



TECH STARTUP ECOSYSTEM IN CAMBODIA 2022

Challenges, Opportunities, and Ways Forward



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EXECUTIVE SUMMARY

The goal of this research is to contribute to the improvement and the achievement of a robust and vibrant tech startup ecosystem in Cambodia.

Through extensive literature review, there is a significant growth of startups, in particular, tech startups in the last five years even though the startup ecosystem is still in a nascent stage. There are several beneficial programs and initiatives supporting startups and their ecosystem in Cambodia, ranging from developing and running incubator/accelerator programs and startup-related events, establishing key institutions in producing and training talents, and initiating public and private funding in order to support startups as well as small and medium enterprises (SMEs). In preparation for the adoption of the digital economy and industrial revolution 4.0 in Cambodia, the Royal Government of Cambodia (RGC) has passed several laws, policies, and strategies with the purpose of supporting and empowering startups and SMEs. Despite the progress, more specific acts and special regulatory frameworks governing startups are still needed in order to help startups flourish in Cambodia.

There is a small number of previous research studies on startups and their ecosystem in Cambodia which is considered to be a foundation in order to provide a mapping of the startup or entrepreneurial ecosystem in Cambodia. Most of those studies found some challenges faced by startups or entrepreneurs, and one research showed some challenges in the development of the startup ecosystem in Cambodia. However, there is a limited number of holistic research which aims to gather and aggregate data and information from all stakeholders in Cambodia's tech startup ecosystem with the purpose of identifying the challenges, opportunities, and ways forward. To fill the gap of previous research, this research on **"The Tech Startup Ecosystem in Cambodia: Challenges, Opportunities, and Ways Forward"** is essential. The objectives of this research are: 1) to identify the key challenges faced by tech startups in operating and accessing supports and services provided by entrepreneurial support organizations (ESOs) in the tech startup ecosystem; 2) to identify the challenges with regard to providing support to tech startups by ESOs in the tech startup ecosystem, and; 3) to identify the opportunities perceived by each ESO on how to cooperate and collaborate interactively and effectively in the tech startup ecosystem.

A combination of both quantitative and qualitative research approaches was employed in this research. Using a mixed method allows researchers to triangulate information and complement the explanation of the phenomenon. Due to the widespread of the COVID-19 pandemic during the data collection process, this research received responses in the form of an online self-administered survey from 122 target respondents, and online in-depth interviews (IDIs) were conducted with 19 target participants. Of the 122 respondents in the online survey, there were 65 startups, 4 investors, 3 corporates, 6 associations, 11 incubators/accelerators, 8 coworking spaces, 8 service providers, 4 academic institutions, 3 government institutions, and 10 development partners. Among the 19 IDIs, there were 8 tech startups, 3 government institutions, 2 development partners, and the remaining participants consisted of one from each aforementioned type of actors. Attempts were made to conduct an IDI with corporates working with or supporting tech startups for the purpose of this research. However, no corporates volunteered to participate in any IDI for this research.

This research found that a vast majority of tech startups faced three main challenges in their business operations: 1) the lack of funds; 2) the lack of team members; and 3) the lack of support. This research also found that tech startups received the most support from incubators/accelerators and received the least support from service providers. Three major forms of support that the tech startups have been receiving from different ESOs were mentoring, network building, and incubator/accelerator

programs. However, receiving and accessing these forms of support also comes with a few challenges. Tech startups claimed that they faced six common challenges when receiving and accessing these forms of supports from ESOs and these challenges can be classified as internal factors from tech startups themselves and external factors from ESOs. Limited funding, lack of technical skills, and insufficient time allocation were categorized as challenges in internal factors whereas the external factors include inadequate mentoring quality, lack of learning resources, and laboratory facilities.

The findings of this research showed that 77.2% of ESOs provided several types of support to tech startups. Out of those forms of support, network building, mentoring, and connections to investment were found to be the most frequent types of support provided to tech startups. Despite the provisions of supports, ESOs also encountered several challenges when offering supports to tech startups, and these challenges are varied from one ESOs to another depending on their respective roles and activities in the startup ecosystem. The common challenges reported by these ESOs can be categorized as internal factors stemming from the ESOs themselves and external factors stemming from tech startups. The internal factors are comprised of three common challenges that include insufficient funding, inadequate quality and quantity of mentors, and the lack of resources/facilities. The external factors include the lack of quality startups, insufficient time and commitment, and lackluster fulfillment of reporting requirements.

As perceived by tech startups and ESOs, the opportunities to collaborate towards a final goal of Cambodia's startup ecosystem growth differ in accordance with the nature and roles of each respective ESO. Nevertheless, the findings of this research revealed common activities perceived as opportunities by ESOs and these activities can be classified into six different categories include capacity building, startup formalization, talents and human resources, investment growth, business support, and events and research.

Key findings found in the research lead to the following recommendations:

- Tech startups should minimize the negative thoughts by identifying and replacing them with possible solutions.
- Tech startups should improve their time management by using the urgent and important matrix to prioritize their to-do lists.
- ESOs should co-organize investment pitch series regularly to allow tech startups to pitch to a large pool of investors.
- ESOs should co-produce TV series on investment pitches to increase opportunities for tech startups to receive investment.
- ESOs should select and invite high quality mentors to support tech startups.
- Tech startups should be ready for the time commitment to the whole process of incubator/accelerator programs or other programs.
- Tech startups should seek support and guidance in fulfilling the reporting requirements from other startups who are experienced in receiving investment funds from investors or financial support from other ESOs.
- ESOs should collaborate with service providers to assist tech startups in building their capacity in reporting document preparation, especially with regard to financial statements.
- ESOs should collaborate with service providers to simplify the process and develop digital tools for reports and document submission.
- ESOs should identify new actors or players in the ecosystem and involve them in any relevant events or programs to support tech startups and the ecosystem as a whole.

- ESOs should organize knowledge-sharing or conferences on a regular basis to rigorously stay updated with the activities, progresses, and achievements of each actor in the ecosystem in order to build collective knowledge and explore better ways of achieving a healthy ecosystem in Cambodia.

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LIST OF ABBREVIATIONS

AgriTech	:	Agriculture Technology
CleanTech	:	Clean Technology
EdTech	:	Education Technology
ESOs	:	Entrepreneurial Support Organizations
FinTech	:	Financial Technology
GDP	:	Gross Domestic Products
HealthTech	:	Health Technology
IDIs	:	In-Depth Interviews
IDP	:	Industrial Development Policy
IoT	:	Internet of Things
MEF	:	Ministry of Economy and Finance
MVPs	:	Minimum Viable Products
NUM	:	National University of Management
RGC	:	Royal Government of Cambodia
R&D	:	Research and Development
SMEs	:	Small and Medium Enterprises
STI	:	Science, Technology & Innovation
TSC	:	Techo Startup Center
VC	:	Venture Capital

DEFINITIONS OF KEY TERMS

Concepts/Icons	Definitions
<p>Startup ecosystem stakeholders</p>	<p>Key actors in the tech startup ecosystem which include startups, investors, corporates, associations, incubators and accelerators, coworking spaces, service providers, corporates, academic institutions, government institutions, and supporters.</p>
	<p>An institution or process that creates and manages business using innovation as a core to develop a business model under uncertain and risky conditions but has huge potential for fast growth (RGC, 2020a). This research considers tech startups that bring technology products or services to market as target participants in the research. Kem, Sou, Ng, and Chan (2019) define six categories of the tech startup in Cambodia, including Financial Technology (FinTech), digital media & advertising, e-commerce & logistics, digital marketplaces, development services, and other disruptor models such as Health Technology (HealthTech), Education Technology (EdTech), Agriculture Technology (Agri-Tech), and transportation.</p>
	<p>High-net-worth people or private firms that provide capital to tech startups with the expectation of receiving financial returns or equity stake.</p>
	<p>A single entity or a large company that organizes or provides financial support in organizing tech startup events. In addition to this, Feld (2012) states that the two most powerful things large companies can do for the startup community are (1) provide a convening space and resources for local startups, and (2) create programs to encourage startups to build companies that enhance the large company's ecosystem.</p>
	<p>A group of entrepreneurs or startups organized for a joint purpose of encouraging and supporting entrepreneurs or startups to use innovative technology in business and often engage in formal and informal meetups in tech startup-related events.</p>
	<p>An organization, place, or program that provides mentorship to tech startups to nurture them in cultivating their ideas to understand better their customers, build MVPs, design their business plan, help them grow, and strengthen their investment credibility.</p>
	<p>A type of working place where the working environment and space are shared with other people. In this research, the coworking space provides a working place for tech startups.</p>

 <p>Service Provider</p>	<p>A company that provides legal services (such as registration), or accounting services (such as accounting and bookkeeping system), or technology services (such as software solution) to tech startups.</p>
 <p>Academic Institution</p>	<p>A university or institute that provides entrepreneurship and innovative technology courses/programs to students in order to build entrepreneurial spirit through active engagement in innovation, technology, and entrepreneurship-related activities.</p>
 <p>Government Institution</p>	<p>A government ministry or an institution under the guardianship of a ministry that supports startups or entrepreneurs to grow and prosper. The support can be through regulatory framework, financial support, technical support, or incubation and acceleration program.</p>
 <p>Development Partner</p>	<p>An entity that provides technical support and funding to startups or entrepreneurs. It also provides financial support in organizing events related to tech startups including accelerator and incubator programs.</p>



1.1. Background of Research

The term “Startup” has gained tremendous popularity over the last decade. A startup is an institution or process that creates and manages business using innovation as a core to develop a business model under uncertain and risky conditions but has huge potential for fast growth (RGC, 2020a). Similarly, a startup is defined as a human institution established to develop a new product or service under conditions of extreme uncertainty (Ries, 2011). This definition reflects the early stage of a company during the development of an innovative product or service, but has yet to produce a market-fit product or service that requires the process of validation and modification of products or services and business ideas. Another key characteristic of startups is scalability; all startups seek the right business model that is scalable without having the need to greatly increase its human or financial resources. Likewise, Blank (2020) defines one of the several characteristics of a startup as being a temporary company in search of a repeatable and scalable business model.

With the mutually agreed outcome of sustainable development, businesses, organizations, and individuals collaboratively interact as a system to support each other and grow together; that is the so-called “Startup Ecosystem” (Chillakuri, Vanka, & Mogili, 2020). Aleisa (2013) defines a startup ecosystem as a society of founders with initiative ideas equipped with skills, young dynamic companies with talents, incubators with mentors and capital, early adopters, and the media. These entities or individuals connect, interact, and help each other to strengthen the ecosystem and increase their value.

Startups have been rapidly propagating globally and into Cambodia, leading to a significant increase in the number of startups in Cambodia. Kem et al. (2019) stated that there are several factors which are responsible for the growth of startups in Cambodia, such as increasing awareness of basic digital needs, growth of market opportunities related to digital economy due to an increasing tech-savvy demographic, continued entrants from international technology companies that create market opportunities, and the evolution and transformation of a certain number of startups from various ideation and incubation programs towards becoming viable startups.

Startups leverage innovation and technology as a core mechanism in order to develop and bring new products, solutions, and services to the market. For instance, a startup can build a digital market platform equipped with technology that allows businesses and small and medium enterprises (SMEs) to offer goods and services more efficiently to consumers (Techo Startup Center [TSC], 2020). It is undeniable that innovation is essential to the growth of a digital economy, and startups are valuable change-makers and disruptors who give rise to innovative ideas across industries. Therefore, the RGC has developed and endorsed Cambodia Digital Economy and Society Policy Framework 2021-2035 that partly aims to establish a strong startup ecosystem to catalyze the digital economy in Cambodia.

1.2. Research Problem and Significance

A robust and vibrant startup ecosystem with fully supported functions is certainly required to nurture startups and help them overcome challenges toward success. However, a research carried out by Mekong Strategic Partners in 2018 and a research conducted by TSC in 2020 commonly found that the startup ecosystem in Cambodia is still in the nascent stage, and each sector is not fully interactive (Kem et al., 2019; Vong, Ty, & Chhoeun, 2020). The interaction between each stakeholder in the startup ecosystem is crucial in helping startups because it can create a conducive environment in which startups can flourish, nurture, and effectively access funding, mentorship, useful resources, entrepreneurship, and technical assistance (TSC, 2020).



In order to generate more positive progress in the Cambodian tech startup ecosystem pertaining to the current situation and trend of the startup ecosystem, it is necessary to identify the stakeholders, their roles, activities, and challenges. In other words, there is a need for the RGC to acquire up-to-date data and information, including the roles, activities, and challenges within the tech startup ecosystem in order to develop an effective policy that is more startup-friendly. Esty and Rushing (2007) highlighted the obstruction to effective policy-making due to the lack of data; thus, should this problem be defined and addressed, the process of policy-making can become more direct, nimble, tailored, and targeted. Kem et al. (2019) recommended the RGC to pilot test policies and iterate where necessary, as effective policies demand revisions based on real-time data and observation of market dynamics.

Ek (2017) conducted a study on the mapping of the startup ecosystem in Cambodia that interviewed startup supporting organizations, universities, associations, companies, funding agencies, and government organizations. However, this study did not interview startups, and the number of interviews with each stakeholder was not disclosed. This led to lack of in-depth and insightful information from startups. Later on, Kem et al. (2019) conducted a study on the tech startup ecosystem in Cambodia that interviewed and surveyed over 120 several stakeholders in the startup ecosystem through various data collection methods both in qualitative and quantitative approaches. However, the study did not mention the number of participants in each data collection method. In addition to this study, Khieng, Mason, and Lim (2019) conducted a study that interviewed startup founders, business and academic leaders involved in entrepreneurship centers, as well as invocation and entrepreneurship education in Phnom Penh. This study focused on the role of academic institutions in supporting startups and entrepreneurs, but did not include other stakeholders. A recent research report, conducted by Swisscontact and Impact Hub Phnom Penh on the entrepreneurial ecosystem in Phnom Penh, surveyed 312 entrepreneurs and 86 ESOs using the social network analysis tool to examine the connections between actors in the ecosystem and six dimensions of ecosystem health framework in order to assess the healthiness of entrepreneurial ecosystem in Cambodia (Swisscontact & Impact Hub Phnom Penh, 2021). This study found several challenges with regards to the ecosystem connections, and produced recommendations to improve the health of the entrepreneurial ecosystem. However, this study did not focus solely on tech startups, but all enterprises in general. The challenges identified in the study were all encompassing, thus, too general and disaggregated by entrepreneurs and ESOs.

It is acknowledged that the aforementioned studies are crucial in providing a broad overview of the tech startups or entrepreneurial ecosystem in Cambodia; however, they were not conducted in a holistic way. More specifically, these studies did not gather information from all types of stakeholder in Cambodia's tech startup ecosystem in order to identify the challenges, opportunities, and way forward. Therefore, this research aims to fill in this gap of knowledge and literature by providing empirical data and up-to-date information from all types of stakeholder in Cambodia's tech startup ecosystem.

In addition to filling the gap of the previous research regarding the tech startup ecosystem in Cambodia, this research will provide a better understanding of the challenges faced by stakeholders in the tech startup ecosystem and produce practical recommendations that can inform policies, strategies, and plans to improve the tech startup ecosystem in Cambodia. The results of this research will be used as a reference for other organizations and researchers who wish to do further research to constantly and rigorously improve Cambodia's startup ecosystem. Finally, the result of this research will also serve to contribute partially to the development and implementation of 'Startup Cambodia Digital Platform', which is a platform that serves to provide information-centric models by allowing reliable information and data to be openly shared and accessible.



1.3. Research Goal and Objectives

The goal of this research is to contribute to the improvement and achievement of a robust and vibrant tech startup ecosystem in Cambodia. In order to achieve this goal, this research has three main objectives as listed below:

- To identify key challenges faced by tech startups in operating their business and accessing supports and services provided by ESOs.
- To understand the challenges of ESOs in providing support to tech startups.
- To identify opportunities perceived by each stakeholder on how to collaborate interactively in the startup ecosystem.

Chapter

2

Startup Ecosystem Overview

Research
Report

2022





Chapter 2 aims to define the concept of “Startup”, and its roles in economic development. It also sketches an overview of startup ecosystem in Cambodia and provide a review of literature on challenges of startups and challenges pertaining to startup ecosystem development in Cambodia. In addition to this, this chapter also identifies and highlights key regulatory frameworks as well as key initiatives and programs relating to startups in Cambodia.

2.1. Startup and Its Role in Economic Development

A startup refers to a company or a project which is sought out and developed by an innovator (in accordance with / with the framework of) a scalable business model (Adepoju, Oluwasina, & Awah, 2020). It is a young company that develops a product or service, brings it to the market, and makes it irreplaceable for customers. Notably, a majority of startups is characterized by their focus on innovation in which they address the deficiencies of existing products and services, or create entirely new goods or services (Katila, Chen, & Piezunka, 2012).

Due to the increasing emergence of modernized and innovative companies with the ability to transform the global economy, the RGC recognizes the value and importance of startups with regards to economic growth as startups leverage innovation and technology as a core mechanism to develop and bring new products, solutions, and services to the market. It is crucial to understand the roles of startups in the growth of the economy. Rafique (2020) identified the main roles of startups with regards to the development of a country’s economy, especially developing countries such as Cambodia as follow:

Table 2.1: Roles of Startups in Economic Development

Employment Creation	Talent Pool Development	Standard of Living Improvement
Startups are reported to be a greater source of employment generation as the amount of new jobs they create is greater than corporates or big enterprises in the same sector, reducing and solving the issue of unemployment in the country.	With appropriate and strong leadership from the government and academic institutions, a big pool of talents – especially in technology and business – can be cultivated in order initiate startups. Moreover, with a conducive environment created by regulatory support (of the government), these startups are expected to grow and mature.	As startups leverage innovation and technology as a core mechanism in order to develop and bring new products, solutions, and services to the market, people will experience better services and products, and consequently, they will also experience a better standard of living, especially for the people who live in rural areas.
Gross Domestic Products (GDP) Growth	Research & Development (R&D) Promotion	Wealth Creation
When startups experience growth and maturity, the GDP of the country will rise due to increasing economic activities as well as the subsequent increase of capital flow and domestic household income.	Startups play a significant and major role in promoting R&D as they produce technology-based as well as knowledge-based products or services in search of more creative innovations and sustainable growth models. This can create an application-oriented culture or research, especially amongst university students and researchers, which can in turn inspire them to implement their ideas via initiating a startup.	At the initial stage, startups develop innovative ideas and product prototypes which attract the first injection of investment funds, mainly from individual investors. As the startups gain traction, they will also garner more investment funds from Venture Capital (VC) firms as well. This maturity process not only benefit startups, but it also benefits the entire economy due to the wealth being created from the distribution of investment funds and the flow of funds within the country’s economy.



2.2. Startup Ecosystem in Cambodia

Through extensive literature review, it is observed that the concept of startup was initially introduced in Cambodia in 2006 via an initiative of the National University of Management (NUM) called the 'National Business Plan Competition', which was NUM's first university-based entrepreneurship and pitching competition (Chan, 2018). Two years following this first initiative by NUM, the first 'Barcamp Cambodia' – an event where tech teams (technology-savvy teams) and companies gathered to share their latest innovations and technologies – was launched (Som, 2015). In 2011, SmallWorld launched its coworking space intending to support startups and provide facilities for hardware workshops (Nov, 2020). At the same time, the first international hackathon event in Cambodia – called "Startup Weekend" – was launched (Drennan, 2013), when there was an estimate of less than 50 active tech startups in Cambodia (Kem et al., 2019). Between 2014 and 2019, the number of startups in Cambodia had grown significantly along with the number of actors within the ecosystem, with more than 300 active tech startups, more than 23 coworking spaces, and more than 15 seed/early-stage incubators in 2018 (Kem et al., 2019).

A startup ecosystem consists of people, startups, and other related organizations that work as a system to support or scale startups. These relevant organizations, either physical or virtual entities, are categorized as follows: startups, government, funding and investment, association and development partners, big companies, universities, and research institutions, and supporting organizations (incubator, accelerator, and coworking space) (Feld, 2012). There are several studies which mapped out the startup and/or entrepreneur ecosystem in Cambodia, including a study by Young Entrepreneurs Association of Cambodia in 2017, a study by Mekong Strategic Partner and Raintree in 2018 and a study by Swisscontact and Impact Hub Phnom Penh in 2021. Figure 2.1 presents the key players in the tech startup ecosystem in Cambodia, but it is not exhaustive.

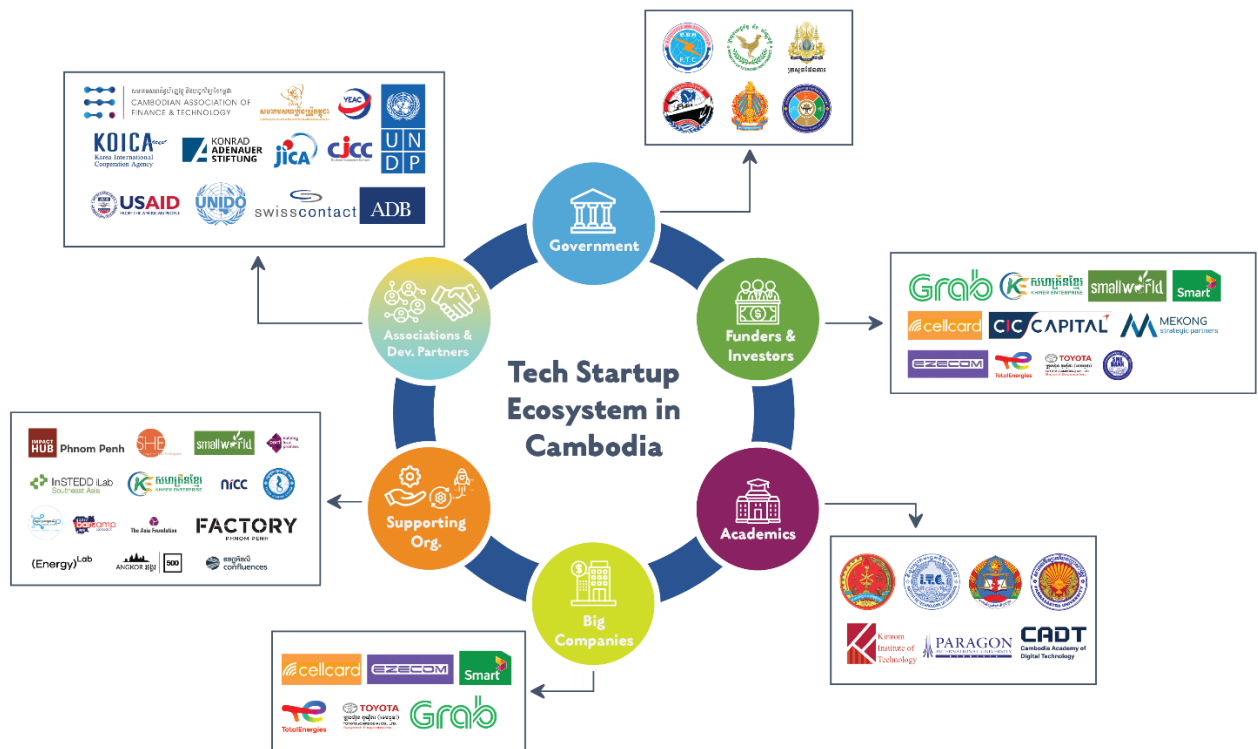







Figure 2.1: Key Players in the Tech Startup Ecosystem in Cambodia
Source: Authors (2022)



2.3. Challenges Faced by Startups in Cambodia

Kem et al. (2019) highlighted several factors which are responsible for the growth of startups in Cambodia. These factors include the increasing level of awareness among Cambodian people regarding basic digital needs, the expanding growth of market opportunities within the digital economy due to the high demographic of tech-savvy individuals, the continued influx of international technology companies in Cambodia, and the increasing number of viable startups emerging from various ideation and incubation programs. The table below highlights the challenges faced by startups in Cambodia, as excerpted from a wide range of previous studies and literature.

Table 2.2: The Challenges Faced by Startups in Cambodia

 Funding	<ul style="list-style-type: none"> - Limited fund for startups at the ideation and prototype stage (Swisscontact & Impact Hub Phnom Penh, 2021) - Limited funds for startups from angel investors and VC (Ek, 2017; Kem et al., 2019) - The inherent risks of investing in startups are high, acting as a deterrent for prospective investors (Ek, 2017) - Limited fund for startups from crowds or public contributors due to their incomprehension of crowdfunding (Ek, 2017)
 Networking	<ul style="list-style-type: none"> - Lack of mentorship from mentors with experience regarding startups (Ek, 2017; Kem et al., 2019) - Lack of connectivity with ESOs (Swisscontact & Impact Hub Phnom Penh, 2021) - Difficulty in finding the right financial sources and network (Ek, 2017)
 Supporting	<ul style="list-style-type: none"> - Lack of support for startups in their early-stage (Ek, 2017; Swisscontact & Impact Hub Phnom Penh, 2021) - Lack of human resources with the entrepreneurship skills and high commitment to support startups (Ek, 2017) - Lack of support services such as R&D and legal perspectives (Ek, 2017) - Lack of access to prototyping facilities (Srang, Taing, & Kuok, 2021)
 Talent	<ul style="list-style-type: none"> - Inadequate talents who have both entrepreneur and technical skills in managing startups (Ek, 2017; Srang et al., 2021; Swisscontact & Impact Hub Phnom Penh, 2021) - Limited talents in technical skills due to low tertiary enrollment in majors of science, technology, engineering, and math as well as information communications technology majors (Cambodia Academy of Digital Technology, 2021)
 Regulatory framework	<ul style="list-style-type: none"> - Complicated tax filling for startups (Ek, 2017; Kem et al., 2019) - Difficult and time-consuming business registration process for startups (Ek, 2017; Kem et al., 2019) - Difficulty in accessing accurate, up-to-date information about laws and regulations (Khieng et al., 2019) - Lack of specific policy and regulation for supporting the startups (Kem et al., 2019; Srang et al., 2021)






Note: The information in above table is taken from four different research that focused on the startup ecosystem in Cambodia. Among them, two studies solely focused on tech startups while the other two focused on all types of startups including tech startups.



2.4. Challenges for the Development of the Startup Ecosystem in Cambodia

Several challenges, ranging from cultural perception to policy and regulatory frameworks, hinders the startup ecosystem in Cambodia from achieving a healthy and vibrant growth. These challenges create a fragmented startup ecosystem within Cambodia (Srang et al., 2021). Categorizing by actors within the startup ecosystem, including universities, startup founders, startup terms, investors, and government institutions, the challenges are as follows:

Table 2.3: Challenges for the Development of the Startup Ecosystem in Cambodia

 <p>Academic institutions</p>	<ul style="list-style-type: none"> - Insufficient talents with technical skills, ranging from mid to senior level, in managing or executing projects (Kem et al., 2019) - Lack of infrastructures/laboratories in universities for testing and prototyping (Srang et al., 2021) - Limited teaching and resources to support students' projects in implementing experiential learning programs (Kem et al., 2019)
 <p>Entrepreneurs/startup founders</p>	<ul style="list-style-type: none"> - Lack of access to mentorship for young and inexperienced startup founders (Kem et al., 2019) - Lack of defined business model and commitment in executing business ideas (Ek, 2017) - Lack of gender diversity among startup founders since a majority of them are men (Kem et al., 2019; Swisscontact & Impact Hub Phnom Penh, 2021)
 <p>Startup teams</p>	<ul style="list-style-type: none"> - Lack of high-skilled talents to build a strong team, especially as a majority of all members in a startup are fresh graduates with limited knowledge of basic financial models (Ek, 2017; Kem et al., 2019) - Difficulty in accessing and receiving up-to-date policies and regulations relating to business (Kem et al., 2019)
 <p>Investors</p>	<ul style="list-style-type: none"> - Different requirements or criteria set by institutional investors or angel investors to invest in a startup (Kem et al., 2019) - Difficulty for startups in receiving investments due to the demand for a high standard of due diligence from VC firms (Kem et al., 2019)
 <p>Government institutions</p>	<ul style="list-style-type: none"> - Lack of specific policy and regulation for supporting startups (Kem et al., 2019; Srang et al., 2021) - Lack of clear process for implementing tax incentives, especially with regard to tech startups (Kem et al., 2019).



2.5. Startup Regulatory Framework in Cambodia

It is undeniable that an appropriate regulatory framework is considered one of the crucial factors to facilitate the development, growth, and success of startups and SMEs. The RGC has passed several laws, policies, and strategies with the aim of supporting and empowering startups and SMEs to raise their readiness for the adoption of a digital economy and the industrial revolution 4.0 in order for the startups and SMEs to be able to significantly contribute to Cambodia’s economic growth and to achieve the RCG’s strategic visions in 2030 and 2050. The key policies and regulatory frameworks are listed in chronological order in Figure 2.2.

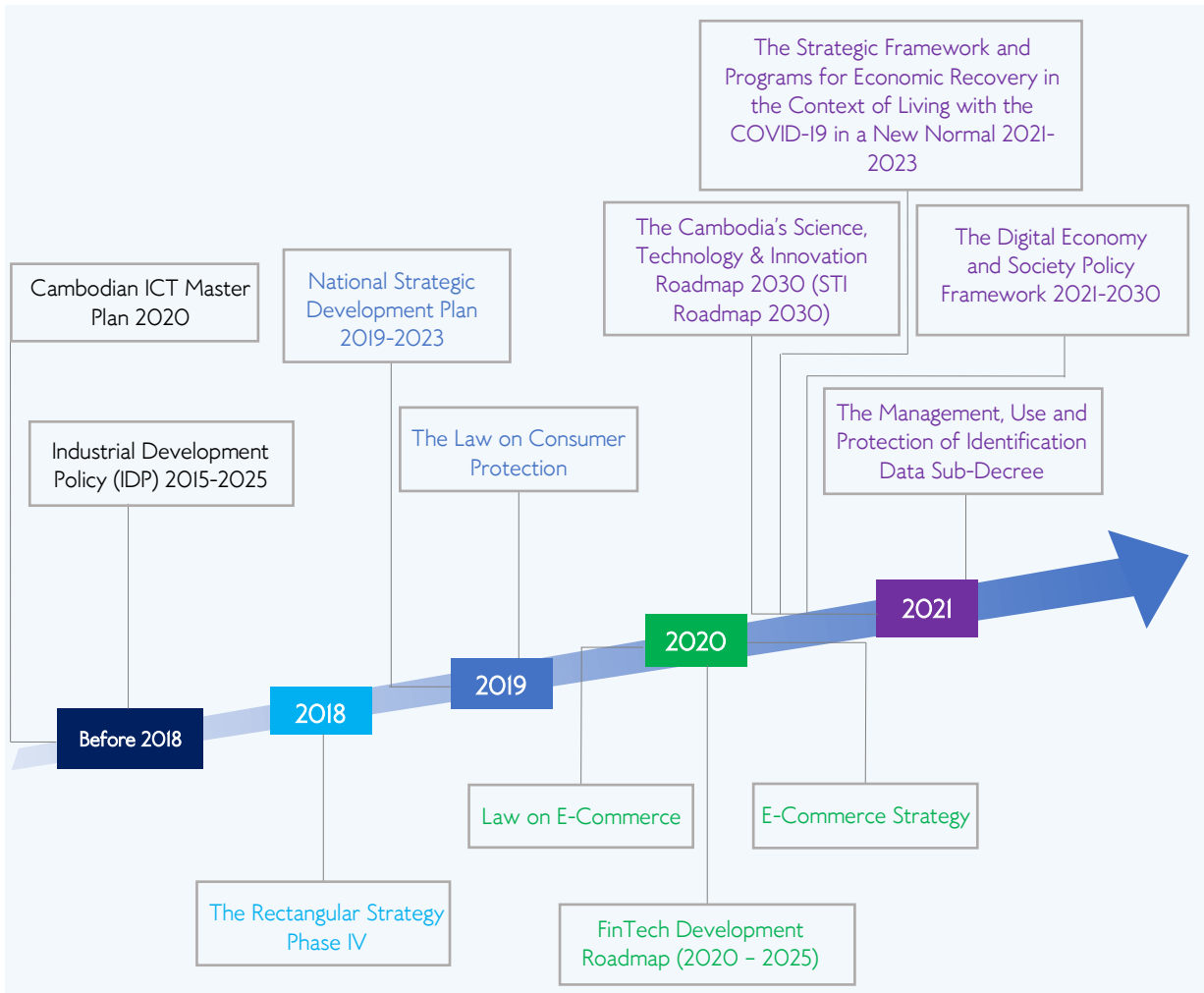


Figure 1.2: Key Startup-related Policies and Regulatory Frameworks in Cambodia
Source: Authors (2022)



2.6. Key Initiatives or Programs in the Startups Ecosystem

Although there are claims that there is a shortage of best practices supporting startups in Cambodia, the literature review revealed some good activities/programs with great non-exhaustive initiatives as shown in the table below:

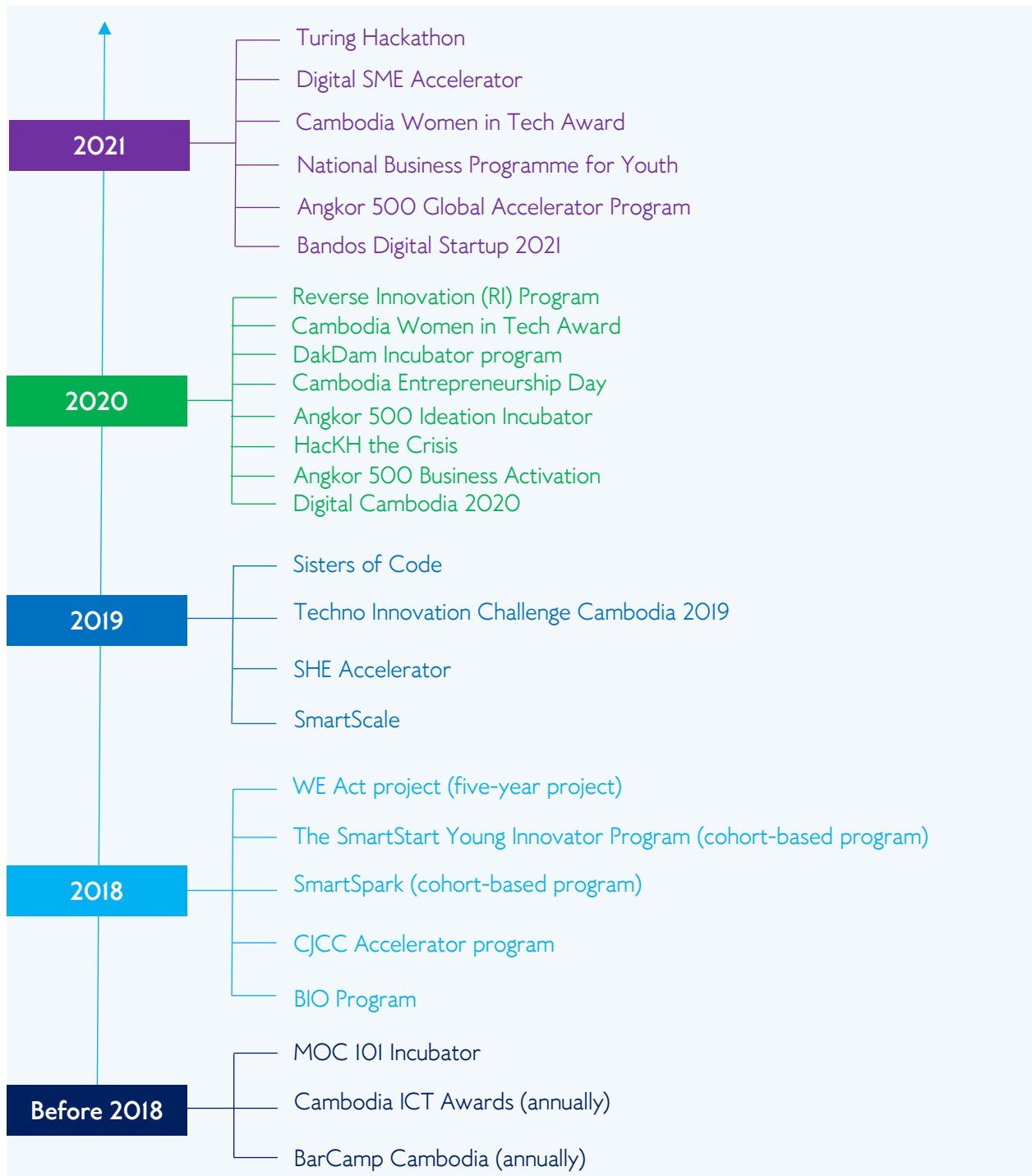


Figure 2.3: Key Initiatives or Programs to Support Startups in Cambodia

Source: Authors (2022)

Chapter

3

Research Methodology

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This chapter lays out the research approach employed within this research, the number of samples and sampling techniques, data collection tools and the data collection process, data management and analysis, ethical consideration, quality assurance, as well as the scope and limitations of this research.

3.1. Research Approach

To respond to the goal and objectives of this research, a combination of both quantitative and qualitative research approaches was employed. Using the mixed method, the researchers were able to utilize the strengths of both quantitative and qualitative methods in order to achieve a broader and better understanding of the research problems (Creswell, 2011). The purposes of using the mixed method are to triangulate information, elaborate the explanation of a phenomenon, identify specific respondents for case studies or success stories after they are surveyed, provide new insights, and expand the range of the study (Greene, Caracelli, & Graham, 1989).

Through the quantitative method, a survey was used to identify the number of tech startups and actors within Cambodia's startup ecosystem. The survey is also used to determine various sectors in which tech startups and other ecosystem actors were concentrating and working in, and external stakeholders whom tech startups and other ecosystem actors were connecting with at the time. Challenges to tech startups in terms of accessing support and challenges to actors within the ecosystem in terms of providing support to tech startups were detected. Through the qualitative method, IDI was employed as a means of data collection in order to explore and comprehend the challenges faced by each actor in the ecosystem and their initiatives or programs or successful operations which have contributed to improving the tech startup ecosystem.

3.2. Sample Size and Sampling Methods

In quantitative studies, probability sampling is typically employed in order to ensure that individual members (target respondents) of the population have an equal likelihood of being chosen as a sample. However, this research faced a limitation when it came to considering this sampling method as there was a lack of access to a population list of tech startups and actors within the ecosystem in Cambodia, which in turn impeded the creation of a target respondent's list frame for random sampling. On the other hand, non-probability sampling is most often employed in cases in which the target respondents are chosen based on availability and convenience (Babbie, 1990). This research utilized two forms of non-probability sampling: purposive sampling and snowball sampling. The target respondents of this research were chosen through purposive sampling, whereby they were selected for a specific purpose based on the researchers' judgement (Cohen, Manion, & Morrison, 2000). In this sense, the researchers handpicked the respondents for the online survey based on the definitions of their respective roles in the ecosystem. In addition to purposive sampling, the method of snowball sampling was also employed in order to reach out to more respondents. Naderifar, Goli, and Ghaljaie (2017) stated that snowball sampling is typically employed when it is difficult to access target respondents with the appropriate characteristics; thus, more respondents are recruited from the network of existing respondents

This research identified several sources for the data on the total number of tech startups as well as the types of actors in the ecosystem. Kem et al. (2019) estimated that Cambodia had approximately 300 tech startups in 2018. In addition, a 2021 study conducted by Swisscontact and Impact Hub Phnom Penh identified 312 entrepreneurs and 86 ESOs. Even though there was no concrete or solid data on the total number of tech startups and each actor in the ecosystem, this research study aimed to collect information from all active tech startups and other all actors in the ecosystem. In June and July 2021, the research team identified and listed all active stakeholders within the tech startup ecosystem. The total number of tech startups found was approximately 120 which was lower than the



number found in previous studies. After compiling the data and consolidating it into a list, the research team reached out to the actors via different communication channels, including email, phone call, Telegram and Facebook page.

The target population of this mixed method research was the tech startup ecosystem stakeholders in Cambodia. The target participants, as shown in figure below, include tech startups, investors, corporates, associations, incubators and accelerators, co-working spaces, service providers (legal, accounting, and technology), academic institutions, government institutions, and development partners. The figure below illustrates the number and categories of participants that responded to the survey and participated in the IDIs.

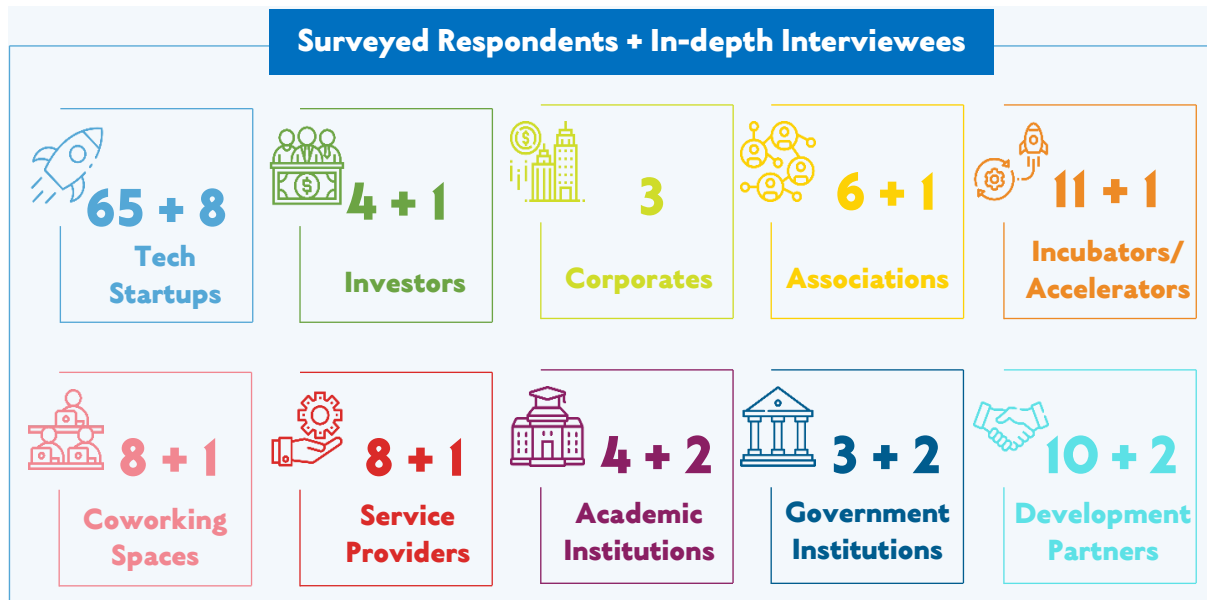


Figure 3.1: Data Collection Tools and Number of Respondents/Interviewees

Source: Authors (2022)

3.3. Data Collection

It was crucial to test the questionnaire and question guide before starting the fieldwork. Pilot-testing the questionnaire and question guides had helped the research team with identifying questions that were unclear or those that could lead to biased answers, as well as any problem with the questionnaire, the question guides, or the data collection technique. Thus, adjustments were made to the questionnaire, question guide and data collection technique, and several actors were contacted to test the survey questionnaire and the question guides.

For the survey questionnaire, a method of internet-based data collection method was employed via the data collection tool, KoboToolbox, allowing data to be immediately available after the surveys were submitted. This was a self-administered questionnaire in which a survey link was provided to the respondents who filled out the questionnaires by themselves and without an interviewer. A concrete introduction that precisely informed the target respondents about the research goal, objectives as well as a persuasive message requesting them to participate were developed. The questions were also developed in a way that could be easily understood by the respondents. A short and concise video tutorial on how to fill out the answers for the questions presented in KoboToolbox was also prepared and sent to target respondents. With user-friendly interface of KoboToolbox, respondents were able to



properly fill in the questionnaire. For the communication channel, the research team used different channels including email, Telegram, phone call, and Facebook Messenger to reach the target participants.

For IDIs, the interviews were conducted by the TSC research team who are experts in the qualitative data collection. The interviews were conducted online using Microsoft Team and recorded with the consent of the target participants. The question guides were sent to a few of the participants in advance as they requested to see it prior to being interviewed. Among 22 interviews, one of them was conducted via phone call due to a problem with internet connection.

The figure below describes briefly the data collection tools used in the survey and the IDI.

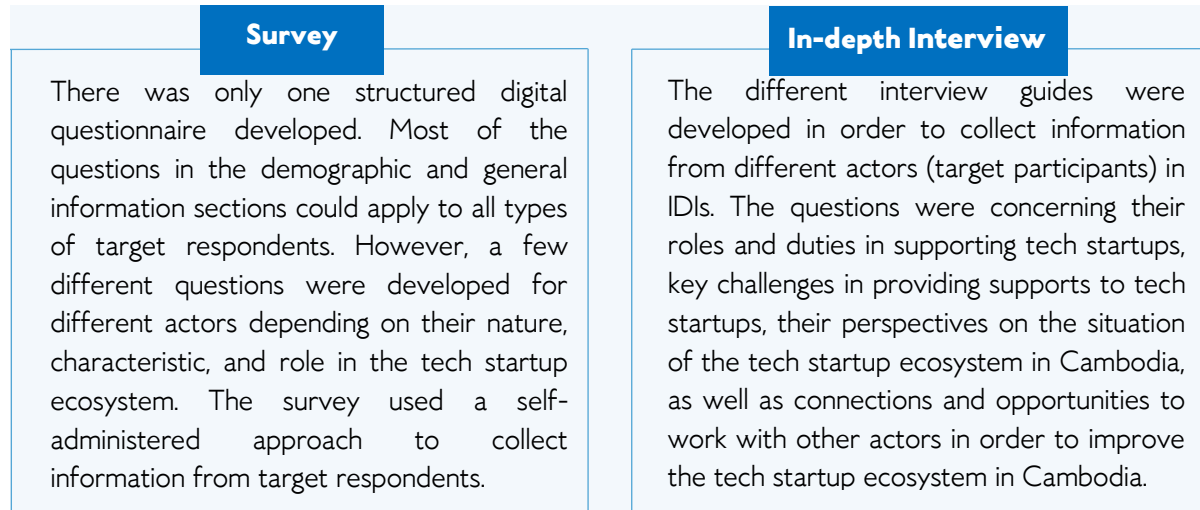


Figure 3.2: Brief Description of Data Collection Tools
Source: Authors (2022)

3.4. Data Management and Analysis

For the survey, all filled questionnaires were checked by the TSC research team to ensure the accuracy of data, as well as to reapproach a few respondents when encountering missing or incomplete data, or where further clarifications were needed on the given answers. The data were stored in the KoboToolbox server. Stata version 16 was used to analyze the data. Descriptive statistical analysis was used to determine the frequencies of key variables and all survey questions. The data were disaggregated by key variables, including type of target respondents, location, gender, focus sector, and stage of startups. In this research, the advance statistical tool was not used to answer any specific question. Only descriptive statistics were used to describe and summarize key characteristics of the key variables which serves to answer the research objectives.

For the IDIs, each interview was put in the expanded notes immediately after the interviews were conducted and then were transcribed in Khmer or English depending on the language spoken during the interview and typed into a computer in Microsoft Word format (with support from recorded online interview). These transcripts in Microsoft Word format were reviewed again by the TSC research team for quality assurance. They were imported to QSR NVivo version 12 for analysis. Inductive coding was applied in order to read and interpret raw textual data to develop categories, concepts, and themes. Through the inductive coding, content analysis then was used to identify important themes and patterns that occurred in the text being analyzed by grouping together the developed categories or concepts and then counting occurrences of the same categories, idea, or concepts.



3.5. Ethical Consideration

The TSC research team is well-versed on research ethics, including confidentiality and anonymity. All selected participants were informed about the overview of the research and asked to give their consent to participate in it. To obtain valid consent, the research used an introductory statement at the start of each interview to ask permission from respondents/interviewees, as well as another statement specifically seeking permission to record the online interviews. All completed records were stored in a secure place during the process of data collection, data transcription, and data analysis. Only people who were responsible for analyzing the data had access to the data and computer files. All data and information were strictly used only to serve the objectives of this research. For the purpose of anonymity, during the process of data analysis and constructing the result of the research, the researchers did not use the name of participants or institutions.

3.6. Quality Assurance

Reliability and validity were the two key concepts used to improve the quality of evidences in this research. To ensure the validity of data in this research, several techniques were employed:

1. **Triangulate information:** In accordance with the research methodology employed in this research, this technique was used in order to triangulate information from different stakeholders who play a role in Cambodia's tech startup ecosystem.
2. **Develop tools:** The data collections tools employed in this research were carefully developed based on available literatures. In addition, the research team had also requested startup specialists from TSC's startup development office to provide feedback.
3. **Conduct pilot-tests:** A pilot test was launched with selected stakeholders prior to commencing the actual data collection in order to check the quality and appropriateness of the research tool, and to receive feedback to further improve the research tool. The researchers reached to stakeholders in their networks, asked for their consent to participate in the pilot testing and to fill in the survey, and requested feedbacks in order to improve the questionnaires.

To ensure the reliability of the data in this research, all interviews and transcripts were conducted by the research team. Transcripts were carefully checked by at least two members in the research team to ensure the consistency of the voice and text.

3.7. Scope and Limitations of Research

This research utilized the data and information collected from active actors within the tech startup ecosystem. Active actors refer to individuals or institutions who are still running their operations. This research focuses on active actors in the ecosystem because collecting data from them would help the research team in answering the questions posted in the research objectives of this research which focused on understanding the current supports and challenges within the tech startup ecosystem. The different categories of actors in the ecosystem as identified in this research can be found in Figure 3.3.

Great efforts were made by the research team from the preparation stage until the final stage of the research. However, there are still some limitations to this research as follows:

- **Sampling method and generalization:** Since the sampling frame of the tech startup ecosystem was not available for drawing sample size, non-probability sampling methods were used to select the target group for the survey and the IDIs. The sampling methods used were a combination of convenience sampling (respondents within the TSC and researcher networks) and snowball sampling (respondents who introduced other startups or other stakeholders that could participate in the research). Due to the fact that this research employed a non-probability



sampling method as well as having a limited number of target participants, the result of this research could not be generalized for the entirety of the population within the ecosystem.

- **Data collection:** Due to the fact that both the survey and IDIs were conducted during the COVID-19 pandemic, there were no face-to-face interactions between the participants and the researchers. This lack of interaction creates a low response rate as well as survey fatigue. Based on the researchers' observation, this could have stemmed from the fact that the stakeholders in the tech startup ecosystem were busy and pre-occupied with their operations as well.

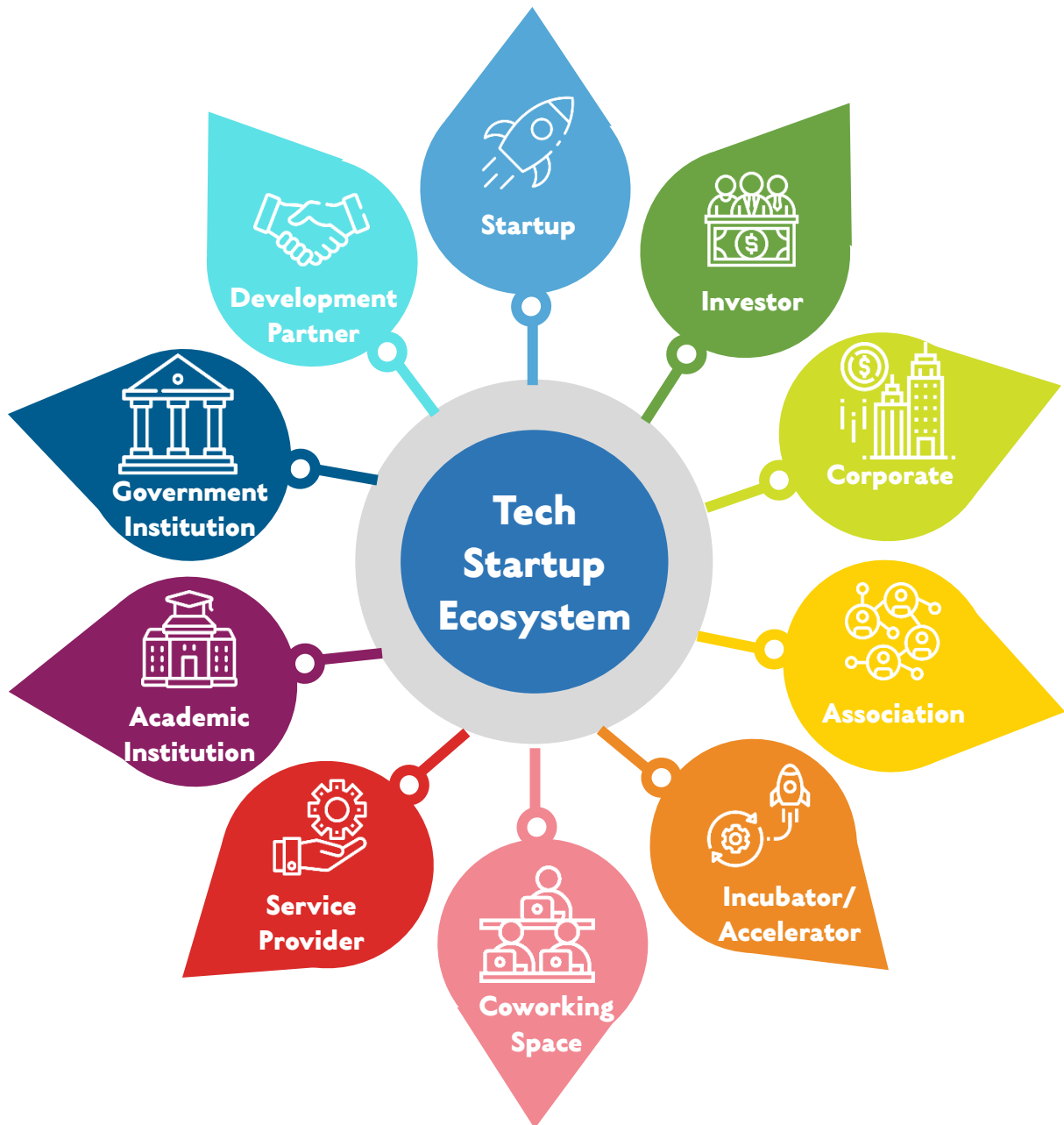


Figure 3.3: The Actors in the Startup Ecosystem in Cambodia
Source: Authors (2022)

Chapter

4

Demographics and Characteristics

Research
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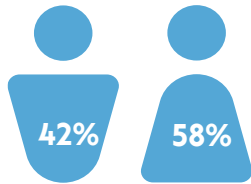


This chapter describes the demographics and characteristics of the participants who partook of this research. The information displayed here are excerpted from the results of the survey and IDIs of tech startups, investors, corporates, associations, incubators/accelerators, co-working spaces, service providers, academic institutions, government institutions, and development partners.

TECH STARTUPS

“ 96.9% of founders/co-founders in 65 different tech startups filled out the self-administered online survey questionnaire. ”

Startup Founders/Co-Founders



95% were Khmer founders/co-founders.

26 was the average age of founders/co-founders.

Tech Startups' Profile

Prototype & Early-Operational Stages

accounted for 59% of surveyed tech startups.

Pre-Seed & Seed

were funding rounds that 48% of surveyed tech startups are in.

45%

were established from 6 months to less than 2 years ago.

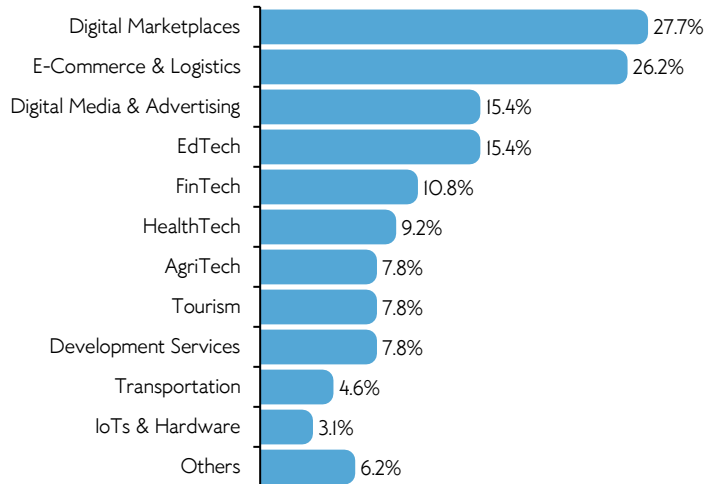
57%

have started operation for less than 6 months.

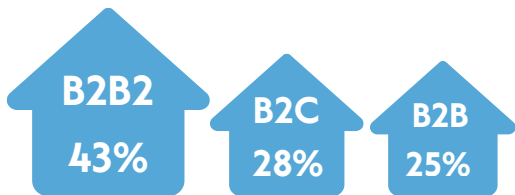
91%

were in Phnom Penh.

Surveyed tech startups were from the following sectors



Surveyed tech startups had the following business models



5-19 51% of surveyed tech startups reported that they had between 5 to 19 members.

< 5 43% of surveyed tech startups reported that they have less than 5 members.

Eight tech startups partook of the IDIs. They are based in **tech business e-commerce and logistics, EdTech, HealthTech, AgriTech, transportation, IoT and hardware.**

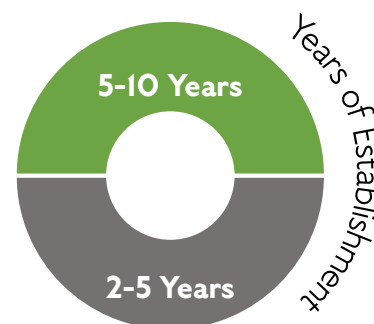
INVESTORS

“ Four surveyed investment companies were from FinTech, EdTech, AgriTech, and transportation sectors. ”

One surveyed investment company employed less than 5 staff.

Two surveyed investment companies employed from 5 to less than 20 staff.

One surveyed investment company employed from 50 to less than 100 staff.



ALL of the surveyed investment companies provided equity and debt investments, but **NONE** of them provided reward-based investment.

Early-Operational Stage was the most want-to-invest-in startup stages, followed by operational as well as scaling and expansion stages.

2 investment companies organized awards competition for tech startups; **3** investment companies ran incubator/accelerator programs.

CORPORATES

“ Out of three corporates, two of them were international. ”

1 surveyed corporate focused on automotive industry.
_____ surveyed corporate has been established for less than 2 years.

2 surveyed corporates focused on the finance and banking industry.
_____ surveyed corporate has been established for more than 10 years.

FinTech

was the sector that all surveyed corporates focused on. However, at the same time, two of those corporates were also interested in supporting tech startups in other sectors as well.

A majority of surveyed corporates focused or wanted to support tech startups in the **scaling and expansion stages**, followed by ideation and operational stages.

NONE of the surveyed corporates organized awards competitions nor ran incubator/accelerator programs.

ASSOCIATIONS

“ One association organized one awards competition, and one ran an incubator/accelerator program for tech startups. ”

Two Thirds of the surveyed associations employed from 5 to less than 20 staff.

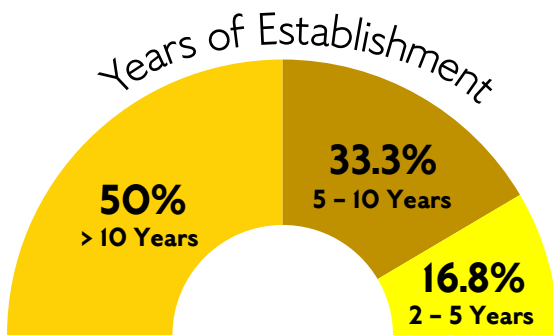
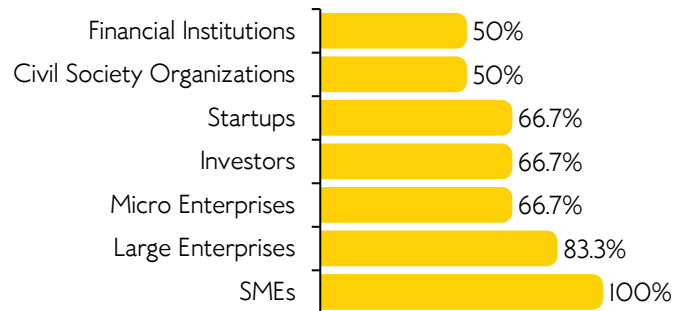
None of the surveyed associations exceeded 50 staff.

All surveyed associations were homegrown business associations and located in Phnom Penh.

Focused Types and Want-To-Support Stages of Startups

- 83%** FinTech
- 67%** Digital media & advertising
- 67%** Development services
- 67%** EdTech
- 67%** Operational
- 50%** Ideation
- 50%** Scaling and expansion

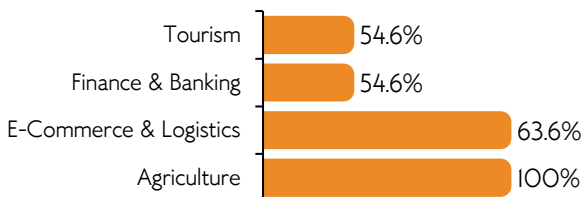
Target Members



INCUBATORS/ACCELERATORS

“ A majority of surveyed incubator/accelerator were homegrown, and all were located in Phnom Penh. Only one-third of the surveyed incubators/accelerators organized awards competitions. ”

Target Industries



Focused Types and Want-To-Support Stages of Startups

- 82%** EdTech
- 73%** AgriTech
- 55%** FinTech, E-commerce and logistics, IoT and hardware, & CleanTech respectively
- 82%** Operational
- 73%** Early-operational & Scaling and expansion respectively
- 46%** Prototype

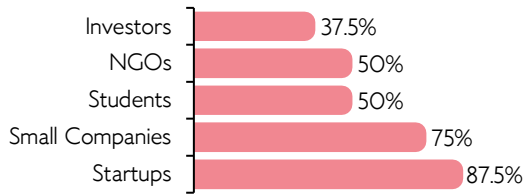
A Majority of the surveyed incubators/accelerators were established in a range of 5 to 10 years ago.

A Majority of the surveyed incubators/accelerators had less than 20 staff.

COWORKING SPACES

“ All of the surveyed coworking spaces have been established in Cambodia for less than 5 years, and the majority were homegrown. ”

Target Customers



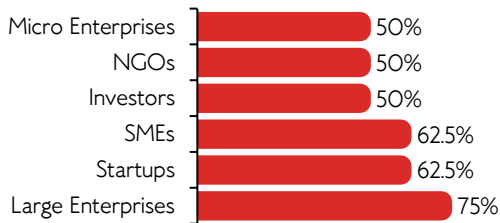
Focused Types and Want-To-Support Stages of Startups



SERVICE PROVIDERS

“ The majority of the surveyed service providers have been established in Cambodia for less than 10 years and were homegrown. ”

Target Customers



Focused Types and Want-To-Support Stages of Startups

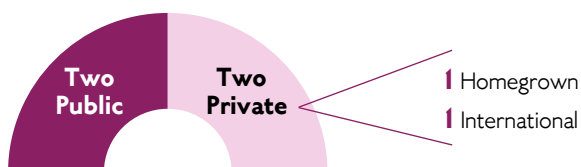


HALF of the surveyed service providers provided technology-related services to customers; **ONE-FOURTH** provided accounting and taxation services, followed by legal services.

ACADEMIC INSTITUTIONS

“ Two out of four surveyed academic institutions organized awards competitions, and two ran incubator/accelerator programs for tech startups. ”

Types of Institution



Laboratory or Innovation Center



GOVERNMENT INSTITUTIONS

“ **HealthTech, EdTech, AgriTech, CleanTech, & Tourism**

were the sectors of tech startups that all surveyed government institutions focused or wanted to support, followed by FinTech, e-commerce and logistics, digital marketplaces, and manufacturing. ”

2/3

of the surveyed government institutions had their own laboratories or innovation centers.

All surveyed government institutions **NEVER** organized any awards competitions, but **Two** ran incubator/accelerator programs for tech startups.

Ideation, early-operational, & scaling and expansion

were the most focused or want-to-support stages for the surveyed government institutions.

DEVELOPMENT PARTNERS

“ 60% of the surveyed development partners claimed that technology and innovation were their focus areas and 90% reported that all startups including tech startups were one of their beneficiaries. ”

Development Partners' Profile

70%

of the surveyed development partners have been established in Cambodia for more than 10 years.

40%

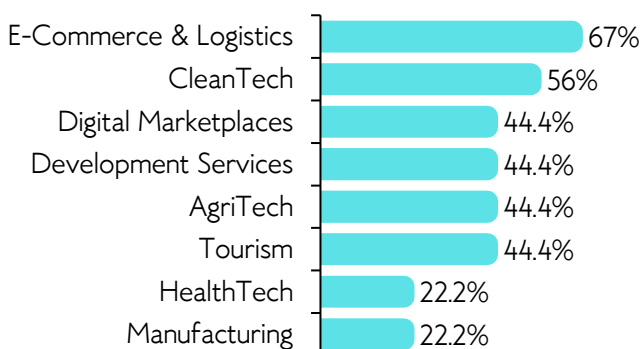
of the surveyed development partners employed between 20 to less than 50 staff.

40%

of the surveyed development partners employed between 50 to less than 100 staff.

2 out of the surveyed development partners had their own laboratory or innovation centers.

Types and Stages of Startups that Development Partner Focused/Wanted to Support



67%

Ideation

67%

Early-operational

67%

Operational

56%

Scaling and expansion

44%

Prototype

Chapter

5

Key Findings and Discussion

Research
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This chapter presents the key findings of the research that are produced from the quantitative information (survey) and qualitative information (IDIs) found in this research. The key findings are also reflected upon and discussed in tandem with the results of previous research studies, articles, journals, books, and legislative documents. The key findings and discussion are organized and presented in accordance with the objectives of this research: (1) to identify key challenges faced by tech startups in operating their business and accessing support provided by ESOs; (2) to identify key challenges faced by tech startups in operating their business and accessing support provided by ESOs; and (3) to identify opportunities perceived by each ESO on how to collaborate interactively in the startup ecosystem.

5.1. Objective 1

5.1.1. Challenges of Tech Startups in Operating Business

Over 95% of startups had encountered challenges in operating their business operation at some point. The first major challenge as reported by those startups was a **lack of funds**. This issue mainly stemmed from the challenges and difficulties in attracting investors, specifically with Cambodian investors who have the tendency to be short-term focused without having any long-term goals. Moreover, a correlation between gaining access to funding and the stage of which the business was currently at, as the research observed that startups that were in the later stages received the most funding, whereas startups that were in the ideation or prototype stages received no fund injection. In contrast, startups in the ideation and prototype stages were not injected with any funding. As discussed in the literature review, previous studies, focusing on the startup ecosystem in Cambodia, also found the lack of funds to be the biggest challenge for tech startups, mainly due to there being limited numbers of angel investors, venture capitals, and crowdfunding. In addition, a combination of both the literature review and the interview with ESOs found that investors did not want to invest in a startup at an early stage which they perceived to be a high-risk investment.

The second major challenge was the **lack of team members**, both in terms of quantity and quality. Building and retaining a strong team was a significant challenge for tech startup founders since working for a startup is considered to be a high-risk job, thus, perceived as a less attractive employment opportunity. According to The Global Entrepreneurship and Development Institution, in 2018, Cambodia was observed to have relatively low human capital and startup-related skills, receiving a score of less than 10 whereas other countries, such as Vietnam, Malaysia, Thailand, the Philippines, and Asia-Pacific all received a score of more than 15. There were insufficient talents with technical skills ranging from mid to senior level in managing or executing a project. There may be a correlation between insufficient technical talents in managing and executing startup projects, and the low university enrollment rate for STEM majors (Cambodia Academy of Digital Technology, 2021) and the lack of talents with entrepreneurial and technical skills (Ek, 2017; Srang, Taing & Kuok, 2021; Swisscontact and Impact Hub Phnom Penh, 2021).

The third major was the **lack of support from other stakeholders**. Support from ESOs in the ecosystem is inevitably vital to tech startups who faced an increased risk of failure due to the lack of funds, knowledge and experiences. The perception that the tech startup ecosystem in Cambodia remained young and fragmented was reinforced through the interviews with ESOs within the ecosystem. It should be noted that the number of ESOs within the ecosystem has been growing steadily overtime, showing a positive growth within the ecosystem. However, there remained the issue of miscommunication among ESOs within the ecosystem as each ESO generally operates within their own interests and agendas in mind, sometimes creating a conflict of interests among one another. Beside the three major challenges, all challenges in operating business faced by tech startups who participated in the survey are as follow:



- Lack of funds (67.7%)
- Lack of team members (36.9%)
- Lack of supports from other stakeholders (32.3%)
- Lack of business knowledge and skills (29.2%)
- Lack of experience in operating startups (24.6%)
- Lack of technology-related knowledge and innovation (23.1%)
- High cost of production (15.4%)
- High number of competitors (12.3%)
- The product or service does not meet the quality and standard requirements (10.8%)
- The product or service does not align with the current market demand (10.8%)
- The cost of customer acquisition is expensive (10.8%)

5.1.2. Support of ESOs in the Ecosystem Accessed by Tech Startups

This research found that over 95% of tech startups received, at minimum, support from one ESO within the tech startup ecosystem. Moreover, the research found that three out of five tech startups received support from three different types of ESOs, and there were no one startup that received support from all nine different types of ESOs that were categorized in this research. A few of the tech startups that participated in the IDIs noted that they received quality supports from one or two ESOs within the ecosystem which enabled them to progress further forward. The data collected also revealed the differences in the relationship and connection between tech startups and ESOs within the ecosystem in the periods before and after 2015. This reflects the fact that the tech startup ecosystem in Cambodia had only garnered significant attention in recent years leading up to this research. In theory, if tech startups can increase the number of ESOs who they can engage with and receive support from, then the level of interactivity and vibrancy within the tech startup ecosystem would also increase as well. In theory, if tech startups can increase the number of ESOs who they can engage with and receive support from, then the level of interactivity and vibrancy within the tech startup ecosystem would also increase as well.

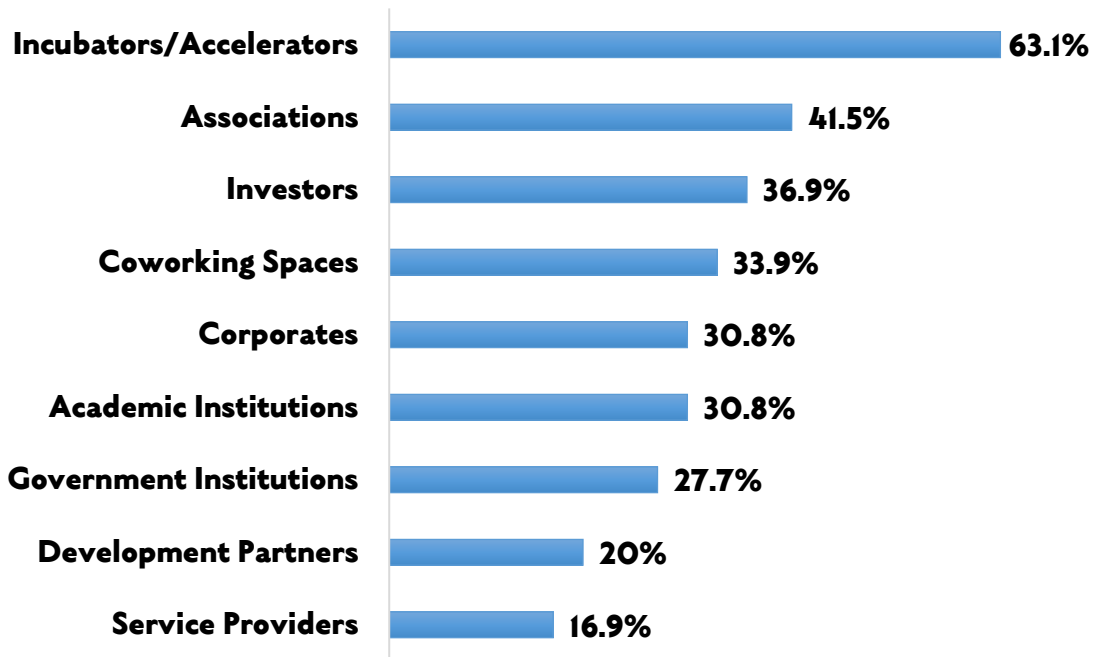


Figure 5.1: Percentage of Tech Startups in Accessing Supports from Each Type of ESOs
Source: Authors (2022)

The figure above depicts the different types of ESOs within the tech startup ecosystem that provide supports to tech startups. The most support received by tech startups was found be from incubators/accelerators, followed - respectively and in order - by associations, investors, coworking spaces, corporates, academic institutions, government institutions, development partners, and service providers. It is evident that incubators/accelerators play a major role in developing startups in Cambodia as reflected by the finding of this research that they provided the most support to tech startups within the ecosystem. Incubators/accelerators partly contribute to the growth of startups in Cambodia, with several incubation programs organized and designed to nurture and grow a certain number of startups to become viable. This research found that 164 tech startups had participated in the programs organized by the surveyed 11 incubators/accelerators.

Out of all the ESO categories, service providers were found to have provided the least support to tech startups, with different reasoning cited by the participating tech startups and service providers. 7 out of 10 tech startups that partook in this research had not reached an operational stage at the time of the survey. At this stage, the tech startups reported that they neither needed the services offered by the service providers, nor did they have the sufficient budget to purchase these services. There are two reasons as to why service providers have not provided any service or product to tech startups. The service providers could neither find a suitable startup to work with, nor were their service fees affordable for the tech startups. However, data gathered from IDIs revealed that support from service providers are beneficial in the prototyping stage, as well as for executing and managing administrative tasks, such as financial reports and taxations.



5.1.3. Types of Support Received by Tech Startups from ESOs and the Challenges

Startups that participated in this research were asked to list and describe the forms of support they received from each ESO. The list below presents the most common forms of support received by tech startups in order of their occurrence frequency:

- Mentoring (how to run a business)
- Network building
- Incubator/accelerator program
- Funding and investment capital
- Awards competition
- Technology-related and innovation-related support
- Free Membership/free office space/free service or special fee
- Connection to investment opportunities
- Internship programs
- Exchange programs or visits
- Testing tools or laboratory
- Joint Venture
- Tax incentives

Incubator/accelerator program is an ideal environment for startups to build and establish network with relevant people who can provide support, as well as for startups to find mentors or coaches. In addition, these supports are crucial in providing guidance and supports for startups that are still in an early stage. However, this research, as well as the studies that came before it, found that there is a lack of experienced mentors who are experts and capable of operating and managing a startup. The paragraph below describes the most common forms of support as well as the most common challenges faced by tech startups in receiving support from each category of ESO.

The paragraph below describes the most common forms of support as well as the most common challenges faced by tech startups in receiving support from each category of ESO.



Incubator/ Accelerator

The most common form of support from **incubators/accelerators**, as reported by participating tech startups, is mentoring on the operational process of running a startup. Moreover, the surveyed startups also reported that the challenges they faced in receiving supports from incubators/accelerators, include the lack of technical skills, funding, team members, as well as the lack of time to participate in the programs. In addition, there were also issues with regards to the program itself, such as the length of the program, the lack of clear guidance during the program, as well as the lack of post-program supports. The surveyed tech startups also raised the issue that the mentors with the programs lack adequate experience in operating and managing startups, thus, this made it difficult for the tech startups to keep on track and to catch up with the programs as they were unable to properly grasp and understand new concepts and terminologies.

The most common form of support that tech startups received from **associations** was via incubator/accelerator programs. In receiving this form of support from associations, the surveyed tech startups also noted two challenges: 1) the lack of time to participate in the programs offered by associations; and 2) the lack of funds,



Association



or the inability to allocate funds to acquire a membership. Moreover, they also added that the connections and networks provided by associations were neither broad nor diverse, hence, the tech startups still struggled with finding and acquiring partners who share common goals. Furthermore, the participating tech startups also noted that the commitment and mentoring support that they received from associations did not fulfill their needs.



Investors commonly provide support to tech startups in the form of investment funds. However, the participating tech startups reported that they have a limited knowledge in financial management, hence, they found it challenging to manage the funds they received from investors.

Surveyed tech startup reported that the most common form of support that they received from **coworking spaces** was through receiving free office space or receiving a special fee. With regards to the challenges faced in receiving this form of support, the surveyed tech startups reported that they faced difficulties in allocating time to work at the provided coworking space due to external job commitments, thus, were unable to fully commit to operating their startups. They also added that the provided coworking spaces were located in places that required long commutes, as well as being small in size, having insufficient rooms and facilities to support the operation of startups. They continued that there were a small pool of startups and other ESOs in coworking space, resulting small network connection to build and exchange ideas.



Corporates, as reported by surveyed tech startups, also provided support to tech startups in the form of incubator/accelerator programs. The surveyed tech startups also noted the difficulties in working in corporate buildings, limitations on flexibility when it comes to prototype and product testing, insufficient resources, and too many reporting requirements.

Academic institutions provided support to tech startups in the form of mentoring and guidance on how to operate a business. Still, the surveyed tech startups reported that they lacked the funds, marketing knowledge, and technical skills needed to operate their business. Moreover, the curriculums provided by academic institutions were insufficient and non-holistic, and the learning resources or materials on the subject of startups in Khmer language were limited. Mentors provided by academic institutions had insufficient experience with regards to tech solutions, and the training and mentoring periods were short. The participating tech startups also received a number of interns from academic institutions, but a portion of the interns had limited knowledge and skills relevant to the operation of a startup.





**Government
Institution**

The most common support as received by tech startups from **government institutions** were through awards competitions and network building. The surveyed tech startups perceived awards competitions and funding to be the most common and helpful form of support provided by government institutions. However, the challenges that the tech startups faced in receiving this form of support were the lack of support in terms of technical knowledge and skill in building prototype, the limited or absence of prize money in some awards competitions, the difficulties in communicating with some units within government institutions, and the lack of opportunities to enter regional competitions and events. It is also interesting to note that the tech startups also reported that some public fees, such as business registration and licensing, were expensive.

The most support tech startups received from **development partners** was network building. The challenges in receiving support were the technical problem of sandbox testing and lack of time to participate in programs or events of development partners. Other challenges were lack of trust, common goals, long-term partnership and sustainability, and flexibility on how to use the fund. Reporting document requirement from development partners was also considered a huge burden by tech startups.



**Development
Partner**



**Service
Provider**

Technology-related and innovation-related supports were reported to be the most common form of support provided to tech startups by **service providers**. Tech startups reported some challenges when receiving supports from service providers, including the lack of clarity in the ideas or strategies proposed by the service providers which could not be implemented in real-world operations, and the lack of experts in specific areas who they could work with. In addition, some services or products provided by service providers were inadequate in terms of both quality and quantity.

In summary, the challenges faced by tech startups in receiving supports from ESOs in the ecosystem can be categorized into two main factors: internal and external. There are six common challenges that can be categorized as internal factors, or factors stemming from tech startups themselves, including limited funding, lack of technical skills, and insufficient time allocation. External factors, or factors stemming from ESOs, also comprise of three common challenges, including inadequate mentoring quality, lack of learning resources and laboratory facilities, and complex reporting requirements.

Internal factors:

- **Funding:** A number of tech startups could not afford to purchase certain specific materials to use in product development or prototype testing as well as in their business operation. Moreover, due to their very limited budget, these tech startups were unable to allocate any budget to pay any membership fee to any associations, or any service fee to any service providers.
- **Technical skills:** A number of tech startups had limited knowledge with regards to advanced technologies, thus, they were limited in their ability to refine and innovate their products



and services using advanced technologies. Moreover, some tech startups did not have the necessary skills needed to operate a business, such as financial management, marketing and branding.

- Time allocation: Some tech startups reported that they could not allocate adequate time to fully commit to working for a startup due to prior commitments and other priorities.

External factors:

- Mentoring quality: A number of mentors had limited skills and experiences to support tech startups and provide unclear instruction or guidance that could not help them much.
- Resources/facilities: A majority of ESOs did not have adequate learning materials, equipment, and facilities to support tech startups during the phases of prototype development and testing, which in turn limited the opportunities for tech startups to successfully develop market-fit products.
- Reporting requirements: Tech startups receive funding from ESOs found that the process of reporting documents was highly complex and that there were stringent requirements and a strong demand to fulfill some key performance indicators.

5.2. Objective 2

5.2.1. Supports Provided by ESOs to Tech Startups and the Challenges

This research found that 77.2% of the surveyed ESOs provided or had been providing support to tech startups. The types of support provided varied from one ESO to another. The list below presents the most common forms of support provided by all ESOs in order of their occurrence frequency:

- Network building
- Mentorship (how to run business)
- Connection to investment
- Technology-related and innovation-related support
- Investment (funding + capital)
- Incubator/accelerator programs
- Exchange programs or visits
- Provision of products or services to tech startups
- Provision of testing tools or laboratory
- Internship programs
- Awards competition
- Free membership or special fee
- Educational training to tech startups

Network building was found to be the most common form of support provided by ESOs to tech startups. Some ESOs have noted that the startup community had been growing and expanding rapidly, allowing people to better connect with one another which had led to an increase of one-to-one referrals, and consequently, a strong culture of network building within the ecosystem. It should be noted that networking is crucial as both an interpersonal skill of an individual - in this context, the startup owners and operator - as well as a form of support from those within the ecosystem. In the early stages, startups typically want to center their focus and efforts around building prototypes or MVP of their products or services rather than allocating time and other resources into building a network. However,



overtime as the startups experience growth and expansion, they would need to divert resources into establishing and building a beneficial and supportive network within the ecosystem.

This also reflects upon the fact that **mentoring** – on the operation and management of a business – is the second most common form of support, partially due to the influences of the growing startup community as well as the mindsets of the people within it. People with prior entrepreneurial experiences are beginning to share their experiences and becoming mentors to budding startups. This is in line with and reflects upon the aforementioned finding that mentoring is the most common form of support that tech startup received from ESOs. However, previous studies by Ek (2017) and Kem et al. (2019) found there are still a lack of experienced mentors. In the Impact Report by Impact Hub Phnom Penh (2018), it was found that there were more than 35 mentors who were passionate in supporting Cambodia’s startup ecosystem.

Connection to investments was found to be the third most common form of support provided by ESOs. This also reflects upon the growth of the startup community and the strong network building culture within the community, both of which gave rise to more opportunities to connect and receive investments. The more exposure that tech startups have to ESOs, especially to investors or corporates, the more opportunities they have to showcase or pitch their products or services in order to garner investment funding.

The paragraph below describes the most common types of support and challenge ESO faced in providing support to tech startups. The information is presented in same ordering sequences of ESOs in section 5.1.3.



Incubator/ Accelerator

The most common form of support which **incubators/accelerators** provided to tech startups were through providing connections to investments, mentoring, and network building. The challenges for ESOs in providing this form of support varies greatly. However, incubators/accelerators found it challenging when it came to recruiting suitable startups to participate in programs. Moreover, they also lack the necessary resources and mentors to provide ongoing support to those startups. The lack of proper a network was another challenge faced by incubators/accelerators. Furthermore, another notable challenge faced by incubators/accelerators was the high rate of program dropouts, especially due to insufficient cashflows and technical talents on the side of the tech startups. In certain cases, some tech startups were reluctant to take part in the programs due to concerns over intellectual property rights.

The most common form of support provided to tech startups by **associations** were mentoring on the operation and management of a business, as well as opportunities for network building. The challenges in providing these supports were mainly a lack of funding as well as the lack of commitment and participation from the tech startups due to prior and external work commitments. Moreover, the lack of support from the government as well as the limited public awareness regarding the works of associations, had led to issues of scarce resources and engagement rate, further creating difficulties for associations to provide support to the tech startups.



Association



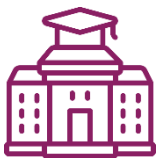
Investor

The most common form of support provided by **investors** to tech startups was also mentoring on the operation and management of a business as well as opportunities for network building. The challenges that investors face when providing support to the tech



startups was mainly the lack of performance tracking in order to monitor and evaluate the funds that were invested. Moreover, there was also a lack of follow-on funding from investors, hence, no additional funding or support was provided to the tech startups at a later stage. However, investors have claimed that the tech startups did not provide their complete financial reports, as well as lacking a proper accounting system and lacking the knowledge with regards to financial statements. It should also be noted that investors were also reluctant to invest in startups that were unwilling to formally register themselves. In addition, startups that based their business model on a long sale cycle, created inherent difficulties for investors to provide support and investments.

The most common form of support provided to tech startups by **coworking spaces** were working spaces and facilities, as well as connections to investment opportunities. The critical challenges in providing these supports were the lack of prototyping facilities and equipment, as well as the lack of mentoring, financial and technical supports. It was also reported that coworking spaces found it difficult to engage with certain startups that lack the commitment to manage and operate their startups fulltime. The lockdown measures during the Covid-19 pandemic also caused problems which resulted in a limited number of startups operating at coworking spaces, in addition to the growing preference of some startups to work remotely from home.



Academic Institution

The most common form of support provided by **academic institutions** to tech startups were through the offers and provisions of specific degrees and courses, as well as opportunities for network building. The challenges in providing these supports were the lack of resources, especially, human resources who could assist and provide support to the tech startups, the lack of students who were able and willing to participate in startup-related programs, and the limited level of digital skills and knowledge among the student population. Moreover, academic institutions also noted that the lack of courses related to business technology was also an obstacle for them when it came to providing support to the tech startups.

Government institutions provided support to tech startup in the forms of investment opportunities and through incubator/accelerator programs. The challenges in providing these supports were the lack of big-ticket investors who could support the burn rate of the tech startups, the lack of physical infrastructures, the lack of funding, and the lack of cooperation. Moreover, the lack of innovative tech startups and talents was also cited as a challenge by government institutions as well.



Development Partner

The most common form of support provided to tech startups by **development partners** were through providing funding and opportunities to build networks. The challenges faced in providing these supports were the existence of similar programs being ran by multiple development partners, the gaps between rural and urban youths in terms of accessing opportunities, the lack of technical expertise and knowledge, the difficulties



faced in recruiting startups to the participate in programs, and the dropout rate from the programs.

Service providers provided supports to tech startups most commonly in the form of technology-related and innovation-related support as well through mentoring on the management and operation of a business. The challenges faced in service providers faced in providing support to the tech startups were the lack of resources to support the tech startups, issues with virtual communication, and non-profitable return on investments when providing funding for startups. Another notable challenge that was raised was regarding the fact that the tech startups have many ideas, but lack a starting point and a direction forward.



The types of support provided to tech startups by ESOs varied greatly, which can be seen as a reflection of the diverse nature of the tech startup ecosystem. These different types of support from different types of ESOs would allow startups to grow and make progress in their respective journeys. Nevertheless, there were challenges faced by ESOs, as described in the section above, when it came to providing support to tech startups, and could be categorized into internal and external factors. The internal factors (factors stemming from the ESOs themselves), include insufficient funding, inadequate quality and quantity of mentors, and the lack of resources/facilities. The external factors (factors stemming from the tech startups), include the lack of quality startups, insufficient time and commitment, and lackluster fulfillment of reporting requirements.

Internal factors:

- **Funding:** ESOs reported that they had limited funding to support tech startups, and in some cases, the amount of funding was insufficient in allowing the tech startups to develop or test their product or service prototypes. In other cases, there were ESOs that were able to provide seed funding to the tech startups. However, they were unable to provide follow-on funding to support those tech startups as they began to grow and scale up.
- **Mentors:** Some ESOs observed that the number of mentors had been increasing as of recent. However, this number is still not enough to meet the demands due to the increasing number of incubator/accelerator programs that are being launched. This also gave raise to concerns with regards to the quality and expertise of the mentors as well.
- **Resources/facilities:** ESOs were still unable to provide sufficient material support to tech startups, specifically in terms of testing and laboratory equipment, as well as a sandbox environment for startups to develop and test their service or product prototypes.

External factors:

- **Quality of startups:** A majority of ESOs reported that there was a limited number of quality tech startups, with most of them only having limited knowledge and skills in terms of business operation and management, as well as technology and innovation. This consequently contributed to the high dropout rate of tech startups from several programs.
- **Time allocation:** Some ESOs have observed that a number of tech startups did not or were unable to devote their time to participate in offered programs due to a stronger commitment and focus on managing and operating their businesses, as well as due to prior or external commitments, for instance, commitment to a fulltime job.



- Reporting requirements: A majority of ESOs that provided support to tech startups reported that there were inadequate fulfillments of reporting documents on the part of the tech startups, including fulfillment of financial reports and statements, in addition to the failure to maintain and accomplish key performance metrics as set by the ESOs.

5.3. Objective 3

5.3.1. Connection Among ESOs in the Ecosystem

Connection, in this context, refers to the communication, participation, and interaction among ESOs within the ecosystems. The use of connection here refers strictly to ESOs, and exclude activities involving tech startups. The survey found that 86% of ESOs had participated in events or programs related to tech startups, organized by one or more ESOs within the ecosystem. In Figure 5.2, Incubators/accelerators were found to be the category of ESOs with the most participations in tech startup-related events (an average of 5 ESOs), followed respectively by coworking space (an average of 4 ESOs) and government institutions (an average of 4 ESOs). Associations, corporates, and academic institutions were found to have the least participations in tech startup-related events (an average of 2 ESOs each).

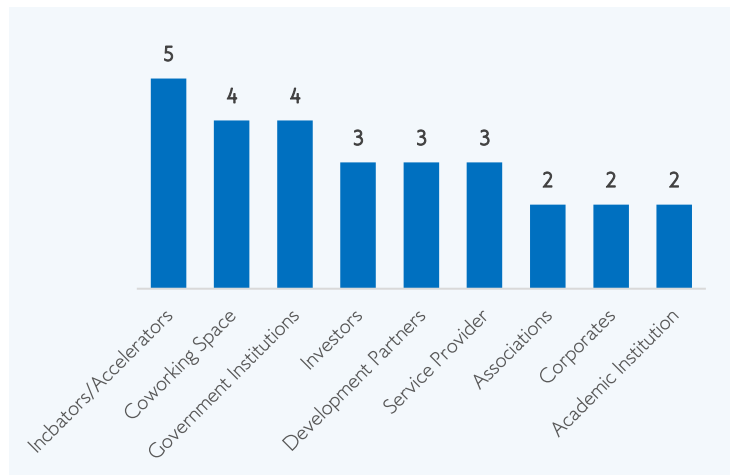


Figure 5.2: Participation of Each Actor in Tech Startup-related Events Organized by Other ESOs

Data from the IDIs revealed that the connection between ESOs has improved overtime in tandem with the growth of the ecosystem. The connection and communication among ESOs within the ecosystem could be perceived as vibrant and lively. In other words, ESOs were actively participating or getting involved with startup-related events hosted or organized by other ESOs within the ecosystem.

5.3.2. Opportunities for ESOs to Collaborate

All ESOs that partook in the survey were asked to identify the opportunities in which they could work or collaborate with one another. The opportunities, or activities as identified by the ESOs, can be classified into six different categories as follow:

1. Capacity Building

- Exchange knowledge and experiences
- Provide mentorship to tech startups who participate in programs of ESOs
- Assist tech startups in accessing free tools for the purpose of testing, or free services from other ESOs

2. Startup Formalization

- Work with other ESOs to identify and build potential tech startups in Cambodia
- Work with other ESOs to develop startup-friendly policies and investment regulations
- Work with other ESOs to help tech startups with the formalization and due diligence processes



3. Talents and Human Resources

- Collaborate with other ESOs in the development of tech talents, entrepreneurs, and internship programs
- Connect tech startups to ESOs when they need talents or seek to tender service providers
- Contribute to the development of curriculums related to technologies, startups, or entrepreneurship

4. Investment Growth

- Reinforce the implementation of responsible investment and the public-private partnership model
- Work together with ESOs to develop investment criteria that fit with the nature of tech startups in Cambodia
- Work with other ESOs to initiate demo days, pitch days, or investment pitch programs on a regular basis

5. Business Support

- Provide products/services to other ESOs or purchase products/services provided by them
- Collaborate with other ESOs to work on competitive pricing of products or services provided by tech startups

6. Events and Research

- Co-organize or participate in events related to technology, startup, or entrepreneurship organized by other ESOs
- Co-conduct or participate in research on technology, startup, or entrepreneurship

Figure 5.3 illustrates the key activities perceived by ESOs in the tech startup ecosystem as opportunities to collaborate in order to support tech startups and improve the ecosystem.

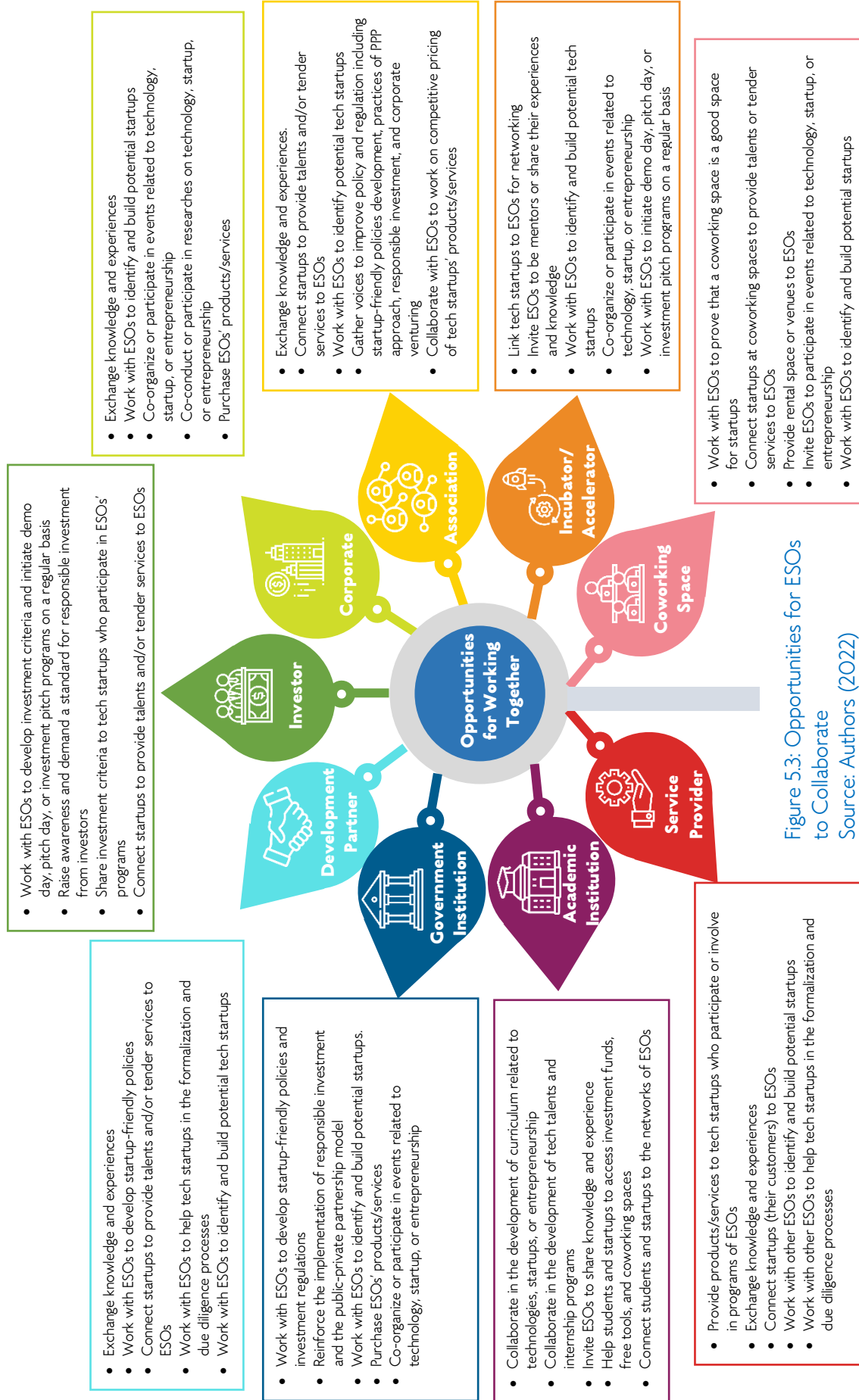


Figure 5.3: Opportunities for ESOs to Collaborate
Source: Authors (2022)

Chapter

6

Conclusion and Recommendations

Research
Report

2022





This chapter aims to summarize and conclude the key findings of the research in accordance with the research objectives. Based on the conclusion of the research, by research objectives, the key recommendations are produced for tech startups and ESOs to work on in order to accelerate tech startup ecosystem development in Cambodia. The three sub-sections below sequentially respond to the three research questions.

6.1. Challenges Faced by Tech Startups

Almost all tech startups encountered challenges in operating their businesses and three in five tech startups announced that they had challenges in receiving support from ESOs in the ecosystem. It is a fact that there are difficult days, hard times, and stressful periods in running a business; some challenges can be prevented, but some are not avoidable. Therefore, tech startups have to be optimistic and strategic to thrive, no matter what conditions and challenges they face. Optimism is a psychological trait or strength possessed by hope and confidence in success and a positive future. Cutler (2015) outlined a few benefits of optimism that can bring when running a business, including seeing failure as a new start and keeping moving, being far-sighted to consider new options and change businesses for the better, improving both physical health and mental well-being, and spreading good vibes to inspire team members. It is recommended for tech startups to be optimistic and the following recommendations will improve their optimism:

- Tech startups should minimize the negative thoughts by identifying and replacing them with possible solutions.
- Tech startups should improve their time management by using the urgent and important matrix to prioritize their to-do lists.

The first major challenge reported by tech startups in operating their business was the lack of funds. Most tech startups bootstrapped their business with their savings. However, without sufficient funds to execute their business ideas, it is quite challenging for startups to scale up their businesses. It is difficult to build a vibrant and healthy startup ecosystem when most startups are struggling to raise funds or get loans to execute their ideas, and when there are only a few successful startups in the ecosystem. The lack of funds did not mean that all tech startups did not receive any funding or investment capital, but just that those funds were limited and insufficient. It is a fact that when tech startups were in the ideation and prototype stages, their chances of receiving investment fund were low, compared to those who were in later stages. Therefore, more pitching opportunities should be available for tech startups, in particular those in the ideation and prototype stages. Therefore, the following recommendations are for ESOs:

- ESOs should co-organize investment pitch series regularly to allow tech startups to pitch to a large pool of investors.
- ESOs should co-produce TV series on investment pitches to increase opportunities for tech startups to receive investment.

Mentoring is the most common form of support that tech startups received from other ESOs. However, the quality of mentoring remains a point of skepticism for tech startups, as they noted that mentors did not have sufficient experience in managing and operating startups, tech solutions, and businesses. Therefore, the support provided by those mentors could not fulfill their needs. In addition, some ESOs mentioned that great mentors are difficult to find, particularly those who are experienced industry veterans. Some ESOs argued that volunteer mentors might not fully dedicate their time and efforts to help and guide startups, whereas paid mentors are incentivized to do so. There is still a big discussion regarding mentors, in particular the quality of mentoring. However, there are more and more



mentors in Cambodia as the actors in the ecosystem have been tapping into the circles of their networks, including professional colleagues, friends, and other professional groups to refer mentors for specific mentorship programs. It is recommended that:

- ESOs should select and invite high quality mentors to support tech startups.

6.2. Challenges Faced by ESOs

It is quite challenging to provide support, in particular incubator/accelerator programs or any specific programs to tech startups when they are not fully committed to participating. Some programs are pretty demanding and require tech startups to devote their time and efforts to develop and refine their products or services or fulfill other requirements. However, ESOs perceived that some tech startups considered this a heavy burden and did not fully commit themselves into doing so. Incubators/accelerators and development partners claimed that one of the challenges in providing support to tech startups is the dropout rate of startups from programs due to their lack of technical expertise and time. In addition, investors also reported that tech startups that received their investment funds did not fulfill the reporting requirements. In order to improve the quality of support provided by ESOs, it is recommended to tech startups:

- Tech startups should be ready for the time commitment to the whole process of incubator/accelerator programs or other programs.
- Tech startups should seek support and guidance in fulfilling the reporting requirements from other startups who are experienced receiving investment funds from investors or financial support from other ESOs.

There was a big number of tech startups in the research; over 80% of them did not receive any support from service providers. There are a few reasons which kept tech startups and service providers distant and less connected. One of the key factors was the service fee charged by service providers. Meanwhile, some ESOs who provided financial support to tech startups claimed that tech startups could not fulfill the reporting requirements. In this sense, there is another possibility to introduce some ESOs to be an intermediary connecting tech startups and service providers. The ESOs should hire service providers as a tender or have an agreement with service providers in part of a memorandum of understanding (MoU) to support tech startups, especially in fulfilling the reporting requirements. The following recommendations are presented specifically for ESOs:

- ESOs should collaborate with service providers to assist tech startups in building their capacity in reporting document preparation, especially with regards to financial statements.

Tech startups were appreciative of the ESOs who provided them with financial support, especially funding and investment capital. However, they perceived that fulfilling the reporting requirement was a heavy and complicated process. The reporting requirements are mandatory because the ESOs need the reporting documents for legal purposes. Reporting documents can also show the transparency and accountability between activities and expenses. With this, ESOs can keep track of the progress, improve quality, manage risks, and build trust. Reporting requirements are inevitable as long as tech startups receive funding from ESOs. However, the reporting process can be simplified and standardized so that tech startups will find it easier. It is recommended for ESOs:

- ESOs should collaborate with service providers to simplify the process and develop or use digital tools for reports and documents submission.



6.3. Opportunities for ESOs to Collaborate

A majority of ESOs mentioned that the tech startup ecosystem in Cambodia has been growing rapidly in the last few years, particularly during the Covid-19 pandemic with more actors or players coming into the ecosystem, but it is still relatively small compared to the ecosystem in developed countries. **Even though the size of the ecosystem is not big and some actors have different paths or directions, ESOs know each other very well and share a common goal to create a healthy and robust ecosystem in Cambodia.** The positive signs of ESOs' collaboration in the ecosystem are proven by the big number of events and programs organized by incubators and accelerators with support from other ESOs. Corporates, development partners, and the RGC typically provide financial support. The technical support and mentoring support were given by investors, service providers, academic institutions, and other mentors in the ecosystem. Coworking spaces normally co-organize or sponsor venues for those programs or events. Another remarkable situation was the government had been working rigorously and aggressively in recent years, especially during the Covid-19 pandemic to promote technology, innovation, and startups. This indicates that Cambodia's tech startup ecosystem is ready for expansion, and that it is essential to add more players for diversification and growth. Therefore, it is recommended for ESOs:

- ESOs should identify new actors or players in the ecosystem and involve them in any relevant events or programs to support tech startups and the ecosystem as a whole.
- ESOs should organize knowledge-sharing or conference on regular basis to rigorously stay current with the activities, progresses, and achievements of each actor in the ecosystem in order to build collective knowledge and explore better ways of achieving a healthy ecosystem in Cambodia.

REFERENCES

- Adepoju, O. D., Oluwasina, D., & Awah, N. M. M. (2020). Social skepticism and its effect on shared economy. In *Africa's platforms and the evolving sharing economy* (pp. 163-181). Pennsylvania: IGI Global.
- Aleisa, E. (2013). *Startup ecosystems: Study of the ecosystems around the world, focusing on Silicon Valley, Toronto and Moscow*. Retrieved from <http://docplayer.net/52141128-Startup-ecosystems-study-of-the-ecosystems-around-the-world-focusing-on-silicon-valley-toronto-and-moscow-prepared-by-eisa-aleisa.html>
- Babbie, E. R. (1990). *Survey Research Methods*. Belmont, CA: Wadsworth, Cop.
- Blank, S. G. (2020). *The four steps to the epiphany: Successful strategies for products that win* (Fifth edition. ed.). Hoboken, New Jersey: Wiley.
- Cambodia Academy of Digital Technology. (2021). *Demand for and supply of digital skills in Cambodia*. Retrieved from https://drive.google.com/file/d/IS_UJO5Vc_2jLaNFDbZiI57zrznRRcVOI/view
- Chan, P. (2018). *Tech innovation sector of Phnom Penh: Landscape scoping and narrative of change 2013-2018*. Phnom Penh: Development Innovations.
- Chillakuri, B., Vanka, S., & Mogili, R. (2020). Linking sustainable development to startup ecosystem in India - A conceptual framework. *International Journal of Business and Globalisation*, 25(2), 139-153.
- Cohen, L., Manion, L., & Morrison, K. (2000). *Research methods in education* (5th ed.). London: RoutledgeFalmer.
- Creswell, J. W. (2011). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Los Angeles: Sage.
- Cutler, Z. (2015). *The 5 benefits of being optimistic*. Retrieved from <https://www.entrepreneur.com/article/246204>
- Drennan, J. (2013, December 02). Challenging business for startups. *The Phnom Penh Post*. Retrieved from <https://www.phnompenhpost.com/business/challenging-business-startups>
- Ek, S. (2017). *Mapping startup ecosystem in Cambodia*. Phnom Penh: Young Entrepreneurs Association of Cambodia.
- Esty, D., & Rushing, R. (2007). The promise of data-driven policymaking. *Issues in science and technology*, 23(4), 67-72. Retrieved from <http://www.jstor.org/stable/43314516>
- Feld, B. (2012). *Startup communities building an entrepreneurial ecosystem in your city*. Hoboken, NJ: John Wiley & Sons.
- Greene, J. C., Caracelli, V. J., & Graham, W. F. (1989). Toward a conceptual framework for mixed-method evaluation designs. *Educational evaluation and policy analysis*, 1(3), 255-274. doi:10.2307/1163620
- Impact Hub Phnom Penh. (2018). *Impact report 2017-2018*. Retrieved from <https://phnompenh.impacthub.net/wp-content/uploads/2020/03/Impact-Hub-Phnom-Penh-Impact-Report-2017-2018-I-I.pdf>
- Katila, R., Chen, E. L., & Piezunka, H. (2012). All the right moves: How entrepreneurial firms compete effectively. *Strategic Entrepreneurship Journal*, 6, 116-132. doi:10.1002/sej.1130
- Kem, B., Sou, J., Ng, Z., & Chan, P. (2019). *Startup kingdom: Cambodia's vibrant tech startup ecosystem in 2018*. Retrieved from <https://responsiblefinanceforum.org/publications/startup-kingdom-cambodias-vibrant-tech-startup-ecosystem-2018/>
- Khieng, S., Mason, S., & Lim, S. (2019). *Innovation and entrepreneurship ecosystem in Cambodia: The roles of academic institutions*. Cambodia Development Resource Institute - CDRI.
- Naderifar, M., Goli, H., & Ghaljaie, F. (2017). Snowball sampling: A purposeful method of sampling in qualitative research. *Strides in Development of Medical Education*, 14(3). doi:10.5812/sdme.67670
- Nov, P. (2020, August 24). Ten to watch. *Focus - Ready for Tomorrow*. Retrieved from <https://focus-cambodia.com/article/ten-to-watch/>

- Rafique, A. (2020). The role of startups in economic prosperity of developing countries. Retrieved from <https://sentientso.com/the-role-of-startups-in-economic-prosperity-of-developing-countries/>
- Ries, E. (2011). *The lean startup: How today's entrepreneurs use continuous innovation to create radically successful businesses* (1st ed.). New York: Crown Business.
- Royal Government of Cambodia. (2019). *The Law on Consumer Protection*. Phnom Penh
- Royal Government of Cambodia. (2020a). *Sub-Decree on the Establishment of Techo Startup Center as Public Admin Institution*. Phnom Penh.
- Royal Government of Cambodia. (2020b). *E-Commerce strategy*. Phnom Penh
- Royal Government of Cambodia. (2020c). *Law on E-Commerce*. Phnom Penh
- Royal Government of Cambodia. (2021a). *The Cambodia's science, technology & innovation roadmap 2030 (STI Roadmap 2030)*. Phnom Penh
- Royal Government of Cambodia. (2021b). *The digital economy and society policy framework 2021-2030*. Phnom Penh
- Royal Government of Cambodia. (2021c). *The Management, Use and Protection of Identification Data Sub-Decree*. Phnom Penh
- Royal Government of Cambodia. (2021d). *The strategic framework and programs for economic recovery in the context of living with the COVID-19 in a new normal 2021-2023*. Phnom Penh
- Som, P. (2015, October 28). BarCamp Phnom Penh 2015: More than just a tech event. *Khmer Times*. Retrieved from <https://www.khmertimeskh.com/32581/barcamp-phnom-penh-2015-more-than-just-a-tech-event/>
- Srang, S., Taing, N., & Kuok, F. (2021). Creating a tech start-up ecosystem in Cambodia. *AVI Policy Brief*, 8 (2021).
- Swisscontact, & Impact Hub Phnom Penh. (2021). *Connecting the Phnom Penh entrepreneurial ecosystem*. Retrieved from https://www.swisscontact.org/_Resources/Persistent/5/4/7/c/547c9a21e2021496bf911046ad662a883505238e/Connecting%20the%20Phnom%20Penh%20Entrepreneurial%20Ecosystem.pdf
- Techo Startup Center. (2020). *Startup development strategic framework*. Phnom Penh: Techo Startup Center.
- Vong, R., Ty, M., & Chhoeun, L. (2020). *Financial technology landscape in the kingdom of promising startups*. Phnom Penh: Techo Startup Center, Ministry of Economy and Finance.



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