

ANNUAL REPORT

2022

Taiwan's Corporate Innovation and Startup Ecosystem



**Corporate
Investment
Startup**

Organizer : Small and Medium Enterprise Administration (SMEA) of Taiwan's Ministry of Economic Affairs
Executive unit : Institute for Information Industry

ANNUAL REPORT

2022

Taiwan's Corporate Innovation and Startup Ecosystem

Corporate

Investment

Startup

Organizer : Small and Medium Enterprise Administration (SMEA) of Taiwan's Ministry of Economic Affairs

Executive unit : Institute for Information Industry

CONTENTS

Chapter 1	—	Accelerating CSE in Taiwan	—————	06
Chapter 2	—	Accelerating Investment in Tech Startups	—————	52
Chapter 3	—	Startup Accelerator Ecosystem in Taiwan	—————	70
Chapter 4	—	Conclusion	—————	76



Ho Chin-Tsang

Director-General,
Small and Medium
Enterprise Administration

Preface by the Director-General

Boosting Industrial Innovation by Coupling Businesses, Investment, and Startups

Innovation is an important measure of competitiveness for numerous countries. While the past few years have seen threats posed by the U.S.-China trade war, the COVID-19 pandemic, and the Russia-Ukraine war, governments around the world are pursuing innovation and digitalization. Against this backdrop, the Taiwanese government has introduced policies designed to encourage entrepreneurial growth at the national level; it has consistently worked to reduce legal barriers, improve the local investment environment, support innovative individuals, and expedite market expansion.

The Small and Medium Enterprise Administration of the Ministry of Economic Affairs (hereafter the “SMEA”) continues to underwrite the startup community in Taiwan by using its thorough innovation and business incubation system. By providing “ample venture capital,” “diversified services,” “startup hubs,” and “links to markets,” the SMEA is refining the local startup ecosystem, in order to support the development of innovation and startup

businesses. Moreover, to improve the industrial competitiveness of small-and-medium enterprises (SMEs) and startups in Taiwan, we encourage private firms to invest in innovative ventures, and thus promote corporate-startup engagement. We are aiming to facilitate the growth of Taiwanese startup firms through various forms of support, and will continue to stimulate the transformation and evolution of SMEs and startups.

Promoting the growth and exit of startups by improving access to investment opportunities

The growth and exit of startups plays a key role in invigorating the startup community. To help startups develop and exit, the Taiwanese government has provided supportive resources and services that contribute to the startup process; it has established an exhaustive range of investment opportunities for businesses, from creation to exit. This allows them to harness capital to accelerate their growth, thereby building a virtuous cycle in the startup community.

PREFACE

The capital is offered through a wide range of solutions that ensure ample venture capital, including financing, investment, and subsidies. The SMEA provides diversified services—in areas such as markets, capital, technology, and training—to enable universal access to startup-related services. By offering capital and resources in a thorough manner, the SMEA is striving to build an environment that accelerates the growth of startups and shortens the time it takes to exit.

Expediting local startups' access to the international markets through startup hubs in northern and southern Taiwan

To link Taiwanese startups with the world, refine the startup ecosystem, and facilitate the exchange of experience between startups across the world, the SMEA has created two international startup hubs respectively in Linkou (in northern Taiwan) and Kaohsiung (in southern Taiwan). Through fields and mechanisms for putting new ventures to practice that will attract startups and accelerators from abroad, and the introduction of the “entrepreneur visa” and

the “golden employment card” to appeal to entrepreneurial professionals worldwide, both hubs are built to accommodate foreign startups and act as an environment that encourages their development. To pair Taiwanese startups with business partners, the Administration has also launched a strategy to establish “links to markets.” As the United States and European countries are dropping their COVID-19 restrictions and global travel is reviving, we are hosting events where local startups can interact with the international market, seek potential investments, and thereby cultivate their worldview.

Matching private businesses large and small to drive industrial transformation

While there is an ongoing paradigm shift to digitalization in the global industrial community, firms in Taiwan are also feeling the need to go digital and innovate. To encourage established businesses to work with startups on open innovation, and help them leverage each other's resources and R&D capabilities, the SMEA positions itself as a platform where startups, SMEs, and large companies can find a match with

each other. They can combine their private investments and industrial resources (i.e., by integrating capital, industrial experiences, markets, and business opportunities) in order to provide strategic investments, build experiential fields, or validate businesses—thus creating a transformative environment where startups can be linked with industries. This year, we are helping Taiwanese firms achieve net-zero carbon emissions, with an eye to fostering the development of innovative green technologies; this involves hosting competitions where established companies pose questions to startups so that they can co-create business opportunities.

Taiwan's Corporate Innovation and Startup Ecosystem report for 2022 examines how Taiwan's startups are developing. Since 2020, the SMEA has published this annual report, available in Chinese and English, to keep stimulating Taiwan's innovation and entrepreneurial environment, and to encourage established and startup businesses to work together. The report covers the state of industries and the startup ecosystem in Taiwan from the perspectives of “business innovation,” “venture capital,” and “startup incubation,” in order to familiarize entrepreneurial professionals at home and abroad with the nation's industrial strengths, and its resources

devoted to startup development. The report is expected to provide guidance for those seeking to enter Taiwan's startup industry.

The SMEA will continue to dedicate its resources to building environments best suited for starting up a business. With guidance from the government, businesses of all scales can work together with startups to accelerate industrial innovation, thereby allowing the Taiwanese economy to grow more quickly and robustly.

Best regards,



Ho Chin-Tsang
Director-General,
Small and Medium Enterprise Administration
Ministry of Economic Affairs

Corporate Investment Startup







Chapter 1

Accelerating CSE in Taiwan

2022 Taiwan CSE Survey Analysis of Results and Case Studies

In recent years, medium and large-sized enterprises (MLEs) in Taiwan have been actively collaborating with tech startups, and corporate startup engagement (CSE) has become the norm in Taiwan, with various industries actively participating in related activities. This chapter provides a quantitative understanding of the current status of CSE in Taiwan through a questionnaire, and provides reference and insight for Taiwanese and international investors, start-ups and MLEs interested in engaging in Taiwan's CSE ecosystem.

Section 1

Analysis of Taiwan CSE Survey Results

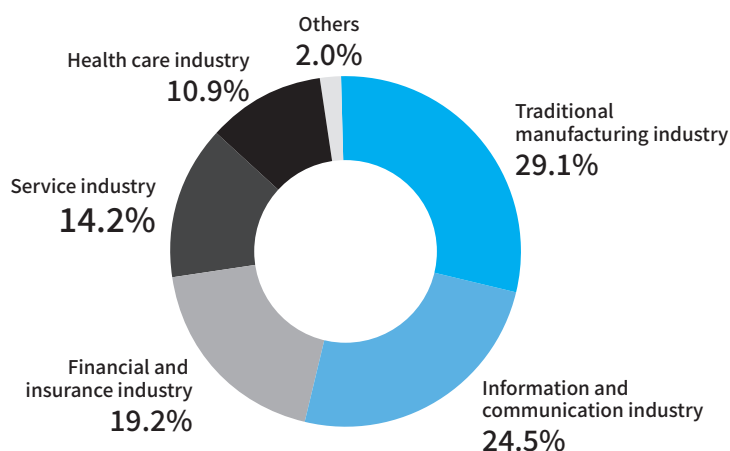
- **Survey description:** In order to understand trends in how Taiwan's MLEs engage with startups, this study uses questionnaires to understand their willingness, current status of implementation, experience, resource requirements, etc. to provide reference for Taiwanese and international enterprises, investors and startups who are interested in CSE.
- **Survey method:** CIO Taiwan was commissioned to conduct an online survey.
- **Survey sample:** 302 effective questionnaires were collected.
- **Surveyed enterprises:** MLEs in Taiwan with a capital of NT\$100 million or more (enterprises with a capital of NT\$1 billion or more accounted for more than 60% of the effective samples in this survey)
- **Surveyed population:** Mid-level and senior executives (such as CEOs, CIOs, COOs)
- **Surveyed industries:** Traditional manufacturing, information and communication, health care, finance, service, etc.

Profile of Survey Respondents

Profile of the respondents of this survey

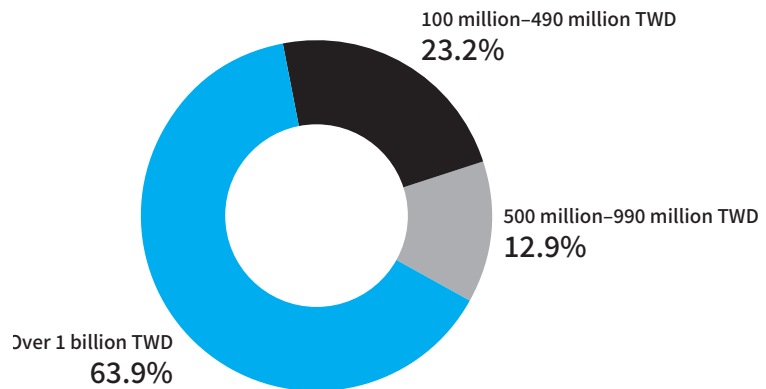
By Industry:

Together, the traditional manufacturing and ICT industries accounted for more than 50% of the total.



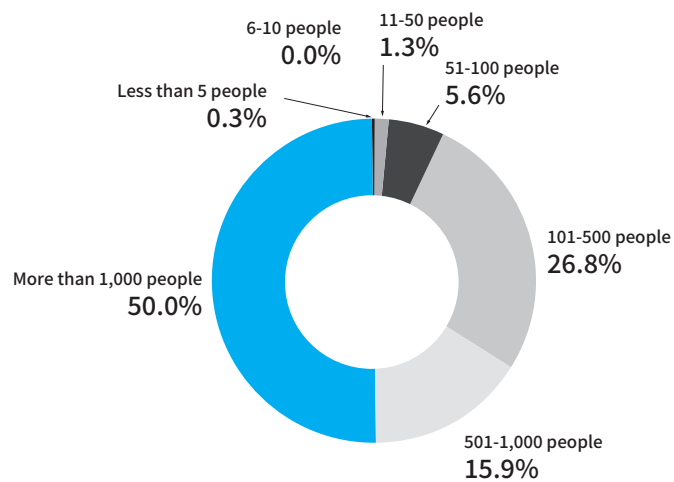
Capital:

63.9% of the MLEs were those with more than 1 billion in capital.



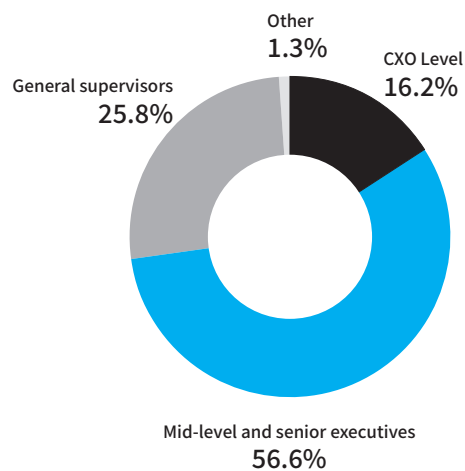
Scale:

50% of the MLEs were those with more than 1,000 employees



Respondents:

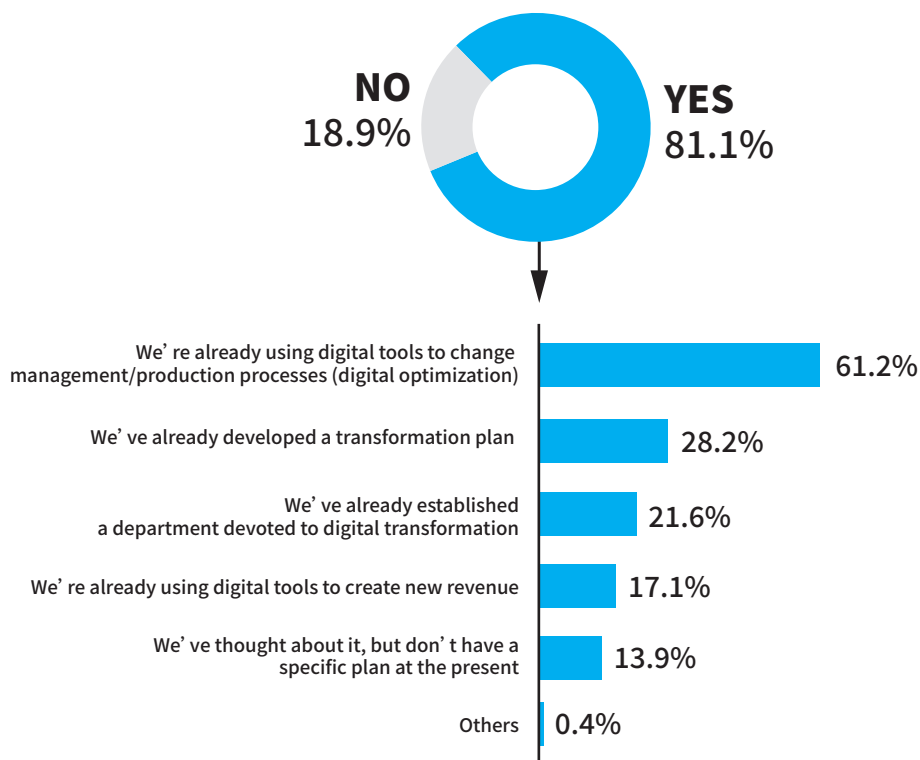
56.6% were mid-level and senior executives



Taiwan's MLEs' Current Status in Digital Transformation

81.1% of MLEs have already engaged in the digital transformation process or are planning to

More than 80% of Taiwan's MLEs are aware of digital transformation or are in the process of doing so. Among them, those who have already used digital tools to improve management/production processes accounted for the highest percentage (61.2%), indicating that most of Taiwan's MLEs are at the digital optimization stage.



Has your organization currently made any progress in the process or planning of digital transformation? (Single choice)

Sample size: 302
Source: Market Intelligence & Consulting Institute (MIC)

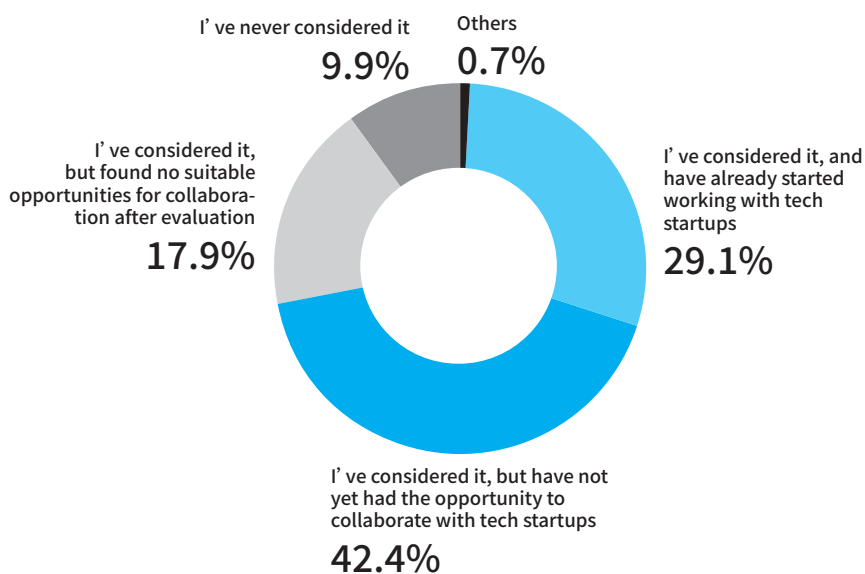


If you answered "yes" to the previous question, which of the following descriptions is more in line with your organization's current digital transformation process or planning? (Multiple choice, up to 2 answers)

Sample size: 245
Source: Market Intelligence & Consulting Institute (MIC)

89.4% of MLEs have evaluated the possibility of collaborating with startups in the process of digital transformation

Nearly 90% of Taiwan's MLEs "have considered" collaborating with tech startups in the process of digital transformation. Among them, those that "have considered it, but have not yet had the opportunity to collaborate with tech startups" accounted for the highest percentage (42.4%), followed by those that "have considered it, and have already started working with tech startups" (29.1%), and then those that "have considered it, but found no suitable opportunities for collaboration after evaluation" (17.9%).



Have you ever considered collaborating with tech startups during the process of digital transformation? (e.g. importing solutions by startups, collaborating with startups to develop new products, etc.)(Single choice)

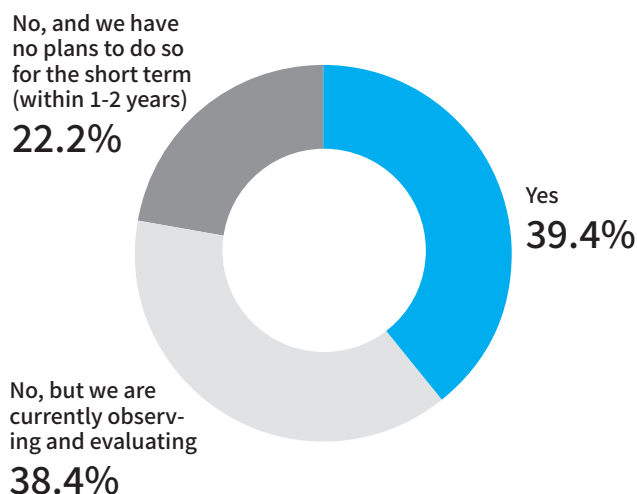
Sample size: 302

Source: Market Intelligence & Consulting Institute (MIC)

Taiwanese MLEs' current engagement in CSE

39.4% of MLEs are already engaging in CSE

39.4% of MLEs have interacted with tech startups; 38.4% are evaluating and observing; and only 22.2% have no plans to engage with tech startups in the near future. This shows that CSE has become a trend in Taiwan, and 80% of enterprises have already had concrete interactions or have started to pay attention to relevant collaborations.



Has your organization ever interacted with tech startup teams? (Single choice)

Note: Tech startups refer to companies with emerging key technologies or services (in areas such as artificial intelligence, blockchain, cloud, big data, Internet of Things, 5G, etc.) that have been established and registered for less than 10 years.

Sample size: 302

Source: Market Intelligence & Consulting Institute (MIC)

In the following section, the survey results of the previous question are used to classify the respondents into two categories—those who have experience in CSE collaboration and those have not yet engaged in CSE—and conduct an analysis from both the positive and the negative aspects.

Basic Question



Those with experience in CSE collaboration

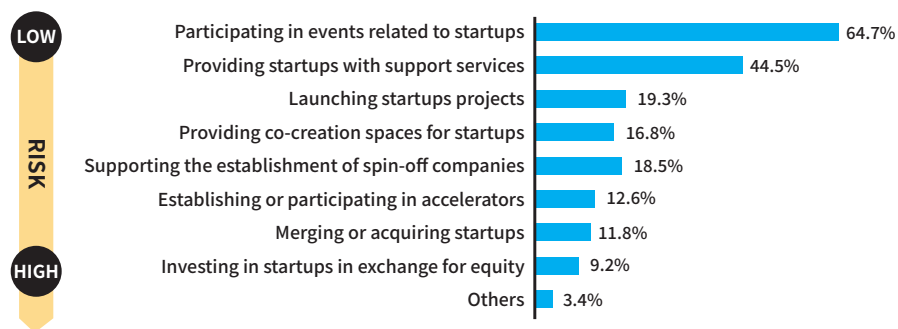
Current status of CSE implementation

YES

Participation model:

Main model for CSE is based on participation in activities and provision of support services

500 Startups, a venture capital firm, categorized commonly-used CSE models into the following eight categories. It was found through this survey that the most common models used by Taiwanese MLEs that have engaged in CSE are “participating in startup-related events” (64.7%), such as hackathon, demo day and matchmaking events, followed by “providing support services” (44.5%) by linking startups with resources that exist within the MLEs, such as financial consulting and entrepreneurial mentoring.



Based on the above description, what are the main models of CSE that your company has adopted? (Multiple choice)

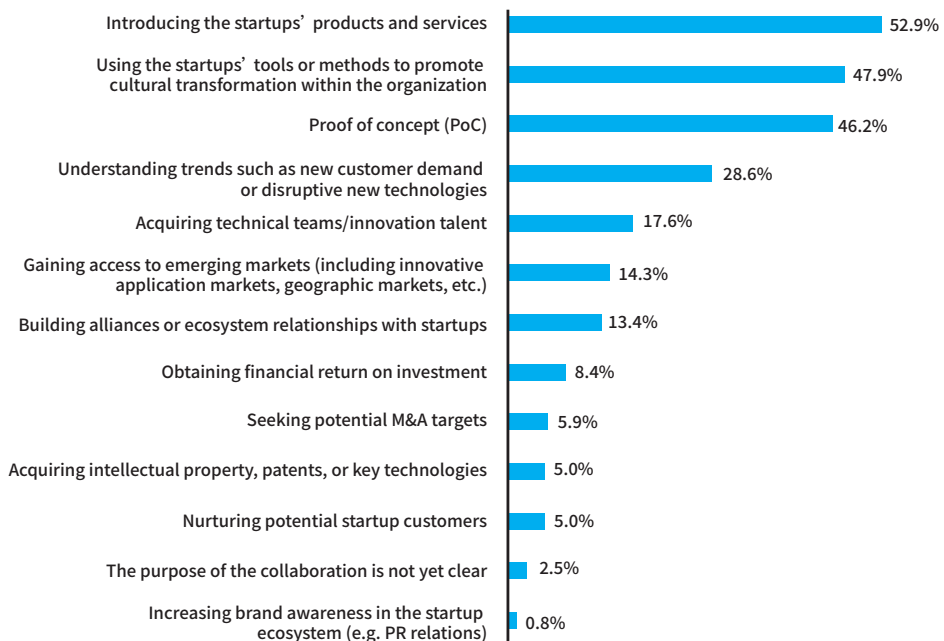
Sample size: 119

Note: For the definition of common international CSE models, please refer to the “2021 Key Report on Taiwan’s Startup Cultivation Industry” .

Source: Market Intelligence & Consulting Institute (MIC)

Purpose of participation: Direct introduction of startups' products and joint POC are the main purposes of CSE

The top three purposes or drivers of CSE for MLEs in Taiwan are: introducing the startups' products and services (52.9%), using the startups' tools or methods to promote internal cultural transformation (47.9%), and proof of concept (PoC) (46.2%). What the three have in common is that the technology or products of the tech startup that the MLEs wish to work with should have a certain degree of completeness, so that MLEs can directly import and apply them, or start the PoC collaboration.



Q What are the objectives or drivers of your organization's interaction with tech startups? (Multiple choice, up to 3)

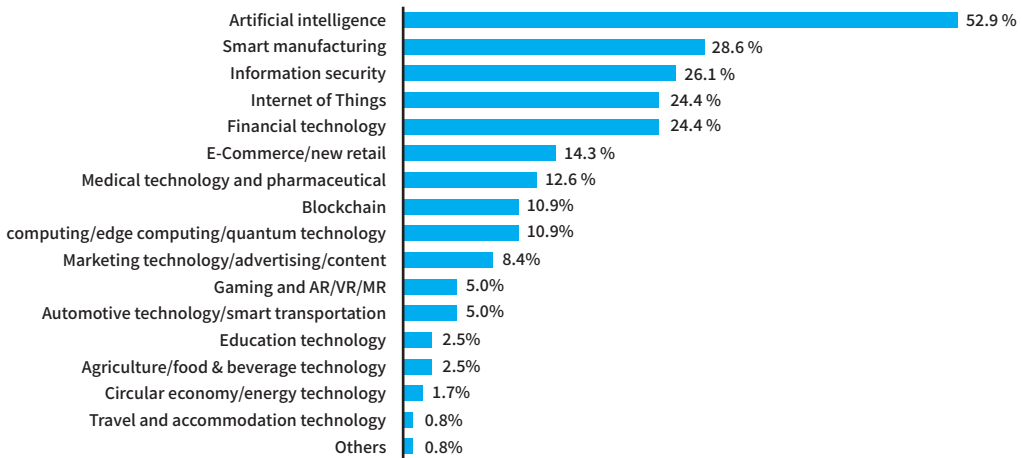
Sample size: 119

Source: Market Intelligence & Consulting Institute (MIC)

Area of preference:

52.9% of MLEs have interacted with tech startups working in AI

The following are the top five areas in which the startups with whom Taiwan's MLEs collaborate with work in: artificial intelligence (AI), smart manufacturing, information security, financial technology, and Internet of Things (IoT), with AI having the highest percentage, indicating that industries are beginning to emphasize and introduce AI-related applications. With a great amount of attention being paid to information security issues in recent years, information security startups have also become popular collaboration partners among enterprises. In addition, smart manufacturing, financial technology, and IoT startups have become priority targets for collaborations for MLEs, driven by the digital transformation of the information and communications manufacturing industry and the finance industry.



In terms of field of expertise, which types of startups has your organization interacted with? (Multiple choice, up to 3)

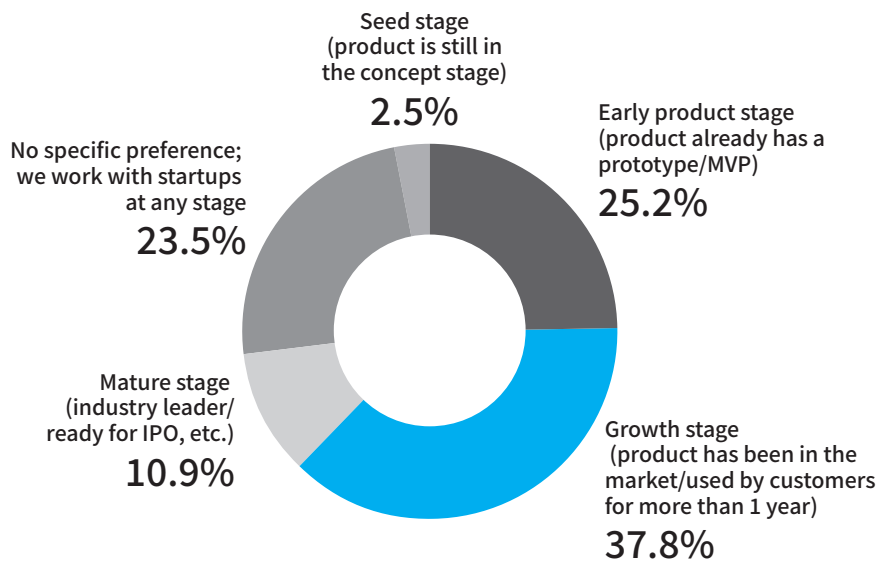
Sample size: 119

Source: Market Intelligence & Consulting Institute (MIC)

Interaction stage:

Growing tech startups are the first choice for CSE interactions

The tech startups that MLEs in Taiwan often prefer to interact with are those in the following stages, ranked from greatest preference to least: growth stage > early product stage > mature stage > seed stage, indicating that MLEs are more interested in tech startups if they have accumulated a certain amount of experience in the market. However, it is worth noting that 23.5% of MLEs do not have a specific preference and are willing to interact or collaborate with startups at any stage.



Which kind of startup does your organization interact with more often or prefer in terms of stage of development? (Single choice)

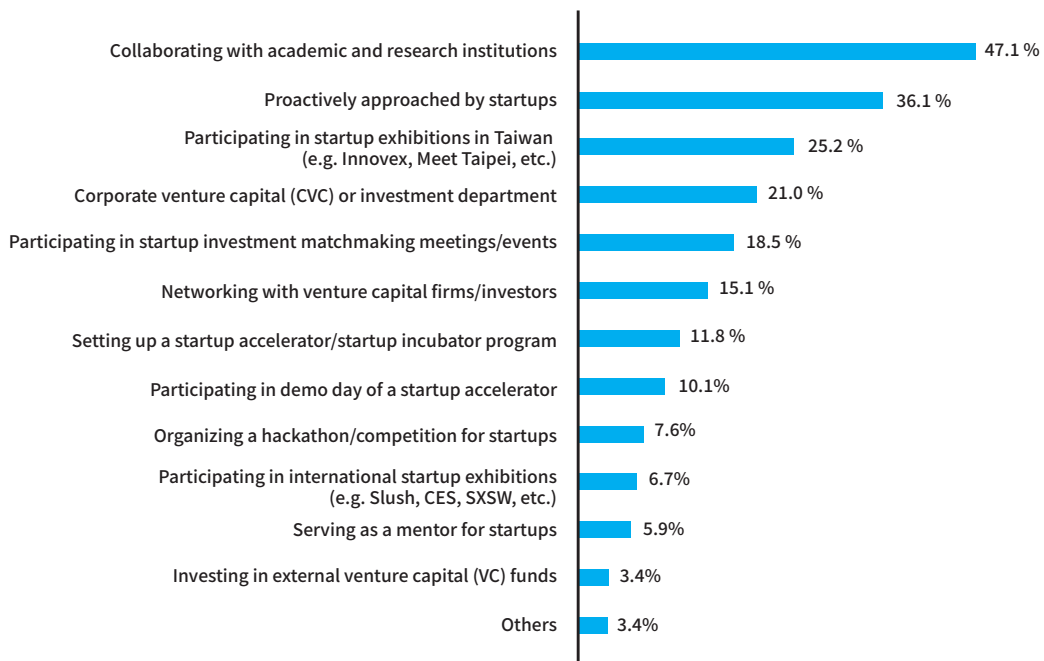
Sample size: 119

Source: Market Intelligence & Consulting Institute (MIC)

Access channel:

47.1% of MLEs most often engage in CSE through academic and research institutes

Taiwan's MLEs most often interact with tech startups through “collaborating with academic and research institutions” (47.1%), followed by “proactively approached by startups” (36.1%), and “participating in startup exhibitions in Taiwan” (25.2%). This shows that apart from alumni networks and making inquiries directly, exposure at exhibitions is also an important channel for startups to connect with MLEs.



Through which channels does your organization most often learn about or come into contact with tech startups? (Multiple choice, up to 3)

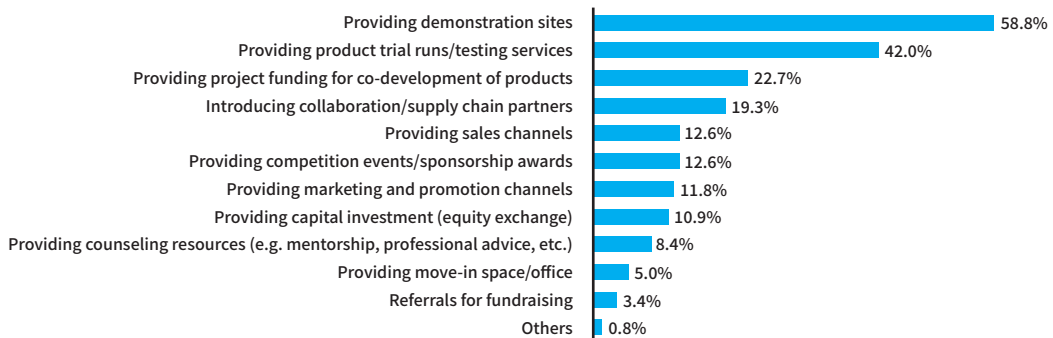
Sample size: 119

Source: Market Intelligence & Consulting Institute (MIC)

Provision of resources:

58.8% of MLEs provide demonstration sites in the CSE process

In the CSE process, Taiwan's MLEs most often “provide demonstration sites” (58.8%) , followed by “provide product trial runs/testing services” (42%) . This shows that MLEs prefer to interact with tech startups by using existing resources such as application contexts or supply chain services.



What resources does your organization provide more often in the process of interacting with tech startups? (Multiple choice, up to 3)

Sample size: 119

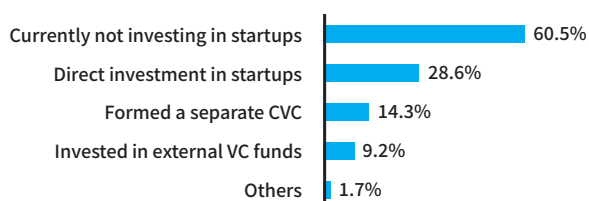
Source: Market Intelligence & Consulting Institute (MIC)

Investment practices:

28.6%

 of MLEs directly invest in startups

Overall, the majority of Taiwan's MLEs are not investing in startups (60.5%), and among those who have invested equity in startups, the majority of them have adopted “direct investment in startups”, while other common models of equity investment, such as establishing corporate venture capital (CVC) or participating in external VCs with a fund of funds (FoF), is lower.



Which of the following descriptions is more likely to describe your organization's current approach to investing (equity exchange) in tech startups? (Multiple choice, up to 2)

Sample size: 119

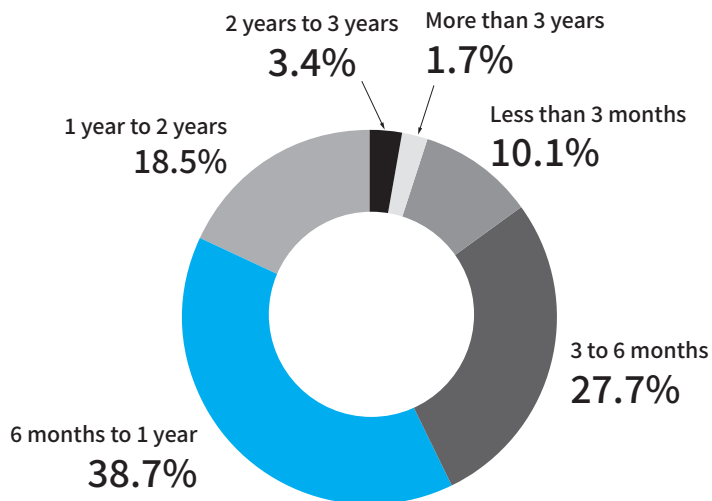
Source: Market Intelligence & Consulting Institute (MIC)

CSE Experience and Perspective

Observation period:

38.7% of MLEs spend six months to a year observing startups

The observation period for medium and MLEs in Taiwan to decide whether to further collaborate with a startup is most often “6 months to 1 year” (38.7%), while the average observation period is 9.8 months.



On average, how much time does your organization spend on observing tech startups to decide whether to interact further? (Single choice)

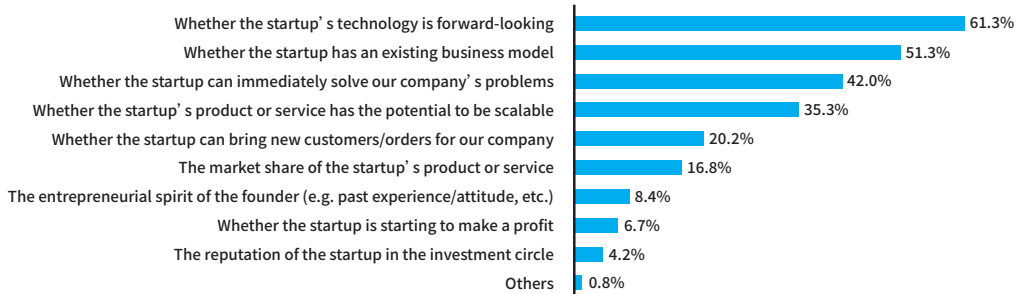
Sample size: 119

Source: Market Intelligence & Consulting Institute (MIC)

Key factors in consideration:

Whether the technology is forward-looking is the key to further interaction

The top three key considerations for MLEs in Taiwan in deciding whether to further collaborate with tech startups are “whether the startup's technology is forward-looking” (61.3%), “whether the startup has an existing business model” (51.3%), and “whether the startup can immediately solve the enterprise's problems” (42%), indicating that the technology of tech startups is one of the most important concerns for MLEs.



What are the most important factors that your organization considers when deciding whether to further interact with tech startups? (Multiple choice, up to 3)

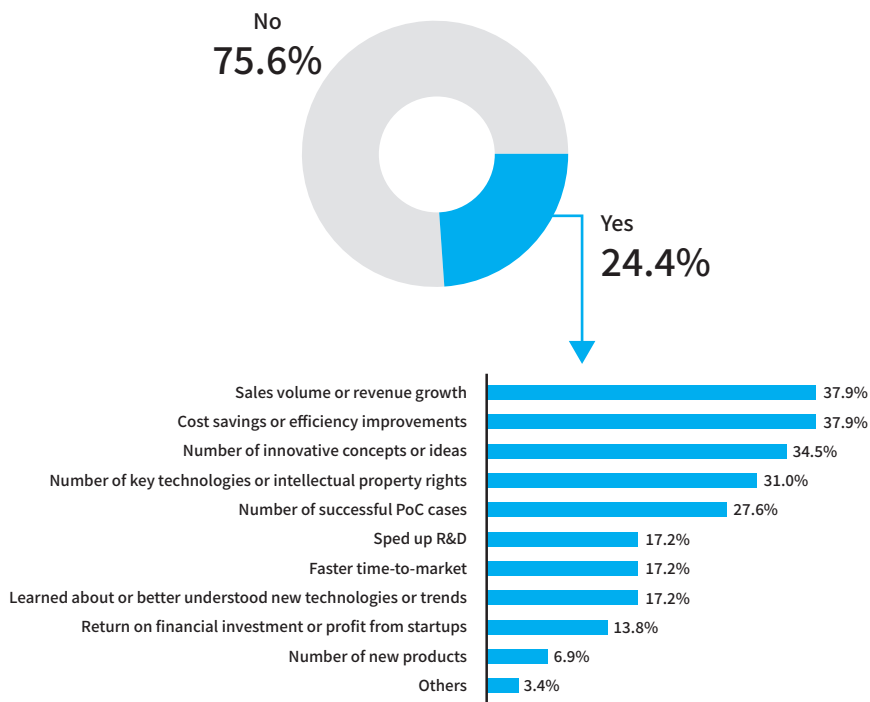
Sample size: 119

Source: Market Intelligence & Consulting Institute (MIC)

Indicators for measurement:

75.6% of MLEs do not have KPIs to measure CSE effectiveness

24.4% of Taiwan's MLEs have explicitly set KPIs to measure their interactions with tech startups, with “cost savings or efficiency improvements” (37.9%) and “sales volume or revenue growth” (37.9%) being the most common.



Does your organization have clear KPIs to measure the effectiveness of your interactions with tech startups? (Single choice)

Sample size: 119

Source: Market Intelligence & Consulting Institute (MIC)



If “Yes”, what KPIs does your organization use to measure the effectiveness of your interactions with tech startups? (Multiple choice, up to 3)

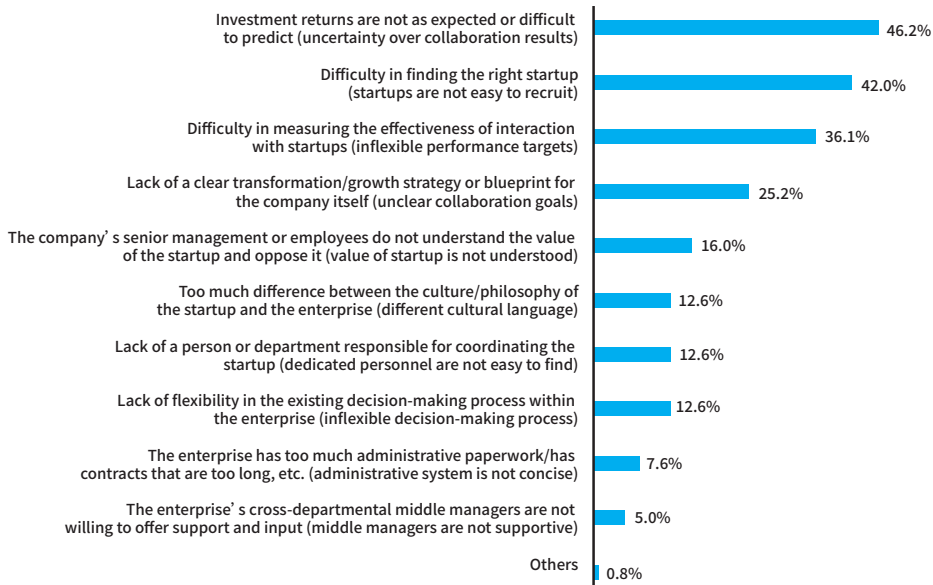
Sample size: 29

Source: Market Intelligence & Consulting Institute (MIC)

Challenges:

46.2% of MLEs' challenges in CSE are uncertainty over collaboration results

The top three biggest pain points of Taiwan's MLEs in the process of engaging in CSE are “Uncertainty over collaboration results” (46.2%), “difficulty in recruiting startups” (42%), and “inflexible performance targets” (36.1%), indicating that the biggest challenge for enterprises is that the return on investment in CSE is not as expected or difficult to predict.



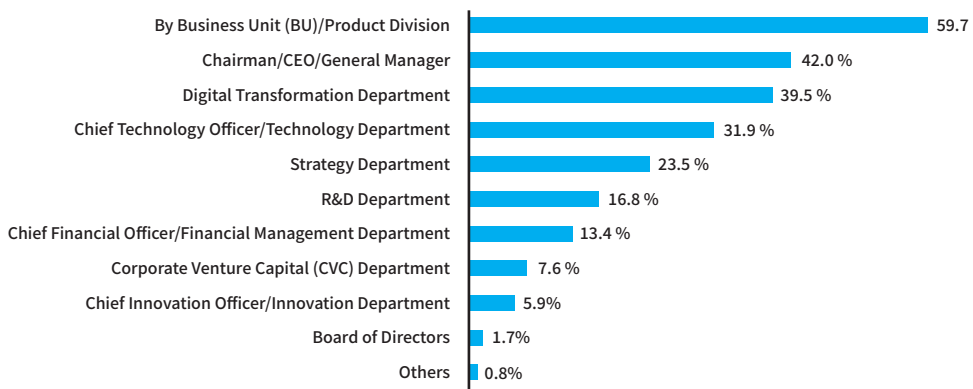
What are the biggest challenges for your organization in interacting with tech startups? (Multiple choice, up to 3)

Sample size: 119

Source: Market Intelligence & Consulting Institute (MIC)

Level of participation: Active involvement of BUs and senior management helps CSE run more smoothly

According to the survey, 59.7% of Taiwan's MLEs believe that more involvement from business units (BUs)/product departments will help CSE run more smoothly or increase its success rate, followed by “the chairman/CEO/general manager” (42%) and “the digital transformation department” (39.5%).



Which level or department in your organization do you think should be more involved in the process of interacting with tech startups in order to make the interaction smoother or increase the chance of success? (Multiple choice, up to 3)

Sample size: 119

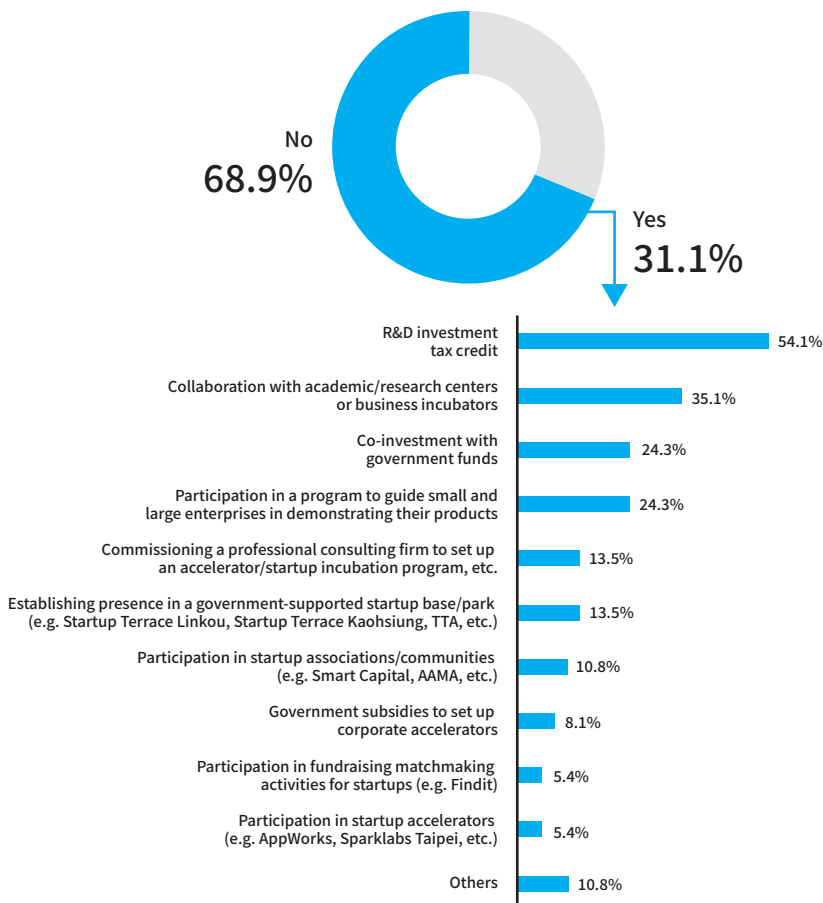
Source: Market Intelligence & Consulting Institute (MIC)

CSE Resource Demand

External resources:

31.1% of MLEs have sought external resources (including government and private sector resources)

According to the survey, 31.1% of MLEs have sought external resources (including government tools or professional partners) in the process of engaging in CSE, with “R&D investment tax credit” (54.1%) and “collaboration with academic and research institutions” (35.1%) being the most common.



Q Has your organization ever sought policy tools or external resources to help you engage in CSE in the process of interacting with tech startups? (Single choice)

Sample size: 119

Source: Market Intelligence & Consulting Institute (MIC)

Q If “yes”, continuing from the previous question, which policy tools or external resources have you sought to help you engage in CSE? (Multiple choice, up to 3)

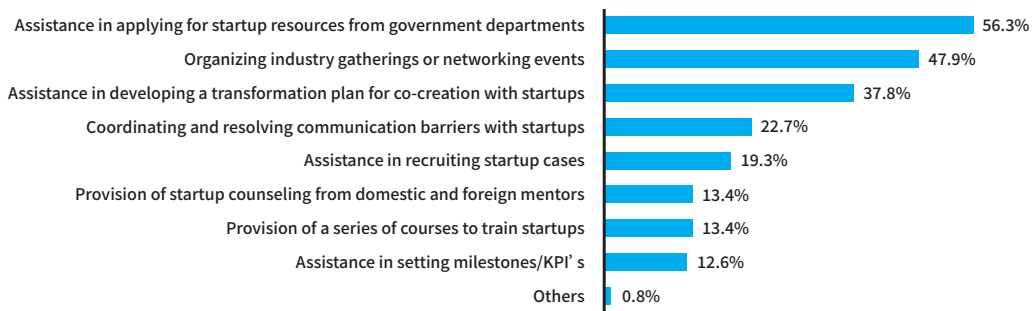
Sample size: 37

Source: Market Intelligence & Consulting Institute (MIC)

External partners:

56.3% of MLEs would like professional partners to help them apply for government resources

The top three resources that Taiwan's MLEs would like external partners to provide are: “assistance in applying for startup resources from government departments” (56.3%), “organizing industry gatherings or networking events” (47.9%), and “assistance in developing a transformation plan for co-creation with startups” (37.8%). It is noteworthy that nearly 40% of the MLEs would like external partners to help construct a co-creation blueprint, echoing the above to some extent, and 25.2% of the MLEs' biggest challenge in the CSE process is “unclear collaboration goals” .



What resources would you like external partners (e.g. startup accelerators, consulting firms, etc.) to provide to help you interact more smoothly with startups? (Multiple choice, up to 3)

Sample size: 119

Source: Market Intelligence & Consulting Institute (MIC)

Not yet invested in CSE

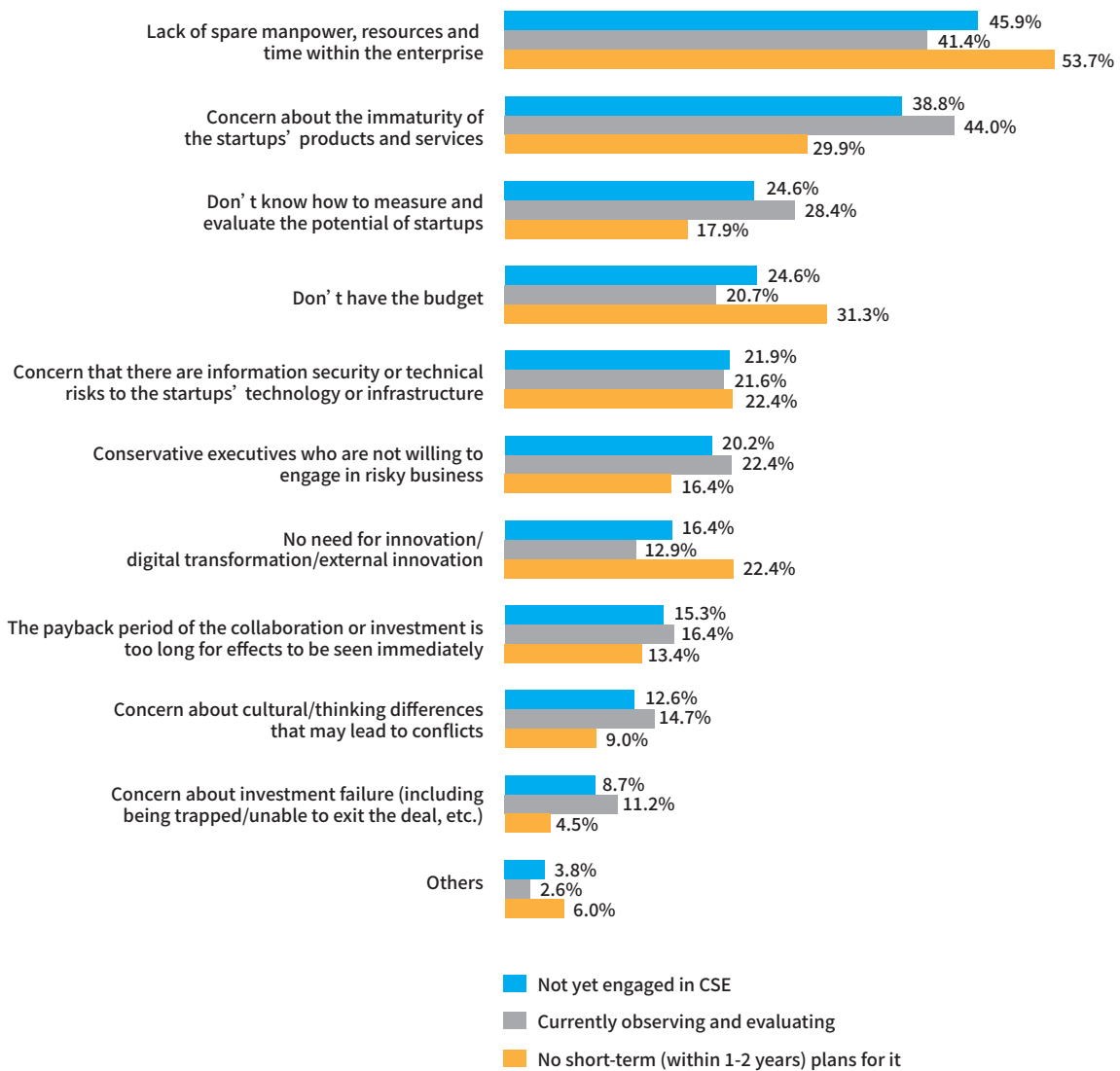
NO

**Negative factors:
Lack of spare manpower and resources is the main reason
for MLEs not yet engaging in CSE**

The main reason why Taiwan's MLEs have not yet engaged in CSE is “lack of spare manpower, resources and time within the enterprise” (45.9%), followed by “concern about the immaturity of the startups' products and services” (38.8%).

After delving deeper into the data on MLEs that are still observing or have “no short-term plans” for engaging in CSE, it was found that the number one reason why they have not yet done so is “concern about the immaturity of the startups' products and services” (44%); it is worth noting that for enterprises with no short-term plans for engaging in CSE, their reason is “lack of spare resources” , followed by “don't have the budget” (31.3%).





What are the factors that have prevented your organization from interacting with tech startups so far? (Multiple choice, up to 3)

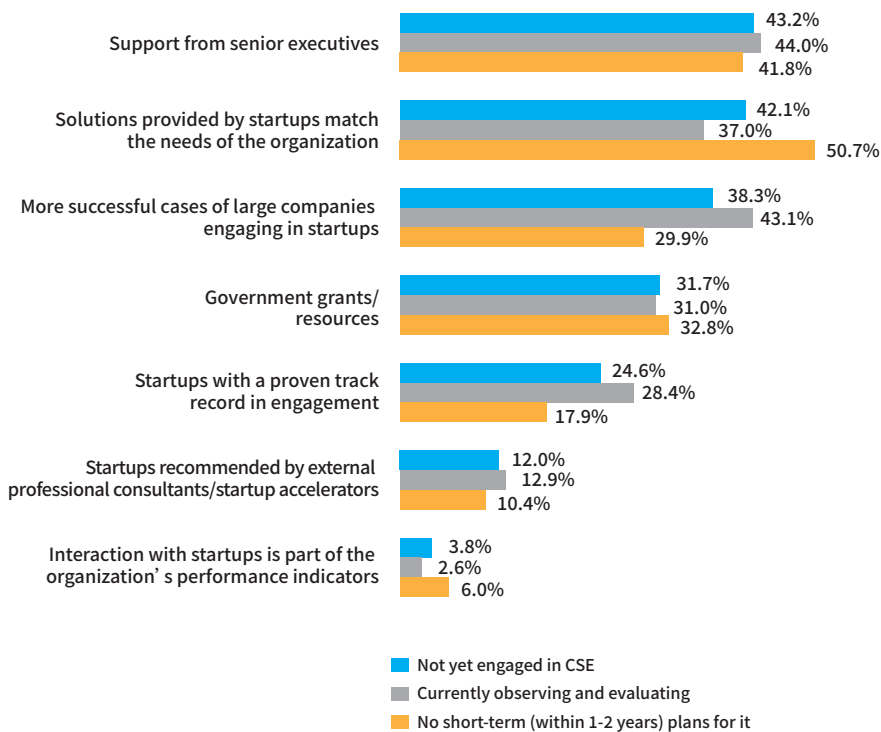
Sample size: 183 in total; 116 currently observing; 67 have no short-term plans

Source: Market Intelligence & Consulting Institute (MIC)

Driving incentive: Senior executive support would increase MLEs' willingness to engage in CSE

According to the survey, the top three incentives to increase the MLEs' willingness to engage in CSE for those that have not yet done so are “support from senior executives” (43.2%), “solutions provided by startups match the needs of the organization” (42.1%), and “more successful cases of large companies engaging in startups” (38.3%).

In addition to “support from senior executives”, “having successful cases to refer to” are also important for MLEs that are on the fence. For those with no short-term plans to engage in CSE, “solutions provided by startups match the needs of the organization” came in first place. Therefore, a more pragmatic and demand-driven collaboration will help MLEs engage in CSE.



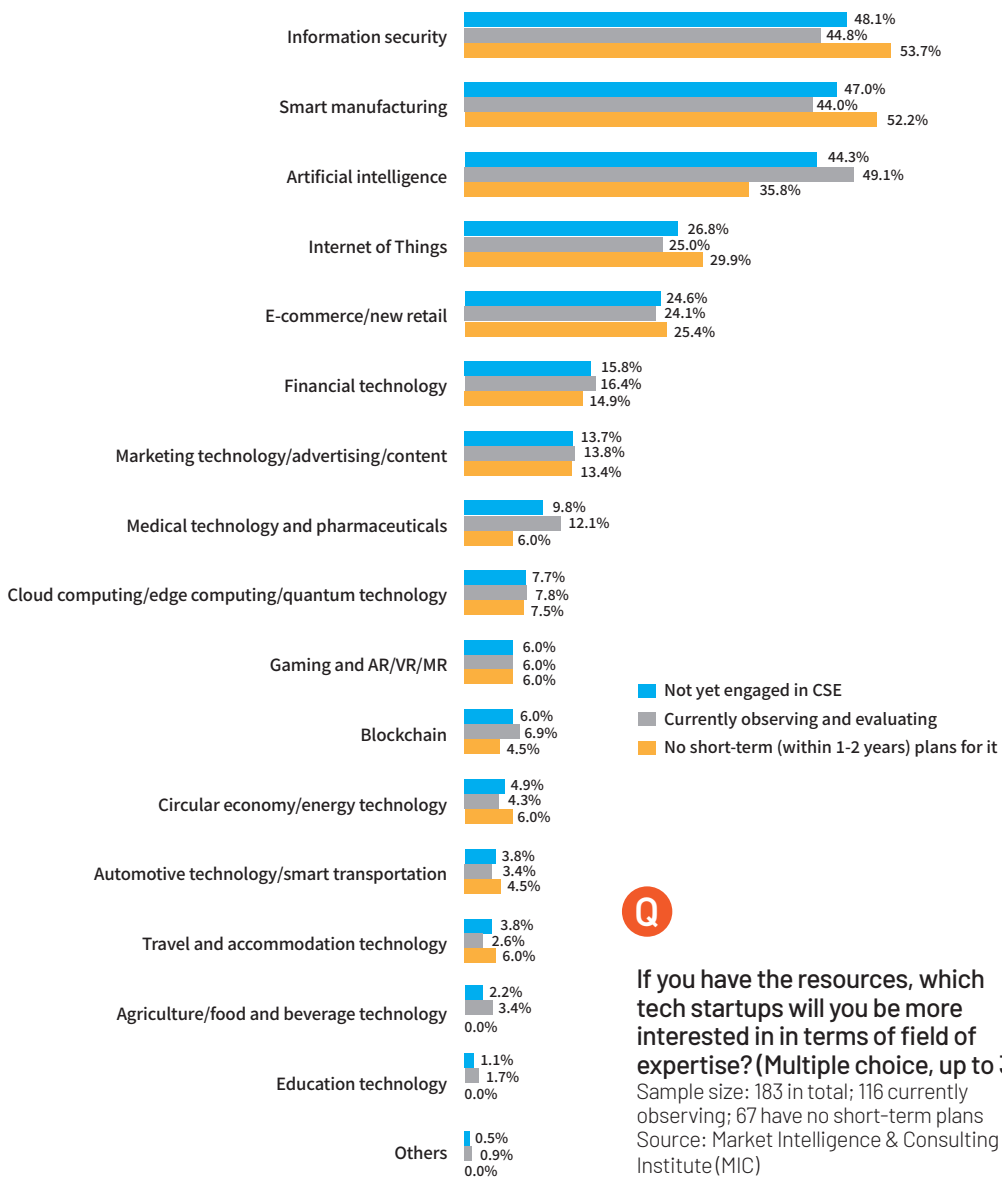
Which of the following would motivate your organization/department to increase its willingness to interact with tech startups? (Multiple choice, up to 2)

Sample size: 183 in total; 116 currently observing; 67 have no short-term plans
Source: Market Intelligence & Consulting Institute (MIC)

Area of interest:

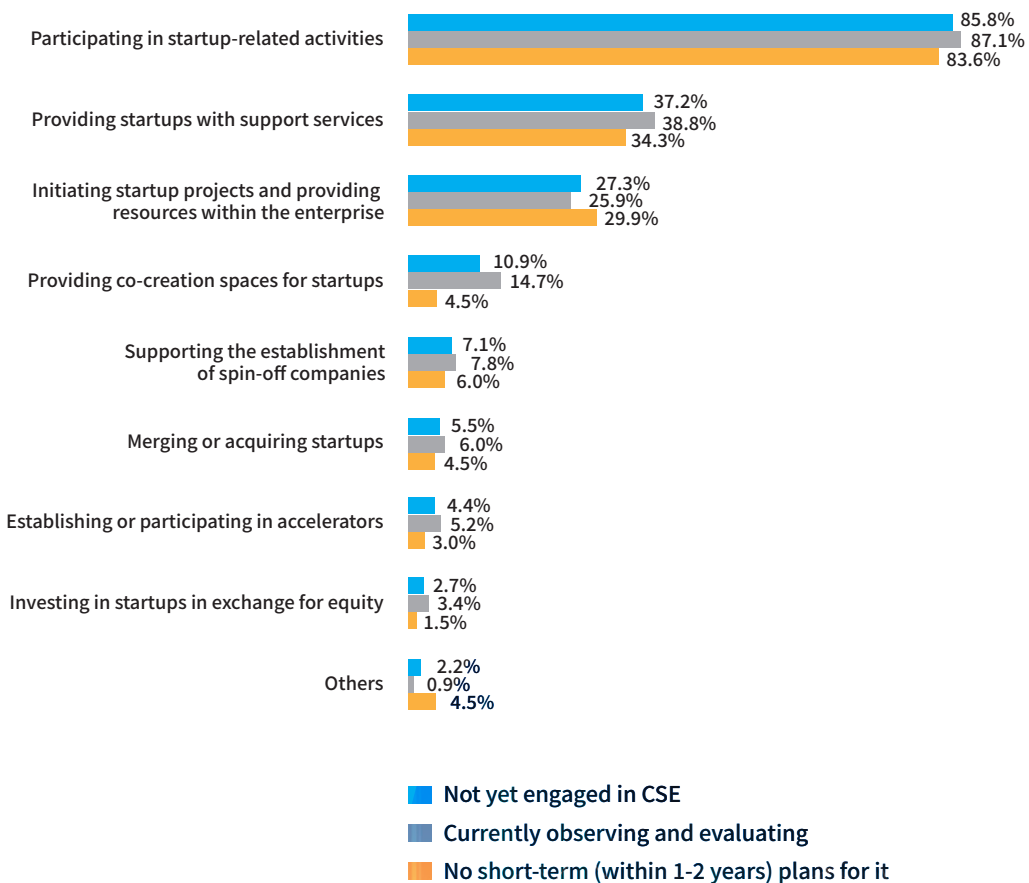
48.1% of MLEs that have not yet engaged in CSE are most interested in information security startups

According to this survey, if Taiwan's MLEs have the resources, they are most interested in interacting with the startups working in information security (48.1%), smart manufacturing (47%), and artificial intelligence (44.3%). Those working in artificial intelligence (49.1%) are of the most interest to the MLEs who are still observing.



Model of interest: MLEs that have not yet engaged in CSE prioritize participation in startup events

According to the survey, the top three priorities for MLEs that have not yet engaged in CSE are “participating in startup-related activities” (85.8%), “providing startups with support services” (37.2%), and “initiating startup projects and providing resources within the enterprise” (27.3%). A more careful look at those who are still observing and those have no short-term plans reveals that there is a significant difference between the two in the provision of co-creation spaces for startups, with MLEs who are currently observing much higher in percentage than those with no short-term plans.



If you have the resources, which models would you prioritize for interacting with startups? (Multiple choice, up to 3)

Sample size: 183 in total; 116 currently observing; 67 have no short-term plans
Source: Market Intelligence & Consulting Institute (MIC)



CASE

1

APT and MAKAR Joined Forces in "Flipping" Songshan Cultural and Creative Park

Q

How did Asia-Pacific Telecom (APT) first learn about MAKAR REALITY (MAKAR)?

APT: As early as 2018, even prior to bidding for 5G, APT had already established the APT 5G Accelerator (hereafter, "the Accelerator") through the support received from the Small and Medium Enterprise Administration of the Ministry of Economic Affairs (SMEA). The Accelerator focuses on 5G communication innovative applications and services, and recruits startups once a year. With the aim of accelerating and facilitating the development of Taiwan's 5G capability, as well as providing comprehensive lectures by mentors and 5G experimental facilities, the Accelerator also gives startups the opportunity to validate the feasibility of their products, services, and business models. Each graduated startup will be included in APT's "GT Farm," which is an exclusive list of future partnership priorities. MAKAR was one of the top five startup teams in the Accelerator program, during our second term of recruitment.

Q

Could you elaborate on the background and scope of this collaboration?

APT: The SMEA launched an initiative to promote growth in SMEs' 5G innovative services and applications, which aimed to boost market activity through 5G. Consequently, APT wished to explore and experiment with the possibility of establishing a 5G exclusive network connection for non-manufacturing companies. Considering that such an innovative experiment would be best carried out through collaboration with startups, we sought partnership with MAKAR, hoping to integrate our capabilities in order

to create a scalable and replicable business model for 5G+AR/VR. The main factor driving this collaboration was that MAKAR's product and service portfolio best matched our objective and our envisaged application scenario. Most importantly, MAKAR's team, production capacity, and their products were sufficiently mature to achieve large-scale collaboration projects. Hence, APT was confident it could create a well-loved and marketable service through this integrated partnership with MAKAR.

MAKAR: In carrying out this collaboration, APT was responsible for providing relevant experimental facilities and hardware equipment, while MAKAR contributed to providing the AR/VR engine platform. Using the brand of Songshan Cultural and Creative Park as our experimental field, we rolled out our 5G virtual park and AR treasure hunting game, with the objective of applying 5G technology in our daily lives; this would attract visitors to cultural and creative spaces through merging the online and offline experience. Specifically, we introduced (1) the 5G guided tour: a smart virtual tour of Songshan Cultural and Creative Park; (2) Kiosk: an online e-commerce store front; and (3) the AR treasure hunt package: a combination of 5G, AR, and cultural heritage, which allows participants to immerse themselves in a 180-minute experience and gain a new perspective on Songshan Cultural and Creative Park.

Q

Could you share with us the pain points or special experiences during this collaboration, if any?

APT: Given that teams from both ends had already cultivated a comprehensive mutual understanding during the Accelerator program (via lectures, extensive communication, and testing activities), the collaboration went smoothly. We did not encounter any pain points from a technological perspective. This is related to the reason why APT prioritizes seeking partnerships with startups that have graduated from the Accelerator program. Regarding special experiences, we did encounter a few. Because this was a cross-industrial collaboration between “technology” and “culture,” where we had to establish our base through extensive installation of an exclusive 5G network in a valuable cultural location, Songshan Cultural and Creative Park, obtaining approvals from relevant authorities was not an easy task. In addition,

extensive communication was required to strike a balance and showcase the best of both technology and artistic aesthetics. Fortunately, all parties involved were patient and determined to produce the best outcome. Ultimately, we were able to achieve 6 million visitors upon the initial launch.

Q

From your point of view, what are the benefits that Corporate Startup Engagement (CSE) brings to the company?

APT: When collaborating with startups, the most direct benefit for us is the enhancement of corporate and brand image. Establishing the Accelerator program has allowed more people to become aware of APT's "GT StartLife" initiative, and it also creates more collaboration opportunities. Additionally, establishing the ecosystem of startup alliance has also driven APT to roll out more innovative applications, to expand its market offerings for both B2B and B2C channels.

MAKAR: By making use of APT's corporate 5G experimental environment and associated hardware and technology, MAKAR was able to try out and validate various AR/VR applications in 5G settings. At the same time, APT's well-established channel and connections helped us to gain positive exposure in the market, and eventually led MAKAR to win a government project by bidding together. MAKAR has thereby gained valuable practical experience.

Q

Do you have any advice to share with other startups that are planning to collaborate with MLEs?

MAKAR: Aside from maturing the products and services, it may also be beneficial for startups to seek opportunities to engage in different activities: for example, participating in accelerator programs, to hone valuable pitching skills and establish personal connections with mentors from MLEs, rather than focusing solely on establishing business collaboration from the outset. In addition, staying in touch and maintaining good relationships with MLEs, and proactively sharing new developments and updates, may also bring opportunities.

CASE

2

Chunghwa Telecom Co-branded with Uniigym in Upgrading the Fitness App

Q

What was the occasion that facilitated the collaboration with Chunghwa Telecom (CHT)?

Uniigym: We initially connected with CHT's MOD division in 2020, to gain the opportunity to include our content as part of CHT's set-top box (STB) offerings. However, due to the pandemic, there was not much progress. Later, our somatosensory fitness services were launched on broadband channels, and gained popularity. Our somatosensory technology and multi-sport courses became known within the Taiwan market. CHT then initiated the contact and proposed to collaborate with us. As a result, in November 2021, CHT and Uniigym co-launched a smart fitness application called "AR Movement x Uniigym."

Q

Could you elaborate on the background and scope of this collaboration?

CHT: In general, the structure of telecom services includes three layers: (1) essential infrastructure; (2) the service platform; and (3) value-adding services. Due to the NCC stringent supervision and control of the first two layers, CHT would usually take charge of establishing these two. However, the third layer allows comparatively more flexibility, where we can seek external collaboration in order to offer our users more diverse content. Our collaboration with Uniigym was also based on the same. It is important to mention that CHT has been collaborating with startups for more than 10 years, including investment in KKBOX for digital music services, and the A-kuei net animation provider Spring House Entertainment (now a service provider on Hami platform). Given that the startup environment in Taiwan is reaching maturity, we are devoting more resources and emphasis to finding suitable startup partners.

Uniigym: At present, 5G technology has already been commonly applied in the industrial and medical fields. However, applications for consumers are still lacking in the market; hence, many telecom providers are looking for a potential B2C application. This co-branding collaboration with CHT mainly focuses on adding value

to CHT's existing fitness service “AR Movement,” with the aim of incentivizing end-users to upgrade their 4G policy to 5G. By integrating Uniigym's AI somatosensory detection technology and comprehensive fitness courses, CHT's 5G high-speed features can be fully demonstrated. It only requires users to be equipped with the internet and a smartphone camera, in order to receive real-time feedback on movement/posture and fitness data tracking during the course, through the detection technology. In combination with marketing promotions, this means that CHT's users are able to enjoy an exceptional 5G fitness experience.

Q

What are the pain points and benefits received from co-branding with CHT?

Uniigym: Given that CHT is a large-scale organization with well-established internal policies, a new business arrangement would generally involve extensive assessment, communication, and discussion processes amongst multiple divisions and layers. To this end, the initial stage of our co-branding collaboration required lengthy and continuous communication and discussion with various divisions. Nonetheless, due to its large business scale, CHT has robust resources, and can therefore provide comprehensive support, ranging from infrastructure to the marketing campaign, to startups. For example, for our co-branding collaboration, CHT allowed us to install our system/server in their server room, and assumed relevant data traffic costs. In addition, CHT also provided access to utilize their telecom network,



for sending push messages to their 11 million users to promote the service; this helped to save part of our marketing costs.

Q

Does CHT have any preferences regarding the types of startups when determining partners for collaboration? What resources are available for startups to interface with?

CHT: We prioritize collaborating with startups that are able to start providing software services immediately (e.g., pre-A round startups). In general, our collaboration with startups has two aims: (1) to develop the value-adding application of telecom services; (2) to act as system integrator, and lead project bidding together with our startup partners. Aside from making the experimental field available for proof of concept (POC), CHT also provides resources for investment and internationalization. In terms of resources related to investment, CHT has established its own investment expertise, which includes the investment division at CHT headquarters; CHT's subsidiary, Chunghua Investment Co., Ltd.; and a joint venture, Cornerstone Ventures. We therefore have the capability to pursue investment in startups with different natures and at different stages. Additionally, given CHT's long-term operation overseas through its foreign branches, CHT's startup partners will be able to benefit from our established operation, and penetrate international markets as telecom service providers.

Q

Do you have any advice to share with other startups that are planning to collaborate with MLEs?

CHT: For startups that are planning to collaborate with medium- and large-scaled telecom providers, we recommend closely observing the company's B2B and B2C operational needs, to identify suitable breakthrough opportunities. Aside from paying close attention to the company's press releases and event announcements, it could also be beneficial to monitor the company's research projects (e.g., with universities or research organizations), for the timely discovery of potential future technology needs. After all, in the fields of telecom and transportation, research projects would serve as the initial work for validation projects.

CASE

3

HuKui Bio Shouldered RedEye in Overseas Market Expansion

Q

How did RedEye Biomedical (RedEye) first learn about Hukui Biotechnology (HuKui Bio)?

Redeye: We first came to know about HuKui Bio during an event hosted by NYCU Alumni Association in late 2018, when Redeye had been established for only two years. Following the recommendation of NYCU Alumni Association, and on the basis of mutual trust, Redeye started to collaborate with HuKui Bio in 2019. Owing to the resources and support provided by HuKui Bio, we were able to obtain medical device validation/certification for selling overseas, and successfully introduced our products on the international market. In 2020, we joined the JOIN Platform, which is sponsored by the SMEA as a forum for large-scale enterprises and startups to connect with each other. Through this platform, we were given the opportunity to learn more about the resources of the Center of Industry Accelerator and Patent Strategy (IAPS). With the JOIN Platform acting as a middleman for coordinating with HuKui Bio, the process of obtaining overseas validation for medical devices went smoothly and resulted in a success in 2021.

Q

Could you elaborate on the background and scope of this collaboration?

HuKui Bio: HuKui Bio was established in 2013 by UMC's honorary deputy chairman, Mr. John Hsuan, as a contract development and manufacturing organization (CDMO) for medical device products. In other words, HuKui Bio is a specialized electronic medical device foundry that also provides compliance consultancy services and authorized dealership services. HuKui Bio's primary objective is to facilitate and accelerate the process of design, manufacturing, certification, and sales/commercialization for Taiwanese biotech companies, so as to achieve speedy penetration of the overseas market. In general circumstances, CDMOs would prefer to collaborate with companies that have already achieved a certain level of production volume; however, as HuKui Bio is itself a newly established company, it fully comprehends the difficulties faced

by startups, and is therefore happy to support them through collaboration.

Redeye: The goal for this collaboration with HuKui Bio was to leverage its capabilities to obtain production certification for our core product offering in a medical device, a hemoglobin sensing system, in the overseas market, as well as establishing local authorized sales functions. This year (i.e., 2022) we are expanding the scope of our collaboration to also include a few non-medical device products, such as PetEye Cat Litter Analyzer (used for detecting occult blood in urine), and the Analyzer for Pollutants of Fruits & Vegetables, for household use. Our common objective is to bring Redeye's technology from Lab to Life.

Q

What are the pain points and benefits that RedEye received from co-branding with HuKui Bio?

Redeye: Given that the business model was for HuKui Bio to act as the authorized dealer for our products in the overseas markets, the pain point during the initial stage was related to the lack of knowledge in how to market and test our products. In this respect, we had to spend time training HuKui Bio's overseas salespersons, virtually through communication software, on how to operate the device when testing it, and how to prepare bio-samples for the purpose of performing hemoglobin analysis. In addition, another pain point was related to the certification costs. Considering that we are a small-scale startup, expenses incurred for sample



RedEye Visible Spectrophotometer For Clinical Use

testing, traveling, and compliance fees were quite burdensome for us. Fortunately, after obtaining the certification, HuKui Bio immediately assisted us with production and sales operations. As for the benefit received, aside from the supporting role of CDMO, the expertise of a well-established MLE, in terms of market momentum and compliance consideration, certainly gave us critical guidance, as a startup that focuses solely on developing technology and products. It also allowed us to better manage our product plans, and certification and compliance aspects. Essentially, this helped us to avoid many detours.

Q

Does HuKui Bio have any preference regarding the types of startups when determining partners for collaboration?

HuKui Bio: We have a long-established medical technology service platform, dedicated to medical device certification and production. At present, there are about five to eight medical device products from different business partners listed on the platform. As opposed to a pure funding relationship, our priority in startup collaboration is to find partners who can complement HuKui Bio in the areas of technology, talent, or business operations. In addition, we also prioritize those at a more mature stage, which can accommodate uninterrupted order placement and sales. Most importantly, the startup partner needs to be clear about its goals, as well as how exactly HuKui Bio can be of assistance, so that a win-win collaboration can be established.

Q

What would be your advice respectively to MLEs and startups interested in participating in CSE in the future?

HuKui Bio: Our advice to medium- and large-sized companies is to clearly identify the objective of collaborating with startups; this may be fulfilling corporate social responsibility, pursuing investment return, or establishing a business partnership. In addition, another key consideration is whether such collaborations give rise to any conflicts with the company's existing business model, including internal corporate culture and interests. For example, many electronic manufacturers diversifying into the medical device industry face the collision between their long-term and short-term interests. On the other hand, our advice to startups would be to identify the real needs of the MLEs, while also being clear about what you can bring to the table.

Redeye: For MLEs, we would like to ask for your understanding. As startups, we are passionate about our innovations, but we are not familiar with doing business; hence, it is likely that we will make mistakes during the initial stage. In this respect, we would greatly appreciate it if MLEs would allow startups more opportunities to experiment and modify their approach accordingly along the way. Our advice to startups is to be well-prepared and convincing, and also endeavor to fully demonstrate the strengths and key selling points of your products and services. Most importantly, you should be clear and compelling about your intention to collaborate with MLEs. This is critical in convincing them to proceed further with the collaboration.

CASE

4

Bringing Concepts to Life Through the Platforms of MLEs: The Journey of JelloX and MeansGood

Q

Could you elaborate on the scope of your collaboration with MLEs? What support and assistance did you receive during the collaboration?

JelloX Biotech (JelloX): JelloX was a result of the commercialization of National Tsing Hua University's imaging technology team, with its core products being 3D Digital Pathology Imaging and the AI Analysis Platform. Upon our initial establishment in 2018, the market contained very few MLEs in the field of hardware device platforms for AI edge computing. Through the referral of IAPS, we were able to connect with some companies pioneering in this field, and thereby welcomed a few opportunities for collaboration. Our collaborations usually involved utilizing the hardware platform of MLEs to carry out device testing for the software we developed, allowing the preliminary application of AI medicine on edge computing devices. Through this, we were also able to connect with many potential customers during exhibition or tradeshow events. Later, because the existing edge computing devices at that time were unable to accommodate sizable capacity requirements for medical AI computation, the collaborations slowed down. Overall, the benefit of collaborating with MLEs

was not only the technical support we received, but more importantly, our increased market awareness through their brand image, which helped us to be recognized by more investors, other MLEs, and hospitals. This has undoubtedly had a positive impact on our JelloX brand.

MeansGood Agri-biotechnology (MeansGood): Our primary product offering is environmental monitoring systems for high-value crops. During our initial set-up, we were able to develop LET light due to the team's opto-electronic and agricultural backgrounds; however, we knew very little about integrating our product application with software. Through the referral from IAPS and the JOIN Platform, we obtained the opportunity to collaborate with MLEs. We collaborated through two non-recurring engineering (NRE) assignments, where we successfully developed the software and integrated it into their edge box. Even though ultimately we did not continue our collaboration due to cost considerations related to the market (arising from excessive computing capacity), and thus had to develop our own edge box, those MLEs continued to support us in our market connection. They even bundled our solutions as part of their pitching to overseas customers, which significantly helped us in terms of international market expansion.

Q

What would be your advice respectively to MLEs and startups interested in participating in CSE in the future?

JelloX: For MLEs, we would recommend formulating a product development strategy and relevant investment resources with transparency. Good product plans and strategic investors are essential to the development of startups; hence, inevitably, startups will need to find resources. After the testing phase, when proceeding to the next stage, the disproportionate scale between MLEs and startups could lead to both parties having different expectations and considerations. Hence, if MLEs can be clear and straightforward to the startups by facilitating direct communication, this would be beneficial and help the startups to form a more accurate assessment. On the other hand, startups need to be clear about their positioning. Only with good products that meet the market demand can startups become successful. During the development phase, they should stay closely coordinated and communicate



MeansGood Domestication and Breeding Equipment

with the MLEs to create a common interest; in this way, a long-term collaboration can be formed.

MeansGood: Our advice to MLEs is to be clear about your needs, so that startups are able to evaluate the level of assistance they can provide. At the moment, there is an increasing trend of business events where enterprises state their current obstacle, and challenge startups to pitch their solutions. We think this is a very good starting point. Through this “challenge-based” approach, enterprises are able to identify their needs and collaborate with suitable startups to find new solutions. For startups, we would recommend seeking collaboration with MLEs after the prototype stage; this would be better than seeking collaboration during the initial concept-forming stage. After all, from a commercial point of view, products and services that have already been validated would have a higher chance of bringing value to the MLEs.

CASE

5

Argo Teamed Up with Startups to Cultivate an Ecosystem

Q

Could you please share with us the reason why ARGO Yacht Club (Argo) sought collaboration with startups?

Argo: It has been our primary goal since our establishment to create a yacht recreation ecosystem; hence, Argo seeks collaboration with small- and medium-sized companies or startups hoping to achieve exceptional synergy through the integrated capability. For example, in order to provide professional yacht and sailboat services, we invested in LOHAS OCEAN maritime academy; the aim was to nurture young talents in marine recreational services, and thereby strengthen the talent pool of this industry. At the time when Argo Yacht Pier was first built, no restaurant was interested in setting up a location here. We initiated contact with Shooting The Breeze Specialty Coffee and invited them to set up a base at our Penghu and Anping Piers. We look for startup business partners based on our needs, in order to drive the development of the marine recreation industry together.

Q

Does Argo have any preference regarding the types of startups when determining partners for collaboration? What resources does Argo provide?

Argo: As mentioned, aside from partners from the catering/hospitality and education industries, we have recently shifted our focus to developing technological applications, and are therefore looking for partners in the technology industry. In particular, we are contemplating (1) a pier management system and VR training for driving/navigation, and (2) meal delivery via drones. We prioritize partnering with startups who have solid technical capability, and more importantly, are financially sound and able to achieve a stable supply of products, so that a long-term collaboration can be accomplished. As for Argo's available resources, these include a market channel, experimental field, and funds. Argo's market reach ranges from Penghu, Tainan, to Kaohsiung, and we own multiple piers and surrounding recreational facilities, which may be suitable for setting up a technology demonstration base. Furthermore, if

an experiment by a highly complementary tech-startup has a positive result, Argo would consider becoming a shareholder, or even acquiring the entire business.

Q

Could you share with us your observations regarding the innovation and entrepreneurship situation in Kaohsiung? And also, Argo's future market plans?

Argo: It is our impression that more technology talents are relocating to Kaohsiung; this will bring greater potential, in terms of innovation and new entrepreneurship. This is also the reason why we are actively preparing and expanding our market in Kaohsiung. This year (2022), we obtained 3.26 hectares of water area at the Love River Bay Marina at Kaohsiung Harbor, as well as 500 square meters of commercial space at Kaohsiung Music Center, where we will vigorously contribute to creating an Argo 3.0 Marina. In addition, in combination with the initiative from Kaohsiung City Government and the SMEA , which is related to Startup Terrace Kaohsiung 5G AIoT project, we expect to install a 5G smart cloud outdoor water and electricity supply pedestal at the pier berth. This would allow more convenient, timely, and smart management of the pier. The pier is also expected to qualify for the Yacht Harbor Association's accreditation program, and is aiming for the “five golden anchor” honor. Essentially, this would drive the development of the yachting industry in Kaohsiung, which would then become more international and intellectualized.

Section 3

2022 Key Observations of
CSE in Taiwan

Seven Key Figures about CSE in Taiwan

WHAT**61.3%****What is the key consideration for MLEs when engaging in CSE?**

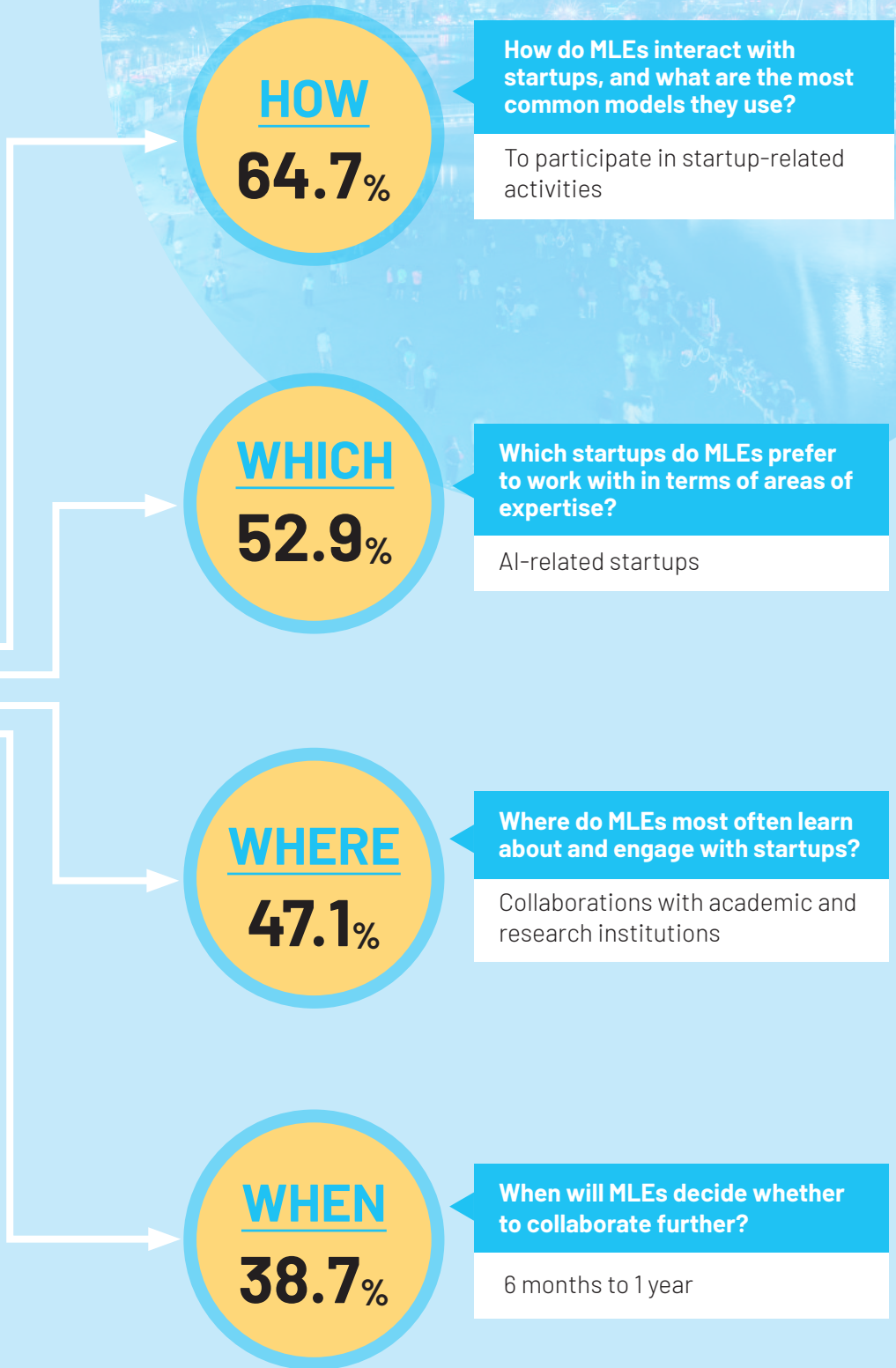
The startup's theme and technology is forward-looking

39.4%

Medium and large-sized enterprises have already engaged in CSE.

WHY**52.9%****Why do MLEs want to engage in CSE? What are their objectives?**

To introduce new products and services



Key Success Factors of CSE in Taiwan

After combining the aforementioned Taiwan CSE survey and CSE interviews, this report has analyzed the key success factors of CSE from the perspectives of MLEs and startups respectively, and provides reference for MLEs and startups who intend to engage in CSE.

For Corporate

Support from senior management



High-level support (including CEOs and chairpeople/professional general managers/second generation-owners, etc.) is crucial for companies to engage in CSE, which helps to: (1) coordinate internal resources and conflicts; and (2) increase the confidence of employees in CSE.

Clear collaboration goals



Thinking carefully about the goal of the collaboration with startups or the direction that the MLEs wants to target in the transformation process from a business perspective only, understanding the actual benefits and values that startups can bring, and avoiding engaging blindly are key to success in CSE.

Establishing a dedicated unit/KPI



A dedicated unit acts as a bridge between startups and the BUs within a corporation, translating the needs of both parties. A dedicated unit should be composed of a project manager/administrator with decision-making power who can deploy resources in the CSE process and set independent KPIs to avoid falling into a profit-centered mindset.

Working with external partners/resources



An open-minded attitude toward external partners, such as third-party accelerators, professional consultants and venture capitalists, can help to complement each party's resources, provide a more comprehensive and coherent set of resources for startups that can increase their success rate and create synergy; at the same time, it is critical to make full use of government resources.

For Startup

Keeping up with forward-looking trends



The most critical factor in success for a startup with flexibility and technology is the ability to thoroughly understand technology and industry trends. Only by understanding the market/corporate needs and pain points can startups develop the right products and services.

Preparing product prototypes



It is relatively less risky for corporations to work with a startup that has a prototype from a business perspective, and proven products and services have a higher chance of adding value to medium and large-sized enterprises.

Inventory and allocation of resources



Since MLEs have their own organizational and business considerations, failure to prioritize resource allocation for a startup with relatively scarce resources may cause confusion in the workflow of the startup.

Establishing stop-loss points



Before startups collaborate with a MLE, it is necessary for startups to set a stop-loss point since continuous investment and nonstop accommodation may affect the startups' original plans and their steps in implementing those plans.





Chapter 2

Accelerating Investment in Tech Startups

Recent investment developments in the Taiwanese tech startup sector

In 2021, Taiwan's tech startup investment ecosystem is active. This chapter adopts various perspectives to review important developments in Taiwan's startup investment environment in recent years, to provide startups and investors at home and abroad with an informed understanding of that environment, and of the developments in domestic and foreign tech startup industries.

Retrospectives and prospects for investment in Taiwanese startups

This section uses primary data collected from interviews, and secondary data gathered from different sources, to discuss important startup investments in Taiwan from the perspectives of exit, investment, and business; it also provides an overview of developments in Taiwan's startup investments.

Observation 1 Widespread exit spurs the growth of Taiwanese tech startups

Exit as IPOs of one startup after another makes entrepreneurs' dreams come true

The “exit” of startups has drawn considerable attention in the capital market. Only when investors derive profits (or capital gains) can capital be increased and the startup ecosystem stimulated. Startups generally exit either through merging and acquisition (M&A) or an initial public offering (IPO). Although very few tech startups in Taiwan used to exit as IPOs, the situation changed in 2021, when six Taiwanese startups went public at home and abroad: specifically, Appier (in Japan), Just Kitchen (in Canada), Hour Loop (in the United States), Gogoro and Perfect (both acquired by NASDAQ through special-purpose acquisition companies, or SPACs), and 911APP, which was the first software-as-a-service (SaaS) provider

to have been listed in the Taiwan Stock Exchange.

The widespread exit of startups as IPOs in 2021 was far from a coincidence; it was thanks to the Taiwanese tech startups' demonstration of resilience and strength, which sped up industrial transformation despite the COVID-19 pandemic, and led to listing SPACs, which were emerging. These successful stories have improved investor confidence that the startups have a reasonable possibility of achieving an exit and ample potential for being profitable; this makes them more attractive to investors. Such stories also give entrepreneurs in Taiwan more confidence. Hence, this year, many local startups have announced their resolve to go public in the near future, as an IPO listing is no longer an unattainable goal for these firms.



IPO

Timeline for Taiwanese tech startups exiting as IPOs in recent years

	Appier	Just Kitchen	91APP	Hour Loop	Gogoro	Perfect ²
Founding year	2012	2019	2013	2015 (in the U.S.)	2011	2015
Main business	Solutions for AI-driven cross-screen marketing	Cloud kitchen for brands	SaaS retailed on an online-merge-offline basis	Third-party seller for Amazon e-commerce platform	e-motorbikes and batteries	AI, AR, and digital technologies
IPO time	Mar 2021	Apr 2021	May 2021	Jan 2022	Apr 2022	Scheduled in Q3 2022
IPO location	Mothers of Tokyo Stock Exchange	Toronto Stock Exchange (later in Germany and the U.S.)	Taipei Exchange	NASDAQ	NASDAQ	NASDAQ
IPO capitalization (NT\$)	42.8 billion	0.8 billion	8 billion	6 billion	65.05 billion	39.3 billion

Note 1: The “tech startups” referred to in this report are companies that, in accordance with Taiwan’s Company Act, have been registered for less than ten years and possess emerging key technologies or services (e.g., AI, blockchain, cloud, big data, Internet of things, and 5G technology). For those registered as subsidiaries by foreign companies, their incorporation years are recognized at the time of their registration with the Department of Commerce of the Ministry of Economic Affairs.

Note 2: Taiwanese tech startups that have exited as IPOs in recent years include, but are not limited to, those listed above.

Sources: All the companies listed, news media, Crunchbase, and compiled by the Market Intelligence and Consulting Institute of the Institute for Information Industry.



EXITS

- Mergers and acquisitions
- Initial Public Offering

List of tech startup M&As in recent years

Tech startup	Product or Service	Field	Merged and acquired by	M&A date	M&A Purpose
HAPPY SHOPPING	e-shopping platform for fresh foods	e-commerce and retailing	Eastern Home Shopping & Leisure	Nov 2020	To enter the market for fresh food e-shopping
SoundOn	Taiwan-based podcast platform	Ad, contents, and marketing	Turn Capital and the Singaporean investment advisor Kollektive Ventures	Jan 2021	To expand further in the Taiwanese and Asian podcast markets
ParseMe	Data processing and compression technologies	B2B business software solutions	Gemini Data (a Silicon Valley startup)	Apr 2021	To improve the way Gemini Data collects data and the flexibility with which it does so, and increase the applicability of a service of its own
Foodomo	Taiwan-based food delivery platform	e-commerce and retailing	7-Elevent	May 2021	To enlarge the existing food delivery model and scale up the model, and consolidate Uni-President's distribution channels of consumer goods
Dapp Pocket and Cappuu (owned by Dapp Pocket)	Decentralized blockchain wallet	Information security (including blockchains) and FinTech	Turn Capital	May 2021	To integrate both products into the newly launched cryptocurrency trading platform "Coinomo"
BotBonnie	Chatbot platform	Ad, contents, and marketing	Appier	Jun 2021	To enhance Appier's portfolio of AI-driven products
21st Financial Technology (happyfan7)	Cardless installation payment service	FinTech	PChome	Sep 2021	To foster the development of PChome's data-based FinTech
Omniscient	Customer data platform	Ad, contents, and marketing	BeBit (a Japanese company)	Jan 2022	To promote BeBit's digital transformation by integrating the startup into its Taiwan-based technology R&D facility

Note 1: Taiwanese tech startups that have been merged and acquired in recent years include, but are not limited to, those listed above.

Note 2: Turn Capital is a family office established by Joseph Phua, co-founder and honorary chairman of 17Live.

Sources: All the companies listed, news media, Crunchbase, and compiled by the Market Intelligence and Consulting Institute of the Institute for Information Industry.

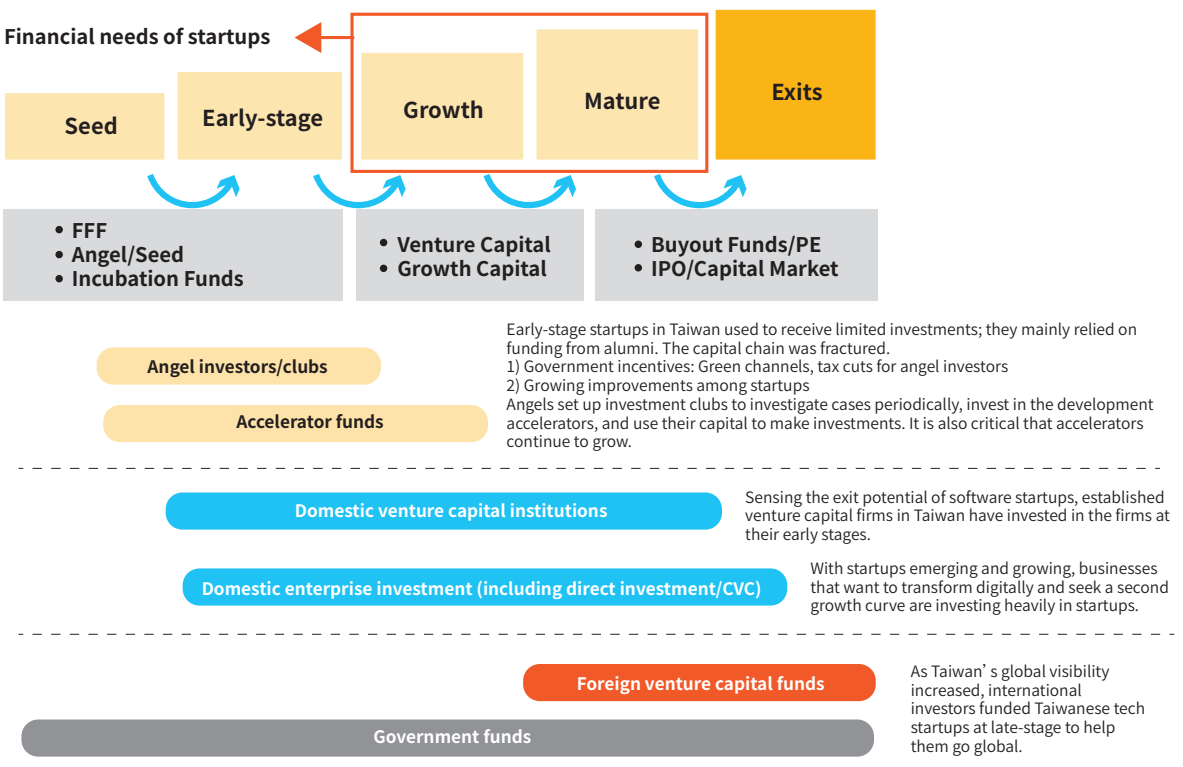
M&A of tech startups as a new business model

While an IPO listing seems impressive, not all tech startups are geared to exit as IPOs. Alternatively, M&A is a relatively easy and popular way to exit. While digital and technological transformations were accelerating and the cost of buying a financial environment decreased amid the COVID-19 pandemic, mergers and acquisitions worldwide and their prices grew considerably in 2021. Thus, global tech giants have been scrambling to merge and acquire tech startups, with an eye to expanding their businesses or developing new technologies, and attracting talents.

It is customary for MLEs in Taiwan to expand by making up- and downstream mergers and acquisitions, or undertaking horizontal integration. However, because changes caused by the pandemic have increased the urgency of many problems, and consumers are flocking to the digital world, MLEs in Taiwan have increasingly set their sights on merging and acquiring tech startups, to gain key technologies or solutions promptly. In addition, mature startups that seek quick growth may acquire new ones. Overall, the M&A of tech startups has become a new business model that allows established companies to achieve rapid transformation.

Observation 2 ▶ Investors build a thorough capital chain for Taiwanese tech startups at all stages of their development.

Capital chain for Taiwanese tech startups



Source: Market Intelligence and Consulting Institute of the Institute for Information Industry.

Taiwanese venture capital (VC) firms are shifting their gaze to tech startups

Looking back at how Taiwan's VC sector has evolved, the domestic VC policy was imported from the United States in 1982; the first VC business was established in 1984, and 285 VC businesses had been created as of the end of 2021 (according to an estimate from Taiwan Venture Capital Association). During the 1980s–90s, when the electronics industry was contributing to Taiwan's economic miracle, local VC firms invested heavily in professionals and high-tech companies based in the Hsinchu Science Park; this laid the bedrock for the development of such industries as IC fabrication and electronics manufacturing.

Observing the industries and development time of Taiwan's VC investment, local venture capitalists mainly backed high-tech industries such as semiconductor, traditional manufacturing, optoelectronics, and electronics manufacturing during 1990–2010. An important watershed came in 2012, when the world was embracing mobile network services; to keep up with this global trend, investors and venture capitalists in Taiwan—among which AppWorks Fund, established by AppWorks in that year, was arguably the

most representative—shifted their focus to Internet tech startups that specialized in software and content services. Afterwards, more VC funds that prioritized Internet tech startups were set up, thanks to the support and guidance from the National Development Fund (NDF) of the Executive Yuan. Meanwhile, some venture capitalists that had focused on technology and manufacturing started to invest in Internet tech startups. All these changes set the tone for creating Internet business ventures in Taiwan.

The coming of angel investors and accelerators fills the funding gap for early-stage startups

An examination of startup investment in Taiwan across all stages suggests that because limited-partner VC funds were customarily allowed to run for only seven to ten years, startups were under time pressure to exit; therefore, venture capitalists preferred to invest in mid- and late-stage tech startups, which had completed Series Pre-A to B rounds of funding. As a result, investment was relatively limited in tech startups during seed and Pre-A rounds, when they were backed by only a handful of angel investment funds set up by university alumni to help young people create businesses and to return the favor to their alma maters. Such funds included National Chengchi University's Taipei Angels and National Chiao Tung University's Angel Club.

Already, with the introduction of incentives for angel investors, such as tax cuts and green channels, investment in early-stage startups has shown signs of growth. At the same time, angel investors can harness the NDF's Business Angel Investment Program to make an





investment. The investors—convinced that local tech startups will continue to grow, as they are highly capable and making a great impact in markets—have also created the Angel Club in order to scout for new ventures and make investment evaluations. Accelerators, which are flourishing, are another factor that is empowering early-stage startups to grow rapidly. They draw on their own VC funds or the resources of angel investors to fund these fledgling businesses. In a nutshell, with angel investors and accelerators pitching in, investment in the chronically underfunded early-stage startups has increased, and more venture capitalists have invested in Taiwanese tech startups.

Late-stage investment from foreign venture capitalists helps Taiwanese tech startups go global

With its rising global visibility, the ongoing U.S.–China trade war, and a world-acclaimed semiconductor industry, Taiwan's startup sector is receiving growing attention from venture capitalists abroad. Alongside these politico-economic factors, a more critical influence is a paradigm shift in the global Internet industry that has led to a third wave of innovation based on the artificial intelligence of things. Because of this innovation wave, there

are various views on how to invest in and establish Internet tech startups. For instance, the widespread focus on B2C approaches has shifted to B2B vertical application, with which Taiwanese firms are already familiar; furthermore, startup hubs have increasingly moved from Silicon Valley to Asia, which is giving Taiwanese tech startups more exposure to foreign investment opportunities.

In addition, because Taiwanese tech startups mainly offer software products in the form of SaaS subscriptions, which sell at lower prices than one-off software products, they need to do business on a large scale to live through their burn rates. Many of them execute a growth strategy that focuses on Taiwan and another market; after all, the Internet and software can be accessed beyond geographical boundaries. It is also customary for software startups to “expand overseas,” and if they make a name abroad, they will be in a good position to receive Series B to D rounds of funding offered by international investors. Taiwanese startups are receiving investment from venture capitalists in Japan, South Korea, Singapore, Hong Kong, and Malaysia; this makes them better equipped to go global. Clearly, Taiwanese startups have become globally connected, and their growing presence worldwide is attracting interest from more foreign investors.

List of Taiwanese tech startups that have received Series B or later rounds of international funding in recent years

Startup	Funding round	Investor	Investment amount
Acepodia	Series B	DEFTA Partners, 8VC, and CDIB Capital Healthcare Ventures	1.3 billion
UnaBiz	Series B	SPARX Group (the lead investor), CDIB Capital Group, PTT Public Company Limited, and G. K. Goh Holdings (co-investors)	704 million
CoolBitX	Series B	SBI Holdings (the lead investor), NDF, BitSonic, and Monex Group (co-investors)	502 million
NextDrive	Series B	Arm IoT Fund and WI Harper Group	300 million
CloudMile	Series B	Substance Capital (the lead investor)	208 million
Acepodia	Series C	Samuel Chen (the lead investor), a majority stakeholder in Zoom and Polaris Pharmaceuticals, and Jerry Yang, a co-founder of Yahoo!	2.8 billion
KKday	Series C	Cool Japan Fund, NDF, CDIB Capital Group, and Darwin Venture Management	2.25 billion
Perfect	Series C	The Goldman Sachs Group, Inc.	1.4 billion
NextDrive	Series C	Arm IoT Fund, Hon Hai Precision, Ta Ya Electric Wire & Cable, Sino-American Silicon Products Inc., and New Economy Capital Management	855 million
FunNow	Series C	Perfect Hexagon Commodity and Investment Bank and Ascendo Ventures (both are co-lead investors), PChome, KKday, Wistron, CDIB Capital Group, Darwin Venture Management, Accuvest Management, Sanpu Travel Group, and CSV Venture Fund (co-investors)	420 million
The News Lens	Series C	SPH Ventures (the lead investor) and Quest Ventures	2.4 billion
M17	Series C	Vertex Growth Fund (the lead investor), Stonebridge Korea Unicorn Venture Fund, InnoVen Capital, Kaga Electronics, and ASE Global Group (co-investors)	800 million

Note 1: The investments are expressed in New Taiwan Dollar (NTD) terms. Some of the startups raised funding in US dollar terms, taking into account the USD/NTD rate of 1:30 before 2021 and 1:28.12 in 2021 according to the NDF.

Note 2: Taiwanese tech startups that have received Series B or later rounds of international funding in recent years include, but are not limited to, those listed above.

Source: News media, Crunchbase, NDF, FINDIT, and compiled by the Market Intelligence and Consulting Institute of the Institute for Information Industry.

Observation **3** **Taiwanese MLEs innovate by investing in startups**

Established businesses in Taiwan used to sit on the fence about cooperating with tech startups. However, faced with the onslaught of COVID-19 pandemic, companies across industries are having to transform to digital faster and more thoroughly; and to innovate faster, they are seeking external innovations. Startups are less concerned with what they have done in the past or what their internal policies require; rather, they focus largely on determining where their new products or services can be sold, and are thus more flexible in the way they operate. Hence, MLEs in Taiwan have worked with local tech startups through various means, thereby harnessing their know-how, entrepreneurial ideas, and flexible operations, to deal with any impacts caused by the new economy and the new normal. Such partnerships have become more common than before COVID. Thus, since Taiwanese tech startups exited as IPOs one after another in 2021, thus contributing to the industrial transformation, more local firms have invested in startups.

To provide a general understanding of how Taiwanese firms have invested in local tech startups, this section compiles published information from news media, the NDF's quarterly/annual reports, invested startups, VC funds, and Crunchbase. It concludes that 26 tech startups received investment in 2021, from sources including direct investment (to the exclusion of funds of funds, which only participate in traditional VC activities). The table below presents the characteristics of these 26 startup investments, and provides an overview of the investment preferences of MLEs in Taiwan.

List of Taiwanese tech startups that have received direct investment from MLEs in recent years

Startup	Founding year	Investor
NextDrive	2013	Arm IoT Fund, Hon Hai Precision, Ta Ya Electric Wire & Cable, Sino-American Silicon Products Inc., and New Economy Capital Management
FunNow	2014	Perfect Hexagon Commodity and Investment Bank and Ascendo Ventures (both are co-lead investors), PChome, KKday, Wistron, CDIB Capital Group, Darwin Venture Management, H&J Management, Sanpu Travel Group, and CSV Venture Fund (co-investors)
TradingValley	2014	Tsinghua Angel (the lead investor) and angel investors including StockFeel, Generiton, and Google's data scientists and engineers (co-investors)
Kneron	2016	Strategic investment made by Hon Hai Precision and Winbond
Kneron	2016	Lite-On, Alltek, Giantplus, Sand Hill Angels, and Gaingels
Playnitride	2016	Lite-On
Elixiron	2017	Taiwania Capital and Grains Valley Venture Capital (co-lead investors), CDIB Capital Group, DCI Partners of Daiwa Corporate Investment, Mega International Commercial Bank, Fubon Financial Holding, and Hong Tai Electric Industrial Co.
JUBO	2018	Chia Hsin Cement, Wistron, and several angel investors
InfuseAI	2018	Wistron (the lead investor), TopTaiwan, Hive Ventures, Silicon Valley Taiwan Angels, 500 Startups, and some angel investors (co-investors)
AccuHit	2018	PChome (the lead investor), Industrial Technology Investment Corporation, Hengstyle, NCTU Angel Club, and NDF (co-investors)
JelloX	2018	Wistron Medical Technology Corporation and Advance Imaging Biotechnology
Profet AI	2018	AU Optronics, Hive Ventures and Silicon Valley Taiwan Angels
XREX	2018	CDIB Capital Group (the lead investor), SBI Holdings, Global Founders Capital, TreeD Capital, E.Sun Venture Capital, Systex Corporation, Black Marble Capital Management, Metaplanet Holdings, AppWorks, New Economy Capital Management, and Seraph Group (co-investors)

Field	Investment amount	Funding round
Environment and agricultural technology	855 million	Series C
Travel and accommodation	420 million	Series B
FinTech	30 million	Series Pre-A
B2B business software solutions	Undisclosed	Undisclosed
B2B business software solutions	696 million	Undisclosed
Hardware and IoT	140 million	Undisclosed
Healthcare technology and pharmaceuticals	759 million	Series A+
Healthcare technology and pharmaceuticals	195 million	Series A
B2B business software solutions	129 million	Series A
Ad, contents, and marketing	167 million	Series B
Healthcare technology and pharmaceuticals	70 million	Series Pre-A
B2B business software solutions	Undisclosed	Series Pre-A
Information security (including blockchains)	470 million	Series Pre-A

List of Taiwanese tech startups that have received direct investment from MLEs in recent years

Startup	Founding year	Investor
ZEPT	2018	Teco Group
Moneybook Co., Ltd. (Moneybook)	2018	PChome and CTBC Venture Capital
Ace Medical Technology	2018	TaiAn Technologies and NDF
ITM	2019	Wistron (the lead investor)
MOOVO	2019	Cherubic Ventures, Cornerstone Ventures (aka “CHT-PCH NO.1,” a VC fund co-created by PChome and Chunghwa Telecom), AVA Angels, and angel investors with industrial strategies
Aiello AI	2019	Colopl Next and Cornerstone Ventures
DeepWave	2019	C-Media Cultural Creative Technology*, Alan Chien (a lawyer) m and NDF
QuickClick	2019	Harbinger Venture Capital** and NDF
hipposcreen	2019	Compal Electronics
3 SQUARE	2020	Hanshin Department Store, Foodland Ventures, and several incorporations and angel investors
AcadeMab	2020	TaiAn Technologies and NDF
MEandMine	2021	Wistron (the lead investor), Smart Capital, and some angel investors (co-investors)
High Entropy Materials Inc.	2021	SinoPac Venture Capital and NDF

Field	Investment amount	Funding round
Automobile technology	Undisclosed	Undisclosed
FinTech	Undisclosed	Undisclosed
Healthcare technology and pharmaceuticals	90 million	Undisclosed
Information security (including blockchains)	Undisclosed	Series Pre-A
Automobile technology	200 million	Series Pre-A
Travel and accommodation	Undisclosed	Series Pre-A
B2B business software solutions	14 million	Angel
e-commerce and retailing	10 million	Undisclosed
Healthcare technology and pharmaceuticals	70 million	Undisclosed
e-commerce and retailing	33.74 million	Seed
Healthcare technology and pharmaceuticals	44.10 million	Undisclosed
Education	60 million	Undisclosed
Materials technology	50 million	Undisclosed

Note 1: The investments are expressed in New Taiwan Dollar (NTD) terms. Some of the startups raised funding in US dollar terms, taking into account an USD/NTD rate of 1:28.12 according to the NDF.

Note 2: Taiwanese tech startups that have been funded by local businesses in recent years include, but are not limited to, those listed above. This section presents an analysis of startups with more generous funding that are covered by the media, so as to chart the developments in the Taiwanese startup sector and local startup businesses.

Note 3: *C-Media Cultural Creative Technology is a wholly-owned firm of C-Media Electronics; **Harbinger Venture Capital is a VC fund owned by MiTAC-SYNNEX Group.

Note 4: The startups are listed in order of the founding year, from the earliest to the latest.

Source: News media, Crunchbase, NDF, FINDIT, and compiled by the Market Intelligence and Consulting Institute of the Institute for Information Industry.

MLEs prioritize investing in Pre-A startups

Across all stages of startup investment, MLEs in Taiwan prioritize tech startups that are seeking a Series Pre-A round of funding. Indeed, seven such investments were made in 2021, accounting for 27% of the total. Unlike those still in the angel/seed round, Pre-A startups have prototype products and services, rudimentary business models, and some measure of popularity in their markets. They need funding to improve their products and services or to validate them on a larger scale, and thereby increase the integrity of their business models. Therefore, Taiwanese MLEs tend to make early investment in tech startups that have demonstrated what they have to offer and established themselves, while helping the startups to enter the proof-of-concept

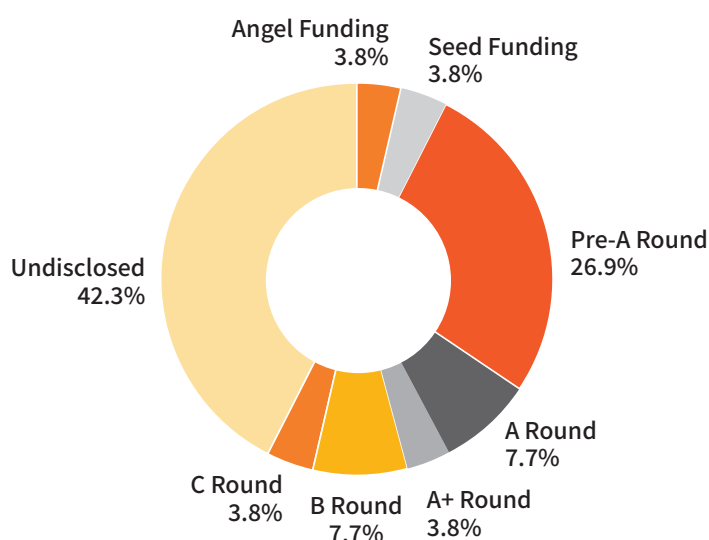
phase and create complete business models. In doing so, they can evaluate the startups to get a sense of their competence and resilience, while gaining financial returns as they grow.

MLEs serve as lead investors

Lead investors do not necessarily make the largest investments, but they are important connectors, leveraging their extensive experiences to help startups find other investors or do networking. In all the tech startup investments made so far in Taiwan, the lead investors are predominantly venture capitalists, and co-investors are mainly local MLEs. Some MLEs, taking into account their parent firms' strategic plans, prefer individual investments to co-investments.

However, this investment pattern has changed since 2021, with MLEs having

Stages of tech startup investment made by MLEs in Taiwan



Round	Piece
Angel Funding	1
Seed Funding	1
Pre-A Round	7
A Round	2
A+ Round	1
B Round	2
C Round	1
Undisclosed	11

Source: News media, Crunchbase, NDF, FINDIT, and compiled by the Market Intelligence and Consulting Institute of the Institute for Information Industry.

List of mature tech startups in Taiwan that have invested in younger ones in recent years

Mature tech startup (earlier startups)	Way of investment	Description
Appier	M&A	Acquired the chatbot platform “BotBonnie” in 2021
Pinkoi	Create a VC fund	Worked with Cherubic Ventures to set up a VC fund and invested in the print fabrics maker “inBloom” in 2019
Vpon	Create a VC fund	Established Vpon Ventures in 2020
cacafly	Investment	Made a strategic investment in the LINE messenger's chatbot “lychee” in 2020
KKday	Investment	Invested in the instant booking platform “FunNow” in 2021
iCHEF	Investment	Made a strategic investment in QLiEER (a developer of cloud-based point-of-sale systems) in 2021
Miezo	Investment	Invested in the online furniture retailer “MR. LIVING” in 2021
PressPlay	Investment	Co-invested with Angelic Founder in the online learning platform “NEWSVEG” in 2021

Note: Mature tech startups that have invested in younger ones in recent years include, but are not limited to, those listed above.

Source: News media, Crunchbase, NDF, FINDIT, and compiled by the Market Intelligence and Consulting Institute of the Institute for Information Industry.

increasingly assumed the mantle of the lead investor. For example, the electronics manufacturer Wistron and the e-commerce service provider PChome were the lead investors in two to three Taiwanese tech startups in 2021. In Q1 2022, UMC Capital, founded by United Microelectronics Corporation, led the investment in Hahow, and Taiwan Mobile did so in CloudMile. All these events indicate the established companies' growing willingness to finance startups and spearhead the fundraising campaign for them. When these companies eventually become thoroughly conversant with tech startups, startup investments may mushroom.

The startup community is heading toward a virtuous cycle, with earlier businesses mentoring new ones

















The Taiwanese startup investment community is seeing not only tech startups financed by MLEs, but also earlier startups mentoring new ones. Some mature tech startups with a foothold in markets have invested in younger ones (e.g., by setting up a VC fund or conducting a merger), in order to seek more business opportunities, integrate their resources, and improve the startup ecosystem. In brief, with serious investment from MLEs and mature tech startups, Taiwan's startup community is moving toward a virtuous cycle.

- Source: Information published by the media (from news media, the NDF's quarterly/annual reports, invested startups, VC funds, and Crunchbase), and research outcomes and statistics reported in the 2020 and 2021 reports of *Taiwan's Corporate Innovation and Startup Ecosystem*.
- Below are two categories of investors prioritized for analysis in this section:
 1. Investors that disclosed their startup investments in Taiwan between Jan 2019 and Mar 2022; and
 2. for "domestic venture capital institutions," and investors that have made "domestic enterprise investments," those that have used the NDF's program to invest in Taiwanese tech startups or disclosed their investments in more than two such businesses are preferably included.

Taiwan's Corporate VC

 Cornerstone Ventures	 Cathay Financial Holdings	 TaiAn Tech
 TA YA VC	 CTBC VC	 Wistron
 Harbinger VC	 Shin Kong VC	 WIN Semiconductors
 UMC Capital	 Taishin Financial Holding	 Foxconn
 Abico Asia Capital	 Fubon Financial	 HTC
 CSC VC	 E.SUN Financial Holding	 PChome
 Mega Holdings	 SinoPac Holdings	 STOCKFEEL

Taiwan's Venture Capital

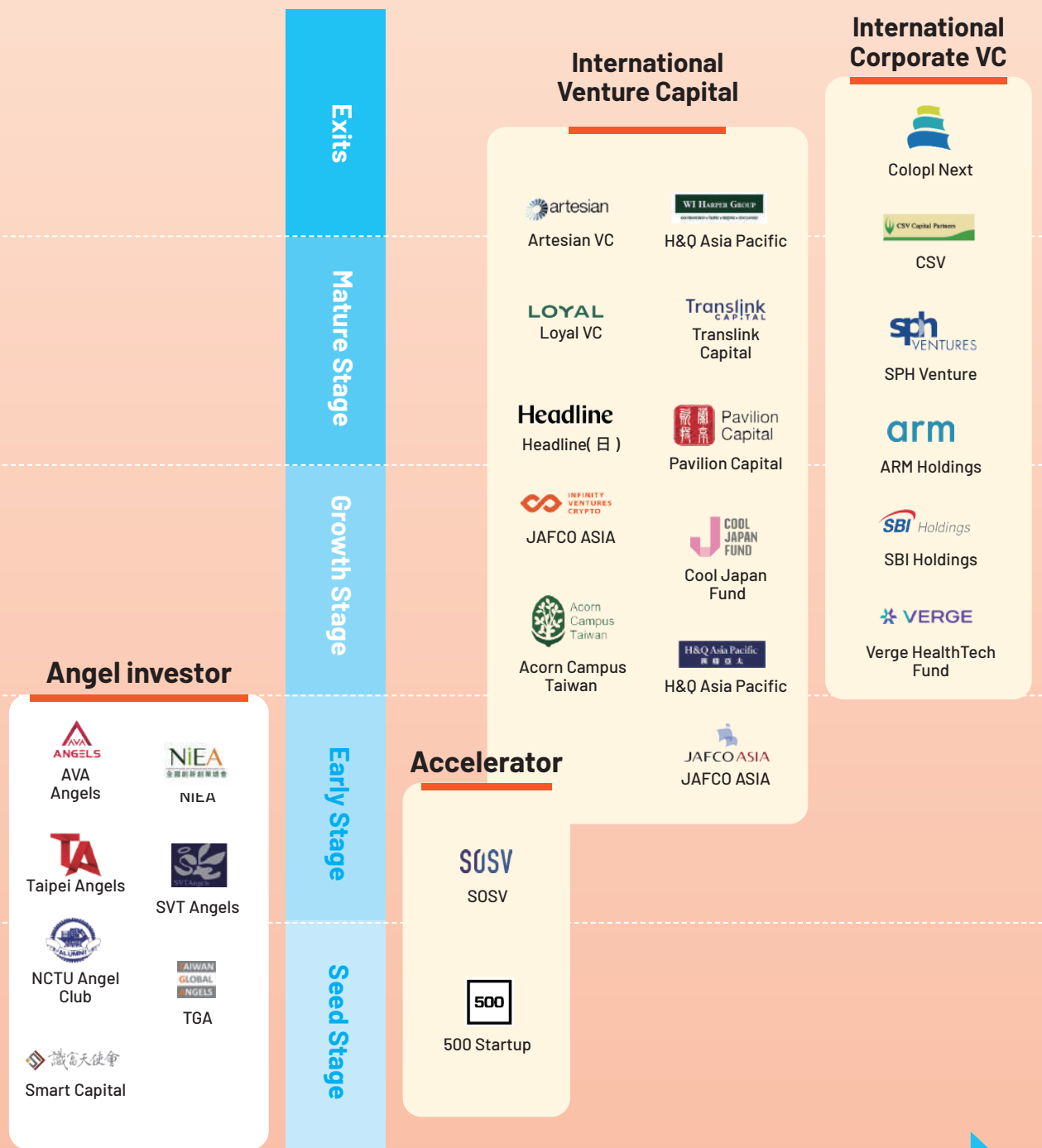
 Cherubic Ventures	 Top Taiwan VC	 Integral Partner
 B Current	 ITIC	 Darwin Venture
 Hive Ventures	 SAGA Unitek Ventures	 Taiwania Capital
 SunSino Venture Group	 Achievement Investment	 CDIB CAPITAL GROUP
 Red Building Capital	 Hotung VC	 Black Marble Capital
 Global Investment Holdings	 Trinity Investment Corporation	

Taiwan's Accelerator

 SparkLabs Taiwan
 DIT Startup
 BE Accelerator
 FoodLand Ventures
 AppWorks

Taiwanese Investor

Overview of investors across all stages of their
startup investment in Taiwan



International Investor

Note: Investors and organizations that have invested in Taiwanese tech startups include, but are not limited to, those presented in the figure above.

Note 2: Investment banks are not included.

Source: Market Intelligence and Consulting Institute of the Institute for Information Industry.





Chapter 3

Startup Accelerator Ecosystem in Taiwan

Startup accelerators provide supportive resources for early-stage companies. This chapter presents an overview of Taiwanese startup accelerators, in order to provide an understanding of local early-stage startups, and to inform businesses, organizations, or investors who intend to play a part in the startup sector.

Taiwanese startup accelerators

With government support and private-sector participation in recent years, accelerators are mushrooming in Taiwan. Their purpose is to furnish startups with the services they need to grow, such as investment funds, batch, program, and the Demo Day.

To help startups and investors in Taiwan and abroad find the resources they need

to enter accelerators and understand the local early-stage startup environment, this section presents Taiwanese accelerators and their services; the readers can choose any of the accelerators depending on their needs. Please note that Taiwanese startup accelerators include, but are not limited to, those listed in the table below.

List of Taiwanese startup accelerators and their services in 2021

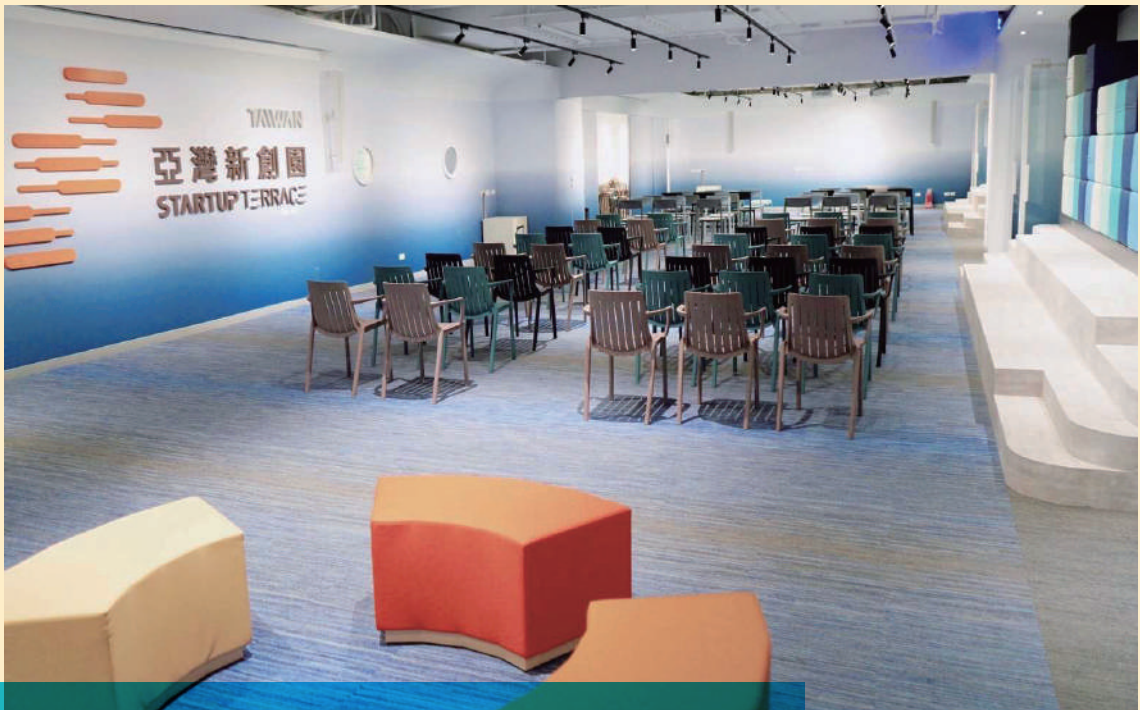
	Exclusive investment fund		Batch	Program	Demo day
	Investment upon entry	Conditional*			
500 Global Accelerator Taiwan with TTA		✓	✓	✓	✓
Asia Blockchain Accelerator		✓	✓	✓	✓
AppWorks		✓	✓	✓	✓
IAPS (Center of Industry Accelerator and Patent Strategy, National Chiao Tung University)		✓	✓	✓	✓
iiiNNO Launchpad		✓	✓	✓	✓
Innovation and Creation Accelerator		✓	✓	✓	✓
Mighty Net			✓	✓	✓
Orange Fab Asia		✓	✓	✓	✓
S2B Startups To Business Accelerator			✓	✓	✓
SOSV MOX Mobile Only Accelerator	✓		✓	✓	✓
SparkLabs Taipei	✓		✓	✓	✓
StarFab			✓	✓	✓
TAcc+			✓	✓	✓
Taiwan Phoenix Project			✓	✓	✓

	Exclusive investment fund		Batch	Program	Demo day
	Investment upon entry	Conditional*			
Accelerators for women (under Women Entrepreneurship Program of the SMEA)			✓	✓	✓
Chung Yuan Innovation and Incubation Center		✓			✓
CDIB Capital Innovation Accelerator		✓		✓	
Chunghwa Telecom 5G Accelerator		✓	✓	✓	✓
BE Accelerator		✓	✓	✓	✓
NTU Corporate Accelerator Program			✓	✓	✓
Tiger Accelerator				✓	✓
Mosaic Venture Lab		✓	✓	✓	✓
Haoshi Accelerator Seed Program			✓	✓	✓
Foodland Ventures	✓				✓
APT 5G Startup Accelerator Program			✓	✓	✓
VtR Inc.				✓	
iLab incubation program (hosted by Social Enterprise Insights)		✓	✓	✓	✓
Atelligent Global Consulting Corporation		✓	✓		✓
Epoch Garage+			✓	✓	✓
Rainmaking Innovation					✓
DIT Startup		✓	✓	✓	
PwC's Scale-up			✓	✓	
AI+ Generator Program (hosted by Systex Corporation)			✓	✓	✓
United Innovation Accelerator		✓	✓	✓	✓
Smart Capital Accelerator		✓	✓	✓	✓

Note 1: Conditional investment is a process in which the accelerator sets up an exclusive VC fund (or a VC fund has created an accelerator program), and startups being funded or having completed the phase-based training are not necessarily selected for investment on the Demo Day or through other means.

Note 2: The contents presented in this chapter are mainly gathered from the official websites of the accelerators listed.

Note 3: The accelerators are listed in order of the number of strokes in the Chinese characters in their names.



To discover more about international startup incubators organizations in Taiwan, please scan the following QR codes:



List of international startup incubators registered with the Ministry of Economic Affairs



Project for Development of Incubator Institutions (hosted by the SMEA)



Startup Terrace Linkou
(an international startup hub built in northern Taiwan by the SMEA)



Startup Terrace Kaohsiung
(an international startup hub built in southern Taiwan by the SMEA)







Chapter 4

Conclusion

**Be trend-versed,
strategize for tomorrow's business opportunities;
seek talents,
turn them into the nation's Guardian Mountains;
then set off overseas in unison,
head for the international market.**

STARTUP

Since the start of 2022, the world has seen an increase in uncertain external factors, such as inflation, rising interest rates, and the Russia-Ukraine war, among others. Many venture capitalists and accelerators around the world have sounded an alert to startups. For startups, this underlines the need to operate in a realistic way by taking into account three elements: trends, talents, and markets.

Be trend-versed, strategize for tomorrow's business opportunities

As the times progress and technology continues to advance, technical know-how and applications have evolved so fast that industries are reshaping themselves. Businesses, whether they have established themselves or are newly born, are working hard to get a sense of how technology is changing, and to grasp business opportunities. When seeking to translate innovative ideas into reality, startups can respond flexibly to changes and provide services of a cross-disciplinary nature, given that they possess state-of-the-art expertise, entrepreneurial thinking, and flexible organizational structures. Looking ahead, startups should give serious thought to “business opportunities of tomorrow,” by exploring fields with enormous potential (e.g., the metauniverse, net-zero carbon emissions, space technology, smart healthcare, and quantum computers), and should seize the chance to co-create business with established firms.

Seek talents, turn them into the nation's Guardian Mountains

“Talents” are the lynchpin of tech startups, and for Taiwan to cultivate national protectors in the digital world, it should ensure an ample pool of software professionals. Amid the COVID-19 pandemic, telecommuting, remote work, digital-nomading, and the migration of tech professionals worldwide have become the order of the day. Thus,

CSE

to improve its talent competitiveness meaningfully, Taiwan should not simply retain and cultivate its pool of local professionals; it should also attract those from abroad, and increase international student enrollments. The “entrepreneur visa” and the “golden employment card” are among the policies rolled out in recent years to encourage foreign talents to find work or create a business in Taiwan. By providing an environment conducive to entrepreneurship, Taiwan can become a hub for foreign talents.

Set off overseas in unison, head for the international market

“Going global” is a key driver behind the growth of businesses in Taiwan. Over the past two years, local MLEs have introduced digital technology through CSE, to speed up their digital transformation. And as Taiwan's global visibility increases, there is an emerging trend where local established firms (armed with brand strengths) and startups (equipped with innovative expertise) are partnering to make forays into overseas markets. For example, in recent years, Gogoro has been seeking to establish a foothold in Southeast Asia. This involves migrating its production operations to the local markets; thus, the company has worked with PowerArena, a startup specializing in AI image recognition, to digitalize its production, thereby eliminating language barriers and facilitating its expansion into the markets. For Taiwan to achieve further growth, the manufacturing know-how of established businesses and the software expertise of tech startups should be synergized, as this will make it possible to secure the domestic market and expand overseas at the same time.

TAIWAN+1

2022 Taiwan's Corporate Innovation and Startup Ecosystem

Distributor / Small and Medium Enterprise Administration (SMEA), MOEA
3F, No. 95, Section 2, Roosevelt Rd., Daan District, Taipei City
www.moeasmea.gov.tw
(02) 2368-0816

Publisher / Institute for Information Industry (III)
Author / Market Intelligence & Consulting Institute (MIC) - Mandy Wang, Rosa Chang
Editor / Digital Transformation Research Institute (DTRI) - Vivi Chiu, Lilian Kao
Address / 19F, No. 216, Section 2, Dunhua South Rd., Taipei City 106
Telephone / (02) 2736-1353
Fax / (02) 2732-1353
Publication Date / November 2022

Ads of Small & Medium Enterprise Administration, MOEA
All company names, trademarks, and product photos mentioned in the report are property of their respective companies.

The above content has been collected and analyzed by the Institute for Information Industry. Due to industries rapidly changing, there is no guarantee that the above information will remain correct and complete in the future. Please pay attention to the publication date, arguments, and circumstances at the time when referencing this publication in other works.

This publication is property of the SMEA. No reprinting or reproduction without permission.

2022

Taiwan's Corporate Innovation and Startup Ecosystem

**Corporate
Investment
Startup**