

# CONTENTS

| 02 | Policy Initiatives- Asia Silicon Valley 2.0 |
|----|---|
|    | Development Plan                            |
| 07 | Overview of Industrial Development          |
| 11 | Potential Investment and Collaboration      |
|    | Opportunities in Taiwan                     |
| 15 | Investment Incentive Measures               |
| 19 | Leading Taiwanese Companies                 |
| 22 | Examples of Successes Achieved by           |
|    | Foreign Companies                           |
|    |   |

# Policy Initiatives — Asia Silicon Valley 2.0 Development Plan

The Taiwan government began implementing the Asia Silicon Valley Development Plan in 2016. The plan has two themes: "Promoting IoT innovation and R&D" and "strengthening the innovative entrepreneurial ecosystem" and aims to integrate technology R&D capabilities, talents, capital, and markets worldwide to drive comprehensive transformation and upgrade of Taiwan's industries through the IoT.<sup>1</sup> Taiwan's promotion strategy is to incorporate the R&D capacity of international giants such as Microsoft, Google, Amazon, and Cisco. We have created smart demonstration sites, promoted exchanges across industries, relaxed talent-related regulations, and provided funding support to create a robust innovative entrepreneurial ecosystem for IoT innovation, R&D, and industrial growth, and create a trillion NTD IoT industry.

The government created the Asian Silicon Valley Development Plan (ASVDP)-Major League IoT for promoting cross-disciplinary cooperation and forming industry standards in December 2016. The ASVDP Major League IoT is led by domestic manufacturers including Acer, MediaTek, and Advantech. Stan Shih, founder of the Acer Group, is the honorary chairperson, and the CEO of the Asia Silicon Valley Development Agency (ASVDA) is the chairperson. The ASVDP Major League IoT addresses industry needs and engages in technology R&D, site verification, and international market exploration. It aims to nurture even more innovative industries by establishing a platform that will accelerate collaboration between experts, start-ups, and system integrators.

<sup>1</sup> Asia Silicon Valley Development Plan Action Plan (Approved), https://ws.ndc.gov.tw/Download. ashx?u=LzAwMS9hZG1pbmlzdHJhdG9yLzEwL3JlbGZpbGUvMC8xMTcwOC8xYzcwOGJmY y02ODAzLTRjNWYtYTc4My04NzdkMDFjZDU2OGYucGRm&n=MTA2MDMxNuS6nua0ssK35 5%2b96LC35o6o5YuV5pa55qGI6KGM5YuV6KiI55WrZmluYWwo5qC45a6aKS5wZGY%3d&ic on=..pdf.

The League has created Special Interest Groups (SIGs) in smart transportation, smart logistics, smart manufacturing, smart energy efficiency and environment monitoring, smart commerce, smart homes, smart farming, smart healthcare, and IoT information security. It organizes quarterly conferences and actively promotes cross-disciplinary exchanges between domestic industry, government, and academia on IoT applications. As of April 2022, the League had approximately 400 members.

5G communication services in Taiwan officially began commercial operations in June 2020. Taiwan's government has added AI and 5G digital technologies based on existing infrastructure and approved the Asia Silicon Valley 2.0 Development Plan (ASVDP 2.0) (2021-2024) to increase the adoption of digital technologies such as the artificial intelligence Internet of Things (AIoT) in industrial development and accelerate the digital transformation of industries in the post-pandemic era.



The plan focuses on accelerated development and evolution of smart IoT and future industries driven by innovative entrepreneurship and leverages the three major strategies including expansion of AloT technology applications, improving the development environment for startups, and consolidating system output capacity. The aim is to transform Taiwan into a key force for digital innovation in Asia and increase the output of Taiwan's IoT industry to 5% of the global output by 2025.

| Contact<br>Information | Asia Silicon Valley Development Agency (ASVDA)<br>Website : https://www.asvda.org/chi/index.aspx<br>Telephone : Taoyuan Head Office +886-3-2871281<br>Silicon Valley Office +1-408-524-3026<br>Address : Taoyuan Head Office: International Finance Twin Buildings, 3F-1, No. 286,<br>Sec. 1, Gaotiezhanqian W. Rd., Zhongli District, Taoyuan City<br>Silicon Valley Office: 440 N. Wolfe Rd., Sunnyvale, CA 94085, Plug and Play<br>Tech Center, #EL303 |
|------------------------|---|
|                        |   |
| Contact                | Major League IoT, ASVDP<br>Website : https://www.asvda.org/Page?itemid=20∣=1023   |

Contact : Ms. Wang, Secretariat

Telephone : +886-2-25774249 ext. 837 Email address : michelle wang@mail.tca.org.tw

To effectively promote the startup and IoT industries, the government created a demonstration site in Taoyuan, planned the Asia Silicon Valley Innovation and R&D Center, promoted smart industrial parks, and established the Hutoushan Innovation Hub, which is the first site in Taiwan created for the verification and validation of autonomous vehicles and IoT innovative technologies. The Hutoushan Innovation Hub is being developed in two phases. Phase 1 focuses mainly on the development of IoV Smart Driving and Information Security IoT. KingwayTek Technology, the operator in the Smart Driving Center in the Innovation Hub, already obtained the first "operable" self-driving vehicle test

Information

license plate in Taiwan in 2020 and has tested self-driving vehicles, automated guided street sweepers, and automated guided vehicles.

In Phase 2, it will introduce a 5G company private network in September 2020 to become the first self-driving vehicle park that provides 5G vehicle-roadcloud tests in Taiwan. It aims to create vertical applications in all industrial sectors to gradually attain the vision of the 5G smart city in Taoyuan. In addition, Taoyuan City Government and National Taipei University of Technology signed a letter of intent for cooperation in December 2021. Teams involved in NTUT self-driving vehicle, smart manufacturing, smart medical equipment, 5G, and IoV will conduct application research projects in the park. They will also work with local industries and help Taiwanese companies enter the international market.

The first Open Testing and Integration Centre (OTIC) with O-RAN certification was established in June 2021. It will help companies connect their 5G systems and equipment with international standards and increase the domestic production capacity for 5G equipment in Taiwan.

Projects outside Northern Taiwan include the Asia New Bay Area 5G AloT Innovation Park launched by the Taiwan government in the second half of 2020. Kaohsiung City Government and Ministries of the central government consolidated their resources to invest NT\$11 billion in 5 years for the development of the industrial park to create a talent center, startup hub, and 5G AloT smart facilities. It is the most comprehensive 5G AloT validation site with the biggest investments in Taiwan (refer to Figure 1).

In November 2020, the Kaohsiung City Government, ministries of the central government, international firms such as Microsoft Taiwan, Cisco Taiwan, and Amazon's cloud service provider AWS, and domestic telecommunications operators including Chunghwa Telecom and Far EasTone jointly formed the Asia New Bay Area 5G AloT International Alliance as they set up operations in the Asia New Bay Area in Kaohsiung. Domestic and foreign companies will work with startups to verify the feasibility of their innovative proposals, work them into commercial applications, and promote the development of the 5G industry in Taiwan to align with international standards. The Asia New Bay Area 5G AloT Innovation Park was inaugurated on December 6, 2021 and has attracted 7 accelerators with international support resources and 42 outstanding startup teams with smart applications.

| Contact<br>Information | Hutoushan Innovation Hub Operation Office<br>Website : https://www.hutoushan-innohub.org.tw/<br>Email : hutoushanihub@gmail.com<br>Residency inquiries : hutoushan@etatung.com<br>Address : No. 1, Sec. 3, Chenggong Rd., Taoyuan Dist., Taoyuan City 330023 |
|------------------------|--|
| Contact<br>Information | Asia New Bay Area 5G AloT Program Office<br>Website : https://asiabay.org.tw/<br>Email : support@asiabay.org.tw<br>Address : 10F-1, No. 25, Chenggong 2nd Road, Qianzhen District, Kaohsiung City 806  |

.

#### The Largest Innovation Experimental Field in Taiwan



Note: Kaohsiung Music Center was inaugurated on October 31, 2021. Kaohsiung Port Terminal is scheduled to open in January 2023.

Source: Economic Development Bureau, Kaohsiung City Government.

#### Figure 1 Asia New Bay Area- 5G and AloT Innovation Park Environment

## Overview of Industrial Development

### 1 | Output Value |

After Taiwan began promoting the Asia Silicon Valley Program in 2016, the output value of Taiwan's IoT industry grew from NT\$890 billion in 2016 (4.02% of the global output value) to NT\$1.17 trillion in 2018, surpassing the NT\$1 trillion mark for the first time and accounting for 4.24% of the global output value. The output reached new heights in 2020 and 2021 with NT\$1.55 trillion and NT\$1.77 trillion, and accounts for 4.62% and 4.73% of the global output value. It is expected to exceed NT\$2 trillion by 2022 (4.84%), and its share of the total global output value is expected to reach 5% by 2025 (refer to Figure 2).



Source: Asia Silicon Valley official website and Industry, Science and Technology International Strategy Center, ITRI.

Figure 2 Global IoT business output and global market share 2016-2022

### 2 | Industry Value Chains |

The IoT industry can generally be divided into four layers (as shown in Figure 3): the sensor layer, the network layer, the platform layer, and the application layer. Taiwan benefits from a comprehensive IoT supply chain. The hardware performance of the sensor layer, which includes processors/ microcontrollers, sensors, and wireless modules, has attracted major international companies (e.g., Microsoft, Google, and Amazon) to set up joint ventures in Taiwan. The network layer includes broadband and mobile telecommunications operators that provide connection services as well as operators that provide commercial services for low-power wide-area networks.

The platform layer is led by large-scale telecommunications operators as well as the Taiwan's electronics industry, which plays the role of system service solution provider. They focus on the needs of industry and use AI and software/hardware solutions to expand in the IoT market for vertical applications and form an IoT ecosystem. The application service layer includes professional operators that provide application services for smart homes, transportation, manufacturing, retail, and healthcare. The forward progress of innovation in application services continues.





Source: Industry, Science and Technology International Strategy Center, ITRI.

Figure 3 IoT Industry Chain in Taiwan

### 3 | Industrial Clusters |

The IoT industry spans the IT manufacturing industry, equipment manufacturing industry, and software and information service industry, which involves multiple fields of technology, including computers, communications, networks, computing, sensors, embedded systems, and microelectronics. Due to the wide range of fields involved in the IoT industry, the government may prioritize key clusters in Taoyuan and Kaohsiung in future development to facilitate balanced development in Southern and Northern Taiwan and local industries (refer to Figure 4).



Source: National Development Council.

Figure 4 5G and AloT Industrial Cluster

# Potential Investment and Collaboration Opportunities in Taiwan

Utilizing Taiwan's Dominant Industries to Develop Core Applications in the IoT Industry

Taiwan has a complete semiconductor supply chain and an abundance of engineering talent for R&D and design, and Taiwan also enjoys proximity to emerging markets in Asia. System application/assembly companies in the ICT industry are recognized by international brands for their manufacturing ability. Our ICT companies have recently expanded beyond the conventional 3C fields (computers, communications, consumer electronics) into vertical IoT applications and system integration solutions.

Computing structure has become increasingly decentralized and flexible, which also powers growth in demand for edge AI computing. Through investing in Taiwan, foreign companies are able to increase the depth of their partnership with Taiwan's semiconductor, AI technology R&D and solution development, and ICT industries, implement high-end parts and components/software design and development technologies, and search for module, subsystem, and application developers to work with, then jointly develop the targeted vertical IoT application markets.

To accelerate the development of AI and IoT industries, ITRI established the IoT Integrated Service Center (IisC) with the guidance of the Industrial Development Bureau, Ministry of Economic Affairs to provide one-stop IoT software and hardware design, manufacturing, and certification services. It has also helped startups and SMEs in more than 200 projects. For instance, IisC helped RedEye Biomedical with IC design and optimization of electronic components for the inspection instruments it developed. It has successfully helped RedEye Biomedical transform from its existing B2C business model to a B2B long-term care institution service model, and expanded to Singapore, Japan, and Western countries.

### 2 Bolster Incubation Resources to Strengthen Innovation and Application Capacity

The rise of IoT technologies in recent years has given birth to multiple innovative applications. To accelerate the development of emerging application markets in the industry, the central and local governments have established many startup parks and incubation centers to cultivate teams/companies that specialize in emerging applications in the semiconductor and smart IoT industries. For instance, the Taiwan Tech Arena promoted by the Ministry of Science and Technology (MOST) has introduced accelerators for IoT and other technologies, and nearly 110 IoT domestic and foreign startups have set up operations.

In addition, the MOEA's Industrial Development Bureau has set up incubation centers in Nangang in Taipei and Qianzhen in Kaohsiung to cultivate teams/ companies that specialize in emerging applications in the semiconductor and smart IoT industries. It has also established the IoT Service Hub in Taipei, Taichung, and Kaohsiung to provide cross-sector software and hardware technology integration, cloud platform connection, product design, market development, and data application resources to help IoT products with potential to attain mass production and enter the market.

### 3 Development of Key IoT Sensor Technologies for Niche Markets

The IoT framework consists of a sensor, network, and application layer. Sensor technologies play a crucial role in the sensor layer, not only involving the integration of hardware sensor components/circuit design and integration, but also software technologies for integrating multiple sensor signals and special algorithms for integrating AI and edge computing. Foreign companies can invest in optical/3D vision sensors, biomedical sensors, or gas sensors for environmental protection and food safety. They can partner with smart vehicle and smart manufacturing test sites in Taiwan to jointly develop key sensor technologies that meet demands particular to the markets of Taiwan and elsewhere in Asia.

# **Expand Business Opportunities in** 4 Innovative IoT Applications to Respond to the Contactless Economy

The pandemic has had a tremendous worldwide impact. The contactless economy has emerged as a new trend as people seek to control the spread of the pandemic. The demand for working from home, online meetings, digital courses, telemedicine, video and audio entertainment streaming, and digital financial payments has increased dramatically. There is also potential for growth in the smart manufacturing, robotic warehousing, and service robot market.

Taiwan's performance in countering the pandemic has received international recognition. The pandemic prevention measures implemented by Taiwan, including the National Health Insurance system, rapid development of a management system for face masks used for disease prevention and vaccination reservation, and the digital fencing smart monitoring and control system have demonstrated Taiwan's strong ICT prowess and cross-disciplinary integration capacity.

By investing in Taiwan or working with Taiwanese businesses to explore business opportunities in the contactless economy, foreign companies can take advantage of Taiwan's ICT, machinery, and medical equipment industries and testing grounds to develop innovative IoT applications. For smart factories, Taiwanese companies such as Advantech, Ennoconn, and Delta Electronics have developed "digital twin" technology, a key technology for the metaverse. It offers greater precision in remote maintenance and repairs and predictive maintenance. Foreign companies can work with Taiwanese companies to explore business opportunities in emerging industries.



# 5

# Reducing the Risks and Costs Associated with Changes in the Global Environment

Network information security and government regulatory policy are important factors that will affect the development of the IoT industry at the investment location. Taiwan's comprehensive IPR and information security protection regime has garnered the trust of international corporations. Next, the Taiwan government and companies are fully aware of trends in the global industry and flexibly adjust their supply chains based on changes in international economic and trade conditions. Foreign companies that invest in Taiwan or partner with Taiwanese companies will be able to reduce the risks and costs brought about by recent trade and technology conflicts between U.S. and China and the global pandemic.

## Investment Incentive Measures

### 1 | Tax Incentives |

The income tax rate for profit-seeking enterprises in Taiwan is 20%. To encourage foreign investments Taiwan, support industrial innovation, and promote industry-academia collaboration, Taiwan offers the following preferential taxes to foreign companies (Table 1):

| ltem   | Preferential Measures   |
|--|---|
| Research,<br>Development,<br>or<br>Introduction of<br>Technologies | • Up to 15% of the company's R&D expenditures may be deducted from its profit-seeking enterprise income tax for current year; or up to 10% of such expenditures may be credited over three years against the profit-seeking enterprise income tax payable by the company.   |
| or Machinery<br>Equipment  | <ul> <li>Royalty payments to foreign companies for imported new production technologies or products that use patents, copyrights, or other special rights owned by foreign companies are, with the approval of the Industrial Development Bureau, MOEA, exempt from the corporate income tax.</li> <li>Companies are exempt from import tariffs for importing any machinery equipment that local manufacturers cannot produce.</li> </ul> |
| Employee<br>Stock<br>Compensation                                  | <ul> <li>A company employee who has obtained stock compensation<br/>worth a combined total of less than NT\$5 million and<br/>continuously held the stock while remaining in the company's<br/>employ for at least two years may choose to be taxed on<br/>the market price of the stock at either the time the stock was<br/>obtained or the time the stock is sold, whichever is lower.</li> </ul>                                      |

#### **Table 1 Preferential Taxes**

| Item  | Preferential Measures  |
|---|--|
| Investment<br>in Smart<br>Machinery / 5G<br>/ Information | <ul> <li>Smart machinery: Use of big data, AI, and IoT in brand-<br/>new hardware, software, technology, or technical<br/>services for automatic schedules, flexible, or mixed-<br/>model production lines.</li> </ul>   |
| occurry   | • 5G: Investments in new hardware, software, technology, or technical services that are related to 5G communication systems.   |
|   | <ul> <li>Information security: Companies' investments<br/>and purchases of brand-new hardware, software,<br/>technology, or technical services for information and<br/>communication security products or services are<br/>included in the scope of investment offsetting.</li> </ul>  |
|   | <ul> <li>For investments between NT\$1 million and NT\$1 billion, companies can choose from either "5% of investment spending deducted from profit-seeking enterprise income tax (current FY)" or "3% of investment spending deducted from profit-seeking enterprise income tax, if the total spending is spread over three years" may be selected, but the total amount deducted may not exceed 30% of corporate income tax that year.</li> </ul> |
| Special   | Special foreign professionals who meet certain criteria are  |
| Foreign<br>Professionals                                  | eligible for a 50% deduction of total income tax for amounts exceeding NT\$3 million.  |
| Industrial Park<br>Locations                              | • Companies that set up operations in export processing<br>zones, science industrial parks, or free trade ports are<br>eligible for exemptions on import duties, commodity<br>tax, and business tax for the import of machinery and<br>equipment, ingredients, fuel, materials, and semi-<br>finished products for their own use.  |
| Others  | • Companies that use undistributed earnings to engage in substantive investments may exclude the invested amount when calculating their profit-seeking enterprise income tax.  |





#### 1. Global Innovation Partnership Initiatives Program

Foreign companies that complement Taiwan's industries are encouraged to invest in Taiwan's R&D innovation and work with Taiwanese companies to jointly develop forward-looking technologies, key technologies, or integrated technologies beyond our current capacities. Such businesses could exert a key influence on Taiwanese industry by: (a) inspiring R&D work on industrial technologies as well as the establishment and development of supply chains; (b) improving R&D efficiency; (c) accelerating the timetable from R&D to production; and (d) contributing actively to the expansion of international markets. Foreign companies successful in endeavors relating to this program will be eligible, upon approval from the MOEA, for subsidies of up to 50% of total R&D expenditures.

#### 2. Pioneers for Innovation Leadership on Technology Program

The program aims to transform Taiwan into a high-tech R&D center and encourage leading international manufacturers to establish cutting-edge R&D bases in Taiwan, empowering their work in forward-looking technologies in Taiwan and connecting with Taiwan's supply chain, thereby creating a division of labor in the areas of research, co-creation, and development, with an eye to strengthening the technological competitiveness of Taiwan's leading industries and accelerating the formation of clusters in emerging industries. Program funding of up to 50% of total expenditures may be granted for any project that has been approved by the Ministry of Economic Affairs.

#### 3. Industrial Upgrading Innovation Platform Guidance Program

To guide industries in Taiwan to develop high-value products and encourage corporations to enter the high-end market to increase the industry's added value, the Industrial Development Bureau, Ministry of Economic Affairs, and the Ministry of Science and Technology are promoting the "Taiwan Industry Innovation Platform Program". The program provides companies that have R&D teams in Taiwan with funding of up to 40%-50% of the project budget for themed R&D projects and funding of up to 40% for projects independently conducted by corporations.

#### 4. Promotion Plan for Smart Commercial Services in the Asian Silicon Valley Project

The Ministry of Economic Affairs (MOEA) provides subsidies to assist with the innovation and development of Taiwan's commercial service industry, strengthening its growth momentum, and enhancing its competitiveness. The subsidies encourage companies to develop new commercial service models and expand their scope of services by using smart technology and mobile technology applications. The subsidies also prompt development of innovative services that are smarter and more convenient. Subsidies were provided to the retail industry and integrated service industry in 2020.

Subsidies of up to 50% of the total budget of each proposal (including subsidies and self-raised funds) are available to qualified applicants. Applicants may only file applications for projects within their own systems, and subsidies are capped at NT\$3 million. For "large companies supporting small companies" or "cross-industry alliances," the maximum subsidy is limited to NT\$5 million. Furthermore, self-raised funds may not be exceed paid-in capital by the company.

## Leading Taiwanese Companies

### 1 Application Service Layer |

Moreover, software and information service providers are taking advantage of their IT capabilities to develop cutting-edge technologies and smart applications and provide customers with system integration services. For example, Acer Being Communication Inc., a member of the Acer Group, specializes in business IoT solutions that can be applied to agricultural monitoring stations, water quality monitoring stations, water meter systems, street light applications, residences and apartment complexes, and factories. Glory Technology Service Inc., the first international system integration company in Taiwan with dedicated government support, has provided assistance in domestic smart city construction, such as setting up the communication system in the expansion of the HSR Nangang Station and Taipower's smart grid projects. Other achievements include successfully implemented projects in foreign smart transportation systems such as Hong Kong's smart grid project (AMI PoC), Thailand's Red Line Mass Transit System Project, track communication equipment update and system optimization for the Metro Rail Transit Line 3 of Manila (the Philippines), and the Noida Metro and Kolkata Metro projects in India.



### 2 | Platform Layer |

The IoT involves the integration of software and hardware of crossdisciplinary, complex systems. Therefore, major telecom operators (such as Chunghwa Telecom and Taiwan Mobile) in Taiwan have been actively playing the role of system integrators in recent years, engaging in cross-disciplinary vertical integration and cross-industry alliances (such as Chunghwa Telecom's IoT Smart Platform and Taiwan Mobile's IoT Ecosystem), while searching for domestic and overseas partners to establish a common platform. These system integrators have developed and tested innovative application services and products that are able to provide greater convenience.

For instance, Chunghwa Telecom developed multiple COVID-Tech application services based on the workplace health management system and health cloud platform it developed during the pandemic. It also completed the development of the COVID-19 Blood Oxygen Monitoring Cloud Platform with National Yang Ming Chiao Tung University, which has been implemented in special wards of New Taipei City Hospital and National Yang-Ming University Hospital.

In addition to major telecom operators, system equipment manufacturers (such as Advantech and MiTAC) are also active in the role of system integrator. For example, Advantech has established an IoT and smart city experience center and has built a smart factory in the Startup Terrace. In 2021, Advantech also commenced a collaboration project with FETC International to jointly create the next-generation ETC management platform, which was successfully exported to Thailand. MiTAC Information Technology Corp. has established the MiOGC platform, which complies with Open Geospatial Consortium (OGC) standards, to develop a smart city IoT system.

### 3 | Sensor Layer |

Taiwan has outstanding IT manufacturing technologies and a comprehensive industry chain infrastructure. Companies are also known for their versatile and flexible production. Taiwan has therefore demonstrated outstanding performance in sensor level hardware in the IoT industry supply chain. As an example, MediaTek, a major IC design company in Taiwan, powers more than 1.5 billion consumer electronic products each year. It is committed to improving chip technology, increasing the degree of integration, connectivity, and power efficiency of electronic products to lay the foundations of the IoT era.

In addition, Wistron NeWeb Corp. (WNC), a major wireless module company, has a wide product line that consists mainly of 5G, IoT, broadband, automotive electronics, antennas, and radio-frequency IC modules. It has the broadest product line among Taiwan's network communication manufacturers and has several very competitive products. For instance, it has become the Alpha site for enterprise-grade wireless communication products for main chip suppliers across the world.

In 2021, Apple, Google, and Amazon established an alliance with ZigBee to promote the CHIP (Project Connected Home over IP) Project with the aim of creating unified specifications for the global IoT industry and overcoming the lack of unified standards and interoperability in the current IoT industry. MediaTek and network communication equipment manufacturers such as WNC, D-Link, Sercomm, Askey, and GemTek have become part of the alliance which will accelerate the development of the IoT industry in Taiwan and create more business opportunities. In addition, Andes Technology, a central processing unit (CPU) semiconductor intellectual property (IP) company with investment from Taiwan's top IC design company Mediatek, jointly launched an IP portfolio solution in January 2022 with Imagination, Apple's main graphic processing unit (GPU) IP supplier, to actively pursue metaverse business opportunities.

# Examples of Successes Achieved by Foreign Companies

### 1 | Digital Transformation and Cooperation |

Starting from 2016. Microsoft has set up the IoT Innovation Center (2016), Artificial Intelligence R&D Center (2018), Microsoft Startup Accelerator (2019), and IoT Center of Excellence (2020). The Microsoft Startup Accelerator has cultivated 32 startup teams for cloud applications in the 3 years after its establishment in the Startup Terrace. 7 startups have become global partners of Microsoft. For instance, Microsoft has helped NADI System Corp. develop a 3D virtual smart factory solution for visual IoT management which has been wellreceived by major companies. Giant, a major bicycle manufacturer, has adopted the technology at its production plants. The second stage of an initiative aimed at upgrading IoT services Microsoft moved to Southern Taiwan in 2022 and commenced a partnership with the Southern Taiwan Industry Promotion Center of National Sun Yat-sen University in the launch of the Asia Cloud Platform Microsoft Startup Accelerator Program. The Program focuses on creating a comprehensive cloud solution ecosystem in Southern Taiwan with the aim of powering entrepreneurship in Southern Taiwan and incubating and assisting more local startups in Taiwan.



### 2 | Development of Smart Applications |

Taiwan's outstanding medical professionals, world-class semiconductor and ICT technologies, as well as an expansive National Health Insurance database makes it an excellent country to develop digital healthcare. For this reason, Merck, a major pharmaceuticals company in Germany, entered into a collaborative project with Instant NanoBiosensors Co., Ltd., a biomedical startup company in Taiwan, in 2020. They plan to market the Light Sensing Biomarker Analyzer, developed by Instant NanoBiosensors, across the world and help Merck continue its development in digital medical services. In addition, the American company Synergies has helped the SME Wantlight Gas introduce the JarviX data analytics system and create an Al war room in response to the digital transformation trend of the post-pandemic era in 2021. It significantly reduced transportation costs by 25% and actively predicts customer demand to increase customer satisfaction rate.

### 3 | Talent Development |

Taiwan has become an important site for global technology development for many foreign companies due to its comprehensive vertical integration of software and hardware as well as a diverse range of top talent. For instance, Google activated the Digital Talent Exploration Plan in 2020 to provide free digital training services, improve the quality and quantity of digital talents in Taiwan, and accelerate digital transformation in Taiwan. In January 2022, AWS launched Skills Guild to provide companies with customized cloud skill improvement plans and help them address the challenge of talent shortages in cloud technologies. AWS also worked with the Cloud Innovation School of Feng Chia University to incorporate education resources into the curriculum and help industries in Central Taiwan cultivate talent in cloud technologies.





Department of Investment Services, Ministry of Economic Affairs Add : 8F, No.71, Guanqian Rd., Taipei City, Taiwan Tel : +886-2-2389-2111

All rights reserved, reprints only with approval.





#### Department of Investment Services, Ministry of Economic Affairs

Add : 8F, No.71, Guanqian Rd., Taipei City, Taiwan Tel : +886-2-2389-2111 Fax : +886-2-2382-0497 Website : https://investtaiwan.nat.gov.tw E-mail : dois@moea.gov.tw

#### InvesTaiwan

Add : 8F., No.1, Xiangyang Rd., Zhongzheng Dist., Taipei City, Taiwan Tel : +886-2-2311-2031 Fax : +886-2-2311-1949 Website : https://investtaiwan.nat.gov.tw E-mail : service@invest.org.tw

