Startup Kingdom

CAMBODIA'S VIBRANT TECH STARTUP ECOSYSTEM

IN 2018

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Executive summary

Technology has the potential to fundamentally alter consumer behaviours, create unprecedented markets and ultimately transform the way we live. In the digital age and the fourth industrial revolution, Cambodia needs to build a strong digital sector to strengthen the economy and achieve its aspirations to become an upper middle income country by 2030. This will demand a skilled workforce and allow the country to transition from a predominantly basic manufacturing economy to a more sustainable and diversified economy. With a young population, high smartphone penetration, and cheap data at a mere \$1 for 10 GB per week, Cambodia has an agile consumer market to enable a significant digital economy of technology-enabled products and services.

Startups and entrepreneurs have a big role to play in this development story. Over the last decade, Cambodia's digital startup ecosystem has developed into a vibrant and dynamic space. With an economy underpinned by micro-businesses, the culture of entrepreneurship is strong. With global coverage of "hero" tech entrepreneurs and an emergence of local, Cambodian role models, the perceptions of becoming an entrepreneur are more attractive than ever before. These perceptions have been further proliferated by an increasing number of pitching competitions, hackathons, and seed-stage startup programs sponsored by non-profits, foundations, and corporates.

Stakeholders in the Cambodian tech ecosystem have been very active in the last five years. Universities and training institutes are introducing more entrepreneurship and technical programs while continuing to explore new curricula. Corporates are expressing more support and interest in startups to drive innovation and digitize business. At the policy level, the tech sector is a key part of the government's economic vision and more active support for the sector is emerging with new regulatory frameworks and resources. From the introduction of targeted business registration and tax policies, media initiatives such as the ICT and Women in Tech awards, facilities such as new innovation labs and national funds for innovation at over \$12M, policy initiatives are being introduced by multiple ministries.

The investment landscape is improving, driven by increased interest in the technology sector. This is also fuelled by positive market conditions, such as relative currency stability with a primarily dollarized economy, less capital flow restrictions compared to neighbouring ASEAN markets, and openness to foreign direct investment (permitting 100% foreign ownership of companies with limited exceptions). Increasing local interest in startup investment is stimulating the establishment of Cambodian-owned venture capital and considerably more angel investments. Between 2015 to 2018, the number of publicly-disclosed startup investments doubled to over 10, as well as increased diversity of funding sources.

While there is positive momentum in the sector, the ecosystem is still nascent with critical challenges to tackle.

High-skilled technical talent while increasing, is not in abundant supply. Curricula need to consider the future demands of the economy, better match market needs, and provide rapid upskilling of engineers - all through increased industry collaboration.

Experienced founders and mentors with deep technical knowledge or high-growth experience are extremely limited. Cambodia does not yet have a generation of successful tech entrepreneurs to support and guide young founders.

Investor alignment in terms of commercial expectations and strategic involvement with startups needs improvement. Local investor expectations often remove incentives for founders, where anecdotally angels target acquisition of large equity stakes early. Investors also may not be willing to actively or strategically contribute to startup growth, which research finds is critical for startup success in this market.

"Investment readiness" of startups results in challenges in deal completion due to issues such as tax, registration or contract administration. This is particularly pertinent for attracting international or institutional investors.

Corporate initiatives are often limited to sporadic, short-term timeframes that don't support longer-term innovation strategies. They may also lack strong technical internal champions to drive digitisation or strategic startup involvement.

Policy and regulation clarity can be developed further to provide certainty and incentivise both startups and investors domestically and internationally, although several new initiatives have been announced and are in the pipeline. Inclusion in the ecosystem remains a challenge across several facets from socio-economic, rural-urban, and gender diversity, though these dynamics are consistent with several other developed and developing markets.

To achieve its full potential, Cambodia will need to overcome these challenges with multi-stakeholder solutions that shape future policy, create an optimal business environment, and nurture talent in the tech startup ecosystem.

Key recommendations cover the broad ecosystem with the aspiration that each stakeholder group contributes to growth of the sector. The research suggests a number of actions stakeholders can take:

ENTREPRENEURS:

- Develop increased product clarity and engage other local startups in partnerships to better serve their customers where relevant.
- Actively engage mentors and experienced technical talent through more structured regional programs as well as industry engagement.
- Focus on huge market opportunities at all levels of the economy, and beyond Phnom Penh, to solve widespread needs, versus parochial niche problems, at all levels of the economy.

UNIVERSITIES & EDUCATION PROVIDERS

- · Align curricula faster, including co-designing programs directly with industry.
- Expand the capacity of teachers, lecturers, and training centres focused on technical programs.
- Adopt innovative solutions for rapid skills training including online, remote, and blended learning, which can be boosted by regional partnerships or leveraging successful international programs.
- · Incorporate digital literacy in earlier stage education to generate a talent pipeline in the long-term.
- Focus on student diversity (socio-economic, rural-urban, gender, language) to build the optimal talent pipeline for the sector through strengthened admissions.

INVESTORS

- · Contribute to tactically building companies as strategic partners or mentors, beyond financial resource only.
- Educate entrepreneurs in the investment process, and align expectations accordingly. Provide continual feedback and build strong founder relationships, especially fundamental in this cultural context.
- Promote and participate in local and regional investor networking events, engaging with experienced venture capital and tech investment professionals to develop investor sophistication in Cambodia.

CORPORATES

- Engage in tactically building companies as strategic partners or mentors, beyond financial resource only.
- Educate entrepreneurs in the investment process, and align expectations accordingly. Provide continual feedback and build strong founder relationships, especially fundamental in the cultural context this ecosystem.
- Catalyse and support the tech startup ecosystem by providing direct mentorship, feedback, and business insights to startup teams.

GOVERNMENT

- Continue to develop policy and regulatory framework in close consultation with the tech startup community.
 Design policy informed by international best practices to incentivise startups and investors in the Cambodian market.
- Publish information and resources online to clarify policy initiatives and remove uncertainty for investors and startups.
- Provide focused initiatives, programs and incentives for startups in early stages.
- Accelerate policy delivery with cross-ministry working group of "digital champions", whereby a ministry may take the lead to ensure delivery of agenda.
- Assist in promoting the narrative of the Cambodian tech startup sector to overseas investors.
- Ensure inclusion in the ecosystem for the long-term benefit of the economy, through advocacy such national awareness campaigns for gender and socio-economic diversity.

Introduction

2.1 WHY CAMBODIA IS FOSTERING A VIBRANT DIGITAL ENTREPRENEURIAL ECOSYSTEM

In the wake of the fourth industrial revolution, startups and the technology sector need to be a critical part of the Cambodian economy to achieve aspirations of becoming an upper-middle income economy by 2030. Although the country has experienced strong GDP growth of 7% per annum, its primary growth sectors are at risk. With an economy dominated by agriculture, textile and manufacturing, the country needs to look to alternative sectors for long-term growth and value creation. Automation is expected to replace a significant proportion of low-skilled labour, such that the digital economy can be part of the answer for fundamental challenges in employability and the future of work.

Cambodia has positive market conditions for foreign investment and government support for the tech startup ecosystem.

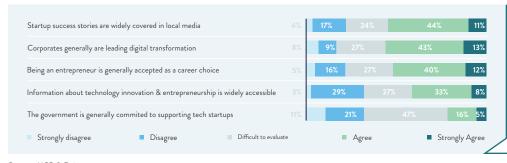
A 90% US-dollarized economy reduces currency risk compared to more volatile emerging market national currencies. Capital flows are significantly less restricted than neighbouring ASEAN markets coupled with aspects that improve ease of doing business, such as registration and immigration. A foreign national can move to Cambodia, register their tech business, and wholly own their company in a matter of weeks, making it an attractive destination for tech entrepreneurs.

A number of undeveloped sectors present opportunities for innovation and "leapfrogging". On the consumer side, 78% of the population remains unbanked in a largely cash-based economy. While this could be considered a challenge for tech startups in areas such as e-commerce, it also represents opportunity. There are many consumer problems to solve, with international entrants Grab and iflix starting to infiltrate the market in very early stages (within the past two years or less at the time of publication). However, localized solutions are required and may provide a stronger, more relevant proposition, exemplars included later in this report. With the market gathering momentum and ready to adopt digital products, now is the time to catalyse the growth of the digital sector.

Perceptions of becoming a tech entrepreneur are rapidly improving amongst young people. Increased media coverage of international startup success stories, as well as local role models, is reducing the perceived risk of choosing an entrepreneurial career versus a more traditional pathway. Government support for the digital economy as defined in the Rectangular Strategy IV, shows public support for the startup agenda as an economic priority.

Cambodia has the building blocks to create a positive environment for startups to flourish and solve some of the economy's most pressing needs. Given the increased digital literacy of the young, as well as scalable nature of tech solutions, this could be the gateway to boosting Cambodia's competitiveness in regional markets while solving large-scale market inefficiencies domestically.

Figure I: Survey on perceptions of tech entrepreneurship



52% Over half of survey respondents agree being an entrepreneur is generally accepted as a career choice

and 55% state that startup successes are widely covered in media.

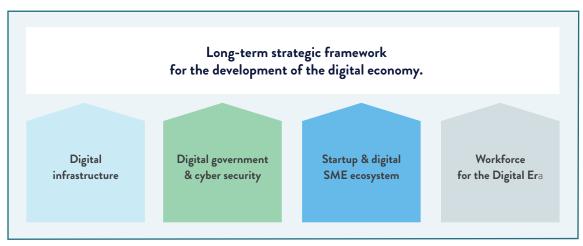
Source: MSP & Raintree survey.

100%

of founders interviewed believe perceptions of being an entrepreneur have drastically improved over the past 3 years.



Figure II: Rectangular Strategy IV - four pillars for the development of the digital economy



Source: Royal Government of Cambodia

2.2 OBJECTIVES, DEFINITIONS & METHODOLOGY

This research project was undertaken to provide an independent snapshot of the tech startup sector up to Q3 2018, characterising existing challenges and an outlook for the future of the sector. While the research synthesises the views of over 100 startup founders, it is not exhaustive coverage of all startups nationwide, but takes a systematic stakeholder approach to provide a comprehensive perspective of the ecosystem. This report aims to be a basic resource for all stakeholder groups in the market, including organisations or individuals outside of Cambodia who are already working in, or interested in participating in, the Cambodian tech startup ecosystem. It serves to:

- Provide an overview of the landscape of the current tech and startup ecosystem for potential corporate, institutional or individual investors.
- Identify and compile key challenges and existing support resources in the ecosystem.
- Catalyse constructive discourse by providing recommendations to enable more systematic approaches by all stakeholders to develop the digital economy.

Figure III: Research process



Source: MSP & Raintree

This report broadly defines "startup" simply as a "company in early stages of operation" to allow a spectrum of perspectives to be represented. Most global definitions of "startup" impose a ceiling of revenue, valuation, number of employees, or years of operation, but these may not be relevant given the economy's early stage of development. For example, there are Cambodian companies operating for up to 10 years that still display attributes of "startups" such as challenges with hiring or funding and exponential growth, in parallel with the development of the wider economy.

Given the nascent nature of the Cambodian startup ecosystem, this report classifies "technology startup" as any company leveraging technology as a core part of their product or have significant digitally-enabled channels. A number of Cambodian startups have offline assets, work with hardware or physical infrastructure, or provide a technology layer to a social problem. Currently most startups are consumer or enterprise digital solutions versus advanced deep tech applications, with the majority innovating around how existing technology solutions can be applied to better serve customers and businesses.

Although some economic and social data is available, digital data is extremely scarce in Cambodia as the country is still undergoing early stages of digital transformation. We therefore employed a number of data gathering methods to develop perspectives for this report as detailed in Figure IV, engaging over 120 stakeholders.

Figure IV: Data sources

DIRECT INTERVIEWS

Qualitative and contextual data were collected via key market interviews to inform analyses of resources, challenges, and opportunities in the sector, including government representatives across three ministries (Ministry of Posts and Telecommunications, Ministry of Economy and Finance, Ministry of Commerce), public and private education institutions involved in technology innovation and entrepreneurship, angel investors and venture capitalists, corporates (specialized in technology, mobile, finance and community building) working closely with the space, support programs and international market experts.

VIRTUAL INTERVIEWS



Learnings and best practices were synthesised from remote interviews with seasoned international market experts across the ASEAN region, as well as similar emerging markets.

LITERATURE REVIEWS -



Comprehensive review of third-party reports by international organisations, local business associations, academic sources and others.

ONLINE SURVEYS



Quantitative and qualitative data primarily targeting Cambodian tech entrepreneurs' demographics, business challenges, and accessibility of support programs and services were collected in an online survey from startup founders and founding team

FOCUS GROUPS

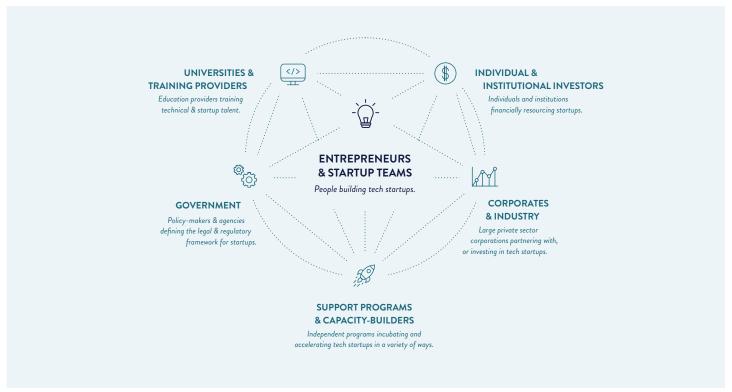


First-hand insights from many Cambodia-based tech entrepreneurs collected during **focus groups and workshops**.

Source: MSP & Raintree

Drawing on the views of local market experts, data from third-party sources, and lessons from relevant regional markets, this report offers recommendations for how Cambodia can expand its nascent tech startup scene and to a thriving digital sector. Report findings are structured around stakeholders in the ecosystem broadly defined in the chart below.

Figure V. Stakeholders in the tech startup ecosystem



Source: MSP & Raintree

Cambodia's digital foundation

3.1 MACROECONOMIC OVERVIEW

Cambodia has a unique macroeconomic foundation for building its digital economy. While the population is a modest ~16 million, approximately one in two people are under 25 years old, making it a relatively young nation. For its level of economic development, the country's mobile penetration ranks at an astonishing top ten in the world. Given Cambodia's geography and significant rural population, it is unsurprisingly mobile-first versus PCs or laptops, with infrastructure challenges related to fixed line internet. However smartphone connections are extremely high with 10.7M phones connected to the internet (a 33% increase compared to 2017). Data rates are some of the cheapest in the world at \$1 per 10GB, as well as significant 3G coverage at 66% of the population.

Similar to other frontier markets, internet usage is highly social with 7M+ Facebook active users (43% of the population) at the beginning of 2018, over 40% increase from 2017. This is projected to significantly exceed 50% of the population in 2019. The majority of businesses with any online presence are on Facebook, with extremely few businesses even having websites or assets optimised for web discovery. Search engine marketing is incredibly limited relative to other countries, with Google not formally monetised in Cambodia yet. In a recent survey, 38% respondents reported they accessed the internet, but 47% reported having accessed Facebook, indicating how synonymous Facebook is with the internet for the average consumer. Even for professional use, anecdotally far more people favour instant messenger apps such as Telegram and Whatsapp over email for daily work communications such as commercial negotiations, file sharing, and other basic enterprise needs. Naturally, entertainment and consuming content are also dominated by social media channels. In 2018, Youtube and Facebook were among the top 5 most visited websites for Cambodians, resulting in the fast emergence of a first-generation of Cambodian social media influencers.

The financial market context is also unique. With 78% of the population unbanked, only 3% population owning a credit card and 13% using any form of mobile payment, there are clear needs in financial services. The rise of fintech platforms and products that circumvent the traditional banking system, could represent 'leapfrog' solutions in the Cambodian market.

Adoption of technology can be incredibly fast, as behaviours are not necessarily slow shifts like in some developed market instances, but first-time experiences or interactions with any formal financial services.

Finally, basic **English language skills in urban populations are reasonably high**, facilitating both employment and technical training. This is particularly relevant to the digital economy given the pace of advancements and skills training required, often primarily available in English. It also is a positive attribute in attracting international talent to participate in the market or even relocate to Cambodia. Overall, these social and economic dynamics paint opportunity for innovative technologyenabled products to access broad markets and be adopted nationwide.

Figure VI. Key facts and figures

POPULATION ~16.3 million

under 25 years old, 23% urban.

53%

6.9%

USD \$22B with **6.9%** growth per annum.

90% CURRENCY

CURRENCY
Cambodian Riel
with 90%
US-dollarised
economy.

78%

~78% unbanked. 3% credit card ownership. < 15% mobile banking participation, minimal capital flow restrictions.

100%

EASE OF DOING
BUSINESS

100% local or foreign ownership, relative ease of in migration for skilled labour.

LANGUAGE

Khmer, with English spoken relatively widely in urban areas, and Chinese dialects spoken amongst significant communities.

84%

NTERNET

~ 14M internet subscribers (27% growth from 2018), ~84% internet penetration.

120% MOBILE

19.4M mobile connections equivalent to **120%** mobile penetration,
Top 10 in the world.

7M SOCIAL MEDIA

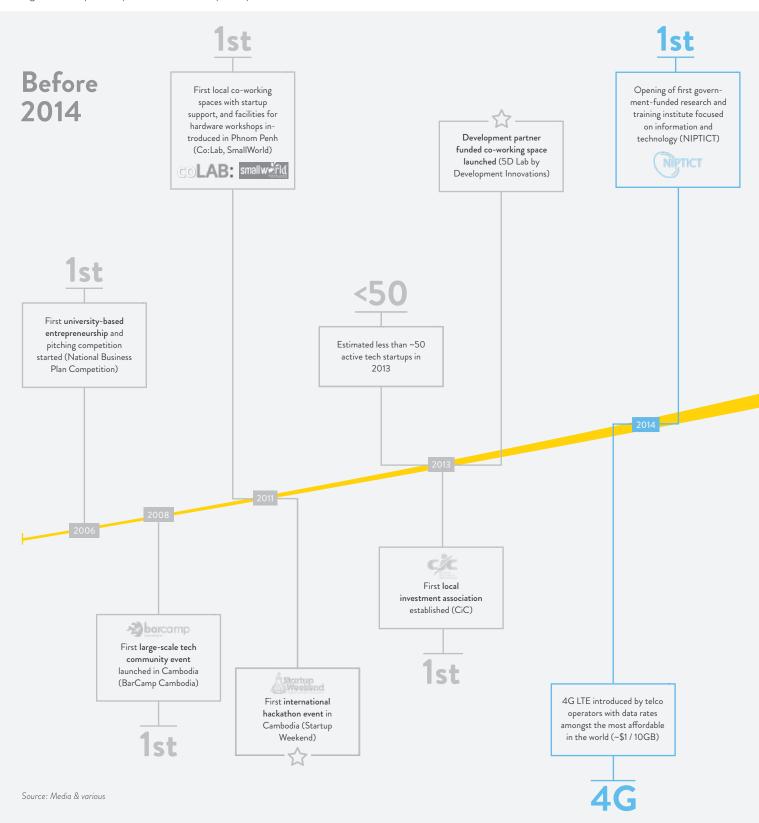
>7M Facebook users (>40% population) >65K Instagram users.

Source: Various

3.2 HIGHLIGHTS OF KEY DEVELOPMENTS IN THE ECOSYSTEM

The Cambodian tech startup ecosystem has progressed rapidly over the past three to five years. The below figure highlights a selection of key developments in the startup ecosystem across multiple dimensions and stakeholders, that will be further detailed later in this report.

Figure VII. Key developments in the startup ecosystem 2006-2019.



Source: Media & various

3.3 OVERVIEW OF LABOUR, STARTUPS AND OPPORTUNITIES

This section describes the characteristics of the Cambodian ecosystem through the dimensions of labour, talent, active startups and sectors of growth.

LABOR & TALENT

The first wave of Cambodian tech companies consisted of a number of hardware importers, telecommunications, basic IT-services, and online media companies. These industries provided both the necessary foundational training and on-the-job learning in basic ICT-related skills for their early employees as the Cambodian tech sector emerged. Today, **the majority of the Kingdom's tech talent, estimated to be ~50,000 workers, are employed in large traditional companies** (banks, retailers, industrials, etc.) while the residual primarily provide IT-services for domestic and international companies in web services and applications.

While freelancers and full-time professionals are attracted to stable high-paying jobs brought on by the demand for technology skills, **many are starting to consider entrepreneurial roles**, largely encouraged by international success stories of the tech industry. Local successful entrepreneur stories and role models are limited given the nascent stage of the ecosystem, but should gradually increase as a result of initiatives and development of the market.

Industry professionals also noted another major trend in the increasing amount of young people willing to start companies and join startups immediately upon graduation from tertiary (even secondary) education. Given the development stage of the digital economy, there is a still a significant gap between industry needs and skilled technical professionals. In addition to domestically-trained talent (estimated at $\sim 2,000-5,000$ new technology graduates per year and increasing) the high-skilled talent gap is likely to be partially bridged by increasing amounts of:

- Foreign expats and digital nomads: numerous technology startups are founded by and/or employ expat technology talents
- Returning overseas Cambodians with foreign education and professional experience

STARTUP SECTORS AT A GLANCE

There are over over ~300 active technology startups currently operating at various stages of development. Current active startups largely relate to establishing early digital platforms and infrastructure, marketplaces and businesses concentrated on consumer tech, illustrated in Figure VII. In these markets, early movers combined with good operators can capture sizeable market share. There is limited deep tech presence of any kind (machine-learning or big data) at this time, representing a future opportunity.

Figure VIII. Tech startup landscape by category



^{*}Note this is not exhaustive of all unregistered 'long-tail' startups emerging from academic courses, hackathons and other similar programs. Source: MSP & Raintree estimates.

The number of startups operating in Cambodia is estimated to double over the next 2-3 years, based on trends in incubation activities and proprietary deal tracking. Research shows a number of factors responsible for this growth. Broadly there is increasing awareness of basic digital needs (e-commerce, fintech, logistics etc.) and natural growth of market opportunities related to the digital economy as consumers become more tech-savvy. Continued entrants from global or regional technology companies are creating market opportunities, as well as serving as a training ground for future founders. This was noted by the number of young entrepreneurs already transitioning from roles with recognised tech companies such as Grab and iFlix to start their own ventures. Another smaller subset of regional startups will likely expand into Cambodia as they saturate their own market, and search for new consumers. As Cambodia is beginning to be recognised as an ideal destination as a 'test-bed' market for piloting new ideas, several stakeholders are encouraging regional founders to either base themselves, or locate specific product or business teams in the market. This has been observed by an increased number of tech-oriented trade visits from regional tech communities. Lastly, the evolution of a certain number of startups from various ideation and incubation programs becoming viable startups is expected to also contribute to sector growth.

OUTLOOK AND OPPORTUNITIES

As Cambodia's early startups are able to establish their prominence within their respective segment, research indicates significant untapped opportunities.

- Development services: While current capacity and client demands largely center on consumer tech such as web and application development, future development demand will require both updated technical knowledge as well as deep tech applications including automation, blockchain, and AR/VR. Although existing agencies may not yet have the capacity to create new platforms and standard protocols, the most successful development service firms will be able to customize and tailor solutions using more advanced development platforms of the future. In order to capture this market, they must continue to invest in evolving both in terms of technical skills and delivery culture.
- E-commerce and logistics: Social selling is made possible due to the proliferation of social channels, aided by the availability of logistics and delivery services with accessible online store platforms. Payment is likely to be frictionless in the very near future allowing more seamless transactions for both buyers and sellers. Existing platforms for last-mile delivery can be improved by leveraging 'shared economy' infrastructure. Additional opportunities in logistics delivery infrastructure also exist on a macro-level, nationwide.
- Digital financial services (fintech): A large unbanked, underserved population will eventually transition into formal financial systems, a significant portion of which will 'leapfrog' to some form of fintech solution, delivered at multiple levels. Simultaneously, banks and microfinance institutions need to address consumer demand for online banking tools while continuously finding ways to reduce costs, operate efficiently and reduce risks with innovative enterprise software. Enterprise-level software-as-a-service, virtual banks, non-traditional credit assessment and digital lending platforms all present significant opportunities as reported in several interviews with industry and other stakeholders. Major questions remain open on how to create an integrated banking ecosystem (across financial institutions, consumers, merchants, regulators). While the National Bank of Cambodia has been progressively-minded about recent innovations like blockchain, they are continuing to explore the appropriate legal framework and compliance, including consumer protection law (which is reported to be currently under development), institutional management, and systematic risk mitigation.
- Digital marketplaces: Existing marketplaces, such as classifieds, have facilitated transactions as an information platform to date. However, through opportunities in socialised data and predictive algorithms, searches can be increasingly personalised and targeted. This enhances the potential of such platforms and marketplaces in exponentially increasing transaction volume, whilst providing a level of trust as a third party.
- Digital media and advertising: Along the global trend of consumers transitioning from watching televisions to accessing news and entertainment online, companies have the opportunity to dominate the market through localised content and online media. Successful media companies must be content focused and take advantage of existing social media platforms (versus competing head-to-head).
- Digital disruptor: While competition is evolving in transport such as the ever-visible ride-hailing platforms in Phnom Penh and first-tier cities, there are many untapped market opportunities outside of the country's capital. For example, edtech and agritech startups have the potential to serve consumers in highly remote areas in the country (comprising the majority of the country's population). There are few agritech startups that have reached significant scale across the market yet, in

any advanced technologies related to data (cultivation and yield-oriented) or supply chain (communication or transaction between farmers and buyers). Given the proportion of GDP in Cambodia represented by agriculture, this is naturally identified as a huge untapped opportunity. Equally healthtech startups can address awareness and early detection through healthcare information platforms, mirroring very successful solutions in other rural and emerging markets recently rolled out in West Africa.

3.4 INTERNATIONAL TECHNOLOGY ENTRANTS



Over the past decade, technology innovation has largely concentrated around developed markets, famously in Silicon Valley (for software), plus Taiwan and more recently Shenzhen (for hardware manufacturing). Southeast Asia has the potential to become a significant regional market and a producer of new technology to meet growing demand for products and rapid development of tech infrastructure, as shown by the 'unicorns' already starting to emerge across ASEAN markets.

In recent years, a number of global and regional technology giants have entered Cambodia as a natural extension of their product or service or to 'plant their flag' early in the market. Being in multiple international territories has given these startups an extra jump in valuation (for example, the gap in valuation between Uber and Lyft). These enter the Cambodian market in three ways:

- Borderless entrants: companies that enter the market with 'the flip of a switch', largely web-based information platforms that require only connectivity and device penetration. They require little on the ground salesforce or commercial infrastructure, if any at all, and may need limited localisation of product. Despite having minimal physical presence, they are still able to capture a significant market share with respect to their verticals. Examples include giants such as Facebook, Netflix, iflix, and Linkedin. Their product dominance in their vertical means it is difficult for local startups to outcompete organically, though niche local solutions exist.
- Operations entrants: companies that enter the market with an on-the-ground operations team, consisting of operators and experienced international "launchers", built upon existing technology products that are largely created abroad. Examples include Grab, Uber, and Rocket Internet products.
- Joint ventures / strategic partnerships: companies that enter the market in alliance with other companies, usually locally-based, to combine resources, expertise and local market knowledge for mutual benefit. In joint ventures, the companies may pool resources to create a separate business entity, versus in strategic partnerships, they may create commercial agreements to optimise existing operations. While local enterprises could share the risks, gain new insights, and expand their networks, agreements can be short-term and for testing or research purposes only. Examples include AliPay, WeChat, and UnionPay.

The continued stream of international tech firms entering the market is a positive sign for the ecosystem.

First, it signals the viability and attractiveness of the Cambodian market, bringing much needed attention to the country's ecosystem that was better known for stereotypical tourist attractions, rather than its vibrant economy. Second, it serves to accelerate the speed of adoption of new technologies and the growth of the digital economy beyond organic trends. The presence of these firms may also serve as a training ground for both tech talent and even future local founders. Thirdly, there are potential opportunities for startups to leverage the channels created by these entrants to create new adjacent products and services, such as social selling resulting from penetration of Facebook and Instagram, and local content available on Netflix, iflix, etc.

Nevertheless, some local startups will likely face challenges as a result of competing with a global competitor, with a highly developed product, brand and sizeable marketing budget. From existing dynamics reported through interviews, local startups can leverage distinct advantages:

- Niche strategy quick to adapt local startups can build an attractive niche product for a focused group of people by solving their particular problems and iterating the product or service quickly. This focus enables them to understand consumer patterns, read signals of change quickly and act to refine or reinvent their business model.
- Local relationships startups may build a network effect by partnering with key local partners, including other startups, regulators, and strategic partners that are pertinent to the local market. For example, a local taxi app may face challenges competing with global firms on pricing alone but may be more suited to work with local payment partners, marketing partners, and operations partners to better provide customer experience.
- Understanding of local tastes a vital understanding of local context is IP and takes time. Local startups may already be aware of specific market conditions; hence, they are better able to adapt to changes, mitigate risks and offer the products or services with intrinsic appeal for local consumers.

3.5 INVESTMENT & FINANCE LANDSCAPE

The investment landscape is growing with an increasing number of local angel investors, private equity, and venture capital funds available in the market. A significant development over the last few years spans the spectrum of deal, including investments and support structure from the earliest stage all the way to preparing for IPO. Significant opportunities still exist for strategic investors at all levels. Perhaps the most pressing capital constraint is in the early or seed stage as reported by this startup survey.

SOURCES OF INVESTMENT AND INVESTMENT PROGRAMS

Selected investment sources in Cambodia are highlighted below, to provide an indication of current activity in the market, shown in Figure IX.

- Ideation programs: to increase participation of university students and budding young entrepreneurs, a number of ideation programs place teams in a crash course on entrepreneurship, where they are able to build a minimum viable product in a few months and, in some cases, have the opportunity to pitch for follow-on financing along with small cash prizes. In the long run, these programs are likely to create a funnel of investment opportunities for seed stage investors. Examples of these programs include SmartSpark, Business Model Competition, Mekong Business Plan Competition, Startup Weekend etc.
- Incubator, accelerator programs and awards: Although relatively new to Cambodia, the ecosystem has seen the emergence of a number of regional or corporate early stage incubator or accelerator programs. These usually comprise pitching competitions along with a component of business development over a short-term period (days, weeks, or months) or a series of cohort-based bootcamps with limited associated funding. Many promote the program as a platform for exposure to potential investors with the possibility of follow-on funding. Examples of these programs include Seedstars, SmartStart, CICTA, e27's APAC Top100 etc. Universities have also established innovation labs via their entrepreneurship programs and run startup competitions and accelerator programs to encourage experiential learning and innovation amongst students. Examples include NIPTICT, NUM, Paragon, and CJCC Accelerator.
- Angel investors and angel investment groups: Local angel investors, consisting of current and former entrepreneurs, high net-worth individuals, and the new generation of family offices, have funded a number of startups with the intention of diversification, getting exposure to opportunities in tech, or intrinsic business interest. Like most angels globally, they are attracted to working with young teams, engaging new ideas as well as learning ways in which technology can disrupt or improve their existing businesses. Many angel investors choose not to disclose their investments, whereas groups such as the Cambodia Investment Club and Corco Angels are active in the market and provide a good entry opportunity for overseas angels looking to explore the local market.

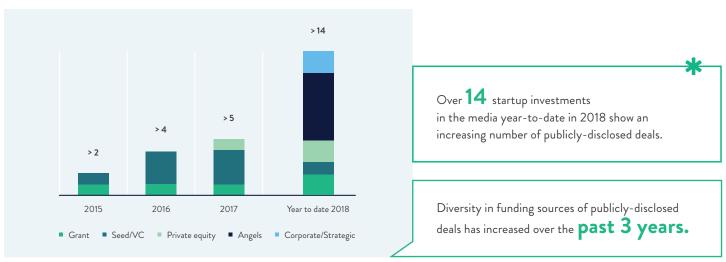
- Venture capital: There are still few established venture capital funds given the stage of market development, with relatively broad investment interests at this time. Among active VC investors in Cambodia are the first Cambodian corporate VC the Smart Axiata Digital Innovation Fund (SADIF), the recently launched Ooctane Fund, and 500 Startups making some of the earliest international VC investments in Cambodian tech startups.
- **Private Equity:** In recent years, sector-agnostic private equity funds, such as EMIA and Belt Road Capital, have made investments into relatively established technology-enabled businesses.

Figure IX. Investment and funding landscape 2018



^{*}Note this is not exhaustive of all local, international, and angel investors. Source: MSP & Raintree estimates

Figure X: Disclosed startup investments by source 2015-2018



Source: media, MSP & Raintree estimates

Since 2015, there are at least 25 startups that have received various types of significant disclosed funding. In 2018 alone, the number of startups that received disclosed funding was at least 14, equivalent to approximately five percent of all actively operating startups. This percentage is vastly higher than many other ecosystems around the world, partially due to the stage of market development, but also reflective of recent local interest in tech investments. More notably, sources of funding have become more diversified, which include prolific local angel investors, corporate and private equity investors, in a funding space previously dominated by a select number of venture capital funds. A number of notable investments are shown in Figure X below.

Figure XI. Selected notable startup investments 2015-2018

FUNDED START-UPS	COMPANY	FUNDING ROUND	FUNDING AMOUNT	INVESTOR	YEAR INVESTED	
NAHM 24	Logistics & delivery	Seed / VC	Undisclosed	Smart Axiata Digital Innovation fund		
KHMERHOME	Real estate classifieds	Seed / VC	Undisclosed	500 Startups		
REALESTATE.COM.KH	Real estate classifieds	Private Equity	AUD 2.25M	Belt Road Capital Management		
AGRIBUDDY	Agriculture platform	Series A	USD 2.8M	Smart Axiata Digital Innovation Fund, Forte Investments, Mistletoe	2018	
SABAY DIGITAL	Digital entertainment	Private Equity	Undisclosed	Belt Road Capital Management		
CLIK	Fintech	Angels	USD 2M	Limestone Technology, OpenWay		
CODINGATE	IT Services	Corporate / Strategic	Undisclosed	ISI Group		
MEAL TEMPLE	Food delivery	Angels	Undisclosed	Undisclosed		
BONGLOY	Fintech	Angels	Undisclosed	Undisclosed Angels		
BANHJI	Fintech	Corporate	Undisclosed	Undisclosed Angels		
UNDISCLOSED	Media	Angels	Undisclosed	Undisclosed Angels		
MORAKOT	Core-baking systems for banks	Seed / VC	Undisclosed	Smart Axiata Digital Innovation fund		
JOONAAK	E-commerce delivery & logistics	Seed / VC	Undisclosed	Smart Axiata Digital Innovation fund		
KHMERLOAD	Digital media	Seed / VC	USD 200K	500 Startups		
SABAY DIGITAL PLUS	Digital media & content	Corporate / Strategic	Undisclosed	Smart Axiata		
BOOKMEBUS	Transportation booking	Seed / VC	USD 15K	Undisclosed Angels		
AGRIBUDDY	Agriculture platform	Seed / VC	USD 730K	ISGS (lead investor)	2016	
СНІВІ	Communications hardware	Seed / VC	USD 92K	UNICEF		
CAMBOTICKET	Transportation booking	Seed / VC	USD 100K	OBOR Capital	2015	
BONGPHEAK	Jobs classifieds	Grant	Undisclosed	USAID / Winrock		

Source: Phnom Penh Post, TechInAsia & MSP Research

There are a significant number of funded startups choosing to remain in 'stealth mode'. For example, a fintech startup reportedly secured a seven-digit investment from an individual angel investor within the last year, but would prefer not to disclose their investment at this stage. The major source of funding in these cases tend to be from high net worth individuals and angel investors. A small number of startups have received follow-on investments, but ultimately there are a limited number of exits yet to be seen in the Cambodian market.

3.6 GOVERNMENT SUPPORT FOR THE ECOSYSTEM

Over the last three years, the government has drawn significant policy initiatives and discourse around propelling the tech sector and startup ecosystem. This includes setting out an initial vision for what Cambodia's digital economy aspires to become in the Rectangular Strategy IV (2018-2023). This is the first time the digital economy has been included explicitly in the national development plan.

The Ministry of Posts and Telecommunications (MPTC) has kick-started public engagement through introduction of broad-based awareness campaigns such as the annual Cambodia ICT Awards (CICTA) and Women in Tech Awards, that raise the profile of local startups and entrepreneurs. These are critical for role-modelling and media exposure for the sector. This is bolstered by support of incubator programs and pitching competitions driven by industry such as SmartStart, Echelon Top 100 APAC, and Seedstars Bootcamp, with increasing presence in universities and media coverage. Many significant initiatives have been enabled through the National Institute of Posts, Telecoms & ICT (NIPTICT). The launch of the NIPTICT Innovation Lab is intended to be a centre for digital innovation and startups both from the entrepreneur community and university research teams. MPTC is also expected to release the Cambodia Startup Policy, the first of its kind in this region, after having a series of consultations with the entrepreneur community and private sector.

MPTC also aspires to do more through one of the most ambitious policy initiatives thus far - **the Capacity Building and Research & Development Fund (CBRD)**, resourced through a 1% service revenue contribution by telco operators from 2017. The CBRDF has already introduced many initiatives in partnership with the private sector in promoting startups and technopreneurship in the country. Other aspirations include building more facilities, creating training resources, and offering learning opportunities for Cambodian startups and entrepreneurs.

Ministry of Education, Youth and Sports (MoEYS) also recognises the importance of building talent for the digital economy. STEM education has been a priority agenda item for several years, including introduction of new curricula and pedagogy in New Generation Schools, the E2STEM program, STEM Festival and other awareness campaigns. Support for programs such as SmartStart, Technovation Cambodia, the Business Model Competition and Mekong Business Plan Competition have encouraged younger demographics to consider technical and entrepreneurial career pathways.

Following the recent general election, the **Ministry of Economy and Finance (MEF)** with input from **General Department of Taxation (GDT)** is beginning to roll out new initiatives to support the startup and MSME sector. A highly anticipated policy change is the three to five year tax break for SMEs including ICT as one of six sectors. Eligibility criteria for such tax breaks was announced publicly at the end of 2018. This is also in line with startup policies in the pipeline co-designed by MEF and MPTC, scheduled to be announced March 2019.

Spearheaded by the Ministry of Economy and Finance, the **National Skills Development Fund** with aggregate capital of \$5M, is intended for programs to bridge the mismatch between university curricula, existing entrepreneur capabilities and market needs. It intends to yield more technically trained talent, and increase private sector partnerships that ensure talent meets employer needs, especially SMEs and startups. A second fund, the **National Entrepreneurship Fund** equally of \$5M funding, is intended to contribute to engendering mindsets that encourage innovation and careers beyond more traditional professional pathways. This may include support such as working with incubators and projects that do capacity building in the ecosystem, but is also still in planning stages at time of writing.

The Ministry of Commerce (MOC) has drafted the Consumer Protection Law. This law is currently being discussed for approval at the inter-ministerial level before obtaining an approval from the Council Ministers. MOC is also drafting Competition Law and E-Commerce Law. The laws are expected to be passed in 2019 and aim to support the development of e-commerce activity not only within Cambodia, but also regionally.

Over \$12M in government funds has been dedicated to startup and tech initiatives or education to be activated from 2019.

Cooperating with MOC, the **Ministry of Industry and Handicraft** have also supported highly visible initiatives such as Cambodian Young Entrepreneur of the Year Awards in association with Young Entrepreneurs Association of Cambodia (YEAC) and Junior Chamber International (JCI).

Although it is a positive sign that multiple ministries are actively engaging in tech and startup policy for economic development, it is still early and will require sustained approaches in close consultation with industry for successful delivery, with iterations throughout implementation.

Support for startups & entrepreneurs

Facilities, programs and other support services for entrepreneurs have been marked by the influx of seed-stage co-working spaces, the proliferation of pitching competitions and hackathons, incubator-style programs, non-profit funded capacity building, and most recently emerging interest from regional accelerator programs.

4.1 CO-WORKING & INNOVATION SPACES: THE RISE OF THE HOT DESK

Co-working space is a recent but growing phenomenon in part because of rising interest in the tech sector, but also due to the steady increase in alternative work arrangements in the new economy. Starting with two co-working spaces opened prior to 2013, Cambodia now has over 25 locations that brand themselves as co-working spaces, although it is reported that local market understanding of co-working space is fairly rudimentary in terms of offering. Expectations are low and service provision minimal, mostly in the form of low-cost, shared workspace with a basic internet connection, especially amongst the new entrants.

Excluding those that are offering purely a temporary desk and internet, there are over 17 seed-stage co-working spaces, 14 in Phnom Penh and three in Siem Reap, with an estimated capacity of over 500 desks. Most of the spaces are privately owned, with only a few non-profit funded. While co-working spaces are widely accessible and affordable in Phnom Penh, only 35 percent of startup founders surveyed indicate that co-working spaces are critical to their company's success.

Figure XII: Timeline of co-working and innovation spaces (Phnom Penh and Siem Reap) 2010 - 2019

■ Closed ■ Operating ■ Upcoming **Emerald Hub** CoLAB Tek4Good previously TekHub 2016-Present, Phnom Penh 2016-Present, Phnom Penh 2010-2017 Phnom Penh Co-working space Emerald Hub Saha'ka **Small World Venture NIPTICT** 2016-Present, Phnom Penh 2018-Present, Phnom Penh 2010-Present Phnom Penh Innovation Lab Outpost Cambodia **BioLAB Coffee & Office** Regus I 2016-Present, Siem Reap 2018-Present, Siem Reap 2012-Present, Phnom Penh 2010 2011 2016 2018 2019 Co-working space DI 5D Lab Comm.ONN Regus II WS1, The Factory Regus Ministy of Industry 2012-2015, Phnom Penh 2016-2017, Phnom Penh 2017-Present, Phnom Penh 2018-Present, Phnom Penh & Handicraft Trybe **Garage Society** Angkor Hub **Coworking Today** 2016-Present, Phnom Penh 2013-Present, Siem Reap 2017-Present, Siem Reap 2018-Present, Phnom Penh **Futures Factory** The Desk Est.2019, Phnom Penh 2017-Present, Phnom Penh Impact Hub Co-working space, Phnom Penh Ministry of Planning

Note: Spaces in grey are no longer in operation. The list does not include university incubation or university innovation spaces as they are covered in the following sections 8.2 and 8.3. Source: Development Innovations, startup-cambodia.com, www.coworkers.com

A handful of co-working spaces have community managers who facilitate some level of support service and programming. These cover a range of activities from community building events to training workshops, mentorship, and investor networking. Notably these are **Small World Venture**, **Impact Hub Phnom Penh**, **Emerald Hubs**, and **Tek4Good**. Joining the co-working movement in 2018 are **The Desk**, **Sah'aka Coworking**, and **WS1 by The Factory Phnom Penh** who are actively building up their community of entrepreneurs spanning across diverse sectors. Trybe, a co-working space, evolved into tech innovation community centers and including in the same space innovation lab, ArcHub makerspace as well as incubator and accelerator programs in 2016. However, the space has since been absorbed as an innovation lab for **University of Puthisastra**.

*

Over 23

co-working and innovative spaces have been opened since 2011 with several move in the pipeline.

Throughout the rise of the hot desks in the last few years, several co-working spaces have been closed due to increasing rent and competition, namely Co:LAB, Comm.ONN, and Development Innovation's 5D Lab. A handful of co-working spaces are in the pipeline for 2019, including spaces to be offered by multiple government ministries either in a stand-alone co-working spaces or as an of an innovation lab or incubation center. Market experts and startups urge existing and new spaces to evaluate their programs to create meaningful communities and improve quality of supports specifics to the startups.

4.2 INCUBATOR PROGRAMS & EVENTS: INCRESE IN NETWORKING & PICTHING

In line with the rise of co-working spaces, corporates and development partners have sponsored incubator-like programs, hackathons, and startup competitions of various themes including technology. Notable programs are Smart Axiata-funded SmartStart and SmartSpark, BMC Accelerator, Development Innovations-funded EPIC, Toyota Impact Challenge, Grab Mobility Challenge and community-led Startup Weekend Cambodia. These programs concentrate primarily in Phnom Penh, and to a much lesser extent in Siem Reap and Battambang.

The majority of cohort-based boot camps adopt an education approach with activities designed for building entrepreneurial mindsets and providing business simulation. They are generally run by or in partnership with co-working spaces, most notably Impact Hub Phnom Penh, Small World Venture, Trybe, and Emerald Hub in the last few years. Although Impact Hub Phnom Penh currently runs a large number of corporate or grant-funded programs, Small World Venture and Emerald Hub have partnered with universities to provide university-based boot camps starting from April 2018.

Participants of seed-stage programs have been primarily university students and recent graduates with little to no prior professional experience, although support programs have begun to see growing interests from young professionals. Programs are selective, but free of charge, and provide mentorship, rapid skills training, and often some form of cash prizes of up to \$10K. Pitching style competitions with cash prizes, which became popular since 2015, has been observed to be oversupply in options. Easy cash-prizes from competition when awarded to winners of mediocre ideas is essentially diverting resources from other potentially great ideas. The MPTC and NIPTICT have also introduced the annual **Cambodia ICT Awards** with prize money of up to \$20K.

While early stage programs are becoming more available, there are limited incubator and accelerator programs for mid-stage startups, particularly post-seeds and pre-venture startups. A few local accelerator programs emerged in recent years with the focus on supporting ready to scale businesses, but none cater specifically to technology startups. **Cambodian Investment Clubs**, for instance, runs a fee-based accelerator programs called **Beyond Investment Opportunities** Accelerator for SMEs in Phnom Penh, Siem Reap, and Battambang. While CiC is interested in supporting technology startups, they admitted that they needs to build domain knowledge in technology and engage with local investors to build trust prior to making such provisions. **CJCC Accelerator**, sponsored by **JICA** and implemented by Deloitte Japan, offers Cambodian startups, including technology business, exposures to Japanese crowdfunding platform, but only for businesses that look to expand to Japan. **SHE Investments** offer fee-based programs to female entrepreneurs to scale their micro-business, but few of the businesses in this program are digital technology business.

Adding to the local dynamics, the last few years have seen interests from regional programs such as the **TigerMekong accelerator, Echelon Top100 APAC, Mekong Business Initiative** accelerators, and **Seedstars Bootcamp**. Cambodia's tech startups also have opportunities to participate in regional competitions and events, which expose them to new ideas, expand their network of peers, improve access to mentorship, increase visibilities of the companies, and access funding through cash prizes and network of investors. Surveys show tech startups that participated in regional accelerator programs and in operation for the three to four years, received some level of investment from VCs and angel investors.

4.3 UNIVERSITIES & TRAINING INSTITUTIONS: EXPERIENTIAL LEARNING & INNOVATION LABS

Most of the 118 higher educational institutions in Cambodia, both public and private, offer business-related courses, and about 30 percent offer IT and engineering programs. Although business is one of the most popular majors, the emphasis on entrepreneurship education is a fairly recent phenomenon. In recent years, in response to increasing interest in tech business, a few leading universities in Phnom Penh have taken steps to bridge entrepreneurship and technology education.

Universities are exploring different models for supporting student learnings and projects. Four universities, namely **The**National University of Management (NUM), Institute of Technology Cambodia (ITC), Paragon University (previously Zaman University) and University of Puthisastra, established on-campus innovation labs with the purpose of spurring entrepreneurial mindsets amongst students. NIPTICT's innovation lab is underway and scheduled to be open for startups in 2019.

NUM has been running annual business competitions, a startup simulator for university students and recent graduates since 2006. ITC, Norton University, and NIPTICT partner with Emerald Hub and SmallWorld Ventures to implement startup bootcamps for students. University of Puthisastra partnered with Trybe to extend the co-working space and innovation lab space into student innovation center. Although there have been forms of active partnership on the education side, such as universities working together for annual business plan competitions, universities interviewed mentioned lack of meaningful partnerships with other stakeholders in the ecosystem.

While corporate funding, most notably from **Smart Axiata** and **EZECOM**, and other development partners, such as **USAID** and the **EU**, have make it possible for the universities to offer a dedicated on-campus facility such as innovation lab for students to work for technology projects, public universities interviewed note that challenges lie in program development, personnel with experience in building meaningful communities and managing innovation space, and financing support for programs and student projects.

Challenges for the development of the ecosystem

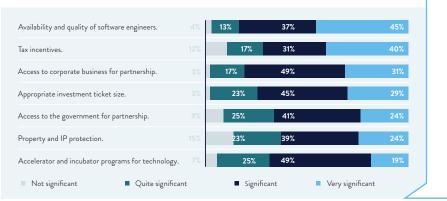
Findings from focus group discussions, a broad survey of startup founders and interviews with market experts reveal insights into the main challenges of the ecosystem. These are characterised by stakeholder groups, and cover a wide range of issues from cultural perception, to training and skills, to policy and regulatory frameworks.

5.1 UNIVERSITIES & TRAINING INSTITUTIONS: MATCHING MARKET NEEDS WITH CURRICULA

While market experts and founders acknowledge that tech capacity is growing compared to five years ago, qualified technical talent with required mid to high-level skills that meet startup needs are still not in great supply.

More than 80 percent of founders who participated in this study believe the availability of high-quality software engineers will be critical to their success; however, more than 90 percent of the same founders report challenges in hiring higher-skilled technical talents. There is currently a lack of mid to senior-level technical talents with project management and execution experience, particularly those with direct experience of building and scaling tech startups. This finding aligns with a recent study by Digital Rain Agency on technical skills gap which reveals that two-thirds of businesses in the IT sector reported being unable to hire staff with adequate IT skills. Project managers and team leaders the most difficult roles to fill, followed by software engineers.





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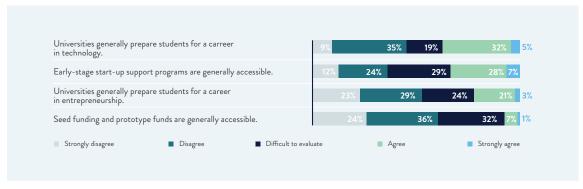
Source: MSP & Raintree survey

Interviews with educational institutions reveal that the majority of **technical universities have been optimised for training IT students skills to maintain business operations in SMEs**, which accounted for the majority of business in Cambodia. Given rising interest in tech ventures amongst students, bolstered by recent public campaigns to boost tech entrepreneurship as a catalyst for SME innovations by several ministries, mindsets are shifting.

Enrollment in technical majors has improved but remains low on an absolute basis. According to a study commissioned by YEAC in 2015, less than 1% of university students graduated with a Master of Sciences in Engineering and Technology. In addition to low enrollment rates, market experts observe that curricula are generally outdated and lack alignment with rapidly changing market demand.

Figure XIV: Survey on perceptions of tech and entrepreneurship education

Founders are concerned about entrepreneurship education and availability of resources to support experiential learning. Only ~30% of founders believe that universities generally prepare students for a career in technology or entrepreneurship.



Source: MSP & Raintree survey

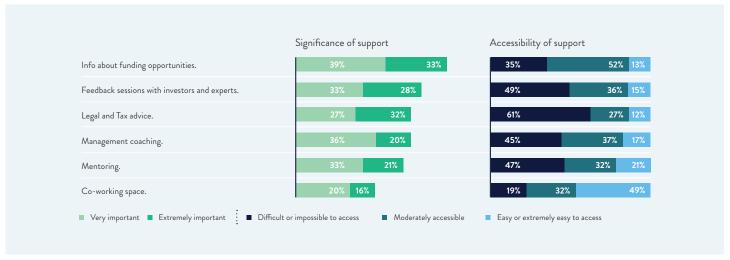
Leading universities in Phnom Penh have begun to adjust their curriculum and designed activities to support student learning, with teachers and universities in the provinces accordingly upskilled. However, educators emphasise limited teaching and resources to support student projects as one of the major constraints in implementing experiential learning programs. Models such as those at the **Kirirom Institute of Technology**, designed to develop tech talent and entrepreneurs, are emerging but are in very limited supply.

Unfortunately only 36 percent of founders surveyed believe that universities alone are equipped to prepare students for a career in technology, and even fewer believe universities prepare students for a career in entrepreneurship. They suggested certified rapid skills training programs could complement university programs to quickly bridge technical skill gaps.

5.2 ENTREPRENEURS: DEVELOPING GREAT FOUNDERS THROUGH MENTORSHIP

As Cambodia develops its first generation of entrepreneurs, ensuring founders are well-prepared to build and scale their startups will be an evolving challenge. Specific functional challenges are highlighted below as reported in the survey.

Figure XV: Survey on perceived support needed for tech startups to succeed and accessibility



Source: MSP & Raintree survey

INVESTMENT, LEGAL & TAX INFORMATION

Founders reported that **information about funding, as well as legal, and tax advice are extremely important but highly inaccessible.** Over 70% of founders believe access to information on funding opportunities is important for their success, but less than 15% believe information is easily accessible. Founders also reported very limited opportunities for feedback sessions with investors, with only 1 in 5 founders having any access to mentorship from finance, investment, or VC professionals. With regards to compliance, clarity on legal and tax processes for startups and tech can be improved further. Startups report struggling to find up-to-date, definitive resources that guide them through policy, instead of straining their resources with complexity or ambiguity. Unsurprisingly founders reported new policy should incentivise not only the development of local startups, but incentivise international founders to launch new ventures based in Cambodia.

While startups ranked the provision of co-working space itself as the least significant support they required, they felt additional services such as investment, legal, and tax consultation from startup support programs through these spaces would be beneficial, with access to investment professionals to engage as mentors or strategic partners.

COMMERCIAL EXPERIENCE

Universities and support programs report growing interest amongst young people, especially recent graduates, who are excited about the idea of building their own startups immediately upon graduating, rather than working for another company. More than 80 percent of founders who participated in this study are working on their first startup project. Amongst those, many founders are recent graduates with limited professional experience, industry knowledge or business acumen required for launching a startup. Young and first-time founders with technical backgrounds identify a lack of commercial experience as a major hindrance to their ability to prove feasibility of business model and follow investment due diligence processes.



Over 80% of founders report to be working on their first startup project at the time of the survey.

MENTORSHIP

While mentorship is not a replacement for academic teaching, it is an important knowledge transfer mechanism for entrepreneurs to acquire commercial insight, business acumen, understand the underreported truth in startup challenges, and access various resources. Given the early stage of the market, access to quality and regular mentorship remains a challenge for founders, and most mentorship is currently received by local peers who have limited professional experience.

Research suggests that mentorship is one of the most important needs for entrepreneurs to succeed, especially for young and inexperienced founders who have good ideas with product-market fit but lack business experience to execute and relationships that can open consumer markets or strategic partnerships. When asked how often founders had access to mentorship, 1 in 2 founders reported having zero or very infrequent access to mentorship, while others receive mentorship from more casual peer-to-peer relationships. Less than 25 percent of founders have access to any finance, investment, or VC professional, resulting in challenges in the investment process detailed further below. Unsurprisingly there is a lack of local professional mentors, both commercial and technical, with direct experience of building and scaling startups (unless they have been previously based overseas).

Figure XVI: Survey on startup access to mentorship



Source: MSP & Raintree survey

5.3: STARTUP TEAMS: ITERATING FAST TO SCALE & DEFINING "INVESTMENT READINESS"

While support programs, pitching competitions, and university-based incubation programs have observed improvement in the quality of ideas over the last two years or so, **challenges lie in execution and building for growth.**

ITERATING FAST & SCALING

Although many version 1.0 startup products serve a simple function or address a clear need, market experts report that the further development of product functions, optimisation or additional features is too slow. Startup teams are less equipped to validate and iterate products at speed versus those in neighbouring markets, and less equipped to develop product clarity in order to scale. Without speed, startups run the risk of losing market share to new entrants both locally and internationally. This may be addressed by another challenge of shifting the mentality of startup teams away from silo-ed product development, instead seeking to partner up with other adjacent startups. The aim of such partnerships is to not 'reinvent the wheel' or duplicate features, and instead differentiate by true product innovation not pure price.

Additionally broader feedback from investors and other stakeholders encourages startups to solve widespread problems at all levels of the economy (instead of parochial problems that focus on higher-income niche urban issues). Particularly with startups born from hackathons and pitching competitions based in Phnom Penh, investors report seeing too many products that address markets that are too focused on a problem only relevant to a small percentage of the population.

DEFINING INVESTMENT READINESS

While interest and allocation is available for startup investment, challenges are identified in closing deals due to 'investment readiness' issues, relating to both startups and investors. To date there have been only ~30 publicly-disclosed tech startups with institutional capital investment. Many early stage startups still lack understanding of what 'investment readiness' means or what conditions are required to close institutional, corporate, or even significant angel investment. These conditions cover a broad spectrum of factors from financial management and reporting, commercial understanding, leadership, and team culture, far beyond just technical product.

Given the lack of extensive experience, the level of sophistication in doing business and professionalism of founders can be a significant challenge. Investors observe that early-stage startups pitch to them before even talking to customers or gaining strong consumer insight. For founders who attended accelerator or mentoring programs, they often overly focus on delivering competition requirements and less on creating sustainable business progress after the programs.

Young founders lack an understanding of basic financing models at a fundamental level, such as the difference between equity and debt, different terms for phased financing, performance conditions of fund release, and more. This is partially reflective of the level of business education currently available via formal education or through entrepreneurship support programs.

Startup teams have difficulty staying up to date with policies and regulatory frameworks which change quickly. Founders surveyed consider legal and tax information the second most important support to enable success, after information about funding opportunities, but indicate that it's the most inaccessible service in the ecosystem. With most startups still operating unregistered, support services should facilitate startups moving into the formal economy, such as creating a 'one-stop centre' for questions regarding processes and policy. It is a lofty expectation that founders can concurrently build their business whilst navigating unclear legal frameworks, especially as general information on policy, regulatory and legal requirements is hard to access online and updates are sporadic and unpredictable. Market experts call for the government to improve the registration and tax payment processes for startups, such as altering withholding tax for services not provided within country, and provide tax incentives to reduce the amount of capital startups need to formalise their business. Furthermore, requiring startups to comply with new salary administration for example (such as quickly-changing seniority or payment schedules) is an additional administrative burden, making day-to-day operations far less manageable.

60% founders surveyed consider legal and tax information important support to enable success, but 61% indicate that it's the most inaccessible service in the ecosystem.



TALENT ACQUISITION & RETENTION

Building and retaining a strong team is a major challenge for Cambodian tech startups, both in terms of supply and affordability. Although the perception of entrepreneurship, and becoming a founder, as a career is generally accepted amongst peers, working for startup as an employee is generally considered a less attractive career aspiration due to perceived risk of job security and lack of prestige that would otherwise come from working for a big-brand corporate.

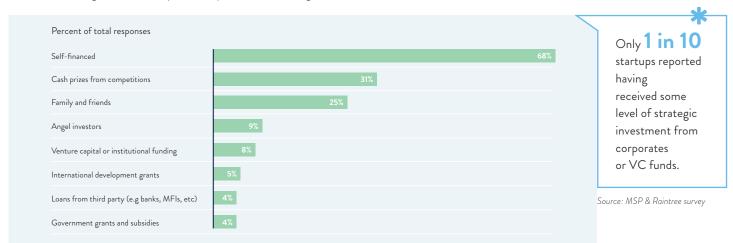
While Cambodia awaits its first 'unicorn' or large exit to shift perceptions of working in a startup team, a temporary solution may come from bridging repatriated Cambodians with foreign education and professional experience with tech startups in the local market. In order to close the technical skill gap and build entrepreneurial culture, the majority of tech startups reported to have allocated resources for internal training programs to build skills that are needed for the job. They are also willing to pay for staff to attend certified technical trainings and personal development courses if such offerings are available, but state they are scarce at the moment. While building a culture of learning is a necessary approach in the long-run, it is an expensive investment in the short-run given trainings are expensive and the cost is absorbed wholly by startups. For start-ups with high turnover, this results in poor return on investment in an already financially-stretched business environment. Providing in-house training or paying for staff training is not only a cost issue, but also diverts resources from developing core business priorities. Founders call for government to provide incentives for companies to invest in training of staff, either through tax credits or cost-sharing (some of which are highlighted in proposals by the CBRD Fund, National Entrepreneur-

5.4: INVESTORS: MANAGING EXPECTATIONS & THE INVESTMENT PROCESS

As previously highlighted, while interest and fund allocation are available for startup investments from the individual, corporate and institutions, startups face challenges in accessing these funds due to their early-stage of development and the uncertainty of technology.

Figure XVII. Survey on startup sources of funding

ship Fund, and the Technical Development Fund).



INSTITUTIONAL & CORPORATE INVERSTORS

Institutional investors typically require the highest level of due diligence, and therefore highlighted a number of concerns with respect to the ability to close deals.

- Readiness: The majority of startups under consideration for investment are between 2-5 years of operations with a loosely defined structure and little formal documentation of their financial performance. While most investors are aware of these circumstances, most still require a robust picture of commercial progress. As such, the fundraising process can be extremely time-consuming despite the potential viability and market uptake of the startup. Several startups operate similarly to family-owned enterprises and must transform their business practices into a baseline company structure to accommodate investors and other non-family members who may be brought into their leadership team.
- Investment process: For most startups, the fundraising process will be a completely new undertaking for them. As such, investors take on the role of educating entrepreneurs on legal requirements, investment structures (convertible note, equity, options etc.), rights and protective clauses, and governance. Investors successful at communicating expectations on valuation and structures very early on are therefore more likely to secure dealflow.
- Liquidity and exits: Most investors surveyed believe exit opportunities are a minor issue, one which should improve over time. While the IPO market should be more robust in the future, domestic and international sales to strategic acquirers and sales to later-stage funds in most cases are the most direct path for exits. However, investors seeking an articulated exit path ("buy to sell"), at the time of the investment need to be creative when structuring an agreement with prospective buyers.
- Market size: Although Cambodia is a small and nascent market compared to some regional neighbours, addressable market sizes for any given digital vertical may appear small at the outset. However, there are no dominant products that prohibit successful new entrants to the market. This represents an opportunity for both startups and investors. Investors can generate sizeable returns for picking early startups that could quickly achieve market leadership and widen their market share over their competitors. However, these investors may need to take risk and have a unique long-term view, which may differ from prevailing market consensus.

ANGEL INVESTORS

Local angel investors may face various challenges depending on their intrinsic motivation for their investment and prior investment experience. Specifically, their level of expectations on returns and performance, as well as sophistication of investment approaches, may vary greatly, especially for first-time angel investors.

For angels making a first-time investment, it may be intuitive to want large equity stakes early to retain a level of control. However this may reduce incentives for founders and eliminate equity that could be used to recruit capable talent to scale the business. Angel investor mindsets should begin to shift as understanding increases that the purpose of angel investing is to enable (and trust) founders in their ability to make sound commercial decisions. Additionally, early investors, particularly high net-worth individuals, may have limited time and resources to actively manage their investment or founders. The investment process can often be unstructured, intuitive, and potentially detrimental to young startup teams.

5.5: PUBLIC POLICY: DEVELOPING GROWTH-ORIENTED POLICY & REGULATORY INFRASTRUCTURE

There are ongoing dialogues and industry consultations about how to design and implement appropriate policy for the tech sector. Many founders are still uncertain about how to build and scale their companies, and equally **investors have significant** questions about long-term risks and uncertainties relating to policy for investing in startups in Cambodia.

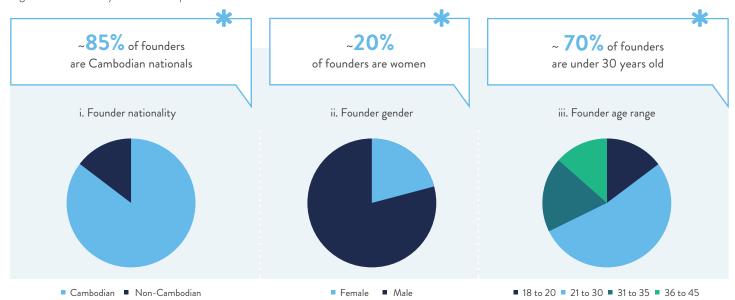
While registering a standard business can be quick, there are still a number of unclear processes and costs associated with operating tech startups. At early stages, several startups remain unregistered for a number of years as entering the formal economy can be both administratively challenging and, occasionally, economically unviable.

Broader tax incentives have been announced, but implementation has yet to be clarified, and **multilingual online resources** to guide startups are still very limited. The adoption of monthly tax reporting is relatively new and changes frequently, such as the introduction of bi-monthly salary payments which can become untenable for a lean startup team of three without a finance specialist. Expertise and time is needed to develop new policies for more sophisticated areas within fintech, such as e-commerce law, that will need greater resource to develop.

These are equally new challenges in many developed markets. Feedback from startup founders is that improving clarity and consistency of application will be critical for the development of the sector, especially should they consider foreign investment opportunities.

5.6: INCLUSION: ENSURING DIVERSITY & ACCESS IN THE ECOSYSTEM





Source: MSP & Raintree survey

In line with many global markets, **diversity in the ecosystem is equally challenging in Cambodia**. Of all the startup founders who voluntarily participated in this research, over 80% were male. Whilst we did not survey full team gender diversity, it is likely that this gender bias is even more exacerbated in their startup teams.

The vast majority of startups are working on urban solutions, with very limited products aimed at mass or rural markets. This is also true for solutions that target lower socio-economic consumer segments in spite of high smartphone penetration and cheap data rates. This represents an additional opportunity considering future market participation. Although several platforms, apps, and services are bilingual or fully Khmer language, the majority are still Anglophone solutions.

While these dynamics may not be surprising, they represent real long-term commercial challenges if Cambodia aspires to truly build its digital economy. In order to be sustainable and create true value in the domestic economy, the tech ecosystem needs to actively build local talent to avoid dynamics like those found in Sub-Saharan Africa, where a mere 9% of all venture capital funds are awarded to founders native to the region (versus expatriate founders building startups in those markets). Overcoming these challenges will require public and private sector solutions driven by potential partnerships, to achieve truly optimal commercial environment.

6

Learnings from other markets

6.1 SINGAPORE: CLEAR POLICY & REGULATORY FRAMEWORK



Singapore is renowned for its strong implementation of national policy, specifically in the tech sector and the startup ecosystem over the last 10 years. When developing their plans for building their digital economy, the government drew from international case studies and best practices, adopting approaches gleaned from Israel and the UK.

A core part of their digital economy foundation is making it easy for both locals and foreigners to build companies in Singapore. Foreigners can simply register wholly online, following a clear process and with total ownership. Tax incentives are aligned, with the first three years of business operations incurring no tax on profit and no capital gains. Entrepreneurship visas are straightforward to apply for. Commercial law is very strong, especially contract law as well as IP and trademark protection. The government takes an open stance on regulatory matters where unanticipated problems arise, creating 'safe spaces' to test product-policy interaction - such as the fintech sandbox led by the Monetary Authority of Singapore. Rather than penalising startups for legal infringements in heavily regulated industries such as insurance, these spaces allow for mistakes to be corrected by startups within a grace period, and collaboratively build out appropriate regulatory frameworks for future sector development.

In their first phase of ecosystem building, Singapore invested in educational institutions, such as universities and research centres - to inspire university students to build tech companies and commercialize, or scale, technology emerging from research institutes. Next, they focused on building additional capacity in the ecosystem. In 2006, the government-funded idam initiative was launched. This program identified a select group of incubators who pitched for matching grants. These grants were not tied to equity stakes in portfolio investments made by incubators, resulting in an early group of seed-stage VCs. This effectively reduced risk for incubators to start small funds in target niches - consumer, deep tech etc., and allowed incubators to build small portfolios quickly. Looking to import technical experience, the government invited overseas incubators, investing in events to promote the sector throughout 2009 and 2010, and even relocated iconic founders like Golden Gate Ventures. Singapore covered expenses in return for active participation in the ecosystem, expecting provision of mentorship, fuelling ecosystem events, and taking on public speaking engagements to foster the sector. The government also looked outward, supporting Singaporean founders to have regional presence, sending them to overseas events and trade shows. These opportunities for exposure and business development were accompanied by a sensible subsidy model, not fully sponsored, to ensure commitment from all stakeholders.

APPLICABLE LEARNINGS INCLUDE:



- Underpinning the sector with an open and clear policy framework allows for sustainable growth of the digital economy.
- Designing and supporting cross-incentivised initiatives on a subsidised basis ensures founders are invested to their own experience, rather than on a purely scholarship basis.
- Implementing and quickly iterating upon a broad portfolio of policy and regulatory initiatives championed by agencies with clear strategies enables efficient development of the sector.
- Making long-term investments in educational institutions, rather than solely focusing on short-term commercial performance metrics, ensures strong sustained growth of tech talent.

6.2 THAILAND: EARLY STAGE POLICY DEVELOPMENT & PRIVATE SECTOR INVESTMENT



Thailand is blessed with advanced and robust telco infrastructure which offers countrywide 4G coverage and the internet. Internet penetration is at 67% and mobile subscription is at 133% of the total population. The country experienced exponential growth in the tech scene when several notable tech startups received publicly-disclosed investments in 2012. Investment actors became more diverse to include local and international angel investors, venture capitalists, and institutional funds. In 2017, the number of funded startups rapidly increased to more than 90 with a total of over \$280M in raised funds that year.

This rapid growth did not come as a surprise, as the Thai government built an economic roadmap for technology two decades prior. The National Strategy has accommodated and strengthened four sectors for future growth, including agriculture, light industry, heavy industry, and advanced machinery. At the time of this research in Q3 2018, the country officially launched the next stage Thailand 4.0, a 20 year sector-specific industrial policy. The policy focuses on digitally-driven initiatives, innovation and creativity, and sustainability on high-value-added manufacturing and services, expecting to raise its status to a high-income country with delivery.

In addition, government agencies work closely on-the-ground and in collaboration with industry to support startups. The Ministry of Science and Technology for example, provides incubation and training programs to educate the public and support startups directly. Thailand's Board of Investment (BOI) offers tax incentives, support services and tax exemption for startups up for 5 years, for co-working spaces for 8 years and venture capital firms for 10 years, showing acknowledgement and commitment to the wider ecosystem and its various stakeholder groups.

Simultaneously, the private sector plays a vital role in boosting higher level of digitisation. For example, telco True has launched a startup digital campus, True Digital Park, to host 1,000 startups under one roof, spanning over 200K square meters, with telco AIS also active in creating its own innovation venture centre in collaboration with co-working space Hubba.



APPLICABLE LEARNINGS INCLUDE:

- Focusing on strong telco infrastructure, providing an open economy, and active government support, fosters the foundations of a strong tech startup ecosystem.
- Ensuring heavy private sector involvement in collaboration with government with on-the-ground initiatives can propel startup development and investment.
- · Boosting sector growth is contingent on foreign investment, through transforming into an attractive global destination for startups.

6.3 VIETNAM: HUMAN RESOURCE DEVELOPMENT AND TECH INFRASTRUCTURE



Vietnam's transformation from a centrally-planned to a market economy over the past 30 years has been remarkably rapid. Doi Moi, a series of internal economic and political reforms, was launched in 1986 to spur economic growth and development. Doi Moi policies center around free economy, such as government decentralization, land rights, ease of doing business, and private sector growth. This reform was Vietnam's first step to becoming a socialist-oriented market economy.

With trade liberalization through free trade agreements, memberships in international organisations and partnerships with other countries, Vietnam is capable of becoming an advanced manufacturing hub. With a priority on human resource development, as well as tech infrastructure development focused on cheap, mass access to strong internet, Vietnam is embracing the advancement of technology. The country has recently achieved a lower middle-income country status, hosting a large population of 95 million.

Similar to Cambodia, Vietnam's potential for the tech startup sector is driven by growing internet penetration, smartphone adoption, and young population demographic. The country's established tech infrastructure has already spurred new innovations and businesses. Additionally, the government has taken major steps with regards to its regulations to support the startup tech ecosystem. In 2016, Vietnam introduced the "Supporting National Innovative Startup Ecosystem to 2025 Project" to develop the legal system and national e-portal for startups. In 2018, the country put into effect the Law on Supporting SMEs which covers areas, such as tech transfer, incentives for venture capital funds, preferential loans, etc. To encourage investments in startups, the Vietnamese government established funds at both the state and city level as well as co-developed innovation programs with major banks to provide business and financial support for entrepreneurs.

According to recent reports, there are about 3,000 startups in Vietnam's tech ecosystem in 2018. The ecosystem is diverse with startups operating in different sectors, including fintech, food-tech, e-commerce and healthcare. It is reported that in 2017, 92 startups received investments equivalent to \$291M, almost double compared to the previous year.

APPLICABLE LEARNINGS INCLUDE:

- Making significant and sustained growth efforts through government, such as Vietnam's 30-year of ongoing effort through domestic reform, trade liberalisation, and large public spending in universal primary education and technology infrastructure, catalyses sector growth
- Prioritising building a strong pool of human resource targeting tech sector ensures talent pipeline
- Creating the necessary infrastructure and ensuring market-friendly policy is in place to attract foreign investors.

6.4 PAKISTAN: ICT PRIORITIES & INTERNATIONAL BENCHMARK-SETTING



Pakistan's large number of skilled, low-cost IT professionals paves the way for its fast-growing digital entrepreneurship. With strong supply of human resources in tech, the government is generating \$500M in domestic ICT services, and expects to reach \$5B in ICT services export in 2020 through building a strong internet infrastructure.

In line with sector growth, Pakistan's universities, local governments, and the national ICT R&D Fund, in partnership with the ICT Fund, expanded the support network for startups, which included incubators providing business programs, coaches, mentors, and co-working spaces. In addition, there is a strong collaboration between all stakeholders - corporations, universities, community builders, investors and entrepreneurs - with a long-term goal of building a self-sustaining ecosystem. For example, corporations work with universities and community builders to provide business support and partnership access to help fund more product research, obtain investments, and commercialize innovations.

The government is taking the initiative to improve the business environment for entrepreneurs, such as faster registration, easier credit loans, more cross-border trade, enforceable contract law, IP rights, and insolvency resolution. Pakistan is investing in a road map to a vibrant ecosystem through learning from other countries' experience and best practices, such as Russia's reduction of restrictions on seed investment and encouraged diversified investment portfolio, and China's nationwide standard management practices for business incubators.



APPLICABLE LEARNINGS INCLUDE:

- · Communicating entrepreneurship is a necessity, rather than a luxury, to accommodate abundant new graduates in the labour market.
- · Ensuring a high degree of collaboration between universities and corporations to support the country's global competitiveness.
- · Providing incentives for industry and corporate collaboration in the tech sector, catalysing actions from all stakeholders.
- Setting international benchmarks helps to identify loopholes in national development strategies.

6.5 ESTONIA: DIGITALLY ADVANCED TECH ECOSYSTEM



Estonia is regarded as one of the most digitally advanced countries in the world. In 1991, Estonia was the first to adopt proactive, fully transparent approach to providing advanced blockchain technology services and solutions across all sectors on a national scale, thereby building a strong trust in data privacy and security between citizens and government. Estonia's advanced tech development gives the economy a national advantage and makes it ready for supporting its tech entrepreneurial ecosystem.

The country has developed advanced technology, eliminated bureaucracy in business practices, and focused on educating technical capacity and human resource to position itself as the ideal business destination. Estonia established E-Residency, Income Tax Declaration System, Digital Signature, and E-Voting, which allow entrepreneurs to do business, declare taxes quickly and keep in touch with Estonia entirely remotely, regardless of physical location. Estonians are tech savvy and entrepreneurial as a result of direct and early support from the Ministry of Education and Research for building skilled labour force for digitalization and for entrepreneurship.

In terms of government policy - The Estonian Entrepreneurship Growth Strategy 2014-2020 - tech entrepreneurship is integrated and prioritized as one of the main national strategies. To strengthen sector development, Estonia identified targeted growth areas in the market (locally and pertinently globally), as well as groups of enterprises with major potential. Estonia also established state-funded cooperation structures to build capacity in tech R&D and enhance cooperation between enterprises on tech platforms.

APPLICABLE LEARNINGS INCLUDE:

- Making long-term investments in entrepreneurship education and implanting digital mindset early on through education, extra-curricular programs and vocational training, enables strong sector growth and a thriving startup ecosystem.
- Embedding government digitisation, technology development and startup support (e-commerce law, online registration, tax incentives, etc.) in policy makes the country attractive for foreign investors and entrepreneurs.
- Increasing public-private dialogue and private engagement in government policy design and decisions, helps build trust and transparency in the digital transformation process.

7

Looking ahead - what's next & recommendations

This research seeks to consolidate and synthesise recommendations based on input from all stakeholders and industry experts, to further the development of the Cambodian tech sector and startup ecosystem. Recommendations are listed by stakeholder, but there are cross-cutting themes that require more systematic approaches in order to be successful.

7.1 UNIVERSITIES & TRAINING INSTITUTIONS: BUILDING A PIPELINE OF TECHNICAL TALENT

Universities and educational institutions play a crucial role in developing a generation of workforce equipped with not only technical skills, but also problem-solving skills and aptitude for continued learning, critical for future tech roles. The country needs to upskill the young labour force with technical skills to prepare them for the digital economy. This talent pool should meet market needs for qualified developers for both Cambodia-based tech startups as well as development work outsourced from overseas tech companies. The necessary education offerings need not come solely from traditional tertiary institutions, but also from professional experiences working in international companies, yielding both technical skills and technical project management skills. In parallel, the education sector needs to identify more innovative solutions for skills training such as online and remote learning.

The government has taken measures to increase enrollment rates by increasing public awareness of ICT and providing scholarships. While these are positive signals that technology education is a priority for the economy, there are additional steps education providers can take to improve the talent pipeline.

RECOMMENDATIONS FOR UNIVERSITIES & EDUCATIONAL INSTITUTIONS:

- Incorporate digital literacy in earlier stage education across private and public providers, to ensure long-term future pipeline of young people interested in, and with an observable capacity for technical higher education.
- Align curricula faster at universities to close targeted technical skills gaps identified for future workforce needs, including collaborating with industry to co-design curricula and facilitate project-based learning.
- Upskill teaching capacity and transition to continuous learning curricula with the use of ICT.
- Create long-term partnerships with regional education providers to update capacity of faculty with programs and share innovation space.
- Make certified Massive Online Open Courses (MOOCs) affordable and endorsed by MoEYS, leveraging platforms such as Udemy and Coursera.
- Reduce barriers for Cambodians to attend internally-certified rapid skills training and professional programs, both technical and commercial.
- Focus on student diversity (socio-economic, urban-rural, geography, gender, language) to build talent pipeline through strengthened admissions.





7.2 INVESTORS: ALIGNING FOR VALUE & BUILDING REAL PARTNERSHIPS

Investors looking to find opportunities in early markets such as Cambodia should be open to taking risks and willing to roll up their sleeves as active partners of their investees. Most investors surveyed in this study are confident about the overall industry and macro-trends, though approaches in making investments may vary according to fund strategy, perspective on timing, and ability to contribute to portfolio companies.

RECOMMENDATIONS FOR INSTITUTIONAL & CORPORATE INVESTORS

- Make small earlier stage investments to de-risk larger follow-on rounds. With neither minimal market data nor extensive time to understand the team, making small bets early will allows investors a glimpse into the inner workings of a company while reserving the option to make bigger bets later.
- Take a lighter due diligence approach for early stage companies due to insufficient information. Focusing on the main indicators of success like the team, the broad company potential and the market will allow investors to place more intuitive bets rather than expecting the same level of due diligence for targets in other more developed markets.
- Limit stringent clauses that tie the hands of entrepreneurs, giving entrepreneurs freedom to design, test, and validate their products and services to enable progress at the right pace. This prevents entrepreneurs being unable to exercise their creativity if the nature of their business involves more process and less control with high pressure on expected outcomes, such as return on investment.
- Prepare to "roll up the sleeves" and provide support not only in financing but also in expertise, operations experience, and strategic networks for growth and success of early stage companies. Actively working alongside a company's CEO, Board, and co-investors allows investors to develop an understanding of the business, and calculate risks and return for further investments.
- Clarify the investor role in strategic value-add as successful startups will likely be pursued by multiple parties and as such, money alone will likely be insufficient. While investors may promise to add value in general, it is advisable to be clear on common KPIs.
- Communicate the investment process and align expectations from the beginning. Ultimately the investor-entrepreneur relationship is long-term, thus clearly communicated ground rules and expectations should be the foundation of a productive relationship to avoid any conflicts or mismatched expectations.
- Assist in the narrative of Cambodian opportunities to overseas investors, as Cambodian startups have the potential for
 becoming regional and global players in the long run. Cultivating the relationship between entrepreneurs and a broad base
 of international investors early will boost performance of the entrepreneurs, allowing for more return on investment and a
 more thriving digital economy as a whole.

RECOMMENDATIONS FOR ANGEL & INDIVIDUAL INVERSTORS

- Focus on one-on-one relationships the team. Providing value-added mentoring and cultivating close relationships with the team will boost their performance, especially during roadblocks or new challenges, particularly pertinent in the Cambodian context.
- Incentivize the founding team, allowing the most equity to the operating team and founders, avoiding trying to be the majority shareholder. This will speak to founders' primary values of creativity and flexibility to ultimately build a better product and company in the longer term.
- Use convertible notes when there is a gap in valuation, likely a useful tool for pre-revenue, pre-product startups as it defers setting the valuation further down the road, thus bridging the gap between valuation expectations of investors and startups
- Collaborate with professionals and peers to become more a sophisticated individual investor. Working with co-investors, partners, and angel groups will enable investors to gain hands-on experience and build deal flows as the tech sector develops, including gaining experience with regional and international investment professionals.
- Become brand ambassadors by endorsing the invested startups to open doors for entrepreneurs, such as gaining trust from customers and stakeholders, forming strategic partnerships, and improving brand recognition.

7.3 ENTREPRENEURS & STARTUP TEAMS: COLLABORATING, MENTORSHIP & STRATEGIC GROWTH

Given the emerging stage of Cambodia's first generation of entrepreneurs, recommendations based on research center around supporting a wide funnel of entrepreneurs to build and iterate fast, with the aspiration to see a cohort of fast-growing but sustainable, investable startups in 2019 and beyond.

RECOMMENDATIONS FOR ENTREPRENEURS & STARTUP TEAMS

- **Get into the market early**, in a tech landscape that develops so quickly, planning and research findings today may be outdated or too late for action tomorrow. Thus it is better to get started and experience real market learnings.
- Study other markets and run experiments to develop global awareness of best practices, failures, and other innovations to avoid historical mistakes and allow founders to leverage product development trends/learnings.
- Balance technology co-founders and business development co-founders to provide the necessary complementary leadership for startups to innovate and commercialize.
- Collaborate across the ecosystem. As technology is not a zero-sum game, focus more on synergizing ideas, traffic and marketing as the path to scaling.
- Seek mentorships and strategic partners, to become connected with those who can give advice to set measurable goals, share risks, costs and resources, either in the form of professional mentors, partners or customers.
- Seek strategic investors, for both financial investment and collaborative business development. Companies at growth stage can have clear, synergistic, aligned goals. Securing an investment agreement with strategic investors will be significant for the entrepreneurs to build relationships with larger players in the industry.
- Prepare the company for the fundraising process, with a clear understanding of what is needed for the due diligence to better map out a strategy to pursue funding more efficiently.
- Explore and gain exposure throughout ASEAN and beyond, via competitions, regional startup events etc. to understand and network more with like-minded people.
- Start to build a moat that protects the company from future entrants. Such a moat can be a combination of better products and better customer experience and relationships, getting ready for embracing the entrance of technology giants from China, the U.S., and Southeast Asia.

7.4 SUPPORT PROGRAMS & CO-WORKING COMMUNITIES: MORE THAN JUST SPACE

Support programs and co-working communities can play a big role in improving startup chances of success. Collaboration in the form of sharing of learnings for the improvement of incubation processes are crucial to address widespread ecosystem challenges. Siloed startup teams with limited sharing opportunities and platforms have higher risk of failing, especially if they are not able to strengthen their consumer value position through partnerships with local startups.

Co-working spaces should focus on identifying key market gaps, exchanging with each other, developing targeted expertise, and provide meaningful programs that meet the needs of a particular set of startups, rather than casting a net wide. With new innovation spaces and incubation centers coming online in 2019, including government sponsored co-working spaces, it is crucial to examine how these new spaces and programs can compliment existing communities and initiatives to address startups pain points, rather than duplication of generic, low-impact activities.

RECOMMENDATIONS FOR ENTREPRENEURS & STARTUP TEAMS

- Provide structured and sustained incubator programs in partnership with successful international models such as

 Entrepreneur First and Seedstars, considering other ecosystem stakeholders. This includes collaboration with regional programs to train and import a larger pool of mentors.
- Provision of more targeted services beyond desk space such as legal, tax and regulatory consultation.





- Assist in the proliferation of global best practices, relevant adjacent models and case studies to spur startup product quality, innovation and competitiveness.
- Focus on inclusion and diversity in programs to ensure robust pipeline of startup teams with diverse backgrounds (socio-economic, urban-rural, geography, gender, language).

7.5 CORPORATES: DIGITIZING BUSINESS & PARTICIPATING IN THE TECH VALUE CHAIN

Corporates and industry play several roles in bolstering the tech sector. As large consumers, how they procure goods and services or employ technology-enabled solutions are decisions which can significantly affect startups and the tech sector as a whole. Through inevitable digital transformation of businesses, industry can collaborate with startups to co-design and build scalable industry-wide solutions. These partnerships are symbiotic and proliferating globally, and are recognised by local startups as a critical factor to their success. Building tech talent is therefore also critical to enabling any industry solution, whether employed directly by corporates or indirectly through development services.

RECOMMENDATIONS FOR INDUSTRY

- Build partnerships with startups that develop both innovative and effective industry solutions, that can be applied to other use cases.
- Increase partnerships with education and training institutions to build relevant, technical talent quickly.
- Provide structured mentorship and feedback to startups on commercial viability of product as a large-scale user, allowing them to iterate or fail faster.
- Create venture operations or spaces to introduce corporate innovation or accelerate digital transformation where relevant and possible.

7.6 GOVERNMENT: CONTINUING SUPPORT FOR DIGITAL ECONOMY & DELIVERING POLICY

The current government has been open about the launch of broad, new initiatives in 2018 and onwards for supporting the tech sector and startup ecosystem. Entrepreneurs, industry, and investors are excited to see policy implementation as quickly as within upcoming months, including tax incentives, and believe this is critical for the sector to grow. However in order for this growth to happen, the government needs to draw upon international learnings and ensure close consultation with industry as it continues to design and implement new policy.

RECOMMENDATIONS FOR GOVERNMENT

- Set up an inter-ministerial working group of "digital champions" possibly enabled by a ministry to mobilise all government initiatives for better focus and alignment.
- Create an online resource for policy reference that is frequently updated with relevant regulatory and policy information for tech startups and investors, such as registration, taxation, e-commerce, and investment resources.
- Continue and increase focus groups with entrepreneurs and industry to strengthen policy design and particularly policy delivery across multiple relevant ministries.
- · Continue to strengthen targeted legal frameworks for startups and technology companies such as fintech, healthtech etc.
- Pilot test policies and iterate where necessary, as it is understood that policy will require updating based on real-time data and observation of market dynamics
- Create 'sandboxes' for disruptive or new technologies by allowing testing in safe spaces, such as fintech labs.
- Collaborate with regional partners such as accelerators, incubators, government agencies and other support programs to bring in expertise and mentorship to the market.
- Support and resource cross-incentivised programs to promote Cambodian startups in regional forums, trade shows, and events. This includes creating incentives, initiatives, and campaigns to encourage strategic international and regional investment, ultimately "branding" the nation's tech sector.





8

Closing remarks & aspirations

Cambodia's digital future is bright, and now is the time to catalyse the development of the sector. Stakeholders are open to partnerships that will boost the digital economy, mindsets are shifting, and there is real energy and momentum to develop this sector. Looking outwards, engaging international or regional capacity to contribute to this market will be key for development, as well as creating an incentivised, open landscape for the sector to grow. Collaboration and innovation in local solutions will ensure the ecosystem thrives to produce strong Cambodian startups that ultimately contribute to the global digital economy.

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ABOUT RAINTREE

Raintree is Cambodia's first creative office development that supports the tech, entrepreneurship and education sectors through programs at the project. Located in the central business district of Phnom Penh, the project houses five floors of work space, event space and independent retail space. Raintree facilitates the localisation of international entrepreneurship and education programs in Cambodia, and provides research input across several private sector and development fields. Its co-founders are also independent angel investors, contribute to the Investment Committee of the Smart-Axiata Digital Innovation Fund, and serve on several non-profit and corporate advisory boards.

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