technological solutions in mobility and related businesses and services. While primarily focused on Japan-based companies, the Docomo Innovation Village has a reputation for nurturing and supporting the startups in their program until they have reached a stable state.
- Samurai Incubate is an early stage venture capital and seed accelerator, which was launched in 2008 with the aim of supporting startups within the areas of management, marketing, sales, HR, and finance. Samurai Incubate also runs the Samurai Startup Island, a startup incubator and co-working space in Tokyo, where startups can find opportunities for networking and funding.
- **East Ventures** is a venture capital firm based in Singapore, Jakarta, and Tokyo. East Ventures focuses on seed and early stage startups in Southeast Asia and Japan and has 4 unicorns in its portfolio.



STRONGHOLDS & OPPORTUNITIES

Japan is one of the few Asian countries where Danish design really resonates with the culture. Additionally, Danish companies are reputed for their high quality products that match Japanese reality. Thus, Danish solutions carry a strong brand value in Japan.

The focus areas of this report are Healthtech and Life

Sciences. The Japanese population is aging rapidly; by 2025, 30% of the population will be above the age of 65. The Japanese government is actively seeking ways to ensure that all citizens (and especially seniors) have access to healthcare in the future while avoiding massive increases in healthcare spending. This naturally magnifies demand for innovative and cost-efficient solutions, opening the field for Danish Healthtech startups.

Artificial Intelligence is the second focus area of this report.

Japan was the second country to develop a national AI strategy, and is home to 12 of the top 20 AI developers in terms of number of patent applications and comes in third in terms of academic papers published. Japanese investors and research institutions are interested in engaging with the Danish AI startup ecosystem.



HEALTHCARE TECHNOLOGY

- Japan is one of the world's main consumers of Healthcare technology and the world's second largest market for pharmaceuticals. Much of this is imported.
- The EU-Japan Economic Partnership Agreement addresses some of the barriers that the EU may experience when trying to access the Japanese market for healthcare. For example, the agreement lets more European companies bid on public procurements, which might be especially relevant within healthcare. The agreement also has a strong focus on SMEs, and not least easing the barriers for imported goods and services in the healthcare industry.
- While Japan is characterized by strong competition amongst multinational healthcare corporations, the market is still fragmented, with ample space for niche products and services and high-quality solutions. Presently, smaller players account for a relatively large share of the total sales.

There is a high demand for products and services that cater to individual and consumer needs. Otherwise, the following areas within Healthtech seem to have particular relevance in Japan: IoT or robotics solutions to assist patients, solutions that facilitate remote diagnosis, and Al and Big Data that can be used to recommend and optimize treatment of patients.







ARTIFICIAL INTELLIGENCE

- In 2017, the Japanese government launched a strategy to increase R&D for AI and strengthen collaboration between academia, industry, and the government. This strategy will centeraroundtheareasofproductivity, welfare, and mobility.
- Japan's market for artificial intelligence is predicted to grow from USD 34 billion in 2015 to 810 billion by 2030.
 While Al solutions for the wholesale and retail sectors made up 35% of the Al market in 2015, the transport sector (including driverless vehicles) and the manufacturing sector are predicted to take up half of the market by 2030.
- While some have mentioned AI as a solution to the labor shortages Japan will encounter as a result of the aging population, others point to the fact that the lack of workforce, especially in terms of specialized personnel, is an obstacle for Japanese AI companies. Also, compared to China and the US, Japan does not have an AI powerhouse equivalent to companies like Amazon, Alibaba, Google, or DJI.

There are several areas where Danish startups might find viable business opportunities. One is companies that incorporate deep learning-based technologies. Al-applied solutions in marketing based on data analysis, automated marketing, and image recognition are also fields where Danish startups may find special prospects.

FUKUOKA

THE GATEWAY CITY

In 2014 the Japanese government launched the Startup Fukuoka initiative; removing regulations, lowering taxes and providing great incentives for foreign startups in the southern city of Fukuoka. Today Fukuoka is the rising star of the Japanese innovation ecosystem, with a growing number of international startups, including a few intrepid Baltic companies.

Fukuoka's special designation as a startup zone means that regulations for foreign entrepreneurs and new businesses are more lenient. All you need to submit to get a startup visa is a bank account, a business plan, and your resume. If the city of Fukuoka believes your business is promising, you will be eligible for all manner of support. It also has good facilities for testing as a part of the national startup-strategy. For example, companies can use public areas to experiment with smart city IoT devices.

Secondly, the startup community in Fukuoka is a lot more accessible and tightly knit than the rest of Japan. Start-up government services are housed in the same building as co-working spaces and startup offices, and to get access to the city's startup support services, you don't even need a booking to get a free consultation. Finally, the government has introduced tax incentives for entrepreneurs, lowering the corporate tax from the usual 30% to 22% in Fukuoka.

With 12 universities, Fukuoka has one of the highest densities of international students in Japan, many of whom are interested in continuing to live and work in the area. Fukuoka also has one of the youngest populations among large Japanese cities. Being located on the southern tip of Japan, the city is also well connected to East Asia – a hop away from Seoul, Taipei, Singapore, and Hong Kong.

So, while Tokyo still is the metropolis of the startup ecosystem in Japan, it might be advisable for early stage startups especially to consider Fukuoka as a less competitive and more cost-efficient landing spot.

VIBRANT FUKUOKA

- With a population of just 2.6 million, Greater Fukuoka is the sixth largest city in Japan
- Fukuoka has the fastest growing population and the lowest average age of Japan's larger cities
- The proportion of foreign-born residents in Fukuoka is increasing faster than any other major city in Japan
- Fukuoka has the highest rate of new business openings in Japan





STARTUP FUKUOKA

Startup Fukuoka is the main go-to point for foreign startups coming to Fukuoka. Startup Fukuoka is a government-run organization that operates an incubation facility that collaborates with private organizations with the aim of centralizing all startup support functions. In total, 180 institutions are involved.

More specifically, the facility works as a one-stop center providing a range of services for domestic and international startups free of charge. These include financial aid for office space and house rent but they also provide marketing, distribution, legal aid, and funding support besides support with administrative work when setting up the company.

Since the Startup Fukuoka initiative was launched in 2014, Startup Fukuoka has entered into collaborations with 14 cities in 10 countries throughout Europe, North America, and Asia. Among these is the city of Helsinki, and Baltic startups like Coffee Pixels and Stigo from Estonia, as well as Junno from Latvia, have been able to leverage Fukuoka's services for successful expansion into Japan.

These examples show that even early stage companies from small local markets, who may not have large amounts of investor backing can consider local soft-landing services like Startup Fukuoka as a valid entry point for the Japanese market.

This report has been developed by



In a collaboration between





COPENHAGEN CAPACITY

With support from

INDUSTRIENS The Danish Industry Foundation

