

INNOVATION
LAB
ASIA

A GUIDE TO
THE INNOVATION ECOSYSTEM OF

KOREA

INDUSTRIENS
FOND FREMME
DANSK
KONKURRENCEVNE
The Danish Industry Foundation



ASIA HOUSE

TECHBBQ

PREFACE

This guide gives you a brief introduction to the Korean innovation ecosystem, with special focus on **Seoul** where most of the startups and stakeholders are based.

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 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 KOREA?

The Nordics carry a strong brand value in Korea. Several South Korean TV programs, for example, have reported on the Danish society, elaborating on concepts such as “flexicurity”, “equal work culture”, “work/life balance” and a strong welfare society. Denmark is famous for being one of “the happiest countries in the world” and even “hygge” is a recognized phenomenon.

Complement this with the celebration of 60 years of bilateral relations between Denmark and Korea, and the fact that Korea is the third-largest export destination for Danish products to Asia, Korea should be on the radar of Danish entrepreneurs considering Asia.

Indeed, the transformation of Korea has been remarkable. During the 1950s, Korea was ravaged by war and one of the poorest countries in the world. Today, with just 51 million people, Korea is the world's 11th largest economy and a cultural trendsetter, with Korean pop music and TV dramas becoming household names across Asia.

Korea's rapid development was made possible by several factors, including a strong work ethic and dedicated collaboration between the public and private sector that paved the way for large conglomerates, called chaebols. Today, the 10 top chaebols own more than 27% of all business assets in Korea. However, this overdependence on a few large companies is risky for the Korean economy, and their national dominance makes it more difficult for startups to compete.

Recognizing this problem, in 2011 the government initiated a concentrated effort to maximize the growth potential of high-tech companies through the development of an industrial complex just outside of Seoul, known as the Pangyo Techno Valley.

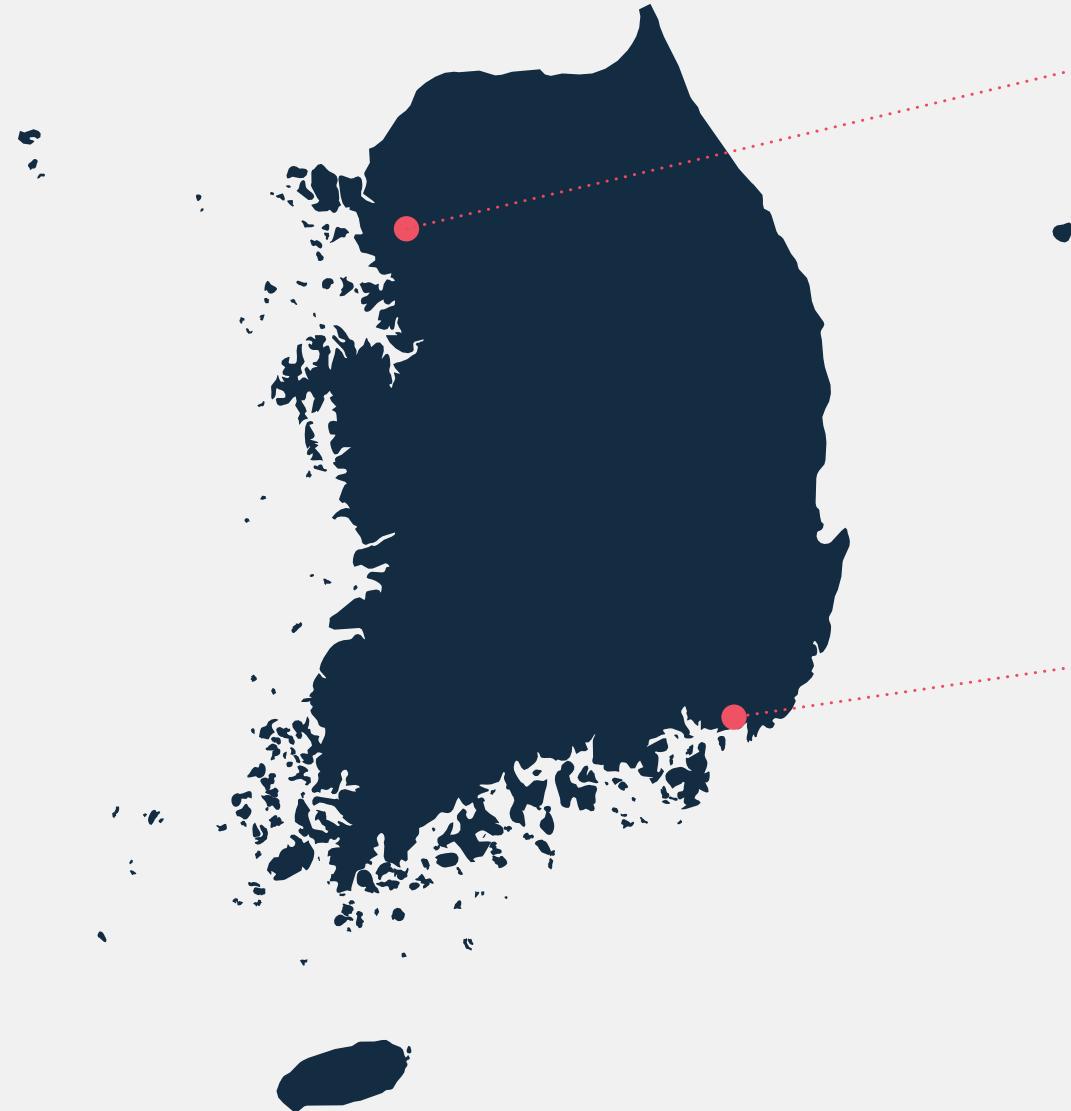
These efforts were further intensified in 2013 in a program collectively known as "Creative Economy", which has included about USD 2 billion in annual expenditures over the past five years. The current administration has continued to support these efforts and in 2018 the government announced a new USD 9 billion fund for startups.

KOREA AT A GLANCE

- Exports of goods and services made up 43% of Korea's GDP as of 2017, compared to 55% for Denmark and 28% across all OECD member states
- Korea has the world's highest percentages of citizens holding a university-level degree
- The country is a signatory to 52 bilateral or multilateral trade agreements that are currently active
- Korea ranks # 5 on the World Bank's Global Ease of Doing Business Index



MAIN ECOSYSTEM OVERVIEW



SEOUL

- Seoul is one of the largest metropolitan areas in the world, and the powerhouse of the Korean economy. Greater Seoul is home to half the Korean population and generates half of the total GDP. Most of the country's giant conglomerates are headquartered in Seoul including Samsung, Kia, LG, and Hyundai, as is the Korean innovation ecosystem.

BUSAN

- Busan is Korea's second largest city, the largest industrial area, and the world's fifth busiest port city. The nearby island of Geoje hosts the most advanced shipbuilding facilities in the world. This is the place for anyone working within the field of Maritime tech.

SEOUL

THE ECOSYSTEM AT A GLANCE

After years of focusing on creating a more entrepreneurial spirit, Korea is now home to more than 30,000 startups, primarily concentrated in and around Seoul. This growth in the startup ecosystem has sparked new opportunities for international startups, especially in fields where Korea already has a stronghold thanks to local talent, resources, and infrastructure.

For international startups looking to scale into the Korean ecosystem, it is critical to work with local partners as the ecosystem is only just beginning to open up to foreigners.

KOREAN INNOVATION

- Korea spends 4.5% of its GDP on R&D, the highest globally
- Korea has the most patent applications in the world compared to GDP
- Korea topped Bloomberg's Innovation Index in 2018, for the second year in a row
- Korea has the highest robot density worldwide
- Korea launched the first 5G network ever and hit 1 million subscribers in 69 days

Local partners are crucial in order to interpret the cultural and legal frameworks within the business culture of Korea, which is dissimilar from Western business culture. Scandinavians especially find it challenging to navigate the hierarchical structure of Korea.

Another barrier of note is government regulation within technology innovation. Outdated regulations often work for the benefit of the big conglomerates, at the expense of startups and SMEs. For example, Korean laws entirely or partially block about 70% of the world's top 100 startups by investment size from bringing their services to the country. Those include giants such as Airbnb, Uber, and China's Ant Financial. Although the government is trying to loosen up on some of these regulations, they still exist and must be considered.

Nonetheless, Korea holds attractive prospects for Danish startups, especially where Denmark has strong capabilities on a global scale and/or where Korea is a leading actor in technology development, such as in Audio, Blockchain, Fintech, Maritime technologies, Greentech, and IoT.





MAIN LEADS

There is a growing political will from the government's side to foster and support foreign-founded startups in Korea. These programs are perhaps the most interesting from a Danish point of view:

- **K-Startup Grand Challenge** invites startups from around the world to establish themselves in Korea, with full support from the Korean government. The 3-month acceleration program is based in Gangnam and includes a large collection of mentors thanks to the Google for Entrepreneurs' network.
- **D.CAMP** is a foreigner-friendly, non-profit startup community ecosystem that serves as a support network for young startups. Their facilities including co-working space, lounges, lecture rooms, event halls, and dedicated offices for promising early-stage companies. Startups here have a higher survival rate than average, and most alumni receive funding after their stay.

The program also offers mentorship from leading Korean tech companies Samsung, Hyundai, SK, KT, Naver, and LG, and free office space in Google Korea's Startup Campus.

A QUESTION OF CULTURE

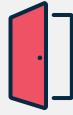
- Korea is homogeneous. 96% of the population are ethnic Koreans, and Korean culture is characterized by a strong sense of collectivism.
- Koreans are hardworking and put in more hours than other OECD citizens.
- Koreans appreciate formality. Dress sharp, show respect, and remember that emotional outbursts are usually frowned upon.
- Korea is hierarchical. People of higher age and rank enjoy higher status and employees of lower ranks rarely question orders from superiors.
- Connections are king. Take your time to build personal relations and understand that Koreans usually work from a long-term perspective.
- Avoid embarrassing others. Fear of losing face is deeply embedded and reflected in a more indirect way of communicating.



OTHER LEADS

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

-
- **MARU180** is a startup incubator set up and managed by the Asan Nanum Foundation. Maru180 offers its own coworking space and also runs the coworking space at Google Campus Seoul. Both spaces are located in Gangnam. In addition, Maru180 provides entrepreneurs with multiple resources and opportunities including education programs, mentorship, investment, and networking.
 - **Samsung NEXT** was founded in 2012 to help launch strategic projects for Samsung in a more agile way. This accelerator has a specific international focus and is open to any company whose technology fits Samsung's mission. Samsung NEXT has established a fund of nearly USD 150 million for pre-seed to series B investments in startups specializing in VR, AI, IoT and "other new frontier technologies." Outreach usually happens on a case-by-case basis.



OTHER GATEWAYS & ACCESS POINTS

- **Seoul Global Startup Center** is a startup incubator founded in 2016, that supports foreign entrepreneurs in Korea through their startup journey in Seoul. The project received funding from the Seoul Metropolitan Government and is operated by Rehoboth, a private business incubator with 20 years' experience in Korea. The Seoul Global Startup Center offers a variety of services meant to ease the challenges that foreign entrepreneurs face as they start and run their businesses in Korea.
- **SparkLabs** is a global accelerator providing investment solutions and mentoring for seed to early-stage startups who wish to expand to the global marketplace. They have a focus on startup companies from Consumer Internet, Enterprise Software, Online Gaming, Mobile, E-Commerce, Digital Media sectors, and Healthcare. The program is three months and includes funding, office space, and access to a network of entrepreneurs, venture capitalists, angel investors, and executives.
- **N15** is a pioneering hardware accelerator in Korea that discovers, grows, and invests in hardware startups and helps them expand to the global market by providing intense legal and business consulting services.
- **DreamPlus** is an ICT accelerator powered by the Hanwha Group that is focused on helping companies scale into other Asian markets. The accelerator also works with ecosystem building across Asia.
- **Google Campus Seoul** Google Campus Seoul offers a variety of services to its members, ranging from mentorship programs and networking opportunities to free cloud services. Located in Gangnam and started in 2015, this was the first Google Campus to open in Asia.
- **HeyGround** is a co-working space for startups with a specific social impact component. Located in the up and coming Seongsu area, complete with quirky cafes and restaurants, HeyGround is a beautifully appointed co-working space. They offer desk rentals and private offices and host impact-focused events. Members have full access the community spaces and other amenities like a photo studio and concierge service.

A FEW FACTS ON SEOUL

- Seoul Capital Area has a population of 25 million and generates 50% of Korea's GDP
- Seoul Capital Area is estimated to be the fourth largest urban economy in the world (after Tokyo, New York City, and Los Angeles) and the fifth largest metropolitan area
- Seoul ranks amongst the top 12 upcoming ecosystems (Startup Genome 2019)
- Seoul ranks 15 on the Economist 2025 City Competitiveness Index that monitors the future competitiveness of cities
- Seoul was listed as the world's 7th most expensive city in 2019, on level with Copenhagen



STRONGHOLDS & OPPORTUNITIES

The Korean strongholds and opportunities are reflected by the fact that Korea is a highly advanced society. Thus, Korea has periodically dominated the global cryptocurrency exchanges and is a leader within Blockchain technologies. Korea has one of Asia's largest eCommerce markets, with five major platforms vying for dominance. One of these, Coupang, has raised USD 3 billion from Softbank, one of the largest of such investments ever made. Korea also has the world's largest food delivery service, Baedal-e Minjok.

Audio is one sector where Danish companies have a brand recognition. Larger companies have gained a local foothold while Danish startup Audiowise has engaged with Hyundai Motors. **Synergies may also be found within the Maritime sector,** where both Denmark and Korea have a strong presence.

IoT is the strongest sector in Korea for foreign startups.

This year, Korea is expected to become the world's fifth largest market for IoT-technology. Furthermore, as one of the most interconnected places in the world, Korea could be attractive as a testbed for IoT firms that wish to perform tests within the fastest and most established 5G network in a real-world setting.

The Greentech sector is also of particular relevance,

due to the strong Nordic brand in this area. Several Danish corporates are already operating in Korea, and there is a high level of respect for their expertise.



IOT

- The domestic sales of the Korean IoT industry stood at USD 7.7 billion in 2018, an increase of 19% from 2017. In just four years, the market for IoT has doubled.
- The market has started to move from the initial equipment-based stage to focusing more on platforms and services, which are segments that are expanding gradually. The sales of wearable devices and smart terminals accounted for 43% of the sales in 2018 equal to USD 3.3 billion.
- **Korea is a major hub for IoT-related technologies, such as VR, AR, gaming, and AI, and as such there are opportunities for Danish startups in these sectors**, especially through collaboration with one of Korea's large telecoms such as SK Telecom, KT, and LG. Korean telecoms are global leaders. In 2019, 5G mobile data service was introduced by Korea's three largest telecoms as part of a government-backed initiative, making it the first nation in Asia to launch commercial 5G networks.
- **VC, incubators and accelerators connected to Korean telecoms are often open to international applicants.** One of the largest, Samsung Next, has established a fund of nearly USD 150 million, targeting startups specializing in VR, AI, IoT, and "other new frontier technologies."



GREENTECH

- The Korean government is pursuing ambitious goals within renewable energy and is investing heavily in Greentech. In 2011, the Korean government launched a plan that included creating 1.5 million jobs within sustainable energy and to take up 18% of the global market for clean energy by 2030. A goal has also been set for 20% of Korea's total electricity consumption coming from renewable sources. The government is focusing mostly on solar and wind power in order to achieve this goal.
- Like much of Korean the startup ecosystem, Greentech is heavily supported by the government. While specifically Greentech focused programs are rarer, there are many support organizations for social enterprises broadly.
- The Korea Social Enterprise Promotion Agency (KoSEA) is a national agency solely dedicated to fostering social enterprises. The Seoul Social Economy Center (SSEC) also provides technical support, capacity building, and networking assistance to Seoul-based social enterprises. The Korean government is itself a major customer for such companies, and in 2015, the Seoul Metropolitan Government alone purchased nearly USD 70 million worth of goods and services from social enterprises. Therefore, many Greentech startups may find it relevant to collaborate directly with government agencies. The Korean International Trade Association (KITA), which has many programs and services for foreign startups, is a good place to start.
- Many chaebols also have dedicated incubators, accelerators, and VC funds to promote social enterprises. H-On Dream, for example, is a venture incubation program launched by Hyundai and the Korean government for startups with a positive social contribution.

This report has been
developed by

INNOVATION
L **Δ** **B**
Δ **SIA** **Δ**

In a collaboration
between



TECHBBQ

**INNOVATION
CENTRE
DENMARK**

With support from

**INDUSTRIENS
FOND** FREMME DANSK
KONKURRENCEEVNE
The Danish Industry Foundation

