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Foreword

Since our first report on financial technology (FinTech) in ASEAN in 2017, FinTech firms have made significant progress in attracting investor funding and scaling their business over the last three years.

In our inaugural edition of the FinTech in ASEAN report, we charted the nascent growth of the FinTech sector in ASEAN at a time when the majority of firms were still at the early stages of funding and were focused on building consumer-related solutions. In 2018, we saw more firms turn their attention to the opportunity to serve businesses, particularly as the region's small- and medium-sized enterprises (SMEs) look to tap the digital economy.

In this year's edition, our third in the FinTech in ASEAN series, we explore how ASEAN's FinTech firms have seized growth opportunities and overcome the myriad challenges to succeed in one of the world's most diverse regions.

Over the years of our report, one thing has remained constant - ASEAN's growth potential continues to draw global investors. FinTech firms have benefitted tremendously from this investor interest. Also supporting the growth of the region's FinTech firms are the region's central banks which have put in place initiatives to promote ASEAN as a hotbed of innovation.

With investments into later-stage FinTech firms increasing more than twofold to US\$370 million in the last year, many FinTech firms are enjoying stellar growth. However, we wanted to provide more insight into the current FinTech landscape in each ASEAN market and of the potential pitfalls for the unwary. To do so, we surveyed 139 FinTech firms across ASEAN for their views on the challenges faced in five areas – customer adoption, regulation, operations, competition from TechFins and funding. In addition, we also interviewed more than 20 thought leaders in the wider FinTech community for a first-hand account of the challenges they faced when scaling their business across ASEAN.

We hope that through the FinTech in ASEAN: From Start-up to Scale-up report, FinTech firms will be able to navigate their expansion in the region with more certainty and as a result, realise their growth ambitions in ASEAN.

Janet Young

Managing Director and Head Group Channels and Digitalisation United Overseas Bank

₩UOB

Wanyi Wong







Chia Hock Lai President

Singapore FinTech Association





Executive Summary



Singapore continues to dominate funding and is the #1 regional base for FinTech firms

Funding into ASEAN has grown more than 30 times since 2014, reaching a new high of US\$1.14 billion as at end September 2019. The growth in FinTech continues unabated, as more investors and FinTech firms set their sights on the opportunities from ASEAN's strong economic fundamentals, including its large unbanked and underbanked population.

While other ASEAN countries have accelerated the development of their domestic FinTech sector, it is Singapore, with its more mature FinTech scene, that continues to attract the most funding within ASEAN. Of total funding in 2019 to date, more than half (51 per cent) of total funding went into Singapore. Singapore also continues to be the preferred base of FinTech firms, home to 45 per cent of firms in ASEAN.



Varying levels of funding maturity for FinTech firms across ASEAN

Based on our survey findings, FinTech firms operating in ASEAN are generally optimistic about meeting their existing and future funding needs, with almost half of those surveyed confident of raising more than US\$10 million for their next funding round.

In Singapore, FinTech firms are maturing as many graduate from pre-series stage to later stage funding. Funding for Singapore-based FinTech firms was also spread more evenly across all FinTech categories, with InsurTech, payments and personal finance leading the way.

In Indonesia, investors focused on alternative lending firms, fuelled by strong demand for credit from the country's rising middle class. Investors sought opportunities in Malaysian FinTech firms developing solutions in payments, finance and accounting; while in Thailand, investors channelled their funds into InsurTech and investment tech firms. In Vietnam, investors favoured payments, which is common for economies in the early stages of developing a FinTech sector.



Stamina needed to pursue corporate customers

Businesses were the main target customer segment for FinTech firms (79 per cent). Among businesses, financial institutions made up half (50 per cent) of the target segment, followed by corporates (17 per cent) and SMEs (12 per cent).

As most corporates tend to require multi-level approvals across different stakeholders, FinTech firms need to have endurance in order to seal the deal. FinTech firms targeting this segment of customers should therefore ensure that they have a longer funding runway to meet their operating expenses.



FinTech firms see more business opportunities with the imminent arrival of digital banks

A development in the ASEAN FinTech scene is the opening up of applications for digital bank licences. While having a digital bank licence will enable FinTech firms to broaden the scope of services they provide, only 21 per cent of FinTech firms surveyed expressed an interest in applying for a licence. Nonetheless, almost two in three (65 per cent) FinTech firms believe they would be able to seize opportunities to offer innovative solutions and to collaborate with the region's newly-minted digital banks.



Beware of overvaluing your company

While it can be exciting to see a company's valuation soar, both Venture Capitalists (VCs) and FinTech firms cautioned against falling into the overvaluation trap. FinTech firms should consider taking a phased approach in valuing the company so that they continue attracting funding from investors. This helps firms to prevent getting into a "down round", where the latest valuation round is lower than previous rounds.



Talent remains a challenge to regional expansion

Talent remains a challenge for more than half of FinTech firms, indicating that this was an inhibitor to their expansion regionally. With six in 10 ASEAN FinTech firms having regional ambitions from the outset, the issue of talent is something that needs to be considered as they plan for their expansion to ensure a higher chance of success.

From the region's economic potential and encouraging regulatory climate to strong investor interest in ASEAN, it is evident that the region holds promise for FinTech firms from around the world. The key to expanding in the region successfully will be in how FinTech firms navigate the diverse cultures, regulatory environments and business practices within ASEAN.

Prospects Remain Bright

ASEAN is an attractive challenge for entrepreneurs and innovators. The region is Asia's third largest market after China and India and is home to 650 million people, many of whom are becoming increasingly affluent.

ASEAN is also a young market, with 60 per cent of its population under 35 years old. This demographic base gives rise to a ready base of digitally savvy and mobile-first consumers. Currently, these consumers are largely underserved by traditional banking solutions - giving FinTech firms the opportunity to develop innovative solutions for these consumers.

Given the strong fundamentals driving ASEAN's future growth prospects, it is not surprising that the region continues to draw attention from FinTech firms and those seeking to invest in innovation and technology.

In this section, we review the growth of the FinTech industry across ASEAN, specifically the ASEAN-6 countries of Indonesia, Malaysia, Philippines, Singapore, Thailand and Vietnam as at the third quarter of 2019. We also pay particular attention to the growth in investment into FinTech firms, given the significance of capital as the lifeblood of any business.

The other four ASEAN economies – Brunei Darussalam, Cambodia, Laos and Myanmar – are not included given the relative infancy of the FinTech industry in these countries. ¹

Due to rounding, numbers presented throughout this report may not add up precisely to 100 per cent and reflect the absolute figures.

1.1 SIGNIFICANT GROWTH OF FINTECH FUNDING IN ASEAN

In the last five years, ASEAN has seen a strong compound annual growth rate (CAGR) of 101 per cent in FinTech funding². In 2014, funding into FinTech firms was US\$35 million, rising sharply to US\$1.14 billion at the end of the third quarter this year (Fig. 1).

In addition to the encouraging growth in funding, funding levels for FinTech firms at different stages of their growth are also very promising. In the last year, funding for later stage FinTech firms increased 211 per

cent to US\$370 million. In the first nine months of this year, a total of nine FinTech firms across ASEAN have raised later stage Series-C or beyond funding. The firms are 2C2P, Advance.AI, Akulaku, BluePay, CXA Group, Momo Pay, Nium³, OVO and Singapore Life. The strong later stage funding also indicates the confidence that investors have in the growth potential of ASEAN-focused FinTech firms.

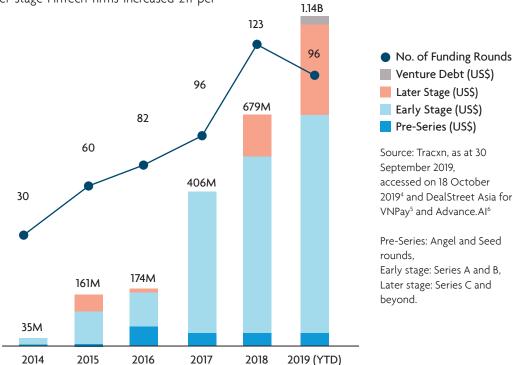


Figure 1 | ASEAN-6 continue to draw more funding

1.2 SINGAPORE, VIETNAM AND INDONESIA ARE THE FORERUNNERS OF FUNDING WITHIN ASEAN

Singapore continues to attract the most funding within ASEAN this year, accounting for more than half (51 per cent) of the total (Fig. 2).

Vietnam saw a sharp increase in funding this year, attributable to two large deals namely US\$300 million into VNPay and US\$100 million into Momo Pay's Series-C fundraising round.

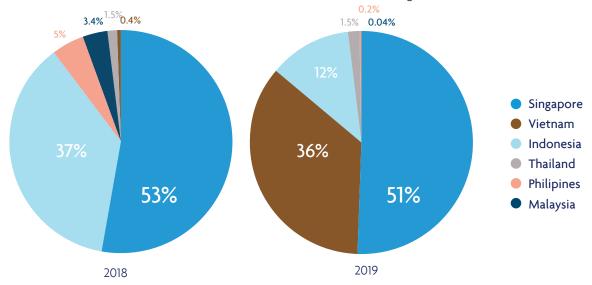


Figure 2 | Where the funding is going, 2018-2019
Source: Tracxn, as at 30 September 2019, accessed on 18 October 2019

In terms of the number of funding deals in 2019, Singapore leads at 51 per cent of total deals in ASEAN while Indonesia comes in second at 28 per cent, similar to that of 2018 (Fig. 3).

The interest in investing into FinTech firms in Vietnam and Indonesia is also driven by the business potential in both markets given their large and underbanked populations⁷ as well as the high mobile and internet penetration rates.

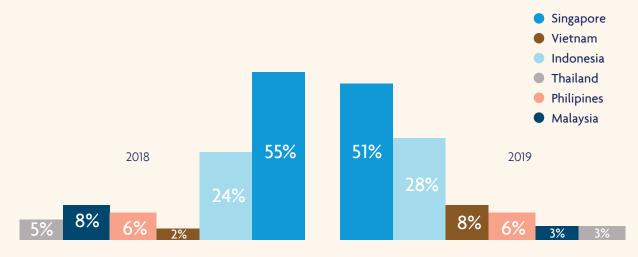


Figure 3 | The funding deals done in 2018 and 2019

Source: Tracxn, as at 30 September 2019, accessed on 18 October 2019

In Figure 4, we set out the top 10 funded FinTech firms. These firms are mostly in the areas of payments, InsurTech and alternative lending. It is not surprising, therefore, that these are also the types of FinTech solutions that have attracted the most amount of investment dollars this year (Fig. 5).

The highest number of deals - 25 - were made with FinTech firms offering payments-related solutions (Fig. 6) and totalled more than US\$480 million (Fig. 5). FinTech solutions in the area of insurance technology (InsurTech) and alternative lending were the next on investors' lists, securing funding of US\$173.5 million and US\$172.6 million respectively (Fig. 5).

	FinTech Firm	FinTech Category	Funding Amount US\$ (M)
	VNpay (VNLife)	Payments	300.0
<u>•</u>	Singapore Life (Series C)	InsurTech	110.3
	MOMO Pay (Series C)	Payments	100.0
	GoBear (Series A)	Personal Finance	80.0
	Advance.AI (Series C)	Banking Tech	80.0
	Deskera (Series A)	Finance and Accounting Tech	40.0
	Akulaku (Series C)	Alternative Lending	40.0
<u>••</u>	Aspire (Series A)	Alternative Lending	32.5
	Credit Culture (Series A)	Alternative Lending	29.4
	YouTrip (Seed)	Payments	25.5

Figure 4 | Top 10 funded FinTech firms in ASEAN, 2019 (disclosed funding deals)

Source: Tracxn, as at 30 September 2019 accessed on 18 October 2019 and DealStreet Asia for VNPay and Advance.AI.

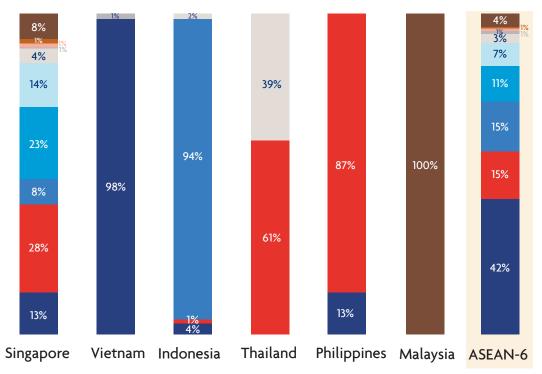


Figure 5 | Proportion of total funding by category⁸, 2019

Source: Tracxn, as at 30 September 2019, accessed on 18 October 2019.

Funding amount only includes disclosed deals.

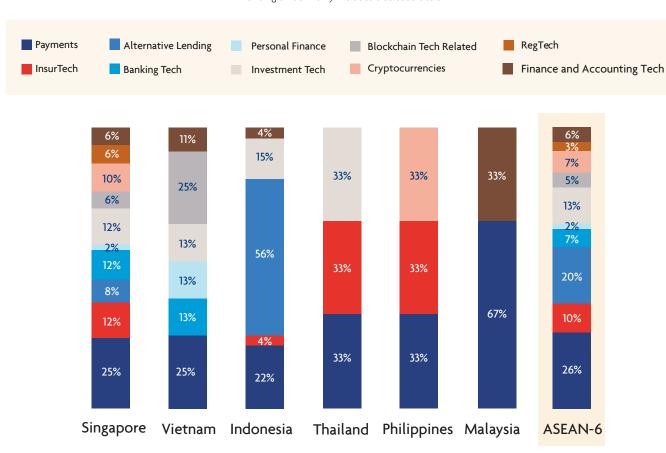


Figure 6 | Proportion of total investment deals by category, 2019

Source: Tracxn, as at 30 September 2019, accessed on 18 October 2019.

Number of funding deals include those with both disclosed and undisclosed amounts.

Singapore had the most variety in terms of solutions focus, testament to the country's push to encourage FinTech innovation across a broad range of areas. The highest number of deals were made with firms offering payment solutions, while the highest amount of funding went to InsurTech solutions, driven by two deals, specifically Singapore Life at US\$110.3 million and CXA Group at US\$25 million.

In Indonesia, FinTech firms that provide solutions in alternative lending attracted the most funding and secured the highest number of deals. This is likely due to the opportunity for FinTech firms to develop innovative credit scoring models and alternative lending solutions to serve the large unbanked and

underbanked population. Such developments are also good for the economy, with the Indonesia FinTech Lending Association noting that lending-related FinTech firms have contributed 60 trillion Indonesian rupiah (equivalent to US\$4.27 billion) to the economy and created more than 300,000 jobs since the start of 2019.

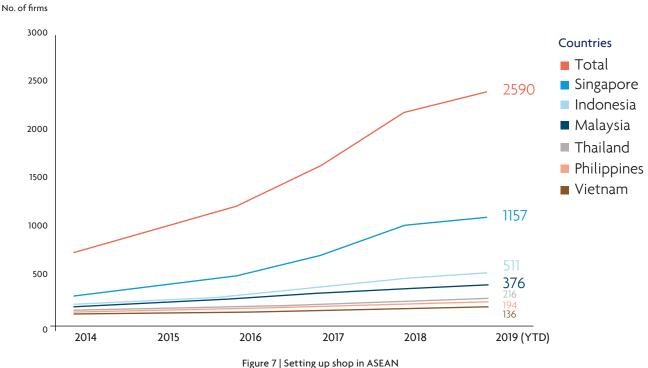
In Vietnam, FinTech firms offering payment solutions received the most funding, in line with the Government's move towards the use of mobile payments. According to the State Bank of Vietnam, as at 31 March 2019, the number of financial transactions conducted on mobile phones almost doubled from 20189. The Vietnam mobile payments market is projected to reach US\$70.9 billion by 2025, up from US\$16 billion in 201610.

1.3 A SURGE IN THE NUMBER OF FINTECH FIRMS MAKING ASEAN HOME

In addition to the increase in funding, the number of FinTech firms headquartered in ASEAN is also on the rise. At the end of the third quarter of 2019, there were a total of 2,590 active FinTech firms in the

ASEAN-6 countries, as compared with 749 firms in 2014, representing an approximate 3.5 times increase (Fig. 7).

Singapore continues to be their preferred base, home to 45 per cent of all FinTech firms in ASEAN (Fig. 8).



Source: Tracxn, as at 30 September 2019, accessed on 18 October 2019.

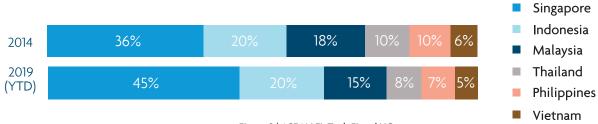


Figure 8 | ASEAN FinTech Firms' HQs
Source: Tracxn, as at 30 September 2019, accessed on 18 October 2019

1.4 ASEAN'S MATURING FINTECH SCENE

Looking at the number of deals and the funding amount for FinTech firms in ASEAN, we see a number of trends as the sector continues to mature.

Firms offering payments solutions tend to see the strongest growth in markets where the FinTech sector is nascent. This is especially so when there is strong support from the government. Such markets have strong demand for digital payment solutions as consumers move away from cash and see an increase in online spending. Vietnam is one example where we can see payment solutions dominating the share of FinTech funding.

As payment FinTech firms capture more consumer and business spending data, they can then diversify into other areas such as lending, bringing about a corresponding change in the range of FinTech solutions

in the market. Indonesia is one example where we have seen a shift in investor funding from payments to alternative lending firms.

Finally, as the FinTech sector matures, FinTech firms will seek to capture more growth opportunities in insurance, asset and wealth management solutions as disposable income of the emerging middle class in ASEAN, which is expected to reach US\$300 billion by 2022, increases¹¹.

This trend is best seen in Singapore where the number of FinTech firms offering InsurTech, investment tech and personal finance solutions increased by 163 per cent since 2014. The country, as the most mature FinTech market in ASEAN, also sees a more balanced distribution of funding deals across a greater number of FinTech categories (Fig. 9).

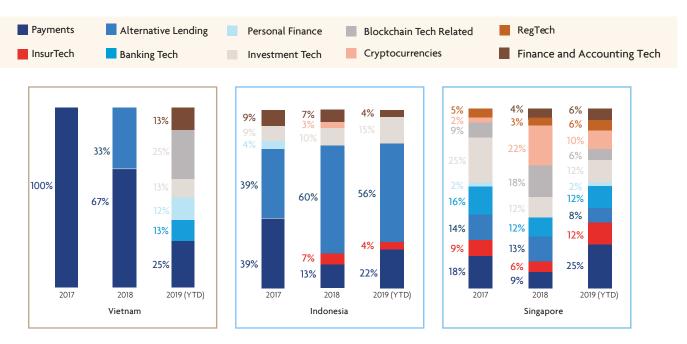


Figure 9 | Proportion of total funding deals by categories across Vietnam, Indonesia and Singapore, 2017 – 2019¹²

In this section, we turn the spotlight to FinTech firms that are entering into or expanding their businesses within the region.

To gain a first-hand understanding of the opportunities and challenges that FinTech firms face in ASEAN, we conducted a survey with 139 FinTech firms that are currently operating in or intending to enter the region. The survey delved into the similarities and differences between the ASEAN-6 FinTech landscapes in areas including the regulatory environment, funding, consumer adoption, talent acquisition, partnerships and competition.

In-depth interviews were also conducted with more than 20 stakeholders from across ASEAN, including FinTech firms, venture capitalists, funding partners and FinTech associations to gain deeper insights into what it takes for FinTech firms to thrive in the region.

The key findings for this inaugural **FinTech in ASEAN Growth Survey 2019** and interview analyses are presented in this section.

KEY FINDINGS

Expansion Plans _____



Singapore is the #1 choice for FinTech firms entering ASEAN.

Fundraising _____



Almost half of FinTech firms expect their subsequent funding round to be in excess of US\$10M.

Big Ambitions _____



7 in 10 ASEAN FinTech firms considered scaling regionally within the first year of incorporation.

Building the Business —



Creating awareness and connecting to the right key stakeholders are the top challenges for B2C and B2B FinTech firms looking to attract customers.

Regulators & Regulations _____



72% of FinTech firms consider the regulatory environment to be very important when expanding into a market.

The Search For Talent.



6 in 10 FinTech firms identified Talent as the top operational challenge when scaling in ASEAN.

Digital Banks _____



65% of FinTech firms believe digital banks will create more growth opportunities for them.

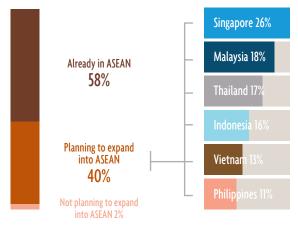
Partnerships _____



79% of FinTech firms cite local banks and financial institutions as key support partners to penetrate the market.

FINDING #1: SINGAPORE RANKS AS THE TOP MARKET FOR FINTECH FIRMS ENTERING ASEAN

Of the FinTech firms surveyed, 58 per cent of non-ASEAN domiciled FinTech firms have already expanded into ASEAN to seize opportunities in the region. Another 40 per cent have plans to do so and among these firms, Singapore is the preferred market for their foray into ASEAN.



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SINGAPORE HAS A STRONG INTERNATIONAL BRAND. IT IS A FINTECH HUB NOT ONLY FOR ASIA BUT ALSO GLOBALLY. ITS INFRASTRUCTURE AND REGULATIONS ARE FRIENDLY FOR BUSINESSES LIKE US TO SET UP IN ASIA AND INTERNATIONALLY.

ZHOU JING, FORMER PRESIDENT,
PINTEC



Plans for expanding into ASEAN Planned ASEAN markets for expansion (multiple responses)

Singapore is consistently ranked as a top global FinTech centre. For example, it was ranked first in the 2018 Institute of Financial Services Zug Global FinTech Rankings index¹³ and second in fDi's FinTech Locations of the Future 2019:20.¹⁴

The country's status as a global FinTech centre is in no small part due to the concerted efforts of its regulators and policy makers who have shaped the country into a leading FinTech hub. One FinTech firm co-founder observed that:

"The Monetary Authority of Singapore is the gold standard – they predict trends based on what they see from the UK and US. They are future-driven and they encourage competition."

– Vikas Nahata, Co-Founder and Executive Chairman
Validus

The MAS introduced Asia's first regulatory sandbox for the FinTech industry in 2016 to drive FinTech innovation in the country. The sandbox enables FinTech start-ups to test the viability of their solutions within a more relaxed regulatory environment, enabling them to focus on innovation and business growth while reducing regulatory friction. The sandbox has resulted in notable FinTech innovations powered by Artificial Intelligence (AI) in the areas of robo-advisory (e.g. Kristal.ai) and online insurance (e.g. PolicyPal).

The sandbox has also helped regulators in Singapore to calibrate the appropriate regulatory environment to encourage more FinTech innovation.

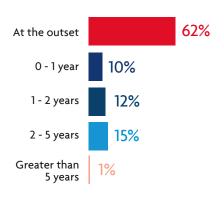
The MAS has since enhanced and accelerated the sandbox initiative with the launch of the Sandbox Express in August 2019. SandBox Express enables FinTech firms to experiment with their solutions more quickly by shortening the approval process for entering the sandbox.

Other initiatives that have helped to drive the growth of the FinTech industry include the 'Smart Nation' programme introduced in 2014 to encourage private sector companies to develop their digital capabilities, to develop blockchain applications and to improve cybersecurity. This, in turn, has created opportunities for FinTech firms who can offer solutions that support the country's drive towards a Smart Nation.

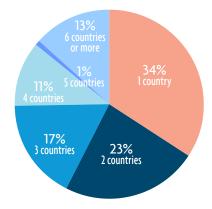
FINDING #2: ADOPTING A REGIONAL MINDSET FROM THE OUTSET

Adopting a regional mindset and planning for expansion from day one has proven to be an important aspect of scaling up in ASEAN, exemplified by the success of the region's e-commerce and ride-hailing giants Lazada and Grab.

It is therefore not surprising that 62 per cent of ASEAN-domiciled FinTech firms said they intend to scale within ASEAN from the point of establishment. Close to seven in 10 of these respondents are also already present in two or more ASEAN markets, with Singapore being the market where the majority of firms have a presence (73 per cent).



Years taken for ASEAN-domiciled firms to consider expanding into other ASEAN markets



No. of ASEAN markets an ASEAN-domiciled firm is currently in

Our survey results also suggest that market size plays a role in determining how early a FinTech firm will consider expanding regionally. Seventy-two per cent of FinTech firms domiciled in Singapore adopted a regional expansion mindset at the outset. Meanwhile, six in 10 of FinTech firms in the rest of the five markets only looked to expand after more than a year in operation – choosing instead to focus on building a strong local presence before going overseas. For example, given the ample domestic business opportunities in Indonesia, 78 per cent of FinTech firms in the country only considered expanding into other ASEAN markets after more than a year of operations.

In order for FinTech firms to scale quickly with minimal cost, it is important for them to be able to establish business processes that can be replicated easily across different markets.

Take for example CXA Group, an InsurTech firm with offices across Asia that runs an online corporate benefits aggregator platform for companies to help their employees choose their preferred insurance, wellness and disease management plans. Their strategy

in each market is similar – to develop a local healthcare ecosystem comprising general practitioners, specialist clinics, gyms and pharmacies.

CXA Group also adopted a "cloud-agnostic" approach to building their platform for greater scalability across different markets. They recognised that as data cannot be shared across borders in certain markets in Asia, there was a need to use different cloud providers in different markets to comply with data regulations. As such, their applications are built to be replicated and adapted easily across different cloud systems so that they can enter into a market quickly.

ASEAN's political, cultural and economic diversity also meant that CXA Group needed a differentiated approach for each new market it entered. For instance, when it set up in Singapore, founder Rosaline Chow Koo opted to acquire the largest locally-owned employee benefits brokerage with an existing and extensive customer base. In Indonesia, on the other hand, CXA Group is partnering with the largest banks and Third Party Administrators (TPAs) to build out their distribution and health ecosystems.

FINDING #3: REGULATORY ENVIRONMENT A KEY CONSIDERATION

More than seven in 10 respondents indicated that the local regulatory environment of their target market is very important when deciding on where to expand.



Top consideration when expanding to target ASEAN markets -Regulatory environment

Many FinTech firms think that regulators across the region already show strong signs of support for FinTech development. For instance, Vietnam was praised by some interviewees for its efforts to promote and to regulate the FinTech industry. They noted that the State Bank of Vietnam has started a FinTech Steering Committee to support the establishment of such firms in the country. Plans include setting up a sandbox for FinTech firms and developing regulatory guidelines and incentives to encourage the sector's growth.

However, the fragmented nature of regulations across ASEAN continues to be a challenge raised by FinTech firms looking to expand within the region. For example, in trying to obtain local market licences, FinTech firms shared that they could use advisers or consultants in some jurisdictions but not in others, resulting in the need to vary their approach to suit local market regulations.

Although the regulatory environment within ASEAN may be uneven, most interviewees believe that they can overcome this challenge. The common advice given was the need to build trust with regulators. As one interviewee noted, "Together with our lawyers, we are taking a proactive stance with the regulators, to clear doubts and to ensure that we are aligned. Essentially, regulators are playing their roles to protect citizens."

Another interviewee recognised that as FinTech firms seek to be involved in the financial system of the country, they need to earn the trust of the regulator and to demonstrate that "we are here for the long term." They noted that regulators are already more open in allowing FinTech firms to set up in their respective jurisdictions.



THE KEY IS TO COME UP WITH "PROOF" THAT SHOWS REGULATORS HOW THE NEW OFFERING HAS MADE A POSITIVE IMPACT IN THE LIVES OF PEOPLE. IT IS ALSO IMPORTANT TO ADDRESS THE ISSUES HIGHLIGHTED BY THE REGULATORS DURING THE ENGAGEMENT AND FEEDBACK SESSIONS."

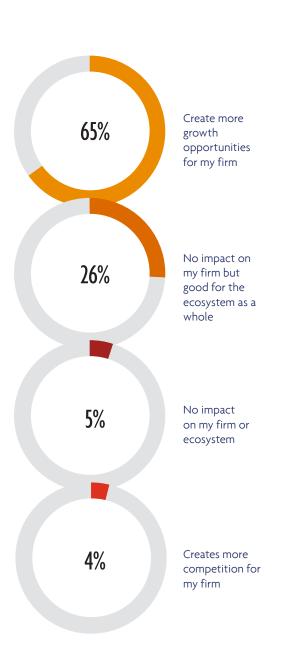
HENDRA KWIK, CO-FOUNDER & CEO PAYFAZZ



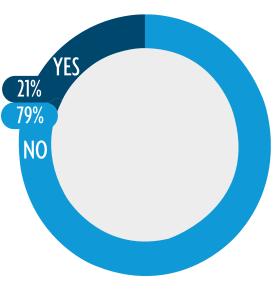
FINDING #4: FINTECH FIRMS WELCOME DIGITAL BANKS

The MAS announced in June 2019 that it will grant up to five new digital bank licences in Singapore, comprising two digital full bank licences and three digital wholesale bank licences.

The majority (65 per cent) of FinTech firms welcomed the issuance of digital bank licences by Singapore's central bank as it would create more growth and collaboration opportunities for their companies in the future. That said, only 21 per cent of survey respondents said that they would consider applying for a digital bank licence themselves. One explanation for this is that the majority of FinTech firms see more growth opportunities when collaborating with digital banks as compared with being a digital bank themselves.



Likely impact of digital banks



Intent to apply for a digital bank licence

Respondents were of the view that these new digital banks would require solutions in areas such as compliance and credit assessment, thereby boosting demand for their own FinTech solutions in the long run.

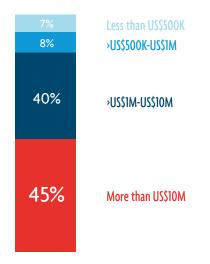
Another reason could also be that most FinTech firms may not be able to meet the requirements to hold a digital banking licence such as the high capital requirements.

Looking at ASEAN more broadly, it is expected that Bank Negara Malaysia will also announce its requirements for digital bank licences in the coming months.

FINDING #5: FINTECH FIRMS ARE OPTIMISTIC ON FUNDRAISING IN ASEAN

FinTech firms are optimistic on the fundraising landscape in ASEAN. Close to half of respondents expect to raise an amount in excess of US\$10 million for their next funding round.

More than half of the FinTech firms surveyed also indicated that their current funding runways will last more than a year.



Less than 6 months 14%

>6 months - 1 year

>1 - 2 years

24%

>2 - 3 years

14%

More than 3 years

19%

Subsequent funding round estimate

Funding runway estimate

Notable VC investors in ASEAN have raised new "growth funds"¹⁵ this year to target investment opportunities and to increase their investments into existing portfolio companies. Examples include Vertex Ventures' new US\$305 million¹⁶ fund and Insignia Ventures Partners' recent US\$200 million fund¹⁷.

Acknowledging that funding is important for a FinTech firm to grow, interviewees advised firms not to focus solely on investors with the most funding. It is also important to look for "smart money" investors who can bring a wealth of knowledge, networks and connections, credibility and future growth.

Several interviewees cautioned FinTech firms against overvaluing their companies. As one interviewee advised, "if your valuations are unrealistic, having one spectacular round of fundraising may make future rounds more challenging." If not careful, FinTech firms

that overvalue themselves could experience a "down round" — a case where a new round of valuation is lower compared with previous rounds.

FinTech firms should also phase their valuations to attract ongoing funding from investors. In terms of the best timing to start a new round of fundraising, interviewees advised that a FinTech firm should start the process of engaging investors at least six months prior to running out of funds.

FinTech firms also need to understand their sales cycle well to ensure sufficient cashflow. Interviewees noted that this is of particular importance when operating in the Business-to-Business (B2B) space compared with the Business-to-Consumer (B2C) space. Given that B2B FinTech firms have longer sales conversion cycles of between six to 18 months, it is important for them to secure a longer funding runway.



ASEAN CONTINUES TO SEE STRONG INTEREST FOR VENTURE CAPITAL INVESTMENTS.

CHUA JOO HOCK, MANAGING PARTNER

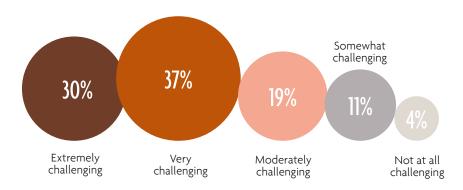
VERTEX VENTURES



FINDING #6: THE BIGGEST CHALLENGES - CREATING CUSTOMER AWARENESS AND CONNECTING WITH THE RIGHT STAKEHOLDERS

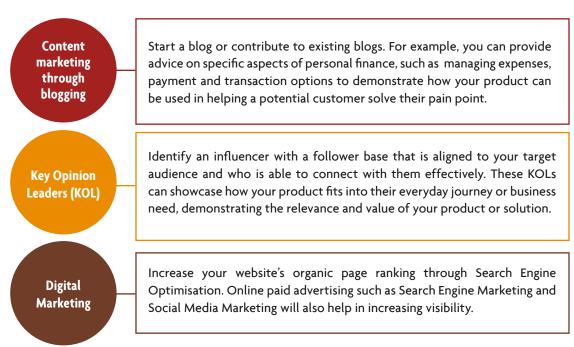
Acquiring new customers is an important aspect of business growth. From our survey, the challenges faced by FinTech firms in acquiring new customers differed according to whether the firm operated in the Business-to-Business (B2B) space, the Business-to-Consumer (B2C) space or both.

B2C FinTech firms reported that **creating awareness** was their greatest challenge in encouraging customer adoption, with two-thirds of respondents ranking this as either very or extremely challenging.



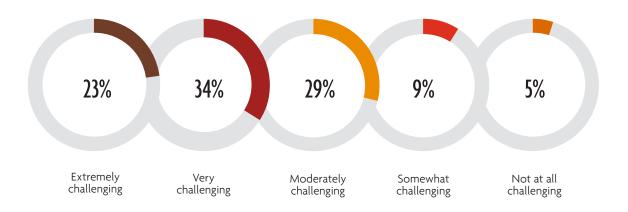
Creating awareness as the key challenge in B2C customer adoption

To overcome this challenge, interviewees suggested that FinTech firms can consider using social media-driven content marketing or engaging key opinion leaders to build awareness and to educate customers on the value of their products or solutions.



EFFECTIVE EDUCATION APPROACHES

For FinTech firms in the B2B and Business-to-Business-to-Consumers (B2B2C) areas, the most challenging aspect of attracting new customers was the **inability to connect and to meet with the correct stakeholder**. Close to six in 10 stated that it was either extremely or very challenging.



Inability to connect and to meet with the correct stakeholder(s) as the key challenge when approaching B2B / B2B2C businesses

This finding reveals how crucial it is for FinTech firms to allocate more time to engage with potential collaborators and to ensure a sufficient pipeline of leads. FinTech firms also need to ensure that they have a clearly articulated customer value proposition. This is so that once they make the initial connection with an organisation, the point of contact is able to determine confidently if the FinTech firm can solve specific pain points or if there are any collaborative synergies.

Although it may seem easier for B2C firms to attract a large volume of new customers as compared with B2B firms, measures to engage consumers such as digital marketing may come at a higher cost. As such, B2C firms need to evaluate their marketing efforts regularly and to ensure that their marketing spend is allocated to the most effective channels to engage their target audience.

Given the relatively higher customer acquisition cost for B2C firms, investors are also focusing more on FinTech firms with a B2B model as it tends to provide better return on investment despite being more challenging.

FINDING #7: FINDING AND KEEPING TALENT IS A KEY OPERATIONAL CHALLENGE

Finding suitable talent was ranked as the top operational challenge faced by FinTech firms when expanding across ASEAN.

Fifty-eight per cent of respondents identified talent as an area of concern, facing challenges in acquiring, managing, developing and retaining talent.

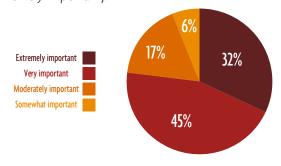


Top operational challenge faced in ASEAN market expansion
- Human talent

FinTech firms need to consider if there is suitable and abundant expertise in the place they have chosen to scale their business. For example, Finhay's founder shared that there are many technology specialists in Hanoi while Ho Chi Minh City has more marketing and business development talent.

As regulators and policy makers across the region recognise the talent gap within the FinTech industry, more initiatives are being developed to support firms in acquiring talent. One way to address the imbalance is to upskill and to reskill the existing talent pools in each country. An interviewee suggested that "talent issues are directly related to how we [shape] our education system, and we will need the corporate sector or education [providers] to bring such education initiatives to the [wider] education system".

Another factor is ensuring the readiness of one's internal team and resources for expanding into the target market (77 per cent found this to be very or extremely important).



Importance of team readiness and resources when expanding

There was a consensus among interviewees that it takes a long time to hire the right talent. It is thus important for FinTech firms to plan ahead when it comes to expanding their workforce and business in a new market. Trusting Social for instance, opted to hire local talents in advance of their expansion into each new market. When it came to hiring their country heads, Trusting Social recruited their CEO for Indonesia eight months in advance and secured their CEO for Philippines two years ahead of their launch.

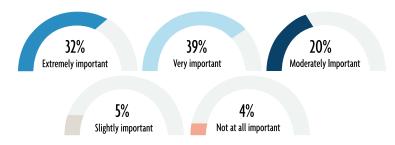
The lack of suitable talent affects FinTech firms across ASEAN, with one interviewee summarising the situation as a "lack of good start-up trained tech talent". It is challenging to find talents who have unique "cross-over skillsets" – deep domain expertise, an understanding of technology, an enterprising mindset and a strong grasp of the local market that the firm is entering.

Several firms noted that it is common for applicants who have work experience in FinTech firms to have only spent about two years in each role before moving on to a new company. As such, many applicants do not have enough experience in leading a project or bringing a product to market – skills that are crucial for many start-ups.

One interviewee also noted the challenge of hiring corporate veterans as part of their management-level talent team, saying that "someone who worked in a corporate for 20 years could present a cultural clash."

FINDING #8: BANKS AND FINANCIAL INSTITUTIONS ARE KEY ENABLERS FOR MARKET EXPANSION

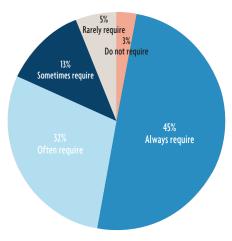
Forming partnerships is a key strategy for FinTech firms when entering a market. To be successful, the majority (71 per cent) of survey respondents said that it was either very or extremely important to find the right partner before entering a market in ASEAN.



Importance of finding the right partner when expanding in ASEAN

It is important for FinTech firms to find the right local partner to supplement the experience, insights and connections required to navigate the differing regulatory frameworks and operating landscape across ASEAN. Many interviewees concurred, saying that it is essential to work with suitable partners in local markets to overcome regulatory and market challenges.

Banks and financial institutions are the preferred partner for many FinTech firms when they enter a market. There are a couple of reasons for this. First, local banks and financial institutions have strong local market knowledge and deep connections that enable the FinTech firm to enter the market more quickly. Second, a sizeable portion of the survey respondents have a B2B model that is suitable for the corporate customer base of banks and financial institutions.



Support needed in ASEAN market expansion - local financial institutions

Another emerging trend for partnerships between FinTech firms and financial institutions is in the area of data. FinTech firms that are able to use data to generate unique insights to help banks and financial institutions develop personalised products and services have more opportunities to secure partnerships.



COMPETITION IN FINTECH IS ABOUT HAVING THE BEST DATA AND UNDERSTANDING OF THE CUSTOMER. THIS FORMS THE BASIS TO SECURE PARTNERSHIPS OR ACQUISITIONS.

TAN YINGLAN, FOUNDING PARTNER INSIGNIA VENTURES PARTNERS



Interviewees were also asked whether they saw TechFins (where technology companies provide financial services) and technology unicorns such as Grab and Go-Jek in ASEAN as competitors or partners to FinTech firms.

Many of the FinTech firms interviewed expressed little concern about competition from TechFins. They believed that the financial services space is large enough to accommodate both TechFins and FinTech firms. There are others who believe that the active participation of TechFins also helps to increase consumer adoption and usage of digital financial services. Lastly, TechFins, with their sizeable customer data, can also be potential partners.

FROM THE VENTURE CAPITALIST'S DESK – 10 TAKEAWAYS TO GET AHEAD OF THE COMPETITION

We interviewed venture capitalists operating in ASEAN to get their thoughts on how to get ahead of the competition. Here are their top hacks when scaling up in ASEAN:



Given ASEAN's diversity, FinTech firms must conduct a bottom-up market analysis to ensure that your value proposition is attractive for the market.

2

Keep a pulse on local consumer behaviour and tailor your product for different markets.

3

Apart from product-market fit, venture capitalists will also look at founder fit to ascertain that the founder has the right experience and credentials.

4

Do not be afraid to ask venture capitalists for help. For example, to test product-market fit in a new market without incurring high costs, consider asking the venture capitalist on the possibility of working out of their office for a few months.



Communicate regularly with your venture capital investors. They can act as a mentor to provide insights and advice on how to scale the business.



A great product is only the start. Determine your exit plan for stronger interest from venture capitalists.



A high valuation may be both a blessing and a curse – venture capitalists are increasingly cautious of FinTech firms with high valuations and it could also result in the firm looking less attractive from an investment perspective.



Understand your regulatory obligations. Even if the firm has a bank as a partner, it does not absolve the FinTech firm's responsibility to comply with regulations such as Know-Your-Customer (KYC) and Anti-Money Laundering (AML) controls.



Venture capitalists place a premium on founder integrity and honesty.



Most importantly, being the new kid on the block, there is a need to build your credentials. Any attempt to take short cuts such as circumventing regulatory rules will result in the firm's reputation being tarnished and could also deny you the right to operate.

ON SCALING AND EXPANDING INTO NEW MARKETS:

"For B2B companies in Vietnam, you must have an extensive network and strong relationships with banks and financial institutions."

Huy Nghiêm, Founder Finhay

"To enter a new market, it is ideal to tap your existing network of customers who are also keen to break into that market. The strength of this combined network makes it is easier to secure local partners that are willing to work with you to promote your solutions."

Piyachart R., CEO Thailand 2C2P

"It doesn't matter which market you expand into always conduct a bottom-up market analysis to ensure that your product works in the market."

> Yuen Tuck Siew, Founder Jirnexu

"Simplify a product to increase customer adoption."

Wilson Beh, Co-Founder PolicyStreet

A key part of our expansion strategy is in finding an anchor investor or partner who is aligned to our vision and interest."

Rosaline Chow Koo, Founder and CEO CXA Group

"Scaling a FinTech firm across Southeast Asia means constant innovation. For example, a payments gateway can expand to adjacencies like lending."

Yinglan Tan, Founding Managing Partner
Insignia Ventures Partners

ON REGULATIONS AND OPEN BANKING:

"Take a proactive stance with regulators and lawyers to clear doubts and to ensure that all stakeholders' interests are aligned."

> Jakub Zakrzewski, APAC General Manager Revolut Ltd

"Solutions offered by digital banks and FinTech firms can help to promote financial inclusion in ASEAN."

Rini Juwita, Senior Manager Indonesia FinTech P2P Lending Association (also known as Asosiasi FinTech Pendanaan Bersama Indonesia)

"Banks play a critical role in creating an open banking infrastructure through open application programming interfaces for start-ups to build upon."

Chua Joo Hock, Managing Partner and Liu Genping, Partner Vertex Ventures SEA "Globally, most regulators are very progressive. They ensure that regulations are in place and work closely with banks and venture capitals who are engaged in FinTech innovation."

Abhishek Chaterjee, Co-Founder and CEO Tookitaki

"Regulatory due diligence should be conducted as quickly as possible when planning to enter a market. For example, the recently enacted Thailand Data Privacy Act will come into full force in May 2020, affecting firms whose business model relies heavily on sending and collecting personal data."

Anon Aunsinmun, Chief Executive The Thai FinTech Association

ON HIRING THE RIGHT TALENT:

"Understand culture differences and having a diverse organisation with different nationalities can be beneficial when the firm is expanding regionally."

Dr. Nguyen An Nguyen, CEO Trusting Social "Invest in a good team with a relevant track record that can work together whatever the challenges."

Thng Tien Tat, Director UOB Venture Management

ON COLLABORATION AND COMPETITION:

"To remain the best-in-class, innovate and continue evolving the product even as others give chase. You need to follow the market, track users' evolving needs and iterate constantly to improve the product."

Hendra Kwik, Co-Founder and CEO PAYFAZZ

"Look for these key factors when choosing a partner: coverage, reputation, branding and knowledge of financial market in the area."

Zhou Jing, Former President PINTEC

ON FUNDING:

"For B2B firms, having sufficient cash and knowing your sales cycle well is key to sustaining a business."

Paul Ong, Executive Director InnoVen Capital

"FinTech companies should also speak to financial institutions as they could potentially become both a venture partner and business partner to adopt the FinTech solution(s)."

Eddie Lee, Vice President Cambodia FinTech Association "Three key things to consider before valuing your company:

- 1. As a founder, are you bringing any value to the company?
- 2. Is your business model and proposition strong enough?
- 3. Is your target market big enough?"

Mohammad Ridzuan Abdul Aziz, Chairman FinTech Association of Malaysia

GENERAL ADVICE:

"Finance is a business of trust. Focus on building trust with your target audience — which, in our case, are investors and dealmakers — and by developing the right technology tools that address their pain points for the long run, instead of pursuing quick wins."

Kelvin Lee, Co-Founder and CEO Fundnel

"Maintain a nimble start-up mindset and agility even as you turn corporate and focus on systematic growth."

Vikas Nahata, Co-Founder and Executive Chairman Validus

"A young team should solve a niche problem that bigger companies are not interested in and expand from there. It is important to collaborate rather than to disrupt."

Jun Ting, Founder Almazing

"Keep reporting lines short to minimise the complexities of an organisational structure. Maintain agility and make decisions that are tailored specifically for each market."

Pieter Kemps, Managing Director Sequoia Capital Singapore

Developments across ASEAN

This section provides a snapshot of the key regulatory initiatives that have been rolled out and are planned for the FinTech sector in the ASEAN-6 countries.



Quick Facts²⁰

Population size: 267.6M Median age: 30.5 years Internet penetration rate: 25.4% Mobile penetration rate: 176%

FinTech Regulators:

- 1) Bank Indonesia (BI)
- 2) Otoritas Jasa Keuangan (OJK) Regulatory sandbox: Yes

FinTech Associations:

1) Indonesian FinTech Association 2) Indonesia FinTech P2P Lending Association (also known as Asosiasi FinTech Pendanaan Bersama Indonesia)

INDONESIA: PAVING THE WAY FOR A MORE ROBUST FINTECH SECTOR

Regulators in Indonesia are supportive of the FinTech sector, with the central bank of Indonesia, Bank Indonesia (BI), and the Indonesian financial services authority, Otoritas Jasa Keuangan (OJK), launching initiatives to support its development.

In June 2019, BI launched Indonesia's Payment System (IPS) 2025 Visions, a national roadmap to develop, to expand and to enhance the payments ecosystem in the country. IPS 2025 Visions will bring together financial institutions, FinTech firms and government agencies to increase interoperability between payment systems, to boost cybersecurity and to spur further innovations.

In addition, IPS 2025 Visions will enhance checks for processes in the areas of Know-Your-Customer (KYC) and Anti-Money Laundering / Countering the Financing of Terrorism (AML/CFT) with the development of data sharing frameworks and Regulatory Tech (RegTech) and Supervisory (SupTech) solutions.

The IPS 2025 Visions will also open up additional opportunities for FinTech firms to collaborate with the more than 100 commercial banks in Indonesia¹⁸ using technology such as Application Programming Interfaces (APIs).

OJK is also building market confidence for Indonesia's FinTech sector. In addition to vetting and regulating FinTech firms operating in the country, it also cracked down on 1,073 illegal FinTech firms in 2019¹⁸. These FinTech firms were deemed to be illegal as they were charging excessively high interest rates, effectively making them "loan sharks". There was also a risk of these firms misusing users' personal information¹⁹.

The commitment of the authorities to ensuring a supportive and secure financial environment is critical to building trust with the public and investors, which will in turn spur further FinTech developments. Such initiatives appear to be paying off, with the country now one of the frontrunners in ASEAN in terms of FinTech funding as highlighted in Section 1 of the whitepaper.



Quick Facts

Population size: 31.5M Median age: 28.7 years Internet penetration rate: 78.8% Mobile penetration rate: 135%

FinTech Regulator:

Bank Negara Malaysia (BNM) Regulatory sandbox: Yes

FinTech Association:

FinTech Association of Malaysia

MALAYSIA: ACCELERATING ITS DIGITAL ECONOMY AMBITION

The Malaysian Government made great progress in developing the FinTech sector in 2019. For example, it published a policy document on "Publishing Open Data using Open Application Programming Interface (API)" to provide guidance and to invite feedback on standardised Open Data API specifications. It is anticipated that this will facilitate greater collaboration between players in the finance industry²¹. The ability for FinTech firms and banks to share information through APIs in a secure manner will support the development of new solutions and the growth in Malaysia's FinTech sector.

An industry-wide electronic Know-Your-Customer (e-KYC) guideline is also expected to be released by Bank Negara Malaysia (BNM) which will set out the customer onboarding requirements and standards for financial institutions to follow. This will present FinTech firms with more opportunities to work with financial institutions to develop e-KYC verification processes, to enhance customer onboarding journeys and to meet regulatory requirements on the e-KYC front.

The Malaysian Budget for 2020 (Budget 2020) released in October showcased the country's ambition to grow its digital economy. Initiatives under the Budget 2020 include a one-time RM30 payout for Malaysians aged under 18 and earning less than RM100,000 per year to encourage the move towards the use of cashless solutions. Also announced was an additional RM50 million for the Malaysia Co-Investment Fund (MyCIF) to help equity crowdfunding and peer-to-peer (P2P) financing platforms access financing²². These initiatives demonstrate the Malaysian Government's commitment to support the growth of FinTech firms and to build confidence in Malaysia's FinTech sector.

The expected launch of a virtual banking framework by BNM in the first half of 2020 is an eagerly anticipated development that will create more opportunities for FinTech firms. The framework will open up licence applications for interested FinTech firms²³ and create more opportunities for collaboration with financial institutions looking to develop virtual bank products and services.

THE PHILIPPINES: A FERTILE GROUND FOR BUDDING FINTECH FIRMS

The FinTech sector in the Philippines is set for growth given the Government's receptiveness to the use of FinTech in the financial services sector.

The Central Bank Bangko Sentral ng Pilipinas (BSP) introduced a National Quick Response (QR) Code Standard in October 2019 to enable a standardised and interoperable payment system in the country²⁴. The nation-wide launch of this system by 30 June 2020 will enable more consumers and SMEs to adopt e-payments as well as drive interoperability between different e-wallet providers.

In a bid to support financial innovation and to provide greater access to finance for start-ups and SMEs, the Securities and Exchange Commission of the Philippines (SEC) issued new crowdfunding regulations in 2019²⁵. Under the new rules, both lending- and equity-based crowdfunding portals must register with the SEC and crowdfunding transactions must be conducted through registered intermediaries. A crowdfunding intermediary may be a registered broker-dealer, an investment house or a funding portal. This is an important development as it provides security for all parties involved by defining a detailed list of disclosures and transparency requirements. With more trust and confidence built into the crowdfunding space, FinTech firms in the country are expected to benefit from an increase in the volume of fundraising dollars.

The mix of ground up efforts and top down initiatives by regulatory bodies in the Philippines to support the development of the FinTech industry is a good sign for the growth of FinTech in the country.



Quick Facts

Population size: 106.6M Median age: 23.7 years Internet penetration rate: 55.5% Mobile penetration rate: 111%

FinTech Regulators:

Bangko Sentral ng Pilipinas (BSP)
 Securities and Exchange
 Commission of the Philippines
 Regulatory sandbox: No

FinTech Association:

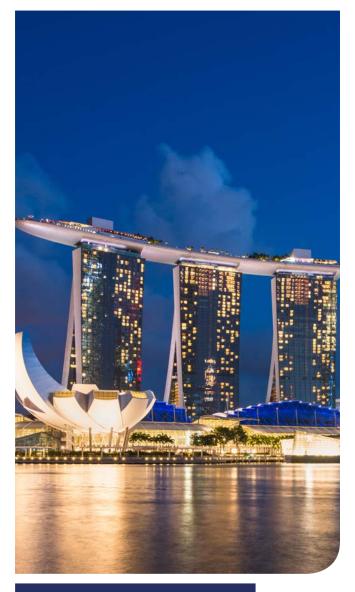
FinTech Philippines Association

SINGAPORE: A GLOBAL FINTECH HUB

Singapore is a recognised global FinTech centre, with its supportive regulatory environment and community of FinTech firms. An added boost to the country's FinTech sector was the announcement by the Monetary Authority of Singapore (MAS) to issue up to five new digital bank licences.

While banks in the country already offer digital banking solutions to customers, successful licensees will be able to offer banking services without a physical branch network. Digital banks are expected to generate more opportunities for Singapore's existing FinTech ecosystem through collaboration on various solutions.

Another development is the launch of the Sandbox Express by the MAS in August this year to speed up FinTech innovation. The Sandbox Express shortens the approval process for eligible applicants, enabling these firms to test their products and services within 21 days of applying to the MAS. Although the Sandbox Express is only open to insurance brokers, recognised market operators and remittance businesses, the MAS is exploring opportunities to expand it to more FinTech firms.



Quick Facts

Population size: 5.6M Median age: 34.9 years Internet penetration rate: 81% Mobile penetration rate: 144%

FinTech Regulator:

Monetary Authority of Singapore (MAS) Regulatory sandbox: Yes

FinTech Association:

Singapore FinTech Association (SFA)

THAILAND: EXPERIMENTING WITH SANDBOXES

There is a strong commitment from financial institutions, policy makers and regulators in Thailand to develop, to support and to regulate the FinTech sector.

One of the ways the Thai government is encouraging foreign investment into the FinTech industry is by lowering or exempting corporate taxes for FinTech firms. Under the investment promotion law, FinTechs firms who are approved by the Thailand Board of Investment are granted up to eight years of corporate tax exemptions²⁶.

Laws such as the Digital Economy and Society Council bill have also been passed to regulate and to support the growth of FinTech firms. ²⁷ One key objective of the bill is to support electronic identity verification, enabling FinTech firms to access government information to improve KYC processes and to develop new financial products and services. ²⁸

There are also several regulatory sandboxes in Thailand. These cover different aspects of financial services as regulators strive to create industry-specific sandboxes for the experimentation of FinTech solutions.

For example, the Bank of Thailand (BOT) implemented a regulatory sandbox to support the development of innovative FinTech solutions in the areas of loans, payments and fund transfers²⁹.

The Securities and Exchange Commission (SEC) has also launched regulatory sandboxes to test FinTech solutions that support the trading of financial instruments such as securities and derivatives. One recent development is the launch of Project Inthanon, a collaboration between eight banks in Thailand and technology partner R3 to design and to develop a proof-of-concept prototype for wholesale funds transfer with the use of distributed ledger technology³⁰.

The Office of Insurance Commission has also launched a sandbox to encourage innovation in the insurance sector, enabling insurers, agents and InsurTech firms to beta test FinTech solutions for the industry.



Quick Facts

Population size: 69.4M Median age: 38.1 years Internet penetration rate: 47.5% Mobile penetration rate: 178%

FinTech Regulators:

1) Bank of Thailand (BOT)
2) Securities and Exchange
Commission (SEC)
3) Office of Insurance Commission
Regulatory sandbox: Yes

FinTech Association:Thai FinTech Association



Quick Facts

Population size: 95.5M Median age: 30.9 years Internet penetration rate: 52.7% Mobile penetration rate: 125%

FinTech Regulator:

State Bank of Vietnam (SBV) Regulatory sandbox: No

FinTech Association: Vietnam FinTech Club

VIETNAM: CAUTIOUSLY OPTIMISTIC ABOUT FINTECH

Thus far, the State Bank of Vietnam (SBV) has taken a cautious approach to FinTech regulations, observing the initiatives championed by regulators in neighbouring countries before determining its strategies to drive FinTech growth.

For example, the SBV imposed a limit on the number of payment licences that can be granted to non-bank organisations in order to safeguard consumer interest. The SBV has also been very selective in issuing payment licences, granting only 31 so far. The FinTech firms that have received the licence are permitted to provide services such as electronic payments, money transfers and e-wallets³¹.

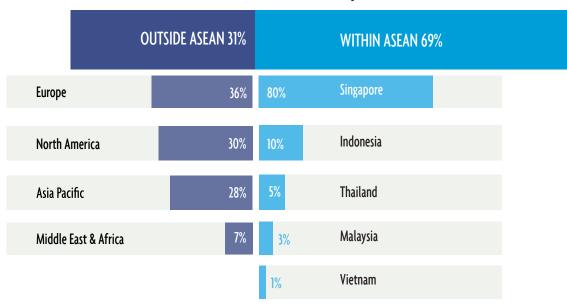
The SBV is also piloting peer-to-peer (P2P) lending³², which is set to build a foundation for a robust P2P lending industry in the country.

To spur more FinTech developments in the coming year, the SBV has also continued with the second iteration of the FinTech Challenge Vietnam (FCV). The challenge focuses on FinTech solutions that use big data and artificial intelligence technology to drive financial inclusion and to improve cybersecurity³³. Learnings from FCV will be used to shape the development of a legal framework for the FinTech ecosystem. It will also help in guiding the secure and intelligent use of data to serve the needs of Vietnamese consumers and businesses better.

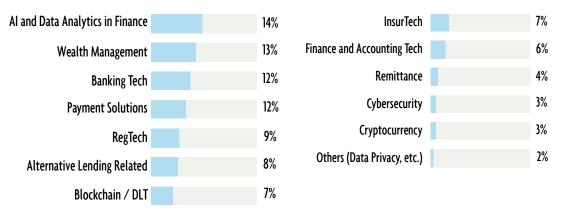
Survey Respondents

Close to 70 per cent of the FinTech firms surveyed are headquartered in ASEAN. All respondents offer solutions and/or services across more than 10 categories of FinTech solutions. Among the survey respondents, close to 80 per cent of the respondents have commercialised their solutions. Thirty-five per cent of respondents have reached profitability.

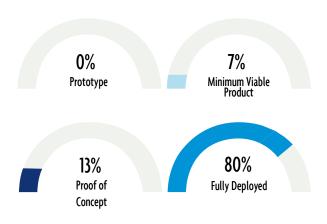
Location of FinTech firms' headquarters



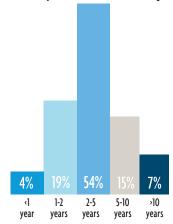
Type of FinTech solution



Product Stage of the FinTech firms

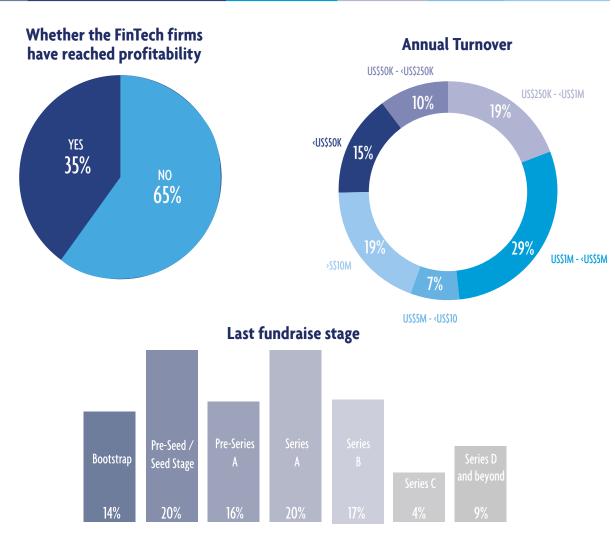


Number of years since incorporation

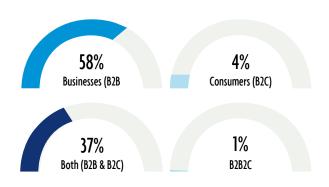


Number of employees

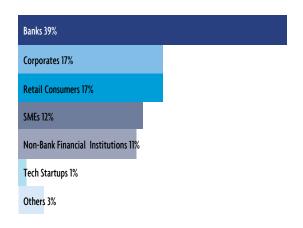




Business model of the FinTech firms



Key target customers



THE FINTECH FIRMS





Piyachart R., CEO for Thailand

Singapore HQ | Also operating in Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines and Thailand, Hong Kong and the United States | B2B | Payments

2C2P is a leading ASEAN-based payment services provider offering omni-channel payment services to financial institutions, e-commerce and m-commerce businesses. 2C2P enables payment acceptance through credit and debit cards as well as alternative payment methods including QR codes and wallets, kiosks, ATMs, online, mobile banking and cash.



FUNDNEL

Kelvin Lee, Co-Founder and CEO

Singapore HQ | Also operating in Indonesia, Malaysia and India | B2B, B2C | Wealth Management

Fundnel is a private investment platform that curates sell-side opportunities for the buy-side. Since inception, the platform has amassed a total deal value of US\$1.8 billion and has completed 36 transactions





Wilson Beh, Co-Founder

Malaysia HQ | B2C | InsurTech

PolicyStreet is an InsurTech company which promotes financial inclusion by offering individuals and businesses the best insurance products for their needs. The firm is one of the 33 financial advisers approved by Bank Negara Malaysia (the central bank of Malaysia) to advise customers on their insurance needs.



Jun Ting, Founder

Singapore HQ | Also operating in Indonesia, Malaysia and Thailand | B2B | Finance and Accounting Tech

Almazing provides a plug and play solution that digitises offline receipt data without the need for integration into existing point-of-sale systems. Its solution captures and processes all itemised data on receipts, feeding the data into analysis tools.





Rosaline Chow Koo, Founder and CEO

Singapore HQ | Operating across Asia | B2B |

Connexions Asia Group (CXA Group) is Asia's first artificial intelligence-driven health ecosystem platform that empowers employees to personalise their healthcare benefits based on their preference and need.





Huy Nghiêm, Founder

Vietnam HQ | B2B, B2C | Wealth Management

Finhay is a lifestyle financial app that helps millennials to invest in financial products with as little as US\$3.00. Finhay enables users to invest rebates earned on their spend into selected investment products.



Jirnexu

Yuen Tuck Siew. Founder

Malaysia HQ | B2B2C | Banking Tech

Jirnexu is a B2B2C fullstack FinTech company that offers end-to-end digital acquisition tools and lifecycle solutions for financial service institutions and service providers in Asia. It operates RinggitPlus, Malaysia's leading financial





Zhou Jing, Former President

China and Singapore HQ | Also operating in Singapore | B2B2C | Alternative Lending

As a leading independent FinTech solutions provider listed on Nasdaq, PINTEC offers tailored digital solutions for point-of-sale financing, personal loans, SME loans, corporate and commercial segments, wealth management and insurance.



PAYFAZZ

Hendra Kwik, Co-founder and CEO

Indonesia HQ | B2B | Payments

PAYFAZZ builds a network of distributed banking agents to enable a fully digital mobile banking solution for the 440 million people who are unbanked in ASEAN. It has more than 100,000 agents serving 10 million active users per month in Indonesia. PAYFAZZ is the first Indonesian start-up to participate in Y Combinator's accelerator programme and to be shortlisted in Y Combinator's Top 100 Companies and Forbes 30 Under 30 Asia lists. It is also a winner of the Singapore Venture Capital Award 2019.





lakub Zakrzewski. APAC General Manager

London HQ | Operating globally | B2C | Payments

Founded in 2015, Revolut is more than a mobilefirst money app. Millions of people worldwide use Revolut to manage their finances, from the everyday to the extraordinary. Think instant spending notifications, built-in budgeting and analytics, foreign currency exchange, bill-splitting, instant global transfers, and spare change round-up vaults.





Tookitaki is a leading RegTech company that has developed a suite of award-winning anti-money laundering solutions. The solution detects complex money laundering patterns using machine learning and distributed systems.



Vikas Nahata, Co-Founder and Executive Chairman

Singapore HQ | Also operating in Indonesia and Vietnam | B2B | Alternative Lending

Validus is Singapore's largest SME financing platform for businesses and accredited investors. An award winning FinTech firm founded in 2015, Validus holds a Capital Markets Services licence by the Monetary Authority of Singapore and has a presence in Indonesia and

Trusting Social

Dr. Nguyen An Nguyen, CEO Jaideep Lakshminarayanan, Chief Financial Officer

Singapore HQ | Also operating in Vietnam | B2B | Alternative Lending

Trusting Social is a FinTech company that uses artificial intelligence technology to provide alternative credit scoring for financial institutions in emerging markets.

THE VENTURE CAPITALISTS (VCS) AND FUNDING PARTNERS



INSIGNIA VENTURES **PARTNERS**

Yinglan Tan, Founding Managing Partner, Singapore

Insignia Ventures Partners is an early stage technology venture fund focusing on Southeast Asia. The fund, which started in 2017, manages more than US\$150 million from premier institutional investors including sovereign wealth funds, foundations, university Asia, Europe and North America.



SEQUOIA╚

Pieter Kemps, Managing Director,

Sequoia helps daring founders build legendary companies, from ideation to initial public offerings and beyond. Sequoia India operates in Southeast Asia and India where they partner actively with founders from a wide range of companies across categories including BYJUs, Carousell, Druva, Go-Jek, OYO Rooms Tokopedia, Truecaller, Zilingo, Zomato and



WentureManagement

Thng Tien Tat, Director, Singapore

Since 1992, UOB Venture Management (UOBVM) has financed more than 100 privately held companies through direct equity investment, mostly in Southeast Asia and China. UOBVM's investments incorporate environmental, social and governance as well as impact investing





Innoven Capital is Asia's leading venture debt and lending platform providing debt capital to high growth innovative ventures primarily backed by venture capital firms. Innoven Capital is a joint venture between Temasek Holdings and United Overseas Bank.

Vertex Ventures



Chua Joo Hock, Managing Partner Liu Genping, Partner, Singapore

Vertex Venture Holdings is a worldwide group of venture capital funds focused on investment opportunities in the information technology and healthcare markets through its global family of direct investment venture funds

THE FINTECH ASSOCIATIONS



FinTech Association of Malaysia

Mohammad Ridzuan Abdul Aziz, Chairman

FinTech Association of Malaysia (FAOM) aspires to be the key enabler and a national platform to support Malaysia to be the leading hub for FinTech innovation and investment in the region. FAOM facilitates ecosystem collaborations between FinTech stakeholders in Malaysia to support the FinTech community, to build awareness and trust for FinTech start-ups and to advocate for better policy on behalf of its members



Indonesia FinTech P2P Lending Association also known as Asosiasi FinTech

Pendanaan Bersama Indonesia (AFPI)

Rini Iuwita, Senior Manager

Appointed formally by the Financial Services Authority (OJK), the Indonesia FinTech P2P Lending Association (AFPI) is the official industry association for peer-to-peer (P2P) lending in Indonesia.



Thai FinTech Association

Anon Aunsinmun, Chief Executive

Established in July 2016, the Thai FinTech Association (TFTA) aims to facilitate network and connections among the FinTech community. TFTA's mission is to increase accessibility to financial products and services for Thai people, to reduce the cost of financial transactions in Thailand, to promote fair and transparent competition and to support Thai FinTech start-ups to compete and expand to global markets. TFTA is taking a major role in setting up the F13, a national FinTech sandbox initiative to accelerate the FinTech industry development in Thailand





Cambodia FinTech **Association**

Eddie Lee, Vice President

The Cambodia FinTech Association is a nonprofit organisation established for the benefit of members across Cambodia, which include FinTech start-ups, hubs, accelerators and VCs.

Appendix

Section 1: ASEAN's FinTech Prospects Remain Bright

- Data from Tracxn reports that there are a total of 64 active FinTech firms based in these four economies to-date, up from 40 firms last year. Cambodia has the largest number with 38 FinTech firms followed by Myanmar with 24. While still nascent, the FinTech industry in these countries has seen an inflow of US\$12.5 million funding in 2019.
- 2. The term "funding" in this Chapter includes all disclosed funding rounds categorised as "pre-series", "early stage rounds", "late stage rounds", "private equity (only 3 deals were reflected in the period between 1 Jan 2014 to 30 Sep 2019)" and "venture debt" provided on data platform Tracxn under its FinTech practice area. It does not include companies solely funded by grants, conventional debt, mergers and acquisitions, initial coin offerings (ICOs) and post-initial public offerings (IPOs).
- 3. Formerly known as InstaRem.
- Our tabulations from Tracxn's data do not take into account funding into Go-Jek as their core business is categorised as transportation and delivery. Tracxn does not categorise Grab under its FinTech practice area.
- SoftBank, GIC complete investment in VNPAY's parent firm VNLIFE, DealStreet Asia website, 25 July 2019
- Singapore-based Advance.Al raises \$80m in Series C round, DealStreet Asia website, 22 September 2019
- According to the Fulfilling its Promise The future of South-east Asia's digital financial services industry by Bain & Company, Google and Temasek report, in Vietnam, 69 per cent of the population is unbanked and 10 per cent underbanked. In Indonesia, 51 per cent of the population is unbanked while 26 per cent are underbanked.
- 8. FinTech solutions are grouped by categories based on Tracxn's taxonomy for the FinTech practice area. See Glossary.
- Towards cashless society: Inevitable trend in industry 4.0 era, State Bank of Vietnam News Detail, 14 June 2019
- Vietnam mobile payment market by type, mode of transaction, end user, application and type of purchase: Global Opportunity Analysis and Industry Forecast, 2018-2025, Allied Market Research, June 2018
- Understanding Southeast Asia's emerging middle class, Bain & Company, March 2019
- A detailed analysis for Malaysia, Thailand and the Philippines is unavailable given that the funding amount and number of funding deals are relatively small in comparison to Indonesia, Singapore and Vietnam.

Section 2: Opportunities and Challenges for FinTech firms in ASEAN

- 2018 IFZ Global FinTech Rankings, The Institute for Financial Services Zug (IFZ) of the Lucerne University of Applied Sciences, 2018
- fDi FinTech Locations of the Future 2019:20, fDI Intelligence, August / September 2019
- Growth funds are funds that are typically used to back companies at their stage of growth where the focus is to

- generate a consistent source of income from new customers.
- Vertex Ventures' US\$305 million fund: Temasek's Vertex closes record \$305 million Southeast Asian fund, Bloomberg article, 19 September 2019
- Singapore's Insignia Closes \$200 Million Southeast Asia Fund, Bloomberg article, 17 October 2019

Section 3: FinTech Regulatory Developments across ASEAN Indonesia Sources:

- 18. OJK FinTech License, DealStreet Asia website, 10 October 2019
- Indonesian finance body blocks 297 unregistered P2P lenders, Nikkei Review, November 2019
- The World Bank Data topics: Population, Total 2018, World Bank website. The World Factbook- CIA library publications: median age (2018 est.), internet users (2016 est.) and mobile subscriptions (2017 est.), CIA website

Malaysia Resources:

- 21. Publishing Open Data Using Open API, Bank Negara Malaysia (BNM), 2 January 2019
- 22. Budget 2020, Ministry of Finance Malaysia, 11 October 2019
- 23. Budget 2020, Ministry of Finance Malaysia, 11 October 2019

The Philippines Resources:

- The Bangko Sentral Pursues Adoption of a National QR Code Standard for Payments, Bangko Sentral ng Pilipinas Media Release, 17 October 2019
- 25. SEC Approves Rules on Crowdfunding, Securities and Exchange Commission Philippines Press Release, 9 July 2019

Thailand Resources:

- 26. A Guide to The Board of Investment 2019 Thailand Board of Investment article, September 2019
- Six digital bills passed in Thailand by NLA, OpenGov Asia news article, 12 February 2019
- 28. Framing the Issues: The Future of Finance in Thailand, Milken Institute article, July 2018
- A Guide to Regulatory FinTech Sandboxes Across Asia Pacific, BakerMcKenzie article, 13 November 2017
- The outcomes and findings of Project Inthanon Phase II and the Project's Next Steps, BOT Press Release No. 39/2019,18th July 2019

Vietnam Resources:

- List of Organisations Licensed to Provide Payment Service,
 The State Bank of Vietnam, 26 August 2019
- Government Moves to Legalise P2P Lending, Vietnam News website, 13 March 2019
- Second FinTech Challenge Vietnam Launched, Vietnam Economic Times website, 13 August 2019

Glossary

(FinTech solutions are grouped by categories based on Tracxn's taxonomy for the FinTech practice area)

Categories	Tracxn Classification	Focus	
Alternative Lending	Alternative Lending	Online lending platforms (including balance sheet lenders, marketplaces, P2P lenders as well as lead generators) and companies that enable online lending.	
	Crowdfunding	Online platforms where people, organisations raise money from the masses, for various projects and causes.	
Banking Tech	Banking Tech	Companies which provide Tech solutions primarily for banking industry including software, innovative hardware, and Tech-enabled services.	
Blockchain Tech Related	Blockchain	Companies developing blockchain technologies such as blockchain network, smart contracts, etc to cater to enterprise and consumer markets.	
Cryptocurrencies	Cyptocurrencies	All companies that provide bitcoin and other digital currency products and services.	
Finance and Accounting Tech	Finance and Accounting Tech	Companies that provide tools or software solutions for automating the fun tions of finance and accounting department of an organisation.	
InsurTech	Insurance IT	Companies which provide software products and data solutions primarily for the insurance industry.	
	Internet First Insurance Platforms	Companies which provide tech platforms to consumers for purchasing and managing their insurance.	
	Employer Insurance	Companies which provide employers with solutions for managing employee insurance benefits.	
	Investment Tech	Companies offering platforms for retail and institutional investors to research and invest in multiple financial assets. Also includes companies offering solutions to financial institutions providing investment related services.	
Investment Tech	RoboAdvisors	Companies that provide automated, low-cost investment services to retail investors. Also includes companies that provide technological solutions for automated investments to financial advisors.	
	Remittance	Companies providing cross-border money transfer solutions and services to consumers and enterprises.	
	Forex Tech	Companies providing software for forex market which includes currency exchange and currency investments.	
Payments	Payments	Companies which participate in traditional web based and offline payment cycle. Also includes companies which provide alternative mode of payment, companies which support the payment companies in terms of security, analytics, platform etc.	
	Mobile Payments	Companies offering solutions to make and (or) accept payment via mobile.	
Personal Finance	Consumer Finance	Companies which offer tech-enabled assistance to consumers to manage their personal expenses, debt and savings, track investment portfolios, plan finances, and compare third-party financial products.	
RegTech	RegTech	Companies offering a range of tech products primarily for financial institutions and regulators for efficient implementation and monitoring of financial regulations.	

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Regional FinTech Associations: Cambodia FinTech Association, FinTech Association of Malaysia, Indonesia FinTech P2P Lending Association; Thai FinTech Association;

And all survey respondents.

About United Overseas Bank

United Overseas Bank Limited (UOB) is a leading bank in Asia with a global network of more than 500 offices in 19 countries and territories in Asia Pacific, Europe and North America. Since its incorporation in 1935, UOB has grown organically and through a series of strategic acquisitions. UOB is rated among the world's top banks: Aal by Moody's and AA- by both Standard & Poor's and Fitch Rating. In Asia, UOB operates through its head office in Singapore and banking subsidiaries in China, Indonesia, Malaysia, Thailand and Vietnam, as well as branches and representative offices across the region.

Over more than eight decades, generations of UOB employees have carried through the entrepreneurial spirit, the focus on long-term value creation and an unwavering commitment to do what is right for our customers and our colleagues.

We believe in being a responsible financial services provider and we are committed to making a difference in the lives of our stakeholders and in the communities in which we operate. Just as we are dedicated to helping our customers manage their finances wisely and to grow their businesses, UOB is steadfast in our support of social development, particularly in the areas of art, children and education.

Find out more at https://www.uobgroup.com

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At PwC, our purpose is to build trust in society and solve important problems. We're a network of firms in 157 countries with over 276,000 people who are committed to delivering quality in assurance, advisory and tax services. Find out more and tell us what matters to you by visiting us at www.pwc.com/sg.

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About Singapore FinTech Association (SFA)

SFA is a cross-industry and non-profit organization. Its purpose is to support the development of the FinTech industry in Singapore, and to facilitate collaboration among the participants and stakeholders of the FinTech ecosystem in Singapore. The SFA is a member-based organization with over 350 corporate members. It represents the full range of stakeholders in the FinTech industry, from early stage innovative companies to large financial players and service providers.

To further its purpose, the SFA also partners with institutions and associations from Singapore and globally to cooperate on initiatives relating to the FinTech industry. The SFA have signed over 50 international memorandums of understanding (MoUs) in more than 30+ countries and are the first U Associate organisation to be affiliated with National Trades Union Congress (NTUC). For further information visit https://singaporefintech.org/

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