

Taiwan leverages accelerator programs to hasten its transition into a startup nation

This article is second in a four-part series, Taiwan in Transition, about Taiwan's economic evolution from manufacturing to innovation. For access to the entire series, click [here](#).

By Michael Sedwick

TAIPEI, Taiwan---Wang Guan Yu, an independent farmer in her 40s, has maintained a vegetable stand outside of Taipei City's [Chenggong Market](#) for more than 10 years. Looking up at the overcast clouds and contemplating the oncoming rain, Wang said that summers in Taiwan are getting hotter, but spring is becoming the worst season for her vegetable fields.

“The rain soaks the fields, and then the sun comes out to dry everything up again. It's a terribly repetitive cycle here that ruins my plants,” Wang said. “I have a tent that I try to put up to protect the vegetables, but sometimes the timing does not work out.”

Several miles away from Wang's vegetable stand, a Taiwanese company has created new technology that could help solve Wang's dilemma of dealing with Earth's ever-changing climate. The company, [Fox-Tech Co.](#), has developed an agricultural monitoring system which helps farmers adapt to the negative impact of Earth's quickly changing environment on global food supply.

“At least \$300 billion are lost every year because of global warming, yet there is no environmental solution for mass outdoor monitoring. We have developed an end-to-end hardware and software solution that is easy to use,” said Yadia Colindres, Honduran immigrant and co-founder of Fox-Tech.

In other words, anyone who can use a smartphone can use Fox-Tech's technology, making its crop-saving benefits more accessible to independent farmers.

In order for Fox-Tech to grow more quickly, the company founders decided to seek advice from someone who had already walked down the path of success—[SparkLabs Taipei](#), an accelerator founded by successful entrepreneurs for the purpose of investing in and mentoring startups who want to expand globally. Because SparkLabs Taipei has invested money and advice into

Fox-Tech, both companies are working together to bring Fox-Tech's technology to the global stage.

An accelerator is an investment group that seeks to quicken a startup's growth by offering funds and mentorship in exchange for partial ownership. SparkLabs Taipei offers a maximum of \$40,000 in funding for up to 6 percent of a startup's equity, according to its [website](#). Specific terms for Fox-Tech's investment were not disclosed.

Colindres said that she and her business partner, Taiwanese citizen Sonic Wang, saw a need to help farmers combat the effects of global warming. Wang said he was inspired for the product idea by his grandparents, farmers who manually checked the field temperatures every morning.

"We wanted to make a product that can really change something. And that's worth devoting ourselves to," Wang said.



TempHawk, Fox-Tech's sensor product, displayed side by side with their data-displaying app.

Photo Credit:
Michael Sedwick

Fox-Tech places sensors in fields, in barns, or at any location in the food supply chain; these sensors measure humidity and temperature data, sending alerts to farmers' electronic devices when those data points deviate from an acceptable range, Colindres said.

Although Wang was inspired by local Taiwanese farmers, Colindres said that the company also needed to prepare immediately for global expansion, because the local Taiwan market is not mature enough for their product.

"Singapore, for example, has a law about food temperature regulation, whereas in Taiwan everything is manual, and the temperatures in the cold chain are actually above the actual measurement," Colindres said. "Traditional business owners in Taiwan will think our product solution is a nice-to-have, not a must-have."

Thus, Taiwanese farmers need to conform to other countries' standards in order to sell its agricultural products abroad. One common example is guaranteeing a continuous cold chain, meaning that a farmer must prove that his or her products have

continuously stayed in a climate-controlled environment before passing the goods off to a distributor or exporter.

According to the Maritime and Port Authority of Singapore, the Singapore government [regulates](#) the cold chain for food products varying from dairy to pork. Fox-Tech's products can help farmers achieve such standards.

Fox-Tech is among the first of seven startup companies to apply for funding and be chosen by SparkLabs Taipei. This startup-accelerator relationship, funding and advice in exchange for partial ownership, is common in Silicon Valley yet continues to develop in Taiwan, said Edgar Chiu, co-founder and managing partner of SparkLabs Taipei.

“New companies here are typically unfamiliar with how to enter the international market, get access to venture capital, and eventually sell their business to a global firm,” Chiu said.

Chiu compared Taiwan's startup atmosphere to Israel's, where the domestic market is too small for profitability and requires companies to look for markets abroad almost immediately.

“I think if we can enter the international market as soon as we can, try to validate the market quickly, and expand our service to more countries, then we may soon build up a “unicorn” in Taiwan,” Chiu said, referring to companies that are valued at or above \$1 billion.

Chiu said that his experiences co-founding a caller ID app in Taiwan inspired his decision to help other entrepreneurs, because his team in that startup faced challenges such as understanding other countries' cultures and phone user habits.

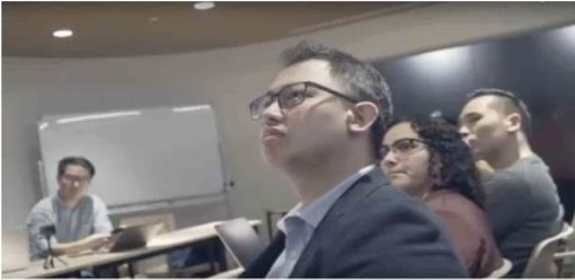
“From the first day in our small office, the goal was to serve the international market, but it was difficult for us to find mentors who had had experience extending their businesses abroad,” Chiu said.

“As we were selling our business to a Korean company, I wanted to start a side project that could give back to Taiwan and help entrepreneurs get to the international market. That's when I started considering angel investing and mentorship,” Chiu said. SparkLabs Taipei's slogan, “Founded By Entrepreneurs For Entrepreneurs,” reflects Chiu's investing philosophy.

Tony Ling, venture partner at SparkLabs Taipei, said that SparkLabs Taipei focuses on helping companies younger than five years that have achieved traction and a general direction for their future development.

“Our mentors can share their past experiences of failure, challenges of getting capital, and success stories of increasing profitability. All of our support is intended to help these companies to use Taiwan as a hub to expand beyond it,” Ling said.

Once SparkLabs Taipei decided to invest in Fox-Tech, Colindres said that she and her team were invited to join a 3-month accelerator program that included office space in [Taiwan Tech Arena](#), a government-sponsored incubator where SparkLabs Taipei resides.



Fox-Tech Co-Founders Sonic Wang, center, and Yadia Colindres, center right, pay attention to a presentation as SparkLabs Taipei Co-Founder Edgar Chiu, left, watches from a distance.

Photo Credit: SparkLabs Taipei

Colindres said that many resources are available at SparkLabs Taipei and Taiwan Tech Arena, but that one must make the most of it; in other words, the available mentors can support but will not do the work for a startup.

“I learned that you have to make your opportunities instead of waiting for them,” Colindres said. “We tried to schedule meetings every other day with our mentors. I spent long days and nights following up with APAC, European, and Latin American leads,” referring to potential sales opportunities across Asia, Europe, and South America.

“The accelerator process really changes you, because it changes your mentality about what is required to succeed as a startup. It encourages me to always give more of myself,” Colindres said.

“New companies here are typically unfamiliar with how to enter the international market, get access to venture capital, and eventually sell their business to a global firm.”

--- Edgar Chiu, co-founder and managing partner of SparkLabs Taipei.

After three months of long days and short nights, Colindres and the Fox-Tech team needed to prepare to attract more investors and media attention. Their chance to present themselves to the

world came on Jan. 17 during SparkLabs Taipei's Demo Day conference, an off-site event in which SparkLabs Taipei's mentored startups pitched their ideas to the media and investors.

Transitioning from the bright, naturally-lit registration desk into the dark presentation room was jarring. Enclosed by dark drapes and stage lighting of all colors on all sides, the gathering felt as if a rock concert was about to begin. A loud buzz of chatter permeated the back of the room as attendees gathered to snack, drink, and visit the exhibition tables of the seven startups that would soon be presenting themselves.

At the conference in which techniques for improving farm monitoring were on the agenda, presenters, investors, media, and other friends slowly began to take their places in approximately 300 reserved chairs. Representatives from the seven startups that had completed their work with SparkLabs Taipei were ready to talk about their experiences.

Chen Liang Gee, minister of Taiwan's Ministry of Science and Technology, said, "SparkLabs and its partner companies will represent Taiwan's entrepreneurial community when making connections internationally. This process will give Taiwan a stronger foundation for a brighter future, helping to put Taiwan on the international entrepreneurial community's radar."

One by one, each company took the stage in order to show the audience their ideas: an entertainment booking app, data management software, an online-only sportswear brand. When the time finally came for Fox-Tech to take the stage, Ling of SparkLabs Taipei said that he was excited about its prospects.

"Fox-Tech is really taking the Taiwanese traditional strength in IoT hardware and layering on data collection and data analysis on top to provide more value for its customers," Ling said.



Fox-Tech Co-Founder Yadia Colindres discusses the company's target industries during Demo Day.
Photo Credit: Michael Sedwick

With only five minutes available to present, Fox-Tech co-founder Colindres explained the agricultural monitoring problems and solutions to the audience. Their four-member team has projected \$3.7 million in revenue this year, ramping up to \$45 million by 2023, Colindres said.

Colindres said that she is hopeful that, thanks to SparkLabs Taipei's support, they will attract additional funding to fuel future growth.

"SparkLabs Taipei doesn't want you to just aim to be Taiwan No. 1. If you want to be global No. 1 industry in your market, SparkLabs will polish you to be that. But you still need to put in your work."

Wang, the independent female farmer, said that she would appreciate the technology and hopes it is not too expensive.

“I don’t belong to any farming association, nor does the government offer me financial support. I’m on my own,” Wang said. “With that device just described, I wouldn’t be alone anymore.”