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# SEOUL'S STARTUP ECOSYSTEM THRIVES

The city government is fueling Seoul's emergence as a global innovation hub through its support of young firms tackling today's biggest challenges.



South Korea's decisive, science-led response to the coronavirus pandemic offers insight into another successful partnership. Seoul is working with Korean entrepreneurs and their fledgling companies to develop one of the world's most promising startup ecosystems in line with the nation's growth as a global economic center.

Across the South Korean capital, startups are harnessing government investment and services to make significant advances in industries engaged in the most crucial challenges of our time, notably finance, biomedical, manufacturing and social enterprise. Seoul is providing intensive support to 300

companies to prepare for global demand for banking and health services in the wake of the Covid-19 pandemic.

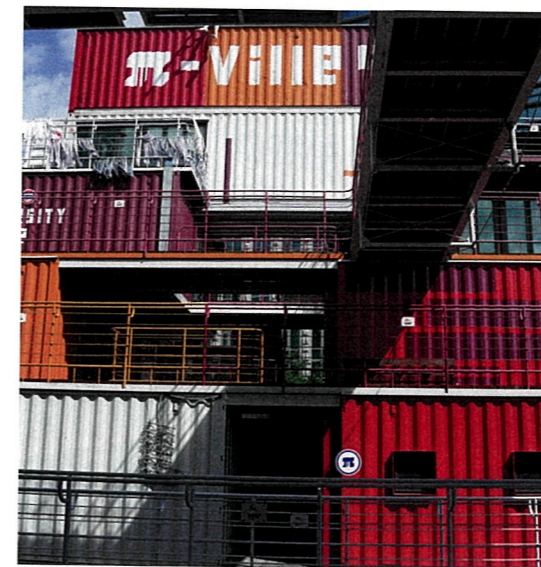
The city's startup ecosystem already has a value of US\$39 billion, according to the research firm Startup Genome's Global Startup Ecosystem Report 2020. Driving that success has been the emergence of 13 Korean unicorns—privately held companies valued at US\$1 billion or more. The near future promises more game-changing developments by a bevy of new Korean companies.

Kim Eui-Seung, Deputy Mayor for Economic Policy at Seoul Metropolitan Government (SMG), said at a news conference in

Seoul in June, "Startups are drawing more attention amid global challenges such as the Covid-19 outbreak, and are becoming increasingly more influential in a technology- and innovation-dependent global economy.

He added, "The city of Seoul will focus on the scale-up of promising startups amid a prolonged pandemic, as we have steadily invested over the past few years to foster future industries such as AI, fintech and biomedicine."

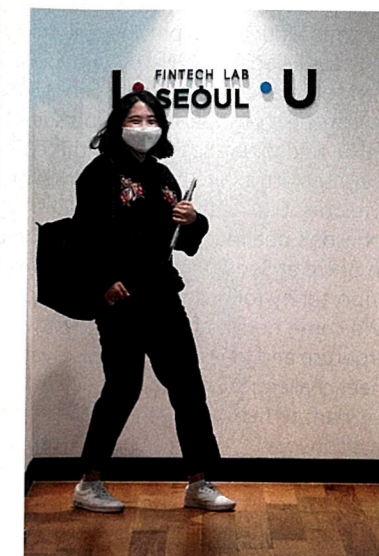
To support innovation in the financial services sector, Seoul Fintech Lab offers accelerate programs, mentorship and investment to fintech startups in Seoul. "We want to be a



π-Ville, Korea University's office space for startups ©PENTA PRESS



Seoul Startup Hub Seongsu ©PENTA PRESS



Seoul Fintech Lab ©PENTA PRESS

driving force to change the fundamentals of the existing financial industry and ultimately serve as an edge for international competition," says Im Gug-hyun, Team Leader of the Financial Industry Team at SMG.

At the lab's gleaming offices in Yeouido, Seoul's financial district in the heart of the city, companies are provided workspaces as well as common areas to network and hold meetings to promote idea sharing and support. "There are many stages of business development, and Seoul city would like to encourage growth to generate synergy," Im says.

Down one hallway sits Tanker Fund, an AI platform that provides real-time information on real estate. Its technology also can help determine terms of a property transaction, such as the optimal amount of a loan. Tanker Fund CEO Lim Hyun-seo says, "The centralization of data collection and sorting on a daily basis is challenging. Our competitive advantage is in the accuracy of our platform's sorting and processing of data."

Along with the office space offered by Seoul Fintech Lab to get his startup off the ground, Lim says, Tanker Fund has benefited from the ability to network with other startups while having a foothold in South Korea's financial epicenter. "Being in a lab gives us access to the companies that can most benefit from our services," he says, and its Yeouido address gives the firm additional clout.

Along with modernizing key industries such as finance, Seoul startups are also working on today's most pressing health issues. Seoul BioHub, located at a nexus of ten

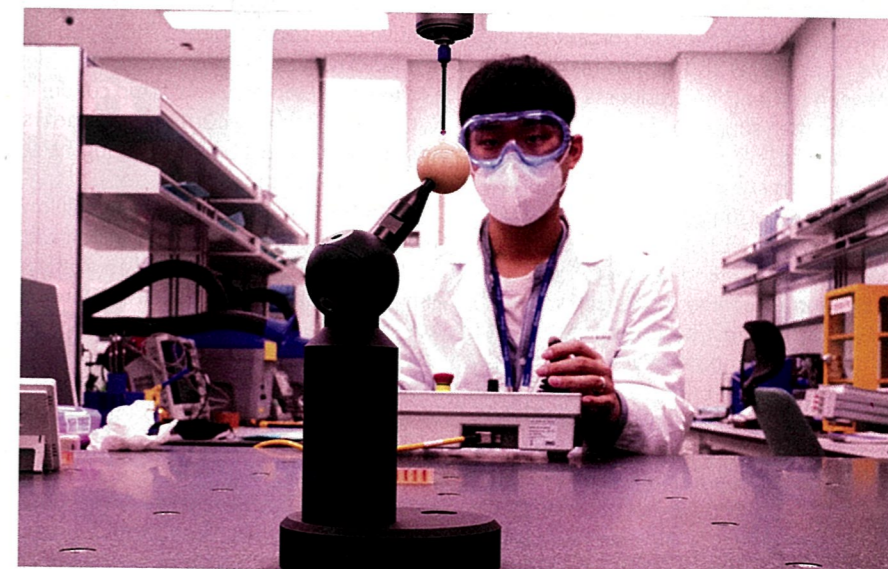
universities and six hospitals in the north of the city, provides a space for companies to operate in an ecosystem while seeking to deliver valued-added health services in South Korea and beyond.

The sprawling green campus, which opened in 2017, features separate buildings for laboratories, education and events, as well as offices. From 2018 to 2022, the government will build a Seoul Bio Fund valued at 300 billion won (US\$262.3 million) and allocate 24 billion won (US\$21 million) for a R&D fund. It also will ease some government regulations to facilitate research. Sixty-six companies now operate in the hub, drawn

from the medical device, pharma and digital healthcare sectors. The pandemic has made the hub's activities particularly timely and relevant.

"Our key role is to recognize potential. This year, Covid provides opportunities for overseas expansion," says Kim Ji-seung, a researcher at Seoul BioHub.

In one brightly lit office is Palogen, a startup that leveraged semiconductor technology to build the diagnostics industry's first "Genomic Biosensor," which provides fast, accurate testing for diseases including early-stage cancers and Covid-19. "Our goal is to harness the speed and efficiency



Seoul BioHub ©PENTA PRESS

of semiconductors to provide real-time testing," says Palogen CEO Han Kyung Joon. "The workspace and support from Seoul BioHub have made it possible for us to pursue that."

The fledgling ecosystem of the campus is also an attractive destination for global investors. U.S. healthcare giant Johnson & Johnson's pharmaceutical division operates an office at Seoul BioHub, recognizing the opportunity for growth and development. "We came here to form a network, to get expertise and ideas. We need innovation to meet challenges in the bioscience field, and we want to help mature all of these ideas," says Lee Joon-young, Manager, Janssen Korea. "We're all striving to meet challenges that are more important than at any other time."

Seoul's startups are using a diverse range of ideas, locations and technologies to find solutions. Throughout a maze of alleys in northeastern Seoul, disused university properties and converted shipping containers now serve as office space for startups, and a former underground parking lot is a hub for cutting-edge 3D printing technology.

The initiative was launched by Campus Town Startup at Korea University—a broad effort to merge technology innovation with the revitalization of the local community through collaboration between the government, the university, entrepreneurs and local residents.

With a 10 billion won (US\$8.7 million) investment from the Seoul government, the project provides office space and equipment, including desks, printers and Wi-Fi, to fledgling companies along with facilities for the community, such as library space and public work stations. Campus Town organizers also hold local events and forums for dialogue between students and residents. "We focus on more than supporting startups. We also find ways to link them with the local community and make those connections sustainable," says Kong Jung-sik, a Professor at Korea University's School of Civil, Environmental and Architectural Engineering. "Creating a good living environment is our ultimate goal."

One of the most promising startups to come out of Campus Town is AEOL Korea, which makes next-generation, energy-efficient heating and cooling ventilation systems. The company is in talks to supply its products to two large public companies in South Korea, and plans to continue developing energy-saving materials that can be applied across industries. Baek Jae-hyun, CEO of AEOL Korea, says, "Our technology



Seoul Fintech Lab

can change the world and be part of a more sustainable future."

In Seoul's Seongsu area, in the east of the city, old challenges and new solutions come together. The neighborhood was once a buzzing ecosystem of auto repair shops and publishing houses. Lee Tae-hoon, Head of the Startup Division of the Seoul Business Agency, saw the now-struggling industrial area as the perfect location for Seoul Startup Hub Seongsu, which is focused on fostering social impact ventures.

Established in 1998, the Seoul Business Agency added the startup division in 2009, selecting 1,000 entrepreneurs for comprehensive early-stage support. The group has prioritized not just the firms' rate of return but also the development of a startup culture in Korea and inspiring young entrepreneurs. Another aim is to establish a space for shared economies to address social issues.

Its annual 5 billion won (US\$4.4 million) investment in the program is paying off with participating startups posting an average annualized rate of return of 160%. "Our goal was to create a culture where socially minded startups could pursue their vision without having to worry about money, and then provide direct investment when they advance to company form," Lee says.

Ted Kwon, CEO of Coolidge Corner Investment, a Seoul-based venture capital fund, says Seoul Startup Hub Seongsu is a constant source of the kind of startups to which he is most drawn. "Before, questions of investment

only focused on the financial aspects. Nowadays consumers, especially young people, are more interested in who made the product and why," Kwon says. "The first question we ask is, 'Did the founder start this company to solve a particular problem?'"

One particularly exciting startup to emerge from Seongsu that has enormous potential for social impact is The Wave Talk, whose core product measures the quality of drinking water with easy-to-use, inexpensive laser technology.

The Wave Talk CEO Kim Youngdug says he was motivated to find a solution since it can be difficult to tell the difference between safe and unsafe water with the naked eye. The Wave Talk has raised more than US\$10 million in funding and plans to launch portable sensors that can be installed in homes around the world to potentially prevent millions of people from drinking tainted tap water and save lives.

"The technology measures bacteria, plastic, heavy metal and viral impurities and gives a numerical reading," Kim says. "It currently takes 10 seconds, and we will get that down to five."

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INNOVATION

By Jeremy Bogaisky | Photograph by Ethan Pines for Forbes



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