2019 Taiwan Startup Ecosystem Survey

Summary of key findings
Foreword

The 2019 Taiwan Startup Ecosystem Survey was conducted jointly by PwC Taiwan and the Taiwan Institute of Economic Research (TIER). It builds on our 2018 study of the evolving start-up sector and its characteristics.

This latest survey looks closer at some other important start-up topics, such as fostering entrepreneurship and entrepreneurial skills, serial entrepreneurship, international market expansion and policy support for the sector.

International expansion in particular is a major challenge for any start-up, and the 2019 survey explores how Taiwanese start-ups deal with the various challenges and opportunities posed by internationalisation.

Another key issue is the availability of support resources for start-ups, and our study also takes an in-depth survey of local incubation organisations and assesses how they support the development of start-ups in Taiwan.

This slide deck provides a summary of the original Chinese survey report. We hope you find it useful and insightful.
The 2019 Taiwan start-up Ecosystem Survey is based on an online survey and in-depth interviews, which were conducted between 4 March and 24 June 2019.

- **Online survey** conducted between 4 March and 30 April 2019.
  
The survey population was sourced from start-ups that had received support from various institutions, including the National Innovation and Entrepreneurship Association, the Taiwan National Association of Small and Medium Enterprises, Taiwan Start-Up Hub, the Chinese Business Incubation Association, as well as other start-ups contacted by PwC Taiwan.

  A total of 412 valid completed surveys were collected, of which 271 respondents had already formally registered as companies in Taiwan or other territories.

- **In-depth interviews** conducted between 17 May and 24 June 2019.
  
  A total of 24 interviews were also conducted by PwC Taiwan with various start-up entities, start-up incubators and accelerators, and senior partners of PwC Taiwan.
Key survey findings

31% of respondents are serial entrepreneurs.

3 top challenges in starting a business include funding, market expansion and talent.

48% target China as their main overseas market, followed by Southeast Asia and North America.

78% view international market expansion as their major goal in the next three years.

47% are seed financed by personal funds, with fundraising the top challenge when getting started.

68% of start-ups participate in incubators or accelerators during their early stage of development.
Entrepreneurs profile
Entrepreneurs profile

Gender

33% 67%

Age: 31-45

18-25: 5%  26-30: 13%  31-35: 19%  36-40: 24%  41-45: 18%  46-50: 10%  Above 51: 11%

Academic and work experience

92% have a college degree or above  10.9 years of average prior work experience  70% first-time entrepreneurs

Key reasons for starting a new business

1. Identified an industry trend or market demand
2. To accomplish a life goal
3. To develop superior products or services

Opportunistic type of entrepreneurs
Q. Which of the following is a major path for developing your abilities or expertise to operate your company?

- 50% Professional/industry exp. from previous education/work
- 31% Personal research/hobby outside of work
- 8% Government guidance and resources
- 7% Family background
- 4% Entrepreneur education at university

How do start-ups evaluate the major capabilities of core team members?

- **Insight into opportunities**: Insight into future opportunities 3.96, Grasp of market demand 3.83
- **Innovation & design**: Uniqueness of innovative thought 3.89, Ability to commercialize concepts 3.87
- **Operation & management**: Ability to implement ideas 3.96, Management ability in corporate operations 3.58
- **Know-how & tech**: Understanding of patent tech. 3.40, Grasp of relevant field 3.89
- **Market channels**: Grasp of sales and customer service 3.43, Ability to get foreign clients 2.92

Rated 1-5, 1 being low, 5 being high
Start-ups profile: Sector segmentation

- IT & Communications: 16%
- Manufacturing: 9%
- Retailing: 8%
- Professional science and technical services: 9%
- Art, entertainment and leisure services: 8%
- Education services: 8%
- Catering & hospitality services: 8%
Q. Please pick 3 key words which are most relevant to your current start-up:

We made keywords for new industry trends (such as “Smart Manufacturing”) and technologies (such as “AI”) and the 5+2 Industrial Transformation Plan promoted by the Taiwan government, and then asked the surveyed start-ups to select three of the keywords most relevant to them. The results allow us to understand the correlation between the start-ups' choices and these trends or technologies.
The main reasons for start-ups being in-the-red shows that although entrepreneurs do have strengths in R&D and technology, they still have much room for improvement in necessary operational concepts, financial management, and understanding of the market.
Funding has always been a major challenge for Taiwanese start-ups. This is especially true for entrepreneurs who have a background in developing products or technologies. Obtaining funding to support operations during the development stage before products or technologies are verified for the market is one of the most important keys to growth and scaling up.
3
International development
Internationalisation: Goals and target markets

Q. Is internationalisation a main business goal for your company in the next three years?

- Yes: 78%
- No: 9%
- Not applicable: 13%

Target overseas markets:

- SE Asia and India: 46% (2019), 30% (2018)
Internationalisation: Current stage evaluation and obstacles

### Readiness at each stage for start-ups advancing into international markets

<table>
<thead>
<tr>
<th>Stage</th>
<th>Have not begun</th>
<th>Just begun</th>
<th>In progress/adjusting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluating the timing to foreign market</td>
<td>34%</td>
<td>44%</td>
<td>22%</td>
</tr>
<tr>
<td>Searching for partners for Int'l expansion</td>
<td>39%</td>
<td>39%</td>
<td>21%</td>
</tr>
<tr>
<td>Hiring/fostering Int'l talent</td>
<td>60%</td>
<td>25%</td>
<td>15%</td>
</tr>
<tr>
<td>Approached foreign market through expo or pitching to the international investor</td>
<td>54%</td>
<td>29%</td>
<td>17%</td>
</tr>
<tr>
<td>Adjusted products/services for foreign market</td>
<td>31%</td>
<td>42%</td>
<td>28%</td>
</tr>
<tr>
<td>Has set model and strategy for entering market</td>
<td>33%</td>
<td>43%</td>
<td>25%</td>
</tr>
<tr>
<td>Evaluating target foreign market</td>
<td>26%</td>
<td>44%</td>
<td>30%</td>
</tr>
</tbody>
</table>

### The major obstacles for developing overseas markets

- Regulatory or policy environment makes dev. unfavorable: 4%
- Language issues: 10%
- Current products/services do not meet overseas demand: 10%
- Lack of local resources: 39%
- Lack of internal resources: 37%
Q. Which of the following areas do you think the government should help start-ups to develop overseas markets?

- **17%**
  - Marketing resources in overseas markets
  - Incentives or mechanism to attract international investors
  - Strengthen the collaboration between government and international investors

- **14%**
  - Collaboration with international institutions for start-ups' soft landing

- **13%**

Taiwanese start-ups are still in the early initial stages of internationalisation.

The two biggest obstacles to internationalisation are, in order, “lack of local resources in overseas markets” and “lack of internal resources.” These are reasons for Taiwanese start-ups hoping for government policies that can bolster overseas marketing resources, attract international investors, strengthen cooperation between governmental and international investors, and help start-ups complete soft landing through the assistance of international institutions.

This shows that, in the future, international-level accelerators, chambers and associations, and other professional institutions will be important for the international development of Taiwanese start-ups, or it may be possible to approach the issue from the gaps in resource demand.
Government and policy support
Government and policy support

To encourage the development of Taiwan’s start-up sector, the government provides assistance in the areas of funding, regulation, and talent.

**Funding:** The National Development Fund has allocated NT$2 billion in the Angel Investment Project, NT$100 billion in the Industrial Innovation and Transformation Fund, and Taiwania Capital has invested NT$10 billion in fostering new start-ups.

**Regulation:** The introduction of the Financial Technology Development and Innovative Experimentation Act, Unmanned Vehicles Technology Innovative Experimentation Act, and amendments to the Company Act and Statute for Industrial Innovation, have made it easier for start-ups to obtain funding, and also provide various tax incentives to encourage investment in start-ups and angel investment funds.

**Talent:** New laws have been implemented to attract more foreign talent to Taiwan, including the Act for the Recruitment and Employment of Foreign Professionals and the New Economic Immigration Act, as well as other measures such as the introduction of entrepreneur visas.

**Hub:** The Taiwan Tech Arena and the Taiwan Start-up Terrace have been established to promote the internationalisation of start-ups in Taiwan and connections with international-level accelerators which can foster foreign and domestic start-up groups. The aim is to help start-ups enter the international market and obtain international funding.
In the past two years, the Taiwan government has released annual surveys on start-ups’ views of policies aimed at helping their development. These found that the most sensitive topic was “sufficient laws and regulations,” showing that current policy only partly meets their needs and expectations in terms of resources.
Incubation organisations survey
Incubation survey introduction

Incubation organisations, such as incubators, have been operating in Taiwan for some 20 years, and they provide guidance and direction for the development of start-ups.

This year’s Taiwan Start-up Ecosystem Survey includes a special survey of incubation organisations in order to provide a different perspective of the start-up ecosystem.

- **Survey population:** Drawn from TIER data on over 1,000 start-up incubation organisations in Taiwan, including incubators, accelerators, campus-based incubators, coworking spaces, and maker spaces.
- **Survey period:** 5 March to 12 April 2019
- **Valid responses:** 210 surveys completed
Most of the incubation organisations surveyed were based in northern Taiwan, followed by southern Taiwan, which is consistent with the geographic spread of economic resources and activity in Taiwan.

There is a strong connection between the services provided by incubators and major local industries, which also reflects the unique characteristics of each area.
Most incubation organisations provide diverse entrepreneurial service models

Providing space services is the starting point for development. As the entrepreneurial client has more needs, the incubation organisation can expand the capacity of its services.

68% of start-ups have participated in incubators or accelerators during their early development stage.
60% of incubation organisations do not limit target particular clientele, with start-ups just one of source of clients.
Funding focus areas in early-stage start-ups

Most start-up groups guided or invested in by incubation organisations are in the seed round (51%), while C round was rather low (8%).

However, start-up investment institutions prefer investing in rather mature start-ups (in the A round, B round, or pre-IPO).
Over 70% of incubation organisations provide office space rentals, mentor networking, and industry get-togethers and social events. Such services fulfil the basic needs of start-ups, and they also serve as a starting point of development for incubation organisations. Start-ups require different resources at different stages in their development, so producing synergies in guidance and resources through collaboration and integration with incubatory organisations is a promising goal for the development of such organisations.
Insights and observations
VC firms focus on start-ups in expansion and mezzanine stages

**Total venture capital investment in Taiwan by development stage, 2007-2017**

For start-ups, funding plays a crucial role in scaling up and expanding overseas, so the investment environment has a significant influence on the development of local start-ups.

According to the Taiwan Venture Capital 2018 Yearbook, the majority of venture capital investments are in mature or pre-IPO start-ups, which suggests an unfavourable climate early-stage (seed or angel stage) start-ups.

Source: Taiwan Venture Capital 2018 Yearbook
Early stage start-ups face difficulty in raising funds

Taiwan start-ups experience a shortage of funding in the early stage while venture capital firms focus on investing in start-ups at the expansion and mezzanine stages.

Q. Which fundraising stage are you currently in?
The market in the Internet era has little room for start-ups (T, technology) with innovative technologies to grow from C-side. In other words, most of the topics or business models have been explored by other start-ups. Furthermore, with medium and large corporations taking hold of marketing and channel resources of the consumer market, it will be very risky for start-up firms to insist on creating a blue ocean market through a To-C model.

We can foresee the trend that future start-ups will likely be operating on the mainstream T2B2C model. Tech start-ups should think about how to apply their strength to provide B-side customers better solutions. In the high-tech era, with IoT and smartphones being widespread, the T2B2C model has become popular and has developed in depth across upstream and downstream industries, which has reshaped user experiences of services and products and further created ecosystems combining various platform systems, igniting possibilities in many aspects for the business environment.

What does the T2B2C trend mean to Taiwan start-ups and firms? Taiwan has fostered a complete supply chain and premium workforce with its focus on ICT industry development over the years. Many international corporations have chosen to set up their R&D or procurement centers in Taiwan, mostly eyeing Taiwan’s strong supply chain and engineering talent. This is certainly Taiwan’s biggest advantage.

As part of the local industries’ urgent efforts to upgrade and transform, medium and large corporations can invest in or acquire start-up firms as a way of external innovation management. This approach will allow them to save the costs of having to employ in-house R&D engineers or work with start-up firms to jointly develop product technologies and commercial applications to grab preemptive market opportunities.

Taiwan start-up firms need to leverage their existing strength and technologies to develop To-B solutions based on iABCD technologies. They can first develop products in Taiwan, including all steps of the processes from idea, design, product research, testing and small-scale pilot run. Then, the products can be launched into other regional markets or the global market. Furthermore, with medium and large corporations encountering an innovation bottleneck for To-B or To-C model, start-up firms boasting their creative power stand a good chance of discovering additional opportunities.

**Strengths**
- Strong iABCD tech. and completed supply chains based on a competitive ICT industry developed for more than four decades
- High-quality R&D talent pool

**Opportunities**
- Develop To-B solutions based on emerging technology
- Large corporations are facing an urgent digital transformation and seeking for external innovation

**T2B2C**
- **start-ups (T)** collaborate with large enterprises (B) to develop product/service to expand To-C market