

White Paper on Startups



Foreword

Startups are a key driving force behind national economic innovation and development. They not only advance technological applications but also facilitate industrial upgrading and transformation, creating job opportunities. This aligns with President Lai's vision of establishing an "innovative entrepreneurial rainforest ecosystem." The government has identified "five trusted industry sectors" - semiconductors, artificial intelligence (AI), defense, security and surveillance, and next-generation communications - as focal points of national industrial development. By leveraging semiconductors and AI as dual-core industries, Taiwan aims to secure pivotal positions within global supply chains, attract investment, and draw top-tier talent. This will further expand strategic national investments, enhance innovation and entrepreneurship capabilities, and strengthen Taiwan's competitiveness in emerging global industries.

According to the latest Global Entrepreneurship Monitor report, Taiwan ranks third globally in national entrepreneurial environment. Taiwan leads in several key areas, including physical infrastructure, commercial and professional infrastructure, and government policy on taxation and bureaucracy, surpassing neighboring countries like Japan, South Korea and Thailand. This reflects Taiwan's favorable conditions for startup growth. The government will continue to support startups in driving Taiwan's economic growth through funding, talent cultivation, market access and international expansion initiatives.

After more than a year of planning, the Ministry of Economic Affairs has released its first White Paper on Startups. This document provides a global perspective on Taiwan's current innovation and entrepreneurship landscape, analyzing the development status and challenges faced by startups. It also consolidates inter-ministerial resources in areas such as funding access.

market expansion, talent development and innovation research. Moving forward, the White Paper will be published annually to serve as a reference for all stakeholders, maximizing the synergy of Taiwan's startup ecosystem and contributing to national economic development and competitiveness.

As of the end of 2024, there were over 9,500 startups with strong innovation capabilities in Taiwan. Their primary sectors include healthcare, media and entertainment, food and beverages, consumer products, hardware manufacturing, and software applications. Among these, the energy, biotechnology and healthcare industries have garnered the most investor interest. Additionally, netzero emissions and green energy sustainability have emerged as the fastest-growing investment sectors in response to market demands. Overall, startups in green energy sustainability, biotechnology and healthcare have flourished under policy guidance. In recent years, the government has further leveraged Taiwan's competitive advantage in semiconductor manufacturing, integrating it with the development of generative AI to drive digital applications growth and encourage more technology talent to engage in innovation and entrepreneurship, strengthening the foundation for future industrial expansion.

It is my sincere hope that this White Paper will provide a deeper understanding of Taiwan's thriving innovation and startup ecosystem. I also extend my gratitude to the editorial committee and all colleagues whose dedication has made this publication possible. We welcome feedback from all sectors to gather valuable insights that will inform future policy planning.

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Executive Summary

The entrepreneurial environment in Taiwan holds a competitive edge on the global stage, making Taiwan an ideal location for startup development. This is attributed to multiple factors, including Taiwan's world-leading manufacturing and innovation capabilities, industrial clusters, high quality of life, and cultural integration. In particular, a comprehensive industrial value chain, highly skilled research talent, and startup-friendly policies form the core competitiveness of Taiwan's startup ecosystem. According to the Global Entrepreneurship Monitor (GEM) report, Taiwan ranks third globally in its entrepreneurial environment, excelling especially in infrastructure and policy support. Similarly, StartupBlink's report places Taiwan's startup ecosystem 22nd worldwide, highlighting its strengths in industrial innovation, hardware manufacturing, and human resources, all of which have drawn the attention of global entrepreneurs.

As of the end of 2024, Taiwan was home to 9,576 startups, demonstrating the vibrant dynamism of its startup ecosystem. Taiwanese startups are primarily in artificial intelligence, biotechnology and pharmaceuticals, and cultural and creative industries. In addition, the investment sector, incubators, and government agencies provide multi-level support to startups.

In the area of investment, angel investors focus on healthcare, software, and hardware; venture capital focuses on healthcare, biotechnology, and energy, while corporate venture capital leans toward energy, hardware, and manufacturing. These diverse investment strategies not only reflect the market's keen interest in innovative technologies and sustainable development but also highlight Taiwan's potential in the relevant technological fields. During business

growth, incubators focus on startups in cultural and creative industries, artificial intelligence, and biotechnology. They provide startup guidance, resource connections, and industry exchanges to help startups grow quickly and expand their market networks. For their part, accelerators are playing an increasingly prominent role in the startup ecosystem, with services covering biotechnology, artificial intelligence, and clean technology. They are critical drivers that enable startups to connect with corporate resources and expand into international markets.

Government agencies closely collaborate across education, research, funding, and market access. To meet the needs of startups at different stages of development, they offer diverse financial support, including grants, loans, and investments. For market expansion, the government facilitates entry into domestic and international markets through international exhibitions, innovation parks, and corporate collaborations. Talent development strategies enhance the competitiveness of entrepreneurial teams, complemented by support services that include regulatory consultations, technological R&D, and information platform support.

Looking ahead, Taiwan will continue to strengthen international cooperation, attract more global capital and talent, and deepen policy innovation and market integration to further enhance the competitiveness of its entrepreneurial environment. In addition, by strengthening industrial clusters and optimizing infrastructure, Taiwan will continue supporting startups in achieving their goals, attracting international talent, driving innovation, and fostering economic growth.

Chapter1 Entrepreneurial Ecosystem

Section 1 Advantages of Taiwan's Entrepreneurial Environment

Taiwan demonstrates unique advantages in technological innovation, industrial development, quality of life, and cultural integration. These strengths provide a solid foundation and abundant resources for innovation and entrepreneurship, helping entrepreneurs and startups stand out in highly competitive markets.

I.Overview of Taiwan's Entrepreneurial Environment

(I)Technological Innovation: World-Leading Manufacturing and Innovation Capabilities

Taiwan has outstanding manufacturing and technological innovation capabilities, especially in the semiconductor and hardware manufacturing sectors. Taiwan is a leading global manufacturer and has received high acclaim from the R&D 100 Awards for 16 consecutive years. In 2023, Taiwan ranked first in advanced semiconductor manufacturing, highlighting its strength in technology R&D and critical role in the global technology supply chain.

The government continues to invest in technology R&D and strives to develop an environment conducive to innovation. It has provided innovation grants, established science parks, and promoted policies that support innovation and entrepreneurship. These efforts drive the growth of domestic technology companies and attract global tech talent, leading enterprises, and innovative businesses to develop in Taiwan.

(II)Industrial Development: Clustering Effect and the Presence of International Tech Giants

Industrial development in Taiwan is driven by a significant clustering effect, enabling the island to become a critical supplier for the global electronics industry. Many major brands, including Apple, HP, Dell, AMD, Qualcomm, IBM, Intel, Microsoft, and NVIDIA, rely heavily on the talent, technology, and manufacturing capabilities in Taiwan to support their global supply chains. Since 2022, international tech giants Micron, Synopsys, and NXP have established R&D centers in Taiwan, further enhancing Taiwan's influence in the global tech industry. The establishment of R&D centers by international companies not only drives economic growth but also fosters innovation and elevates the standing of local enterprises within the industry. On a global scale, the presence of tech giants creates a robust industrial clustering effect that enables domestic businesses to access international resources more readily while promoting the exchange of technology and expertise, leveraging these beneficial industrial conditions to help startups accelerate their growth and help them gain a competitive edge in the global market.

(III)Quality of Life: Sound Healthcare System and Excellent Living Environment

In addition to its technological and industrial advantages, the quality of life in Taiwan is another major attraction for entrepreneurs. According to a CEOWORLD survey in 2024, Taiwan's healthcare system ranks first globally, providing top-tier healthcare services to all residents. In addition, public safety in Taiwan ranks among the best in the world. According to the 2023 Numbeo Crime Index, Taiwan ranks third globally in public safety, which allows expatriates and startup teams to focus on their work and daily lives with peace of mind. The quality of life and environment for starting

a business is also reflected in its digital infrastructure. A 2023 Digital Taiwan survey shows that Internet penetration in Taiwan is 90.7%, and 95% of residents have mobile Internet access. This digital infrastructure has provided strong support for remote work and digital technology startups, making Taiwan an ideal location for startup growth.

(IV)Cultural Integration: Respect for Diversity and High Inclusivity

Cultural integration is another key feature of Taiwan's entrepreneurial environment. According to PEW Research, Taiwan ranks second globally on the Religious Diversity Index, reflecting a high level of cultural acceptance. In addition, Taiwan is also a leader in marriage equality policies in Asia. Multiculturalism and inclusivity help entrepreneurs from different backgrounds integrate into the local society and inspire creativity and innovation during their entrepreneurial journey. Taiwan has the utmost respect for cultural diversity, which provides startups with a rich pool of talent and market opportunities, enabling them to develop more diverse products and services.

As a society that offers technological innovation, industrial development, sound quality of life, and cultural integration, Taiwan provides comprehensive support for startups. Advanced industrial development, robust supply chains, and resource networks resulting from technological innovation allow startups to more easily secure partnerships, reduce costs, and quickly enter markets. Meanwhile, a stable quality of life and cultural inclusivity allow startups to operate in a safe and supportive environment, fostering creativity and enabling the development of diverse products and services to meet the needs of different customer groups.

II.Regional Startup Ecosystems in Taiwan

With the emergence of innovation and entrepreneurship, Taiwan has gradually developed unique regional startup ecosystems. Each region leverages its industrial foundation, academic and research resources, and policy support to create diverse, specialized startup environments. Below is an overview of the startup ecosystems in northern, central, southern, and eastern Taiwan, focusing on their respective industry sectors, academic and research institutions, and policy initiatives.

(I)Northern Taiwan

Northern Taiwan includes Taipei City, New Taipei City, Keelung City, Yilan County, Taoyuan City, and Hsinchu County/City. Being the core commercial hub for technological innovation in Taiwan, it has abundant industrial and commercial resources within a vibrant innovation ecosystem that includes the financial, smart retail, digital content, biotechnology, and electronic technology sectors. Due to its large population, comprehensive industrial chain, and advanced infrastructure, Northern Taiwan has become an important hub for entrepreneurship and technological development.

As of December 2024, the FINDIT database of the Small and Medium Enterprise Startup Administration (SMESA) has listed 6,669 startup companies in Northern Taiwan (see Table 1-1). The startups are primarily concentrated in Taipei City (60.89%), followed by New Taipei City, Hsinchu County, and Hsinchu City, Taoyuan City, and other areas. Startup companies in Northern Taiwan are mainly concentrated in six major sectors: Electronics-related Hardware (9.91%)¹, Healthcare (9.01%), Media and

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¹Electronics-related hardware includes semiconductors, communications, and other hardware, such as drones, mobile and wearable devices, and other electronic components.

Entertainment (8.37%), Consumer Goods (6.67%), Digital Applications (Software) (5.76%), and Food and Beverage (5.74%). These sectors collectively account for 45.46% (see Table 1-2).

Table 1-1 Distribution of Startup Companies by City/County: Northern Taiwan

Unit: Number of Companies, %

County / City	Number of Companies	Percentage (%)
Taipei City	4,060	60.89
New Taipei City	1,293	19.37
Hsinchu County/City	633	9.48
Taoyuan City	567	8.51
Yilan County	73	1.09
Keelung City	43	0.64
Total	6,669	100.00

Source: FINDIT platform of the Small and Medium Enterprise and Startup Administration. Data only includes registered startup companies. Data compiled by the Taiwan Institute of Economic Research and updated to December 31, 2024.

Table 1-2 Top 6 Sector Distribution of Startup Companies: Northern Taiwan

Unit: Number of Companies, %

Rank	Sector	Number of Companies	Percentage by Region (%)
1	Electronics-related Hardware	661	9.91
2	Health Care	601	9.01
3	Media and Entertainment	558	8.37
4	Consumer Goods	445	6.67
5	Digital Applications (Software)	384	5.76
6	Food and Beverage	383	5.74
	Total	3,032	45.46

Source: SMESA FINDIT platform. Data only includes registered startup companies. Data compiled by the Taiwan Institute of Economic Research and updated to December 31, 2024.

To further promote the development of the entrepreneurial ecosystem in Northern Taiwan, the government in March 2024 launched the Greater Silicon Valley Initiative for Taoyuan, Hsinchu, and Miaoli. The goal is to integrate the industrial technologies and innovation clusters in the region to build a technology corridor to attract more entrepreneurial and technological resources. This initiative is expected to boost the technology industry and entrepreneurial ecosystem in Northern Taiwan to further drive Taiwan's international competitiveness in innovation.

(II)Central Taiwan

Central Taiwan includes Taichung City, Changhua County, Miaoli County, Yunlin County, and Nantou County. Showcasing a unique industrial structure and innovative capability, the region is known for its strong industrial foundation and technological advantages, particularly in precision machinery and smart manufacturing. Key enterprises within the region actively invest in research and development, creating an ecosystem that focuses on machinery manufacturing, automation equipment, and IoT technology. At the same time, local traditional industries are also undergoing upgrades and transformations, linking with the cultural and creative industry to build a diverse and rich entrepreneurial ecosystem.

As of December 2024, the FINDIT database has listed 1,166 startup companies in Central Taiwan. Table 1-3 shows that Taichung City has the highest number of startups (71.44%), followed by Changhua County, Yunlin County, and Miaoli County. Table 1-4 shows that startup companies are concentrated in three major sectors: Manufacturing (10.89%), Food and Beverage (10.81%), and Electronics-related Hardware (8.66%). Other areas such as Consumer Goods (8.32%), Health Care (7.20%), and Agriculture and Farming (6.78%) also demonstrated high potential, collectively accounting for 52.66%.

Table 1-3 Distribution of Startup Companies by City/County: Central Taiwan

Unit: Number of Companies, %

County / City	Number of Companies	Percentage (%)
Taichung City	833	71.44
Changhua County	107	9.18
Yunlin County	92	7.89
Miaoli County	86	7.38
Nantou County	48	4.12
Total	1,166	100.00

Source: SMESA FINDIT platform. Data only includes registered startup companies. Data compiled by the Taiwan Institute of Economic Research and updated to December 31, 2024.

Table 1-4 Top 6 Sector Distribution of Startup Companies: Central Taiwan

Unit: Number of Companies, %

Rank	Sector	Number of Companies	Percentage by Region (%)
1	Manufacturing	127	10.89
2	Food and Beverage	126	10.81
3	Electronics-related Hardware	101	8.66
4	Consumer Goods	97	8.32
5	Health Care	84	7.20
6	Agriculture and Farming	79	6.78
	Total	614	52.66

Source: SMESA FINDIT platform. Data only includes registered startup companies. Data compiled by the Taiwan Institute of Economic Research and updated to December 31, 2024.

At the policy level, the government launched the Zhongxing New Village Regional Revitalization Startup Incubator project in 2024, integrating entrepreneurial resources and policy support to link together local culture, agriculture, and technological innovation. The initiative has driven the development of the entrepreneurial ecosystem

and enhanced overall competitiveness, enabling the region to become an important engine for entrepreneurship and innovation in Taiwan.

(III)Southern Taiwan

Southern Taiwan includes Kaohsiung City, Tainan City, Chiayi County/City, Pingtung County, and Penghu County. Initially focused on traditional industries such as metal machinery, electronic components, and petrochemical materials, it has gradually moved toward high-tech development due to industrial upgrades and transformation, with semiconductors, energy technology, and AI technology becoming primary drivers. In addition, the region's industrial ecosystem continues to integrate emerging fields such as biotechnology, cultural creativity, and information services, exhibiting the potential for diversified development. Academic institutions in the region, such as National Cheng Kung University, National Sun Yat-sen University, National Kaohsiung University of Science and Technology, and Kaohsiung Medical University, are also actively invested in talent cultivation and research in semiconductor, energy, and AI technologies to provide strong support for industrial technology breakthroughs and innovation in Southern Taiwan.

As of December 2024, the FINDIT database has listed 1,445 startup companies in Southern Taiwan (see Table 1-5). Kaohsiung City has the highest number of startup companies (52.38%), followed by Tainan City, Chiayi County/City, Pingtung County, and Penghu County. The entrepreneurial trend shows a two-pronged development in the region that covers high-tech and daily livelihood applications. As shown in Table 1-6, startup companies are mostly concentrated in the following six sectors, which collectively account for 46.23%: Food and Beverage (9.55%), Manufacturing (8.30%), Electronics-related Hardware (8.24%), Health Care (7.61%), and Consumer Goods (7.13%).

Table 1-5 Distribution of Startup Companies by City/County: Southern Taiwan

Unit: Number of Companies, %

County / City	Number of Companies	Percentage (%)
Kaohsiung City	756	52.38
Tainan City	484	33.45
Chiayi County / City	95	6.57
Pingtung County	92	6.36
Penghu County	18	1.24
Total	1,445	100.00

Source: SMESA FINDIT platform. Data only includes registered startup companies. Data compiled by the Taiwan Institute of Economic Research and updated to December 31, 2024.

Table 1-6 Top 6 Sector Distribution of Startup Companies: Southern Taiwan

Unit: Number of Companies, %

Rank	Sector	Number of Companies	Percentage by Region (%)
1	Food and Beverage	138	9.55
2	Manufacturing	120	8.30
3	Electronics-related Hardware	119	8.24
4	Health Care	110	7.61
5	Consumer Goods	103	7.13
6	Agriculture and Farming	78	5.40
	Total	668	46.23

Source: SMESA FINDIT platform. Data only includes registered startup companies. Data compiled by the Taiwan Institute of Economic Research and updated to December 31, 2024.

In 2024, the government launched multiple policies to provide full-scale support for the entrepreneurial ecosystem in Southern Taiwan. The initiatives include the Taiwan Startup Terrace and TTA South, which provide international networking and integrated entrepreneurial resources. In addition, the Semiconductor S-Corridor and the Southern Taiwan Technology Center initiatives aim to connect resources

in the Southern Taiwan Science Park, Kaohsiung, and other regions to create a comprehensive industrial chain and innovation clusters. The goal is to promote digital transformation, Al applications, and the introduction of new technologies, thereby enhancing the competitiveness of Southern Taiwan and its industry.

(IV)Eastern Taiwan

Eastern Taiwan includes Hualien County and Taitung County, and it focuses on agriculture and tourism. With its rich natural resources and diverse cultures, its boasts of advantages in agricultural technology, ecotourism, and cultural creativity. The region's industry structure is focused on sustainability and innovation, which gives entrepreneurs more opportunities for development. In addition, National Dong Hwa University and National Taitung University also play a key role in promoting the economy and entrepreneurial ecosystem in the region by providing technical support and talent cultivation to agricultural biotechnology, cultural creativity, and the tourism sectors.

As of December 2024, the FINDIT database has listed 117 startup companies in Eastern Taiwan (see Table 1-7). Taitung County accounts for 58.12% of the total, while Hualien County accounts for 41.88%. The entrepreneurial trend shows a strong potential of combining local resources with innovation. As shown in Table 1-8, the startups are mainly in Food and Beverage (29.06%), followed by consumer Goods (13.68%), Agriculture and Farming (11.97%), Travel and Tourism (5.13%), Media and Entertainment (5.13%), and Professional Services (5.13%), with these sectors collectively accounting for more than 70% of the total startups.

Table 1-7 Distribution of Startup Companies by City/County: Eastern Taiwan

Unit: Number of Companies, %

County / City	Number of Companies	Percentage (%)
Taitung County	68	58.12
Hualien County	49	41.88
Total	117	100.00

Source: SMESA FINDIT platform. Data only includes registered startup companies. Data compiled by the Taiwan Institute of Economic Research and updated to December 31, 2024.

Table 1-8 Top 6 Sector Distribution of Startup Companies: Eastern Taiwan

Unit: Number of Companies, %

Rank	Sector	Number of Companies	Percentage by
1	Food and Beverage	34	29.06
2	Consumer Goods	16	13.68
3	Agriculture and Farming	14	11.97
4	Travel and Tourism	6	5.13
5	Media and Entertainment	6	5.13
6	Professional Services	6	5.13
	Total	82	70.09

Source: SMESA FINDIT platform. Data only includes registered startup companies. Data compiled by the Taiwan Institute of Economic Research and updated to December 31, 2024.

III.International Rankings of the Entrepreneurial Environment

(I)GEM: Taiwan ranks 3rd in the national entrepreneurial environment, with infrastructure and policy support as key factors.

Global Entrepreneurship Monitor (GEM) is a cross-national survey on the level of entrepreneurship among countries. It is often cited by the World Bank, International Monetary Fund (IMF), and Organization for Economic Co-operation and Development (OECD) to examine global entrepreneurial trends and startup environments of different countries. GEM uses National Expert Surveys and Adult Population Surveys to observe changes in a country's entrepreneurial development environment and attitudes and aspirations toward entrepreneurship².

The National Entrepreneurship Context Index (NECI) reflects the overall strengths of the entrepreneurial environment in a country³. According to GEM, in 2023, Taiwan's NECI ranked third out of 51 economies, indicating that Taiwan's overall environment is favorable for the development of startups. The NECI consists of 13 variables, with Taiwan ranking 1st in Physical Infrastructure, Commercial and Professional Infrastructure, and Government Policy: Taxes and Bureaucracy. However, Taiwan lags behind in Entrepreneurial Education at School and Ease of Entry: Market Dynamics.

²Results of the Adult Population Survey is more affected by the general environment, such as the pandemic and state of the economy. For more information, refer to: https://www.gemconsortium.org/reports/latest-global-report.

³ NECI is calculated based on multiple entrepreneurial environment conditions (EFCs). For more information, refer to: https://www.gemconsortium.org/news/global-entrepreneurship-monitor-releases-ranking-of-countries-for-conditions-to-start-a-business

Physical Infrastructure: This measures whether a country's government infrastructure is of good quality, available, and affordable, ensuring that it can effectively support domestic industry development. Taiwan's infrastructure, which includes roads, utilities, telecommunications, and the Internet, is well-developed. The service quality is stable and efficient with reasonable costs. As a result, startup costs are lower than the international average.

Commercial and Professional Infrastructure: This evaluates whether a country has sufficient commercial and professional services to assist startups and whether these startups can access professional services in an adequate, fair, and cost-effective manner. According to GEM, startups in Taiwan can obtain access to professional legal and accounting experts and banking services, as well as reliable outsourcing partners, suppliers, and consulting services.

Government Policy: Taxes and Bureaucracy. This assesses whether government agencies, policies, regulations, taxes, and administrative efficiency are favorable to entrepreneurs and whether the government effectively supports startups. Compared to the 2021 survey results, this is an area where Taiwan has made the most progress. Experts recognize the improvements in Taiwan's regulations, tax policies, and administrative efficiency, which allow new ventures to efficiently navigate government processes, application procedures, and certification without excessive delays. Overall, this indicates that Taiwan's policies are relatively favorable to startups.

Entrepreneurial Education at School; This refers to the extent to which a country or region offers startup education and training within its educational system. This measure is used to evaluate the contribution of entrepreneurship education to enhancing entrepreneurial skills, confidence, and success, particularly how entrepreneurship concepts are introduced in the primary and secondary school curricula. Compared to other better-performing areas, Entrepreneurship Education at School is relatively weak in Taiwan.

Ease of Entry: Market Dynamics. This refers to a country's or region's market openness to entrepreneurial activities and the ease with which entrepreneurs can enter the market. It includes whether the government has implemented policies to encourage fair competition and lower entry barriers, such as reducing the administrative burden of establishing a company. Experts believe that Taiwan's performance in this area is relatively weak.

Table 1-9 National Entrepreneurship Context Index (NECI): Taiwan's Scores and Ranking

Entrepreneurial Framework Conditions (ECFs)	Score	Ranking
Entrepreneurial Finance	5.9	8
Ease of Access to Entrepreneurial Finance	5.4	8
Government Policy: Support and Relevance	6.6	3
Government Policy: Taxes and Bureaucracy	7.1	1
Government Entrepreneurial Programs	6.6	4
Entrepreneurial Education at School	4.3	13
Entrepreneurial Education Post-School	5.9	5
Research and Development Transfers	5.8	4
Commercial and Professional Infrastructure	6.9	1
Ease of Entry: Market Dynamics	5.9	16
Ease of Entry: Burdens and Regulation	5.2	11
Physical Infrastructure	8.4	1
Social and Cultural Norms	6.7	4

Note: The scores range from 0 to 10, with higher values indicating a more favorable entrepreneurial environment.

Source: GEM 2022/2023 Global Report. Compiled by the Taiwan Institute of Economic Research.

(II)StartupBlink: Taiwan ranked 22nd globally in startup ecosystems, excelling in industrial innovation, hardware manufacturing, and talent.

Since 2017, the Swiss research institution StartupBlink has published the Global Startup Ecosystem Index Report (GSEI) to monitor the development of startup ecosystems worldwide. The ranking is based on three key dimensions: Quantity, Quality, and Business Environment, with the three subscores added up to get the total score. In 2024, the rankings covered 119 countries and 1,240 cities globally.

Table1-10 Explanation of the StartupBlink Scores

Subscore	Explanation
Quantity	The number and scale of startups (e.g., the number of accelerators, investors, and offices)
Quality	Investment amounts, the number and scale of unicorn companies, and the value of startup exits
Business Environment	Focus on national policies and infrastructure to create a business environment conducive to the thriving development of startups

Source: Global Startup Ecosystem Index Report 2024. Compiled by the Taiwan Institute of Economic Research.

Table 1-11 Startup Blink Taiwan Annual Ranking

Year	Ranking
2020	30
2021	26
2022	25
2023	24
2024	22

Source: Global Startup Ecosystem Index Report 2024. Compiled by the Taiwan Institute of Economic Research.

The 2024 report shows that Taiwan has steadily risen from 30th place in 2020 to 22nd place in 2024, demonstrating strong growth potential in its startup ecosystem. Notably, Taipei, Hsinchu, Taoyuan, Tainan, Taichung, and Kaohsiung have moved into the list of the world's top 1,000 startup cities. This indicates that Taiwan's overall performance is sound, and its major cities provide favorable environments for startups, becoming key drivers of Taiwan's startup ecosystem.

Taiwan is innovation-driven. It has an exceptionally startup-friendly environment and a strong pool of technical talent. It possesses unique advantages across different sectors, exemplified by large and impressive tech companies that include Foxconn, ASUS, and TSMC, as well as numerous small- and medium-sized enterprises. This success demonstrates how the development of large-scale companies can foster the emergence of a diverse range of startups, showcasing Taiwan's innovative strengths.

Section 2 Taiwan's Policy Outcomes

In recent years, faced with technological innovation and international competition, the government has introduced policies and measures to encourage innovation and entrepreneurship, supporting the growth of startups. These strategies have increasingly focused on fostering a conducive environment for innovation and entrepreneurship, such as building platforms, providing incentives, and assisting startup teams in obtaining resources and expanding into international markets. In addition, there is also an emphasis on the role of the private sector in the entrepreneurial ecosystem. The goal is to create a vibrant startup environment driven by bottom-up initiatives and public-private collaboration. The overall policy outcomes are as explained as follows:

I.Expanding Financial Support to Accelerate Startup Growth

To provide funding that is startup-friendly, the government has launched different assistance programs to help startups acquire the resources needed for development. For instance, a total of 107,000 youth startup loans have been approved, helping businesses secure a total of NT\$88.5 billion in loans. The Startup Funding for Young Entrepreneurs has approved investments in 274 startups totaling NT\$3.816 billion, which in turn attracted additional private-sector investments of NT\$15.338 billion. The bailout program for startups has also approved 1,158 applications to provide NT\$12.29 billion in loans. The above measures show that the government is proactive in providing startup capital to accelerate growth, and has offered relief to startups facing operational challenges, thereby reducing financing costs and risks.

The Ministry of Economic Affairs has also used NT\$10 billion earmarked in the National Development Fund to implement the second phase of the program to increase investments in small and medium enterprises (SMEs). Using a co-investment model, this initiative partners with accelerators, strategic investors, and corporate venture capitalists to jointly invest in high-potential SMEs and startups. Investment targets are not limited to specific industries, and each business is eligible for a maximum investment of NT\$150 million. In addition, the government is promoting social innovation collaboration to ensure the sustainable development of startups. Through the Buying Power procurement incentive mechanism, different sectors are encouraged to purchase products and services from social innovation enterprises, using their influence to help these enterprises raise capital.

II.Attracting Overseas Talent to Match Domestic Industries

To recruit international talent needed by the industries, the International Talent Taiwan Office (Talent Taiwan) provides comprehensive support for Employment Gold Card holders, foreign professionals, and their families. This includes assistance with pre-arrival application procedures and a range of in-person consulting services after arrival. Talent Taiwan serves more than 2,500 people each month. As of the end of December 2024, a total of 17,051 permits have been granted to foreign specialized professionals, including 12,082 Employment Gold Cards. The Entrepreneur Visa program has received 1,127 applications, with 887 visas approved. These figures underscore Taiwan's ongoing efforts and achievements in attracting global talent.

III.International Collaboration and Bilateral Landing

Government ministries and agencies have been actively promoting international exchanges, resulting in collaborative initiatives between Taiwan and other countries to jointly train and support the growth of startups.

- · Singapore: Taiwan Startup Terrace partnered with Singapore ACE.SG to launch the Taiwan-Singapore Startup Exchange Program in 2022, focusing on smart cities, smart manufacturing, smart healthcare, and green energy technology. Both sides have recommended promising startups and offered cross-border training, mentorship, market promotion resources, and local networking opportunities. The program aims to help startups secure new opportunities under the New Southbound Policy. To date, it has helped five Taiwanese startups in establishing companies in Singapore.
- · Indonesia: Taiwan Startup Terrace and Innovation Factory in Indonesia jointly launched the Taiwan-Indonesia Startup Exchange Program, focusing on

e-commerce, agri-food technology, smart cities, and ESG initiatives. The program provides guidance and training, selects outstanding startups for cross-border development, and offers overseas landing support and pilot demonstration opportunities to help startups access international markets and funding.

· Lithuania: Since 2022, Startup Terrace Linkou has led Taiwanese startups to participate in the Startup Fair in Lithuania for three consecutive years. In 2024, the program supported five startups in short-term landings, thereby expanding their presence in the EU market.

IV. Attracting Overseas Startups to Taiwan

Taiwan has established world-class startup hubs located in Taipei (Taiwan Tech Area), New Taipei City (Startup Terrace Linkou), Tainan (TTA South), and Kaohsiung (Startup Terrace Kaohsiung). As of July 2024, over 50 domestic and international accelerators and more than 1,500 startups have joined these hubs. The initiative encourages overseas startups in the smart healthcare, space technology, green technology, and smart IoT sectors to come to Taiwan to foster partnerships between domestic and international startups.

The government actively promotes international exchanges through inter-agency collaboration. To boost space technology development in Taiwan, the Small and Medium Enterprise and Startup Administration of the Ministry of Economic Affairs, the National Science and Technology Council, and the Pingtung County Government have jointly facilitated exchanges between overseas space industry startups and local industries. In October 2024, an event to promote international cooperation in the space industry brought together 10 space industry startups from India, Germany, Australia, the UK, France, Luxembourg, and Argentina to collaborate with Taiwanese companies that include Aerospace Industrial Development Corporation (AIDC),

Thunder Tiger Corp., Ho Song Enterprise, and Satoro Taiwan, as well as Pingtung University of Science and Technology, and National Cheng Kung University. The goal is to ensure that Indian space industry startups establish a presence in southern Taiwan, thus accelerating the growth of the local space industry.

V.Participating in International Exhibitions to Enhance Global Visibility

Government agencies have led startups to participate in international exhibitions across Europe, Asia, and the United States, including the Startup Fair in Lithuania, the Collision Tech Conference in Canada, and the Techsauce Global Summit in Thailand. At the 2024 SelectUSA Tech Program startup competition, nine startups from Taiwan were shortlisted, and three were ranked among the global top 3 in different categories, achieving the best results globally. Notable achievements include: EndoSemio winning first place and RephImmune Biotechnology placing third in the Healthtech session, while Chakou Scientific Research placed second in the OpenTech session.

VI. Facilitating Diverse Exit Opportunities

To assist startups to enter the capital market, the government has launched the Taiwan Innovation Board, lowering the listing requirements and easing the financial qualifications for eligible investors. This initiative has helped 18 companies become listed on the Innovation Board, while 4 unicorn startups have successfully exited: Appier became listed in Japan in March 2021 and was recommended as a top Al investment choice; 91APP became listed over-the-counter in Taiwan in May 2021; Gogoro became listed on Nasdaq in April 2022; and PERFECT was listed on the NYSE in October 2022.

VII.Building a National Startup Brand to Expand Business Opportunities

In collaboration with the startup community, industry leaders, and government representatives, 22 leading startups (NEXT BIG) took part in the largest-ever startup event in Japan. In two years, the government led 73 startups to join the event, and 15 startups were able to foster substantial collaborations with Japanese companies. For instance, KKday became the exclusive e-ticket platform for Nikko Toshogu Shrine.

VIII.Regulatory Adjustments to Enhance Innovation and Entrepreneurship

Amendments to the Business Mergers and Acquisitions Act allow for shareholders of a merged startup to choose to defer tax payments (spread over three years starting in the third year after merger). The Startup Regulatory Adjustment Platform has helped resolve 50 cases, such as allowing platform operators to sell travel and health insurance and stipulating that food delivery platforms may provide group accident insurance for delivery personnel. In addition, an Innovation Regulatory Sandbox has been established, and 28 startup experiments in fintech and unmanned vehicles were approved. This provides a testing environment for new business models, such as using robo-advisors to help investors make small investments in global ETFs.

Chapter2 Members of the Entrepreneurial Ecosystem

The success of a startup depends on the presence of different elements, including capital, talent, technology, and regulations, and the integration and realization of these elements require collaboration and efforts by different agents. In the entrepreneurial ecosystem, startups are the focus, and their success will depend on external support and resources. On the other hand, investors, incubators, and government play the role of facilitators. They create an environment conducive to startup growth by providing financial support, expertise, network resources, and policy assistance.

Section1 Startups

I.Overview of Startups

Since 2015, the FINDIT startup database has compiled and listed relevant competitions, exhibitions, and government startup-related programs, as well as startups that have moved into startup bases, accelerators, and incubators. The aim is to present a profile of startup companies, including the total number, sales revenue, industry sector, and regional distribution. Currently, the listed startups are those established after 2010. They have achieved either technological innovation or business model innovation, are registered in Taiwan, and are registered as companies (excluding sole proprietorships, partnerships, and enterprises). The list also includes startups registered overseas but founded by Taiwanese individuals. The relevant details are explained below:

(I)Health Care is the primary sector where the startup companies are located, while electronics-related hardware startups are also flourishing.

The distribution of startups by sector as of December 31, 2024 is shown in Table 2-1. The top 6 sectors are, in order: Health Care (813 companies, 8.49%), Media and Entertainment (695 companies, 7.26%), Food and Beverage (685 companies, 7.15%), Consumer Goods (671 companies, 7.01%), Other Hardware (591 companies, 6.17%), and Digital Applications (Software) (531 companies, 5.55%). In Electronics-related Hardware, which is the most important for Taiwan, existing startups are experiencing continued growth and are at the same time driving the continuous development in innovation and entrepreneurship in the industry. As shown in Table 2-1, the total number of Electronics-related Hardware startups is 904, accounting for 9.44%. They are further divided into Semiconductor Hardware (1.7%), Communication Hardware (1.57%), and Other Hardware (6.17%).

Table2-1 Distribution of Startup Companies by Sector

Sector	Number of Startups	Percentage (%)
Total	9,576	100.00
Health Care	813	8.49
Media and Entertainment	695	7.26
Food and Beverage	685	7.15
Consumer Goods	671	7.01
Other Hardware (Example: Drones, Wearables, Sensors, etc.)	591	6.17
Digital Applications (Software)	531	5.55
Energy, Sustainability, & Natural Resources	513	5.36
Manufacturing (Example: Industrial automation, Materials, Metal Processing, Textiles, Machinery)	502	5.24

Sector	Number of Startups	Percentage (%)
Commerce and Shopping	410	4.28
Information Technology	336	3.51
Education (Example: E-Learning, EdTech, etc.)	316	3.30
Agriculture and Farming	303	3.16
Professional Services (Example: Legal, Financial Adviser, Accounting, etc.)	288	3.01
Biotechnology	280	2.92
Sales and Marketing (Example: Digital Marketing, SEO, CRM, Social Media Marketing, etc.)	262	2.74
Other (Example: Social Impact, Real Time Servicers, etc.)	262	2.74
Financial Services	234	2.44
Real Estate	215	2.25
Design (Example: Visual Design, Image analysis, UX Design, etc.)	203	2.12
Transportation	192	2.01
Community and Lifestyle	188	1.96
Semiconductor	163	1.70
Telecommunications Hardware	150	1.57
Travel and Tourism	146	1.52
Sports	139	1.45
Artificial Intelligence (Data Processing and Analysis)	117	1.22
Privacy and Security	87	0.91
Internet Services	77	0.80
Science and Engineering	68	0.71
Mobile	57	0.60

Sector	Number of Startups	Percentage (%)
Advertising (Example: Mobile Advertising, Social Media Advertising, Precision Advertising, etc.)	44	0.46
Administrative Service	34	0.36
Government and Military	4	0.04

Source: SMESA FINDIT platform. Data only includes registered startup companies. Data compiled by the Taiwan Institute of Economic Research and updated to December 31, 2024.

(II)Changes in the distribution of startups by sector reflect the innovative drive of the entrepreneurial ecosystem as a result of industrial innovation policies.

Figure 2-1 shows the distribution and ranking of startups in 2010 by sector, as well as the ranking from 2023 to 2024. A comparison of the rankings show changes in the sector distribution, and the sectors with significant and steady increase in rankings are discussed below.

Since 2010, the ranking of Artificial Intelligence has increased from 27th to about 16th. This is mainly due to the rapid expansion of its scope of application brought about by active digital transformation in factory automation, data analysis, customer management, and technology marketing. Of course, this trend has also benefited from the frequent breakthroughs in key technologies such as deep learning, machine learning, natural language processing, and large language models over the past decade, which have accelerated the speed of Al deployment due to increased corporate demand and the emergence of new services. Energy, Sustainability, and Natural Resources is another sector that is moving up significantly (from 9th to 1st). This is driven by the innovative net-zero carbon reduction initiatives from both Taiwan and abroad, as well as investment incentive policies and relevant tariff schemes such as CBAM of the EU. In addition, governments and businesses worldwide have increased

investments in renewable energy, energy-saving technologies, and circular economy, resulting in more entrepreneurial development opportunities.

In addition, Digital Applications (Software), Sales and Marketing, Professional Services, Real Estate, Advertising, Privacy and Security, Financial Services, and Travel and Tourism have also steadily risen by five places. Technological advancements in cloud computing and open-source software have reduced the cost of software development and deployment, significantly lowering the barrier to starting a business. Over the past decade, business demand for software, such as cloud services, big data analysis, artificial intelligence, and the Internet of Things, has increased significantly, bringing huge business opportunities to Digital Application (Software) startups. Furthermore, these digital applications and technologies have also been widely used in other fields. Startups in Smart Home, Real Estate Technology (PropTech), Financial Technology, Social Media Marketing, Advertising, and Travel and Tourism are able to analyze real estate and customer data to more accurately predict market trends, so as to provide more efficient property purchase and investment advice and higher quality services.

Taiwan's industrial innovation policies from 2016 to 2024 are clearly reflected in the changes indicated in Figure 2-1. In 2016, the government proposed the 5+2 Industry Innovation Plan to drive next-generation industrial growth. The industries include: Smart Machinery, Asia Silicon Valley (IoT), Green Energy (clean energy, energy storage, system integration), Biomedicine (medicine, medical materials, examinations), National Defense (aerospace, shipping, data security), New Agriculture, and Circular Economy. In 2020, the Six Core Strategic Industries Promotion Plan has driven innovation and development of information and data, data security, precision health, green energy, and renewable energy. In addition, the five-year Smart Nation Program, which started in 2021, has further driven the development of digital applications by promoting infrastructure development, developing technology for digital transformation, facilitat-

ing industrial transformation, building an ecosystem for data governance, and fostering digitally inclusive society. In 2022, the government announced Taiwan's Pathway to Net-Zero Emissions in 2050, followed by the Green Finance Action Plan 2.0 and the National Green Energy Development Strategy. These initiatives aims to encourage industries, investors, and financial institutions to focus more on investments and technological innovation in energy and sustainability to foster an environment conducive to entrepreneurship. At the end of 2023, the government launched the Taiwan Chipbased Industrial Innovation Program to leverage Taiwan's world-leading capabilities in semiconductor manufacturing, packaging, and testing, linking them to technologies such as generative AI to develop innovative applications. The program aims to secure Taiwan's position in future technology industries and accelerate innovation breakthroughs across all sectors.

The policies on digital transformation, healthcare, net-zero transformation, semi-conductor, and AI development have driven investments and cultivated talent. By helping to stimulate the development of innovative technologies and identify potential market demands through incentives and subsidies, these policies have created a conducive environment for business startups, which highlight the key role of Taiwan's industrial policies in shaping the entrepreneurial environment. The policies on industrial innovation have laid the groundwork for the entrepreneurial environment in areas such as overall business environment, capital, technology, and market access. In 2024, the government launched an initiative to promote the Five Trust Industries, which include Semiconductors, Artificial Intelligence, Military Industry, Security Control, and the Communication industries. The initiative is expected to help enhance Taiwan's competitiveness in the global innovation industry.

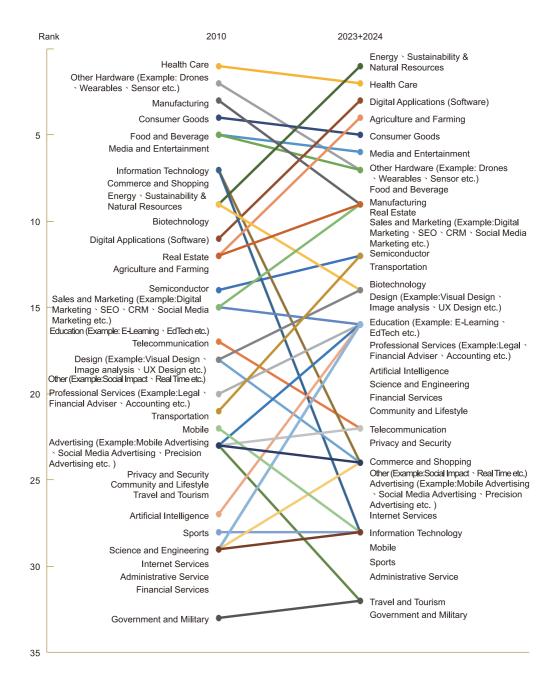


Figure 2-1 Changes in the Distribution of Startups by Sector

- Note: 1.The above figure ranks the sectors by the percentage distribution of startups, from highest to
 - 2:The percentage distribution of startups is calculated as (number of startups in each sector in the current year \div total number of startups in the current year) \times 100%.

Source: SMESA FINDIT platform. Data only includes registered startup companies. Data compiled by Taiwan Institute of Economic Research.

II. Startups' revenue mainly comes from domestic sales

As of December 31, 2023, there were a total of 7,477 startups established after 2010 with registered locations in Taiwan. According to the commercial and industrial registration website of the Administration of Commerce of the Ministry of Economic Affairs, 6,649 companies among them were in operation. These companies, approved for establishment and registration, accounted for nearly 90 percent of all startups. A total of 6,512 startups reported sales, with a total revenue of NT\$479.208 billion. Domestic sales accounted for 79.61 percent while exports made up 20.39 percent.

Table2-2 Number of Startups, Sales Revenue, Domestic Sales, and Export Sales

Unit: Number of companies; NT\$ million; percent

Indicator / Scale	Total	% of sales	SMEs	Large Companies
Number of companies	6,512	-	5,732	780
Sales Revenue	479,208.77	100.00	146,987.67	332,221.11
Domestic Sales	381,515.34	79.61	125,570.65	255,944.69
Export Sales	97,693.44	20.39	21,417.01	76,276.42

Note:1.The SMEs are identified based on the Standards for Identifying Small and Medium-sized Enterprises revised and promulgated by the Ministry of Economic Affairs on June 24, 2020. The number of enterprises and sales revenue indicated (including domestic and export sales) are based on the definition that SMEs are enterprises whose paid-in capital is not more than NT\$100 million.

- 2.The data on the number of SMEs and their sales revenue includes information from small vendors. The export sales revenue data is derived from the export amounts reported by businesses during tax filings. This data may differ from the import/export statistics published by the Customs Administration of the Ministry of Finance due to fluctuations in exchange rates, scope of data, or actual calculations.
- 3.The pandemic has posed significant challenges to the operations of businesses. To cope with the challenges, enterprises might have taken flexible measures, such as reducing business hours, shortening working hours, or canceling shifts. They might even suspend or close operations altogether. Because the data used in this chapter have been anonymized to protect personal information, it is impossible to track operational changes of the businesses across different years or confirm closures or shutdowns. This is a limitation of the data.
- 4."-" indicates not applicable.

Source: The number of enterprises and sales revenue data are compiled from business tax collection data in 2023 provided by the Fiscal Information Agency of the Ministry of Finance.

Table 2-3 shows the sales revenue (domestic and export combined) of the startups in each region. In 2023, Northern Taiwan, which accounted for 74.03% of the total number of startups, had the highest sales revenue at more than NT\$426.1 billion, accounting for 88.92% of the total. With 908 startups and accounting for 13.94% of the total, Southern Taiwan recorded sales revenue of approximately NT\$25.8 billion, which was 5.39% of the total and slightly higher than that of Central Taiwan. Central Taiwan, with 700 startup companies, generated approximately NT\$26.6 billion in sales. Eastern Taiwan and the offshore islands have a total of 84 startup companies, which generated NT\$550 million in 2023.

To understand the sectors from which the sales revenue was generated, Table 2-4 presents the sector rankings by sales revenue for each region⁴. The top five in Northern Taiwan are: Wholesale and Retail with approximately NT\$152.3 billion, accounting for 35.76% of the total. This is followed by Manufacturing, with approximately NT\$108.3 billion (25.43%); Publishing, Audio-visual, and Information Communication, approximately NT\$92.7 billion (21.76%); Professional, Scientific, and Technical Services, approximately NT\$30.3 billion (7.12%); and Construction, approximately NT\$11.3 billion (2.65%).

In Central Taiwan, the top five sales revenue came from the following sectors: Wholesale and Retail, with approximately NT\$10.7 billion (41.09%); Manufacturing, approximately NT\$9.36 billion (35.76%); Professional, Scientific, and Technical Services, NT\$2.91 billion (11.12%); Publishing, Audio-visual, and Information Communication, NT\$1.46 billion (5.59%); and Agriculture, Forestry, Fishery, Animal Husbandry, and Mining, NT\$680 million (2.61%).

⁴ For the offshore islands, business tax data are only available for Wholesale and Retail. In 2023, startup companies recorded sales revenue of NT\$100 million.

In Southern Taiwan, the top five sales revenue came from the following sectors: Manufacturing, with NT\$10.22 billion (39.96%); Wholesale and Retail, approximately NT\$7.72 billion (30.19%); Publishing, Audio-visual, and Information Communication, NT\$2.07 billion (8.12%); Construction, NT\$1.96 billion (7.68%); and Professional, Scientific, and Technical Services, NT\$1.39 billion (5.46%). In Eastern Taiwan, the top three sales revenue came from Wholesale and Retail, Publishing, Audio-visual, and Information Communication, and Manufacturing⁵. Wholesale and Retail generated sales revenue of NT\$150 million (73.22%), Publishing, Audio-visual, and Information Communication NT\$54 million (24.96%), and Manufacturing NT\$4 million (1.82%.).

Table2-3 Number of Startups and Sales Revenue, by Region

Unit: Number of Startups, NT\$ million, %

Region	Total	Northern Taiwan	Central Taiwan	Southern Taiwan	Eastern Taiwan	Off-shore Islands
Number of Startups	6,512	4,821	700	908	66	17
Percentage	100.00%	74.03%	10.75%	13.94%	1.01%	0.26%
Sales Revenue	479,209	426,122	26,693	25,836	395	162
Percentage	100.00%	88.92%	5.57%	5.39%	0.08%	0.03%

Source: Data on number of companies and sales revenue compiled from the Fiscal Information Agency of the Ministry of Finance and data on business tax collection, 2023.

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⁵According to the business tax collection data from the Fiscal Information Agency of the Ministry of Finance, only these three industries in Eastern Taiwan have sales revenue data for startup companies, and additionally, the companies within these three industries can be de-identified.

Table2-4 Sales Revenue Ranking by Sector and Region

Unit: NT\$ million, %

Region	Ranking	Sector	Sales Revenue	Percentage
Northern Taiwan	1	Wholesale and Retail	152,375	35.76%
	2	Manufacturing	108,351	25.43%
	3	Publishing, Audio-visual, and Information Communication	92,712	21.76%
	4	Professional, Scientific, and Technical Services	30,332	7.12%
	5	Construction	11,309	2.65%
	1	Wholesale and Retail	10,758	41.09%
	2	Manufacturing	9,363	35.76%
Central	3	Professional, Scientific, and Technical Services	2,910	11.12%
Taiwan	4	Publishing, Audio-visual, and Information Communication	1,463	5.59%
	5	Agriculture, Forestry, Fishery, Animal Husbandry, and Mining	683	2.61%
	1	Manufacturing	10,226	39.96%
	2	Wholesale and Retail	7,727	30.19%
Southern Taiwan	3	Publishing, Audio-visual, and Information Communication	2,079	8.12%
	4	Construction	1,965	7.68%
	5	Professional, Scientific, and Technical Services	1,398	5.46%
	1	Wholesale and Retail	159	73.22%
Eastern Taiwan	2	Audio-Visual Publishing and Information Communication	54	24.96%
	3	Manufacturing	4	1.82%

Source: Data on number of companies and sales revenue compiled from the Fiscal Information Agency of the Ministry of Finance and business tax collection data in 2023.

III.Early Investment Trends in Taiwan

The global venture capital market experienced a significant capital pullback in 2022, resulting in a sharp decline in investments. The trend continued into 2023. However, the global decline in investments did not appear to have had a significant impact on Taiwan. After 2021, the early-stage investment market in Taiwan appeared to have been revived, as evidenced by the increasing number of transactions and a record-high transaction volume of US\$2.787 billion in 2023. Mature industries and policy support became important drivers for early-stage investment, further enhancing the development of Taiwan's startup environment.

From 2015 to 2024 Q1, there were 3,605 early-stage investment cases⁶, with a total investment amount of US\$14.061 billion. Over the past nine years, there were two major turning points in the early-stage investment market in Taiwan. In 2019, the Business Angel Investment Program of the National Development Fund played a pivotal role in driving the investment boom, and the number of investment cases significantly increased. There were 447 cases in 2019, a 47.04% increase compared to 2018. Despite the pandemic in 2020, the number of investment cases remained over 400. The second turning point came in response to global climate change and trends toward net-zero and green sustainability. Between 2020 and 2021, government policies and strategies quickly aligned with these global shifts, leading to

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⁶ Definition of companies that have received early investments: (1) The company is registered in Taiwan, or its registration location is overseas, but the founders are from Taiwan; (2) Private equity investments before public or over-the-counter listings, excluding debt, convertible company bonds, subsidies, and ICOs; (3) Does not include acquisitions or 100% investments by a parent company in its subsidiary. Sources of data include: (1) International early-stage investment database; (2) News media; (3) Invested companies; (4) Investment institutions, including institutional investors and information on investments by listed companies; (5) National Development Fund quarterly/annual reports and government investment projects; (6) Company registration information from the Administration of Commerce of the Ministry of Economic Affairs.

a significant increase in early-stage investments. The total investment doubled from US\$1.326 billion in 2020 to US\$2.683 billion in 2021, with projects related to energy conservation, energy generation, energy storage, and energy systems particularly favored by the market.

In 2023, the early-stage investment market continued to gain momentum. There were 542 transactions, a 10.39% increase from the 491 in 2022. The investment amount grew by approximately 9.77% from US\$2.539 billion in 2022 to US\$2.787 billion.

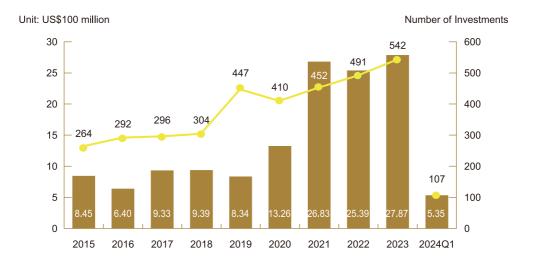


Figure 2-2 Early Investment Trends in Taiwan: 2015 to 2024 Q1

Note: Data are taken during the period from 2015/01/01 to 2024/03/31.

Source: FINDIT platform of the Small and Medium Enterprise and Startup Administration.

Section2 Investment Sector

Early-stage investment trends have always been an important indicator of the entrepreneurial ecosystem. An analysis of the investment landscape provides insights into recent market trends, their impact on current investment behaviors, and the potential challenges early-stage investments face in Taiwan. This serves as a reference for the government when formulating strategies. In Taiwan and abroad, investors in startup businesses can generally be classified into three main categories: Angel Investors, Venture Capitalists, and Corporate/Enterprise Venture Capital. For startups in Taiwan, investments may also include those from the National Development Fund and overseas investment institutions. Early in a startup, as the business is still in the conceptual phase or in the process of developing new products, technologies and business models may not be fully mature. Therefore, additional financial investments are often required to obtain the necessary resources. Because investors often hesitate due to the high level of risk involved, successful fundraising thus becomes a critical factor for the success of a startup. Given the different levels of assistance investors provide at different stages of business development, it is therefore important for startups to seek out different types of investors when looking for external investments. In addition, information on the different types of investors is available from 2015 to 2023. To better understand the preferences of early-stage investors in recent years, the following sections present an analysis of the areas and stages of investment in the past five years.

I.Angel Investors

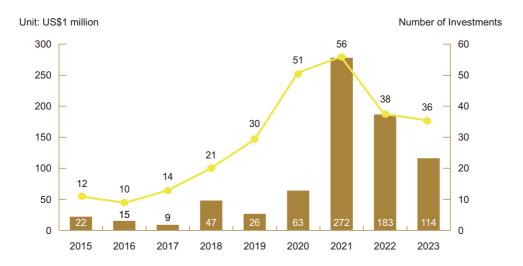


Figure 2-3 Angel Investors: Participation and Investment Cases form 2015-2023

Source: FINDIT platform of the Small and Medium Enterprise and Startup Administration.

Angel investors, as the name suggests, refer to early-stage investors who are willing to support a startup in its creation phase, when the direction of business operations remains unclear and when the startup may not have yet overcome the valley of death. These investors provide funding based on the startup team's execution ability and future market potential. In Taiwan, angel investors include alumni angel organizations such as the NCTU Angel Club, Taipei Angels Investment, Taida Entrepreneurship Center, Tsinghua Angels Club / Tsinghua Angel Company, and Shui Mu Entrepreneurship Consultant. Other private angel organizations include Smart Capital, AVA Angels, Taiwan Global Angels, Silicon Valley Taiwan Angels, Sustainable Impact Capital, Taiwan Leap Venture, Darwin Angel Investment Corp., and XChange Angel Investment. Over the years, the number of angel investments has increased yearly since 2017. In 2021, the number increased to 56, nearly five times that in 2015. Between 2015 and 2023, there were 268 angel investments, with nearly 130 occurring in the last three years, accounting for 48.5% of the total. In addition, 100 of

these investments were early-stage investments before the Series A round, with seed-to-angel rounds accounting for 60%, indicating that angel investments have been active in recent years. Looking at individual investments in the last three years, the two most active angel investment organizations were AVA Angels, with 15 investment cases, followed by Smart Capital with 10. It is also noteworthy that individual angel investors invested in as many as 50 cases. These individual angel investors, typically well-known entrepreneurs or wealthy individuals from traditional industries, played an important role in early-stage investment in Taiwan.

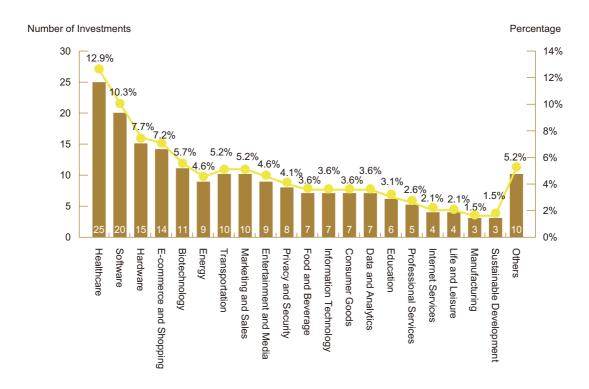


Figure 2-4 Distribution of Angel Investments: 2019-2023

Source: FINDIT platform of the Small and Medium Enterprise and Startup Administration.

With regard to the areas of investment, the top four were Healthcare (12.89%), Software (10.31%), Hardware (7.73%), and E-commerce and Shopping (7.22%). Healthcare investments were primarily in medical devices and biotechnology. Examples included Primo Biotechnology, which promotes precision medicine and is backed by AVA Angels and Paragon Investment. Other notable investments included ClearMind Biomedical, which designs and develops advanced neurosurgical instruments; Al Medical Technology, which applies Al to drug discovery; and Fecula Biotech, which develops cancer adjunctive drugs. Many of these cases, particularly those between 2017 and 2021, involved funding from the National Development Fund (NDF). One-third of investments in Software were AI-related. Participating angel organizations included Silicon Valley Taiwan Angels, Taiwan Leap Venture, and NCTU Angel Club. Notable investments involving larger amounts included MoBAgel, which specializes in data learning technology, and Profet AI Technology, which integrates automated machine learning. Investors in Hardware focused on electronics, such as Ardomus Networks Corporation, a spin-off from Zyxel, and PetaRay, which develops AR light-field projection display modules. Investments in E-commerce and Shopping were mainly concentrated between 2019 and 2021, with a significantly higher proportion of individual angel participation. Looking specifically at the 36 angel investments in 2023, Healthcare and Software remained the top two preferences of angel investors. Major investments included Profet Al Technology, Primo Biotechnology, and Taiwan Main Orthopaedic Biotechnology, which specializes in developing smart surgical glasses and integrated hardware-software solutions for advanced medical devices.

II. Venture Capital (VC)

Venture capital primarily involves the use of private equity to manage capital. They support high-potential, fast-growing startups in developing new products or services by providing capital, market access, financial resources, and professional expertise. They offer technical support and marketing channels in pursuit of long-term capital appreciation through a high-risk investment model. However, venture capital is not entirely disconnected from seed or angel-stage startups. When evaluating investments, VCs will still consider the forward-looking potential of the startups.

Looking at the activities of domestic VC firms in recent years, 2021 remained the most active, with the highest number of transactions and total investment amounts. This was primarily driven by 17 large investments, each exceeding US\$20 million. While the number and total amount of investments declined in 2022 and 2023 compared to 2021, the overall performance in these two years remained relatively stable. In 2022 and 2023, there were 12 investments exceeding US\$20 million. In 2023, investments were concentrated mainly in Healthcare, Biotechnology, Hardware, and Energy. Notable cases included Acepodia (a cancer drug company), Kneron (an edge AI computing solutions provider), Taiwan Bio-Manufacturing Corporation (a CDMO), and Obigen Pharma (a botulinum toxin R&D and production company). Key VC firms, including E.Sun Venture Capital, Fubon Financial, and the Industrial Technology Investment Corporation, participated in multiple investments. In addition, there were 19 investments exceeding US\$10 million, with CDIB Capital accounting for several of them.

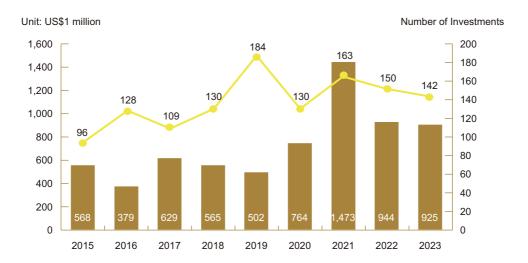


Figure 2-5 VC Investments: Total Transactions and Investment Amount from 2015-2023



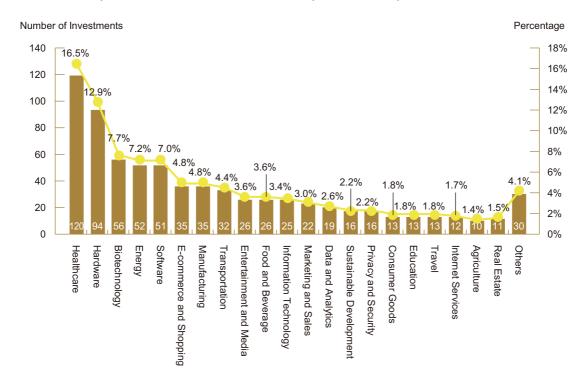


Figure 2-6 VC Investments from 2019-2023, By Sectors

Source: FINDIT platform of the Small and Medium Enterprise and Startup Administration.

Looking at investments by sector, the top three were Healthcare (16.51%), Hardware (12.93%), and Biotechnology (7.70%), closely followed by Energy (7.15%) and Software (7.02%). In Healthcare, VCs favored medical devices and biotechnology. Notable investments in medical devices in 2023 included WCC Biomedical, which develops microarray patches, and QT Medical, which develops medical-grade ECG systems and offers heart disease screening services. Key investors included CDIB Capital and Taiwania Capital. In Hardware, investments primarily focused on electronics, and most were made between 2019 and 2021. A notable case in 2023 was FlowVIEW Tek, which specializes in image detection. VC firms actively participating in Electronics investment included Taiwania Capital, the Industrial Technology Investment Corporation, Fubon Financial, and Cathay Venture. As for Biotechnology, there were 19 investments in 2023 alone, accounting for roughly one-third of the total investments in the past five years. Notable cases with significant investment amounts included Taiwan Bio-Manufacturing Corporation, ARCE Therapeutics, Obigen Pharma, and Full Hope Biomedical.

III.Corporate Venture Capital (CVC)

Corporate venture capital (CVC) investments often stem from strategic considerations or a company's development needs. By engaging with startups, corporations can use the partnership to enhance internal innovation and open new markets. In addition to securing funds, such collaborations provide substantial practical support for startups. CVC has consistently played a vital role in Taiwan's entrepreneurial ecosystem. From 2021 to 2023, the number of CVC investments increased from 291 to 384, reflecting a dynamic investment environment. Investment amounts also continued to grow, primarily driven by large-scale investments in the energy sector. There were 86 energy-related investments, representing 22% of the total, with nearly 20 of these exceeding US\$10 million. Notable large-scale

investments included He To Energy Integration (ground-mounted solar development), SunnyRich Multifunction Solar Power (aquavoltaics), and APh ePower (aluminum-ion batteries).

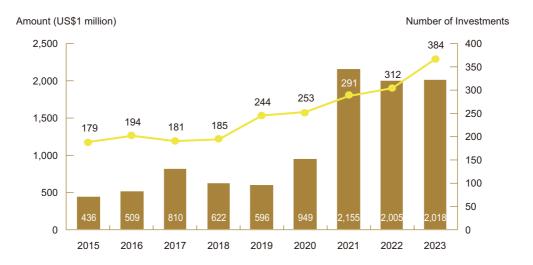


Figure 2-7 CVC Investments: Total Transactions and Investment Amount from 2015-2023

Source: FINDIT platform of the Small and Medium Enterprise and Startup Administration.

Looking at investments by sector, Energy was the most preferred, accounting for 18.71%, followed by Hardware (15.72%), Healthcare (12.87%), and Manufacturing (10.29%). Compared to the previous year, the top four sectors remained unchanged, but CVC participation in the energy sector increased; investments in energy grew by 6% compared to the previous year. Active corporate investors (including subsidiaries) included Hotai, Shin Kong Financial Holdings, and Chailease. In Hardware, there were relatively few investments that exceeded US\$10 million, and the notable cases included Main Drive Corporation (robotic joint modules), Kneron (edge AI neural network chips), and TMY Technology (millimeter-wave technology). Investors were primarily electronics giants that included UMC, Innodisk, and ELAN Microelectronics. In Healthcare, investments in 2023 included Lumi Health Innovation (chain healthcare channels), AnnJi Pharmaceutical (small molecule drug development), and Prodeon

Medical Corporation (prostate disease treatment). Active investors included AUO, ShareHope Medicine, and Wistron.

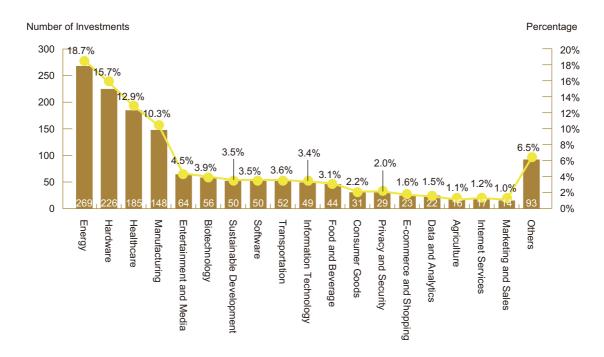


Figure 2-8 CVC Investments from 2019-2023, By Sectors

Source: FINDIT platform of the Small and Medium Enterprise and Startup Administration.

Section3 Incubation Organizations

According to the 2024 Taiwan Startup Ecosystem Survey, nearly 70% of startups during their initial stages participated in incubation organizations, either physically or virtually, highlighting the importance of these organizations. While entrepreneurs bring innovative ideas and a passion for problem-solving, they often face challenges, which include limited resources, lack of experience, and insufficient networks. To support the growth of startups, incubation organizations provide essential services and resources that startups might find difficult to acquire independently or within a short period. This section will explain the services, effectiveness, and future development of incubation organizations to demonstrate the value and impact they bring to the startup ecosystem.

I.Types of Incubation Organizations

The most common types of incubation organizations were Incubation Centers (39.11%), followed by Parks or Bases (16.34%), and Co-working Spaces (16.34%). The primary function of an incubator center is to support the growth of startups and individual entrepreneurs by offering services and helping startups overcome the challenges they face in the early stages of business. For startups and entrepreneurs, incubators, parks, accelerators, and similar organizations are effective avenues for driving rapid business growth.

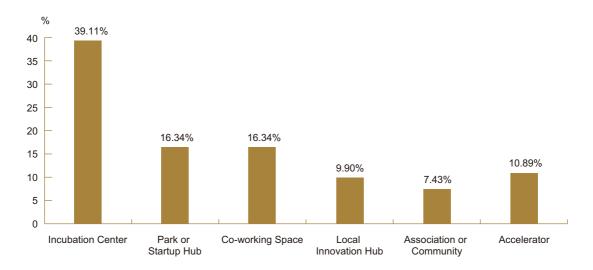


Figure 2-9 Types of Incubation Organizations

Source: 2024 Taiwan Startup Ecosystem Survey. Graph prepared by Taiwan Institute of Economic Research.

II. Focus Areas of Guidance

Incubation Organizations provided guidance services that focus on the following areas: Cultural Creativity (24.75%), Artificial Intelligence/Big Data (20.30%), and Biotechnology/Medical Devices (18.81%). As these three areas were also the main focus of domestic startups in recent years, it shows that incubation organizations were involved in guiding and assisting startups to excel in popular industries. Due to the emphasis on inter-disciplinary collaboration in recent years, the assistance extended not only to the generally recognized cultural and creative industries, but also to the concept of cultural creativity, such as offering information services to assist cultural creators in adopting digital technologies, managing websites, and using digital tools.

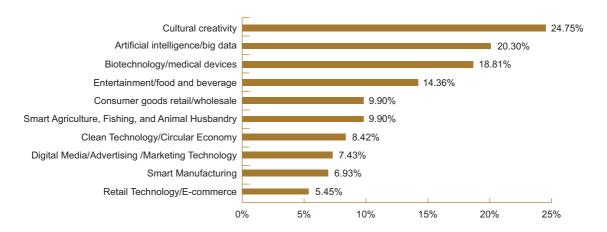


Figure 2-10 Top 10 Focus Areas of Incubation Organizations

Source: 2024 Taiwan Startup Ecosystem Survey. Graph prepared by Taiwan Institute of Economic Research.

To build a new type of entrepreneurial ecosystem, the Ministry of Economic Affairs launched the Corporate Accelerator Subsidy Program in 2022 to encourage large and medium-sized enterprises to invest in incubation services. This program guides external innovation and entrepreneurship development and is an important tool in assisting the transformation of traditional industries and developing innovation clusters in high-tech industries. By involving large and medium-sized enterprises with incubation and leading startup capabilities into the ecosystem, the program strengthens collaboration between large enterprises and startups. It also encourages inexperienced large enterprises to work with startups through incubation organizations, translating their participation into more diverse startup ventures. This approach brings resources from corporate groups into startups, integrates group supply chains, and strategically invests in startups to accelerate their growth and drive innovation for large enterprises. In 2024, eight corporate accelerators received subsidies: Mercuris F&B, Taiwan Kiss Me Cosmetics, Taiwan Web Service Corporation, Lion Travel, CASwell, Greenrays International, Formosa Plastics Transport Corporation, and Might Electronic.

III.Services and Resources Provided by Incubation Organizations

The top services provided by incubation organizations were as follows: Mentoring for Domestic Startups (83.17%), Organizing Industry Networking Events (77.23%), Assisting with Applications for Government Resources (73.27%), and Renting Coworking Spaces (73.27%). Most of the current incubation organizations are primarily incubation centers; they provide basic mentoring and startup resources, allowing startups to receive professional guidance. They also organize industry networking events to offer opportunities for information sharing and provide basic services such as space rental.

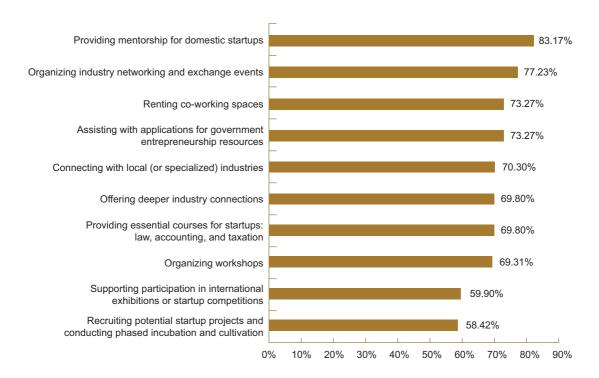


Figure 2-11 Top 10 Services and Resources Provided by Incubation Organizations

Source: 2024 Taiwan Startup Ecosystem Survey. Graph prepared by Taiwan Institute of Economic Research.

Section4 Government Organizations

The government plays an important role in helping the growth of startup businesses. The GEM report shows that Taiwan has a favorable entrepreneurial environment supported by different government measures. In recent years, the government has launched large-scale, inter-ministerial programs, including the Asia Silicon Valley Development Plan in 2016, Plan to Improve the Startup Investment Climate in 2018, and the Asia Silicon Valley Development Plan 2.0 in 2021. These programs offer financial support, talent, market access, regulations, and infrastructure.

Under these overarching development programs are clear innovation and entrepreneurship programs. Each government organization provides support and assistance to startups within its scope of jurisdiction and responsibilities. They also collaborate to jointly promote and implement measures that benefit the startup ecosystem.

I.Ministry of Education

The Ministry of Education recognizes the importance of improving the quality of entrepreneurial talent through education. It works hard to strengthen ties between schools and industries, enabling innovative and entrepreneurial thinking to develop among the young. The By providing capital and mentoring, the Ministry uses relevant programs to encourage university students to demonstrate innovation and assists them in the early stages of their startup ventures. In addition, there are regional talent cultivation and technology training programs and national research institutes. They focus on providing high-quality talent into the innovation and startup ecosystem.

II. National Science and Technology Council (NSTC)

Policies of the National Science and Technology Council focus on the commercialization of scientific research results, including technology transfer, industry-academia collaboration, and university spin-offs. It provides funding to support research entrepreneurs, helping them accelerate product development and market entry. The NSTC also encourages collaboration between researchers and businesses for knowledge and technology transfer while actively supporting entrepreneurial teams engaged in technological innovation. To foster a favorable environment for R&D, the NSTC has established the Taiwan Tech Arena (TTA), which brings together innovative entrepreneurs, investors, and industry experts. The TTA provides a diverse and interactive platform for startup teams to facilitate the development of the innovation ecosystem.

III.Ministry of Economic Affairs

The Ministry of Economic Affairs plays a pivotal role in promoting entrepreneurial policies, particularly in resource integration and market expansion. Its core policies focus on providing funds and connecting markets. These include providing financial support to individual entrepreneurs and SMEs, offering R&D subsidies to help businesses enhance their innovation capabilities, and encouraging continuous investment in R&D, thereby fostering product innovation. The MOEA also provides loans to young entrepreneurs and SMEs to meet their early-stage funding needs, and it has established mechanisms for early-stage funding to help entrepreneurs connect with potential investors and industry partners, thereby accelerating business growth. In addition, the MOEA promotes technology-based entrepreneurship by encouraging research institutions to commercialize the results of their technological projects through valuation and spin-offs, fostering the creation of startups.

IV. Financial Supervisory Commission (FSC)

One of the key policy focuses of the Financial Supervisory Commission (FSC) is to enable entrepreneurs in the financial technology (FinTech) sector to innovate within a legal and effective framework. To aid the development of the domestic FinTech industry, the FSC has partnered with the Taiwan Financial Services Roundtable to bring together resources from domestic and international FinTech industries, government, academia, and research institutions. Together, they have established FinTechSpace, a fintech-focused co-working space, to create a collaborative environment for the development of FinTech. FinTechSpace integrates physical space, mentoring services, and open financial technology APIs to drive the creation of a FinTech co-innovation ecosystem.

V.National Development Council (NDC)

The National Development Council (NDC) is responsible for integrating talent, capital, and market access to help develop Taiwan's entrepreneurial environment. It offers the Employment Gold Card to attract foreign professionals to Taiwan for employment and entrepreneurship, fulfilling the needs of Taiwan's industrial development. To expand international markets, the NDC is promoting the Startup Island TAIWAN brand to enhance the global visibility of Taiwanese startups and help them reach out to potential customers and access international markets.

VI.Ministry of Culture

The Ministry of Culture focuses on developing the cultural and creative industries. By investing in policy resources to support youth entrepreneurship and the production plans of domestic creative teams, the Ministry aims to unlock the potential of creative talent, encourage innovative thinking in the cultural sector, foster cross-disciplinary

collaborations, and integrate culture with modern technology. This approach seeks to develop competitive services and products in the market.

VII.Ministry of Labor

Given that entrepreneurship is one of the employment options, the Ministry of Labor offers entrepreneurial support measures, including entrepreneurial courses, consultation, and financial assistance, to enhance entrepreneurs' business knowledge. These efforts help entrepreneurs overcome operational challenges and ensure smooth business operations.

VIII. Ministry of Digital Affairs

The Ministry of Digital Affairs focuses on integrating computing power, data, talent, and capital to foster AI startups and build an AI software ecosystem. It encourages startups in software services to develop solutions with market application potential.

The above support from government organizations demonstrates the comprehensive and diverse nature of the government's entrepreneurial policies. The Ministry of Education is focused on foundational education and talent cultivation, the National Science Council on technology transfer and industry-academia cooperation, the Ministry of Economic Affairs on funding and market support, and the Financial Supervisory Commission on FinTech innovation. In addition, the National Development Council provides assistance in expanding international markets, the Ministry of Culture supports the cultural and creative industries, the Ministry of Digital Affairs supports digital technology ventures, and the Ministry of Labor further contributes by offering resources to promote entrepreneurship from the employment perspective. All these government efforts collectively shape a robust and supportive entrepreneurial ecosystem, ensuring that startups receive necessary support at different stages of their development.

Chapter3 Talent and Service Needs in Startups and Entrepreneurial Teams

To understand the key issues in the local startup ecosystem, this chapter draws on the findings from the 2024 Taiwan Startup Ecosystem Survey. Section 1 of this chapter describes the profiles and characteristics of the surveyed startups, their fields of business, and their overseas expansion. This gives readers an overview of the background of the survey participants, followed by a discussion of the focus topics. Section 2 shows key data on the workforce composition of startups, the employment of foreign workers, current employment plans, and future manpower needs. Section 3 presents the types of accelerators, their services, and future trends.

Section 1 Background of the Respondents

I.Basic Characteristics and Company Type

Over 60% of the surveyed startups were founded by entrepreneurs who were starting their first company. They typically had more than 10 years of work experience and most were male. Most of the surveyed startups have completed company registration, with the majority having been established within the past five years. Most used a B2B business model, targeting businesses or organizational clients as their core customers.

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⁷This project began in 2018 and was jointly planned by the Taiwan Institute of Economic Research and PwC Taiwan under the guidance of the Small and Medium Enterprise and Startup Administration. Each year, it conducts survey on different ecosystem themes and participants. The survey targets innovative entrepreneurial teams that have not yet established companies and innovative companies that have been in operation for less than eight years. The research was conducted through online surveys and telephone interviews between May 27 and July 12, 2024, with a total of 733 valid samples collected.



Figure 3-1 Basic Description of the Surveyed Respondents

Source: 2024 Taiwan Startup Ecosystem Survey. Graph prepared by Taiwan Institute of Economic Research.

II.Key Industry Areas

Looking at the entrepreneurial sectors, the top three were Artificial Intelligence/Big Data, Biotechnology/Medical Devices, and Cultural Creativity. This result shows that Artificial Intelligence/Big Data remained the mainstream. Among the top 10 industries, 7 were related to digital transformation and technological innovation. This reflects the ongoing wave of digital transformation, which continues to move toward Al-driven fields and is catching up in different industries.

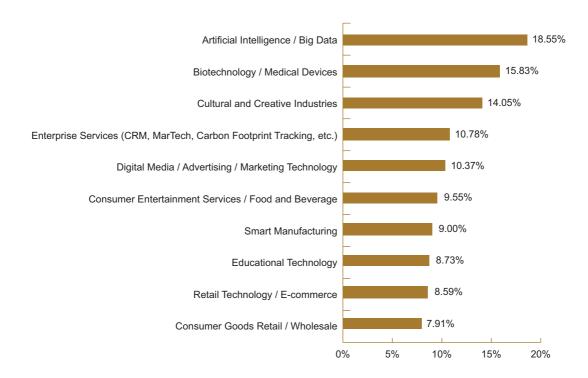


Figure 3-2 Top 10 Industries According to the Survey Respondents

Source: 2024 Taiwan Startup Ecosystem Survey. Graph prepared by Taiwan Institute of Economic Research.

Section2 Manpower Demand in Respondents

I.Current Situation and Plans for Hiring Foreign Employees

Regarding the employment of foreign employees, 13.64% of respondents employed foreign employees. While this percentage is not high, it shows that some respondents are already recruiting foreign employees to enhance their teams' international perspectives and diverse backgrounds.

Within the respondents, the top three nationalities of foreign employees were Malaysia (28.00%), Mainland China (20.00%), and the United States (18.00%). The nationality distribution of foreign employees shows that respondents tend to hire

individuals from countries with strong connections to their target markets, or from countries where communication is more convenient and cultural backgrounds are similar. This facilitates easier integration and allows employees to quickly generate value.

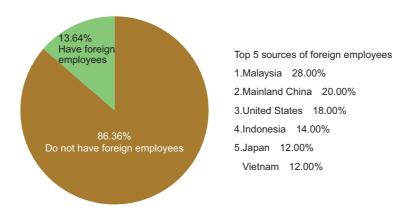


Figure 3-3 Respondents with Foreign Employees

Source: 2024 Taiwan Startup Ecosystem Survey. Graph prepared by Taiwan Institute of Economic Research.

Regarding future plans for overseas recruitment, 38.3% of respondents expressed willingness to hire internationally, indicating that an increasing number of respondentsrecognized the importance of global talent deployment and internationalization. The top three countries considered for future overseas recruitment were the United States (41.13%), Japan (35.47%), and Malaysia (27.82%).

The United States and Japan were not only the preferred countries for overseas recruitment but also the priority regions these respondents considered when expanding into international markets. This shows a high level of synergy and consistency between talent sourcing and market expansion strategies when planning global operations. Choosing these countries for recruitment reflects the desire to bring in talent with international experience and expertise, thereby accelerating the globalization process and enhancing competitiveness in the international market.

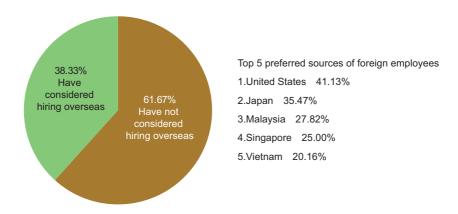


Figure 3-4 Respondents Plan to Hire Overseas

Source: Taiwan Startup Ecosystem Report 2024. Graph prepared by Taiwan Institute of Economic Research.

II.Future Talent Recruitment Needs

Moving forward, 88.26% of respondents would recruit new talent in the coming year, indicating that most respondents were in a critical phase of expansion and growth. The key areas for future recruitment were: Business Development (48.57%), Innovation R&D / Software / Technology / Programming (43.11%), and Advertising/Marketing (23.47%). Looking at future recruitment needs, Business Development and Innovation R&D were the priorities of most respondents. Business development personnel will accelerate the ongoing expansion of new markets and potential clients, while personnel devoted to technological innovation will continue to enhance the core competitiveness of startups.

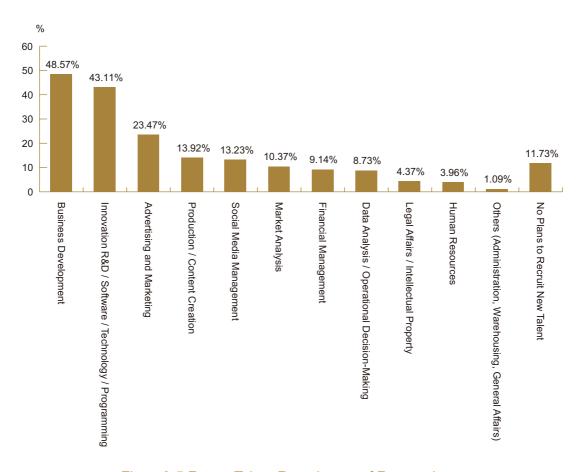


Figure 3-5 Future Talent Recruitment of Respondents

Source: 2024 Taiwan Startup Ecosystem Survey. Graph prepared by Taiwan Institute of Economic Research.

Section3 Trends in Accelerator Services

The accelerators in Taiwan can be categorized into four types: Resource-oriented, Corporate Connection, Academic and Research Value-added and Investment-focused. Corporate Connection accelerators are typically established by large enterprises seeking to develop new businesses through external innovation collaboration. They nurture startup development using corporate resources, industry supply chain connections, and technological capabilities. Examples include the NextT Accelerator for Travel and Lifestyle, the KissMe High Heat and Humidity Beauty Care Accelerator, and the Mighty Net Innovation Express. On the other hand, Investment-focused accelerators aim to profit from investments by providing capital to startups and sharing equity. From the investor's perspective, they assist startups with their development. Examples include the Startup 101 Elderly Industry Accelerator, BE Health Accelerator, and SparkLabs Taiwan. Resource-oriented accelerators focus on leveraging domain expertise and resources to attract startups. They include PwC's Scaleup Accelerator, YEZ International Accelerator, Smart Kaohsiung Software Soft Accelerator, and the AppWorks Accelerator. Academic and Research Value-added accelerators promote the commercialization of academic and research outcomes. By encouraging startup activities based on university research capabilities and alumni resources, they serve startups using resources from higher education institutions. Examples include the NTU Corporate Accelerator, the National Yang Ming Chiao Tung University Ageing-Tech Accelerator, and the National Kaohsiung University of Science and Technology Innovation Incubation Center.

I.Fields Served by Accelerators

Surveys show that the top five sectors served by accelerators were as follows: Biotechnology/Medical Devices (27.27%), Artificial Intelligence/Big Data (27.27%), Clean Technology/Circular Economy (22.73%), Smart Manufacturing (13.64%), and Consumer Goods Retail/Wholesale (13.64%).

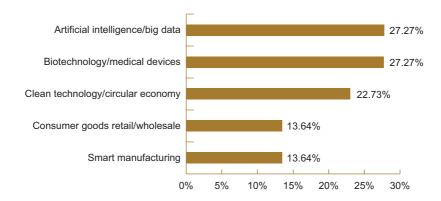


Figure 3-6 Sectors Served by Accelerators

Source: 2024 Taiwan Startup Ecosystem Survey. Graph prepared by Taiwan Institute of Economic Research.

The top five preferred sectors for business startups in Taiwan in 2023-2024 were Artificial Intelligence/Big Data, Cultural and Creative Industries, Biotechnology/ Medical Devices, Consumer Entertainment Services/Food and Beverage, and Digital Media/Advertising/Marketing Technology. These five sectors are slightly different from the sectors currently served by domestic accelerators, and it shows that the startups requiring professional services from accelerators tend to belong to sectors with a higher degree of technological innovation. As these sectors have relatively high technical barriers and innovation demands, the startups will require professional services early in the product or service development stage in order to adjust their offerings to market opportunities.

II. Accelerator Services Offered

Domestic accelerators primarily provided startup services that include as Mentorship, Foundational Courses for Startups, Industry Meetups and Networking Events, and Phased Incubation for Promising Startups. Among the top 10 services provided, five focused on matching resources and introducing startups to industry networks: Organize Industry Meetups and Networking Events, Matching Startups with Medium- and Large-sized Enterprises, Providing Deeper Industry Connections, Connecting Startups with Local or Specialized Industries, and Facilitating Funding Channels. This indicates that domestic accelerators are using their extensive industry networks to offer valuable resource connections.

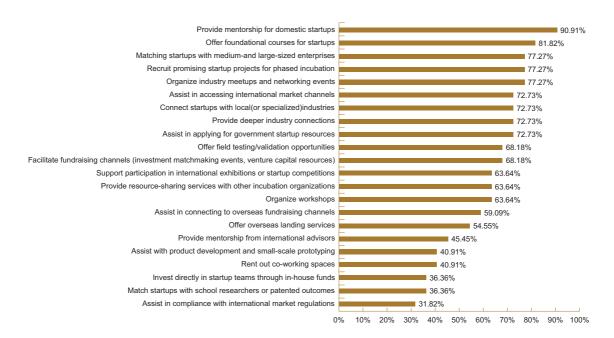


Figure 3-7 Services Provided by Accelerators

Source: 2024 Taiwan Startup Ecosystem Survey. Graph prepared by Taiwan Institute of Economic Research.

III.Achievements of Policy-Driven Corporate Accelerators

In recent years, corporate accelerators in Taiwan have gradually become essential in promoting innovation and driving industry upgrading. From Chunghwa Telecom to the Formosa Plastics Group, large corporations are not only using accelerators to introduce innovative technologies but also transforming these innovations into new business opportunities. Through accelerators, companies have access to innovative ideas from startups and can conduct technological experiments and market exploration with relatively low risk. This model of cooperation helps businesses quickly respond to market changes while reducing the pressure on internal R&D.

(I)Smart Vehicle Startup Accelerator (Formosa Plastics Transport Corporation)

In 2022, Formosa Plastics Transport Corporation (Formosa Transport) worked together with Ming Chi University of Technology (Ming Chi University) to join the corporate accelerator program in order to develop its electric vehicle business. The program offered opportunities for startups to participate in Formosa Transport's innovation activities. This pilot project aimed to explore the potential of electric vehicles and accelerate the validation of technologies and business models through startup participation. Formosa Transport, in collaboration with Ming Chi University, also established the Smart Vehicle Startup Accelerator to cultivate startups and work towards building a complete industry chain for smart vehicles.

YJ Engineering Consulting received technical guidance from Formosa Transport to connect to international markets. Its electric vehicle repair and maintenance technology is now ready for real-world implementation. The company has also been certified as a supplier in Formosa Transport's supply chain and has entered into a strategic cooperation with the Thai logistics company PANUS at their electric vehicle maintenance center in Thailand.

(II)Al Supercomputing Accelerator (Taiwan Web Service Corporation)

Taiwan Web Service Corporation (TWSC) plans to leverage the ASUS brand, its product innovation capabilities, and its global market to introduce real commercial opportunities for startups. In collaboration with the National Health Research Institutes (NHRI), TWSC joined the corporate accelerator program. In 2023, the company established the AI Supercomputing Accelerator, using Taiwan's largest native supercomputing power, Taiwania 2 AIHPC. This supercomputer, which hosts the world's first large-scale, pre-trained language model developed specifically for traditional Chinese, the Formosa FFM, assists startups by providing a powerful technological backbone to accelerate AI 2.0 applications. It offers the necessary supercomputing resources for AI+5G+SaaS+biomedical applications and serves as a cloud platform to support the operation of these applications.

TWSC offers a comprehensive computing platform and consulting services to assist startups in accelerating computational processes. For instance, DeepMentor saved a significant amount on building its own server infrastructure and was authorized to use FFM. This allowed DeepMentor to rapidly develop a commercially viable, traditional Chinese-optimized model. During the company's participation in the accelerator program, DeepMentor was able to match with three venture capital companies and ASUS venture capital, receiving over NT\$140 million in investment.

(III)Climate-adaptive Beauty Industry Chain Accelerator (Taiwan Kiss Me Cosmetics)

Taiwan Kiss Me Cosmetics (Taiwan Kiss Me) aims to build the T-Dimensional Beauty industry chain. In collaboration with Taipei University of Technology, Taiwan Kiss Me participated in the corporate accelerator program and established the KissMe High Heat and Humidity Beauty Care Accelerator in 2022. The accelerator focuses on four key areas: basic research, innovative technology, digital technology, and brand marketing. Through a one-stop incubation process, the goal is to help startups transform services and technology into products, and then achieve rapid commercialization using raw materials, production processes, and finished products. Taiwan Kiss Me provides collaborative channels, media, and promotional resources to assist startups with marketing and sales.

During its participation in the corporate accelerator program, Taiwan Kiss Me helped PuraVida to increase media exposure, expand market channels, and enter international markets. As a result, PuraVida successfully entered the Southeast Asian market, with its beauty products being launched in Indonesia and Malaysia.

(IV)BE Health Accelerator (BE Health)

BE Health Accelerator is a specialized accelerator in the biotech vertical, providing startups with services that include connections to large hospitals, clinical experts, venture capital angels, and regulatory advisors. It focuses on guiding forward-looking biotech and medical startups. BE Health Accelerator has successfully helped several startups raise capital, launch new services, and collaborate with hospitals or day-care institutions. For instance, Dentall Co. raised millions in funding after being mentored by BE Health. Dentall also collaborated with Nan Shan Life Insurance to validate its new business model, Dental Home Service. On the other hand, LTPA Solution Co. worked with Show Chwan Healthcare System to co-offer senior healthcare, establishing a demonstration site for dementia training and expanding it to different locations within Show Chwan's network. Meco Technology, in collaboration with Vanyi Group, designed group training courses and integrated them into 120 of Vanyi's senior day-care locations, driving the scaled development of innovative products.

Chapter4 Entrepreneurship Measures

To support Taiwan's startups, the government has launched a series of policies aimed at fostering an excellent environment and platform for startups. These initiatives include loans, subsidies, and investments, as well as the infusion of R&D talent and technology into enterprises, so as to contribute to the development of Taiwan's startup ecosystem.

Strategies	Entrepreneurship Measures	Contact
	Carbon Reduction Program using Smart Technology for Commercial Services	https://www.gogreen.org.tw
	DIGITAL+Digital Innovation Subsidy Platform-Incentive Program for Digital Startups	https://digiplus.adi.gov.tw/index.html
	Directions of Loans for Startup Funding for Young Entrepreneurs	https://taicca.tw/funds/financing_service/detail/1
	FINDIT	https://findit.org.tw/
	Implementation Plan for Strengthening Investment in SMEs(Phase II)	https://0800056476.sme.gov.tw/ smeinvest2/
	"Implementation Project for Strengthening Investment in Cultural and Creative Industries"	https://taicca.tw/funds/investment_ service/detail/1
funding	Industrial Design-Driven Innovation	https://www.tdri.org.tw/iddi/
g	loan interest subsidy for cultural and innovation industries	https://taicca.tw/funds/financing_service/detail/3
	Loans for Startup Funding for Young Entrepreneurs	https://www.sme.gov.tw/arti- cle-tw-2570-4238
	Micro-entrepreneur Loans	https://0800056476.sme.gov.tw/index.php
	NDF Angel Investment	https://www.angelinvestment.org.tw/
	NDF Direct Investment	https://www.df.gov.tw/News.aspx?n= 2E562B3DF04F19E9&sms=520BE A5A96670349
	NDF Venture Capital Investment	https://www.df.gov. tw/News.aspx?n=B- B236A323135C174&sms=2B7EF- 4DC7496CD43

Strategies	Entrepreneurship Measures	Contact
	One Stop Service	https://0800056476.sme.gov.tw/
funding	Phoenix Micro Business Start-up Program	https://beboss.wda.gov.tw
	Project of Value Advancement for Intellectual Property	https://assist.nat.gov.tw/wSite/ct?x- Item=266641&ctNode=150∓=2
	Service Industry Innovation Research	https://gcis.nat.gov.tw/neo-s/Web/ Index.aspx
	SME Innovation Development Project Loan	https://www.sme.gov.tw/arti- cle-tw-2570-4235
	Taiwan Innovation Board	https://www.twse.com.tw/TIB/zh/index.html
	Taiwania Capital	https://www.taiwaniacapital.com/
	U-start Plan	https://ustart.yda.gov.tw/?Lang=zh-tw
	Asia Silicon Valley Development Agency	https://www.asvda.org/
	Development of Incubation for Small and Medium Enterprises and Startups	https://incubator.sme.gov.tw/
	Exhibition Supporting Project	https://tpsp.trade.gov.tw/espo
	FinTechSpace	https://www.fintechspace.com.tw/
	G Camp	https://www.facebook.com/gcamptaiwan
	International Market Develpoment Program	https://www.imdp.org.tw/
	Market Access & Value Enhancement Project for Innovative Medical Product	https://assist.nat.gov.tw/wSite/ct?x- ltem=269878&ctNode=232∓=2
market	Public Procurement for Start-ups	https://www.spp.org.tw/spp/
	Startup Island TAIWAN	https://startupislandtaiwan.info/
	Startup Island TAIWAN Tokyo/Silicon Valley Hub	https://tokyo.startupisland.tw/
	Startup Support Office	https://www.startupterrace.tw/
	Startup Terrace Kaohsiung	https://www.startupterrace.tw/
	TAcc+	https://taccplus.com/
	Taiwan Germination Program	https://exp.stpi.narl.org.tw/project/ TGP/index
	Taiwan Tech Arena (TTA)	https://www.taiwanarena.tech/
	TTA South	https://www.taiwanarena.tech/
talent	0800-589-168 toll-free hotline	https://startup.sme.gov.tw/
	FROM IP TO IPO PROGRAM	https://exp.stpi.narl.org.tw/project/ FITI/index
	Small Enterprises Talent Skill Progressive Program	https://onjobtraining.wda.gov.tw
	SME e-university	https://www.smelearning.org.tw/

Strategies	Entrepreneurship Measures	Contact
talent	Taiwan Entrepreneur Visa	https://www.sme.gov.tw/arti- cle-en-2618-7911
	Taiwan Startup Hub	https://startup.sme.gov.tw/home/ modules/startuphub/about.php
	Talent Taiwan	https://talent.nat.gov.tw/?lang=zh
	X Talent	https://xtalent.stpi.narl.org.tw/index
	A+ Startup Technology Enhancement Program (A+STEP)	https://service.moea.gov.tw/EE514/ tw/aiip/153.html
	Academia-Research Collaboration Innovation & Entrepreneurship Program	wenhuapan@itri.org.tw
	Accelerated Examination Pilot Program for Design Patents	https://www.tipo.gov.tw/tw/cp-85- 925650-1fdcd-1.html
	AWE	https://woman.sme.gov.tw/
	Business Startup Award	https://startup.sme.gov.tw/startup-award/
	Digipark	https://www.digipark.com.tw/
	GISA (Go Incubation Board for Startup and Acceleration Firms)	https://www.tpex.org.tw/web/regu- lar_emerging/Creative_emerging/ Creative_emerging.php?l=zh-tw
	Innovative Legal Clinic	Line ID: @legalclinic
other	Legal Consulting Service Website for Small and Medium Enterprise	https://law.sme.gov.tw/ailt/
ouror	Operation Directions on Subsidies for Strengthening Global Connections of Tai- wan Startup Ecosystem	https://www.ndc.gov.tw/ nc_9469_37702
	Positive Patent Examination Pilot Program for Startups	https://www.tipo.gov.tw/tw/cp-85- 930526-2704f-1.html
	Small Business Innovation Research Grant Program	https://www.sbir.org.tw/
	SMEs Succession project	https://startup.sme.gov.tw/home/modules/funding/detail/?sId=164
	Startup Portal Taiwan	https://startup.sme.gov.tw/
	Startup Value Creation Program	https://service.moea.gov.tw/EE514/ tw/tdpa/
	Taiwan Industry Innovation Platform Program	https://tiip.itnet.org.tw/index.php
	Taiwan Research-Institute Entrepreneur Ecosystem Program (TREE)	https://tree.meetbao.net/





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