









2:

FinTech in ASEAN 2022: Finance, reimagined



S=

Contents

| Foreword | 1 |
|---|----|
| Executive summary | 2 |
| Staying resolute: ASEAN funding braces for winter | 4 |
| Finance everywhere: Businesses try on FinTech | 14 |
| Embedded payments and rewards | 22 |
| Embedded lending | 24 |
| Embedded investing | 28 |
| Embedded insurance | 30 |
| Looking ahead: What's next for embedded finance? | 32 |
| Country insights | 34 |
| References | 40 |

Foreword

Investments in ASEAN's FinTech firms tracked last year's bumper funding, clocking in US\$4.3 billion in the first nine months of 2022 - higher than the combined sum from 2018 to 2020. While the global economy is in challenging times, the numbers so far signal a vote of confidence in ASEAN's FinTech industry, due to its open regulatory and business environment.

As digital services continue to proliferate in the region, more companies are finding ways to embed financial services within their apps. A travel app today may not just provide location reviews and itineraries, but also allow users to book and pay for their flights and accommodation, split those payments into instalments, buy travel insurance, and more. Apart from providing personalised services and convenience to users, the move to become a FinTech-enabled app can generate additional income streams as well as enriched customer data for the business.

This is the power of embedded finance, and despite marked development in various embedded categories like consumer payments and buy now, pay later (BNPL), its growth potential remains high.

For this year's *FinTech in ASEAN* report, the team surveyed more than 4,000 respondents and spoke with industry leaders to find out how consumers are warming up to embedded finance, and how companies and FinTechs can tap into this promising sector.

We have named this edition *Finance, reimagined* as we have reached an inflection point for the industry – one where key drivers like embedded finance are contributing to the creation of accessible, user-focused digital ecosystems.







Executive summary



ASEAN FinTech sees steady growth

ASEAN remained an attractive proposition for FinTech investments, amidst external pressures. Investments in the region now stand at 7 per cent (US\$4.3 billion) of global FinTech funding, up from 2 per cent (US\$863 million) in 2018.



Fundraising remains resolute in the face of winter

While funding in the first nine months of 2022 (YTD 2022) was just shy of the US\$4.5 billion funding received in the same period last year, it was higher than the combined sum from 2018 to 2020.

However, dark clouds lie ahead, as the number of deals made in 3Q 2022 fell to the lowest in two years.

Investments in late-stage companies (Series C and above) accounted for more than half of total funding, as investors grew more selective, placing a greater focus on FinTechs with a clear pathway towards profitability.

Singapore and Indonesia continue to lead in numbers

Both countries combined accounted for 76 per cent of ASEAN's total funding, driven by mega deals (deals >US\$100 million). Out of 163 deals that took place in the first nine months of 2022, more than half (55 per cent) went to Singapore-based FinTech firms.



Crypto and blockchain companies saw vibrant dealmaking

Cryptocurrency companies moved into the top three rank of most-funded FinTechs, after payments and alternative lending.

In terms of deal flow, one in three investments in ASEAN went to crypto/blockchain companies.

Executive summary

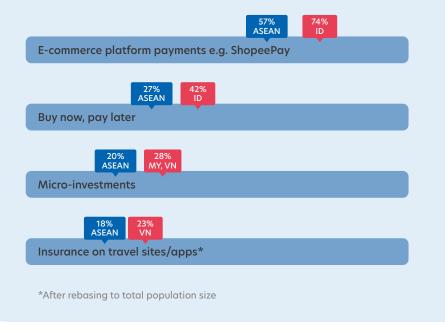
Embedded finance is taking root in ASEAN

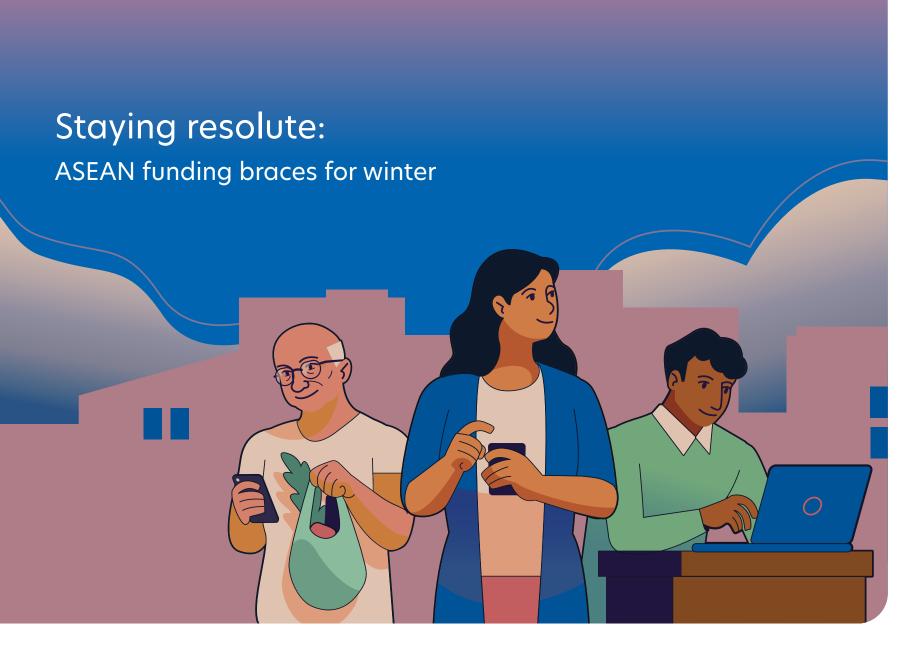
Digital transformation, data availability and a drive towards the cashless economy are increasing demand for more holistic digital user experiences in the region - something embedded finance excels at.

Our survey results indicate that 70 per cent of respondents in ASEAN use apps with embedded finance, with the highest being in Thailand and Vietnam (83 per cent). Of those who use such apps, almost three-quarters use them at least once a week.

Indonesia and Vietnam hold big potential for growth in embedded finance adoption

Our research unveiled an encouraging number of respondents who have used embedded-related services. Indonesia had the highest usage for specific services like e-commerce payment platforms and BNPL, while Vietnam had the highest usage in micro-investments and integrated insurance*, showcasing both countries' potential for further FinTech adoption.





Introduction

Fresh from last year's high, ASEAN FinTech funding displayed resilience even as global events hampered optimism.

That momentum, however, is slowing.

In last year's *FinTech in ASEAN 2021: Digital takes flight* report, we saw how a prolonged pandemic still led to record FinTech funding¹ in ASEAN, along with a heightened adoption of FinTech solutions such as e-wallets, cryptocurrencies and online investment platforms.

This year, the ongoing Russia-Ukraine conflict and interest rate hikes to combat rising inflation have spooked markets, increasing expectations of an impending recession. These factors have also affected private investments globally as investors pull back from 2021 highs.

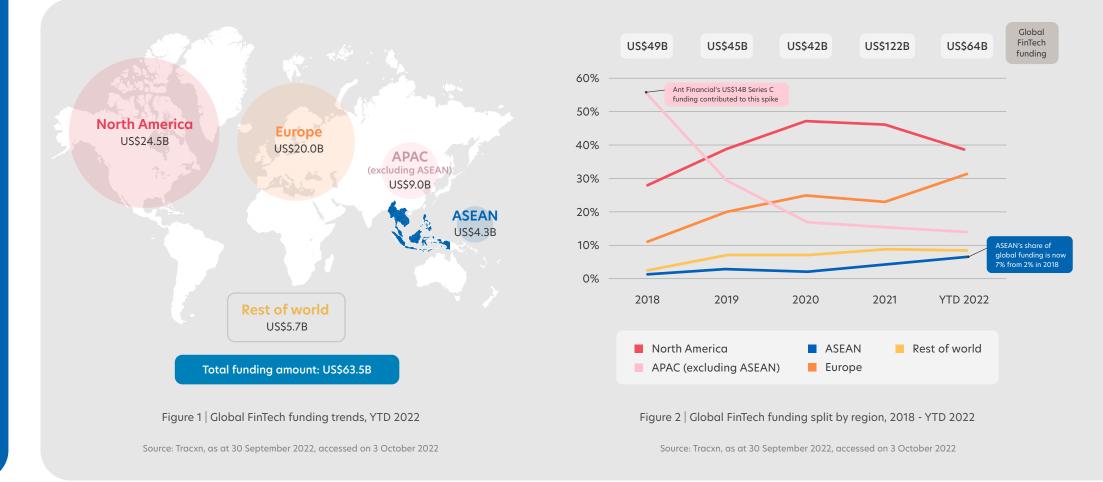
In this report, we review FinTech investments into six of the biggest ASEAN economies: Indonesia, Malaysia, the Philippines, Singapore, Thailand and Vietnam - also referred to as 'ASEAN-6'.

The four other ASEAN nations—Brunei Darussalam, Cambodia, Laos and Myanmar—have not been included in the funding analysis.

ASEAN's share of global FinTech funding rises to 7 per cent

- Global FinTech funding reached US\$63.5 billion up until September this year (YTD 2022), crossing the halfway mark of 2021's bumper funding.
- North America, which has led in global FinTech funding for the past three years, saw a drop of 57 per cent over its 2021 haul.

ASEAN's FinTech sector² remained an attractive proposition amid external pressures. Investments in the region now stand at 7 per cent, up from 2 per cent in 2018.



Investments reach US\$4.3 billion, led by late-stage funding

- Funding in YTD 2022 reached US\$4.3 billion, just shy of the US\$4.5 billion funding received in the same period last year, but higher than the combined sum from 2018 to 2020.
- > While funding activity remained vibrant in 1H 2022, 3Q 2022 funding fell to a quarterly low since 2Q 2021.
- Although the number of deals are lower (163 vs 194 year-on-year), the average deal size increased to US\$26.5 million from US\$23 million.
- Funding into late-stage FinTechs made up 54 per cent of the YTD total, up from 43 per cent, as investors back mature startups with a larger and more established customer base.



Explore the data

FinTech funding in ASEAN-6 (2018-2022)

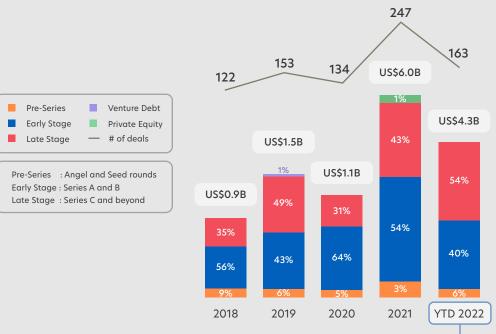


Figure 3 | ASEAN-6 FinTech funding trends, 2018 - YTD 2022



Figure 4 | ASEAN-6 quarter-on-quarter funding trends, 1Q 2021 - 3Q 2022

Singapore and Indonesia continue to dominate FinTech funding

- Singapore and Indonesia accounted for more than three-quarters of ASEAN's total funding – Indonesia with a substantial 11 percentage point gain over last year.
- > The Philippines and Vietnam saw a reduction in their share of the pie as the number of mega deals from both countries decreased significantly in YTD 2022.
- Of the 163 funding deals that took place, more than half (55 per cent) went to Singapore-based FinTech firms.

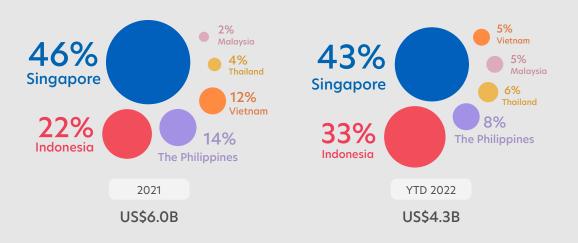


Figure 5 | Share of funding amount by country, 2021 vs YTD 2022

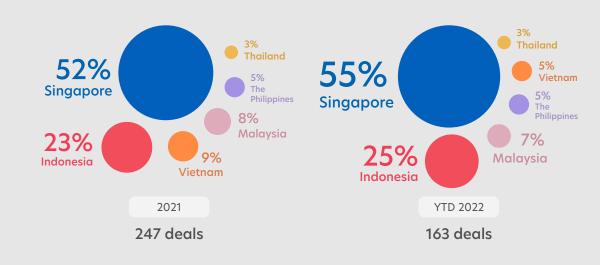
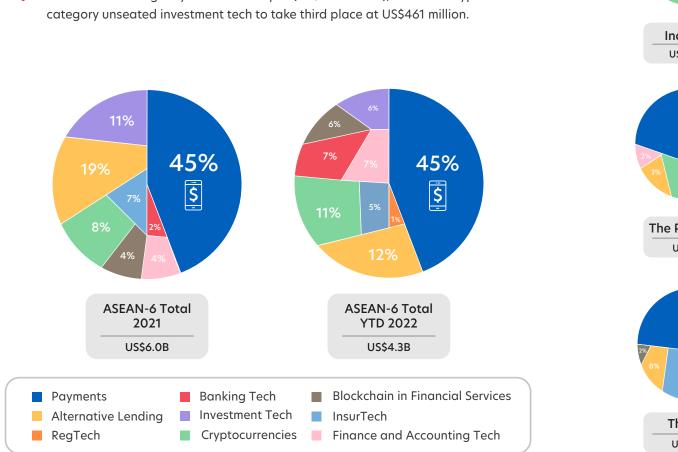
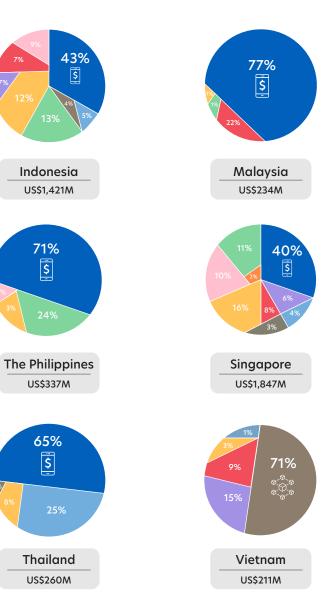


Figure 6 | Share of funding deals by country, 2021 vs YTD 2022

Payments maintains lead in funding numbers

- Apart from Vietnam, the payments category received the highest funding at > US\$1.9 billion across ASEAN-6.
- Alternative lending stayed in second spot (US\$506 million), while the cryptocurrencies > category unseated investment tech to take third place at US\$461 million.





\$

Figure 7 | Funding breakdown by FinTech categories, 2021 vs YTD 2022

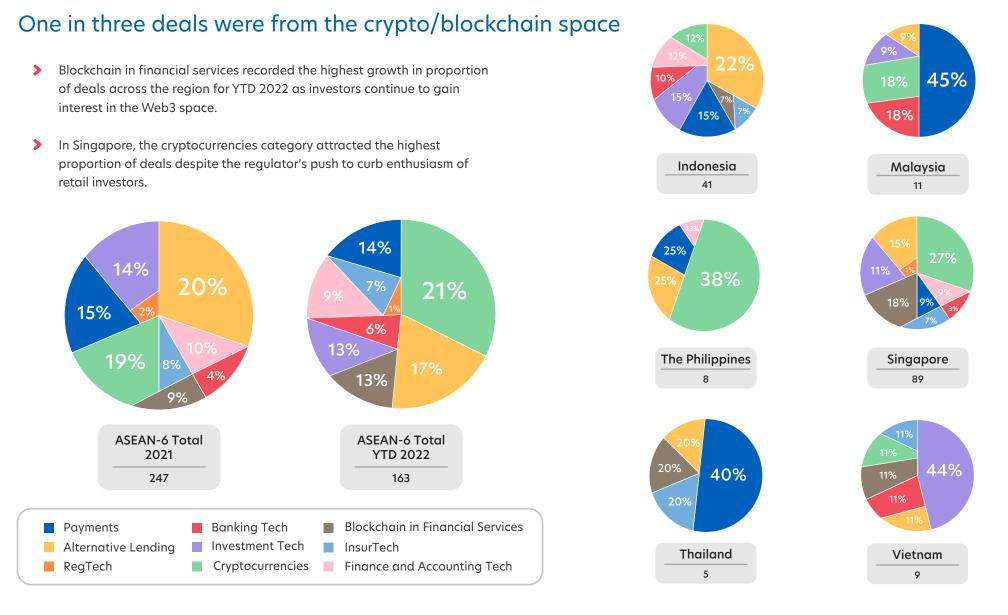


Figure 8 | Number of funding deals by FinTech categories, 2021 vs YTD 2022

Enter ASEAN's gaming giants

- While the top five funded FinTechs are from the payments category, two companies on this year's leaderboard stand out.
- Singapore's Coda Payments—which helps gaming publishers monetise their digital content—and Vietnam's Sky Mavis—which publishes the non-fungible token (NFT)-based Axie Infinity, with its own in-game economy—represent how the digital economy is shifting towards virtual worlds.
- 10 mega deals, amounting to US\$2.2 billion, accounted for 52 per cent of all FinTech funding in ASEAN.

| YTD 2022 | Company | Round name | Primary category | Funding amount US\$ (M) | |
|------------|-------------------------------|------------|----------------------------------|-------------------------|--|
| <u></u> | Coda Payments | Series C | Payments | 690 | |
| \bigcirc | Xendit | Series D | Payments | 300 | |
| \bigcirc | DANA | Series D | Payments | 250 | |
| \otimes | Voyager Innovations (PayMaya) | Series F | Payments | 210 | |
| ٩ | TNG Digital | Series A | Payments | 168 | |
| • | Sky Mavis | Series B | Blockchain in Financial Services | 150 | |
| <u></u> | Funding Societies | Series C | Alternative Lending | 144 | |
| <u></u> | TONIK* | Series B | Banking Tech | 131 | |
| | Opn | Series C | Payments | 120 | |
| | Pintu | Series B | Cryptocurrencies | 113 | |
| | | | Average funding amount: US\$228M | | |

Table 1 | Top 10 funded FinTech firms in ASEAN-6, YTD 2022

| 2021 | Company | Round name | Primary category | Funding amount US\$ (M) | |
|-----------|----------------------------|------------|----------------------------------|-------------------------|--|
| | company | Koona name | Thindry category | | |
| | Mynt | Series D | Payments | 475 | |
| <u></u> | Advance Intelligence Group | Series D | Alternative Lending | 400 | |
| <u>()</u> | Grab Financial Group | Series A | Payments | 300 | |
| | МоМо | Series E | Payments | 300 | |
| | VNPAY | Series B | Payments | 250 | |
| <u>(</u> | Bolttech | Series A | InsurTech | 247 | |
| \square | Ajaib | Series B | Investment Tech | 243 | |
| <u></u> | TSLC | Series B | Alternative Lending | 225 | |
| | Xendit | Series C | Payments | 215 | |
| <u>()</u> | NIUM | Series D | Payments | 200 | |
| | | | Average funding amount: US\$285M | | |

Table 2 | Top 10 funded FinTech firms in ASEAN-6, 2021

Source: Tracxn, as at 30 September 2022, accessed on 3 October 2022

*Tracxn classifies Tonik as a FinTech headquartered in Singapore, with the digital bank operating in the Philippines.

Number of new FinTech firms at record low

- There were 127 new FinTech firms³ set up this year across ASEAN-6.
- This represents a record low even when compared with 2020, during the height of the pandemic's restrictions.
- While capital may seem to be in shorter supply, venture capitalists (VCs) we spoke with were still upbeat about the growth prospects for the region, citing the innovation on the ground, talent, ideas and financial needs that remain to be addressed.

Compared with the last bull market, maybe it's called winter, right? But if you compare (funding now) to pre-pandemic, it's still summer.

Liu Gen Ping Partner, Vertex Ventures



Explore the data

FinTech firms in ASEAN-6 (2018-2022)

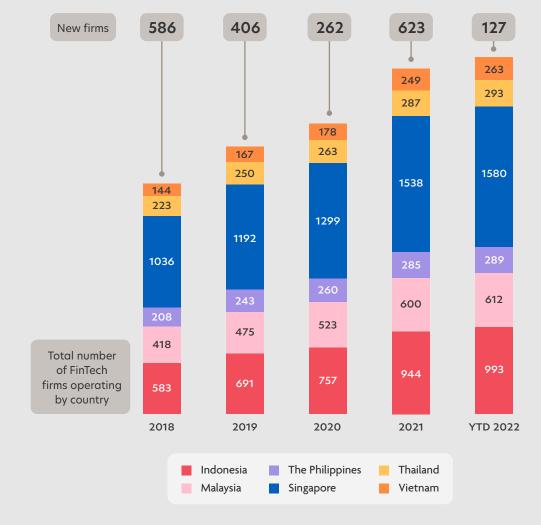


Figure 9 | Growth in FinTech firms by country, 2018-YTD 2022

Bracing for a funding winter: 5 tips for FinTechs from VCs



Business sustainability trumps growth

Pay attention to gross margins, unit economics and having a clear pathway to profitability.



Lead with a plan

Figure out your milestones in the next 12-18 months to position for the upswing when the economy recovers.



Reprioritise your business focus

Rather than try to win on all fronts, double down in a key domain area that you are good at.



Stay nimble and adaptable

Market conditions and regulations can change fast. Learn to react swiftly.



Consider raising even when you don't need the money

Always make sure you have a strong war chest of at least 18 months in the bank.

Notes from the VCs' desk-

Early-stage companies need to convey the right message to investors, understand how to position their company and what makes sense in the early stages of growth.

Scott Krivokopich Co-founder and Managing Partner, 1982 Ventures

Investors will look upon companies with a lean business model and stable margins favourably.

> Ben Cheah Partner, InnoVen Capital

Investors are now much less forgiving of these high-burn, high-growth companies. There is a renewed focus on profit margins, unit economics and path to profitability.

> Justin Hall Partner, Golden Gate Ventures

Founders can explore bridge financing - while it might not be a big upside from the last financing round, but if you're a great company, you can always claim back dilution. That is going to be the kind of mood for the next few quarters.

> Weisheng Neo Partner, Qualgro Ventures

Companies that continue to do well amidst the winter tend to have internalised a discipline to build a healthy business. Building healthy is not mutually exclusive from building for billion-dollar scale. Using this winter to focus on fundamentals then opportunity, not just for when the thaw or spring comes, but any season, will be key.

Tan Yinglan Founding Managing Partner, Insignia Ventures Partners

Right now, companies must be thinking really hard about where is their growth and what is their use of proceeds? Who's that entity they can sell to and continue the vision? They just need to continue the vision.

> Frank T. Troise Managing Partner and CEO, SoHo Advisors

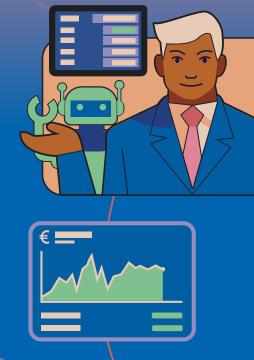
Founders should always build the firm to last because you can never really time the market. They should always plan for the long run.

> Liu Gen Pina Partner, Vertex Ventures

Be aggressive. If you don't win, you can only lose.

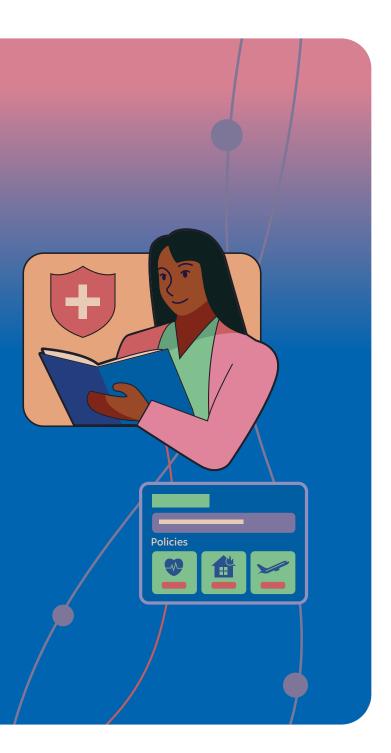
James Tan **Managing Partner, Quest Ventures**

Finance everywhere: Businesses try on FinTech









According to the *e-Conomy SEA 2022* report by Google, Temasek and Bain & Company, Southeast Asia's internet economy could reach up to US\$1 trillion in gross merchandise value by 2030, driven by the migration of consumers and businesses online.

As businesses look to tap ASEAN's thriving internet economy, FinTech offers businesses the opportunity to expand their existing services and plug gaps in the customer journey. In this chapter, we explore the growth of embedded finance across ASEAN, delving deeper into embedded payments and rewards, embedded lending, embedded investing and embedded insurance.

Observations were gleaned from a consumer survey, coupled with in-depth interviews with VCs and players in the embedded finance space. The case studies at the end of this chapter illustrate how embedded finance is taking shape from the perspective of embedders, enablers and providers.



Research methodology

| Survey | In-depth interviews with | | | Desk research |
|-------------|--------------------------|---------------|--------------|----------------|
| 4,313 | 8 | 9 | 3 | Analysis of |
| respondents | venture | firms with an | regional | embedded |
| across | capital | embedded | FinTech | finance across |
| ASEAN-6* | firms | finance angle | associations | ASEAN-6 |

*An electronic survey was conducted between Jun-Jul 2022 across Indonesia, Malaysia, Singapore, Thailand and Vietnam, while a supplementary survey ran in the Philippines from Jul-Aug 2022.

Embedded finance: A short guide

What is embedded finance?

Embedded finance is the integration of financial services within the products and infrastructure of a non-financial entity.

Take for example, a travel app. With embedded technology, customers can go one step further by booking air tickets, travel insurance and accommodation at the same time, and even splitting those payments up over an extended period. All without having to be redirected to any third-party destination.

Through embedded finance, the financial logistics of any given transaction fade into the background, thereby reducing friction and providing a seamless experience across the entire process.



What's driving this trend in ASEAN?



Consumer demand

The pandemic has accelerated the reliance on digital services. Customers are now accustomed to purchasing things online and have higher expectations of seamless digital experiences.



Ecosystem of partnerships

The region's superapps have provided a blueprint in areas such as fostering partnerships. Embedded finance could thrive as more parties explore partnerships to leverage and expand existing business models.



Technology and infrastructure

FinTechs and tech startups have been building the infrastructure for others to build upon, such as 'plug and play' Application Programing Interfaces (APIs). These are not just in core areas like payments, but also in non-core domains like Know Your Customer (KYC) and credit scoring.

Embedded finance is ubiquitous, cutting across different verticals and industries. Its power lies in its ability to reduce user flow friction, ensuring that the most relevant financial service is presented at the right time.

> Wilson Beh President, FinTech Association of Malaysia

Embedded finance value chain

In an embedded finance relationship, three core participants contribute to the distribution of digital products on a single interface: the embedder, enabler, and provider. The fourth party, the user, completes the ecosystem and makes it transactional.

- **Embedder** : Non-financial brands that integrate financial solutions into their products.
- Enabler : Firms that develop applications to connect embedders with providers to enable distribution, in areas like credit, payments, compliance, data connectivity and KYC.
- Provider : Regulated banks and financial institutions that provide financial services like lending, insurance, and payment processing.

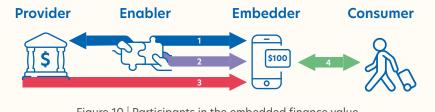


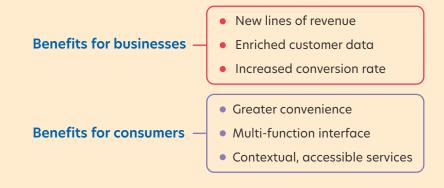
Figure 10 | Participants in the embedded finance value chain may have overlapping roles

These roles may overlap depending on the capabilities of each entity (see Figure 10):

- 1 Typically, the **enabler** links the provider to the embedder via APIs.
- 2 Certain enablers could also provide financial services directly to the embedder.
- 3 Providers may work with embedders directly via APIs.
- 4 As capabilities deepen, embedders can also provide their own financial service.

How can businesses and users benefit?

Embedded finance can offer a safe, straightforward, and economical way for non-financial entities to package necessary services customers might require into a single, manageable model.



What we see across our investments is that the rise of embedded finance in the region is driven by the demand for more holistic digital user experiences. Financial services are not just for payments anymore; it has become a fundamental part of one's digital identity and overall digital experience. Moving forward, nearly every tech company will have some level of embedded finance in their product or service.

 Tan Yinglan

 Founding Managing Partner, Insignia Ventures Partners

Who's

involved?

Snapshot of embedded finance in ASEAN

Integrated apps with built-in financial services offer an opportunity for users to adopt digital financial services, especially for those from rural areas with minimal access to banking services. We asked respondents across ASEAN their thoughts on using such apps. Here's what we found.

Are consumers aware of embedded finance apps?

- More than four in five survey respondents (81 per cent) were aware of embedded financial services.
- Respondents in the Philippines and Vietnam held a resounding lead in this regard at 91 per cent and 90 per cent respectively.

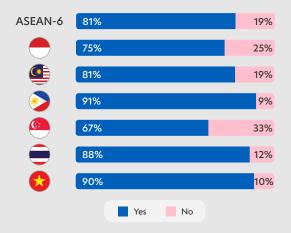


Figure 11 | Awareness of embedded finance apps across ASEAN-6

Question:

Are you aware of apps that have built-in financial and banking services that allow consumers to pay for various services that they use?

Base: All. Total: 4,313 / ID: 652 / MY: 674 / PH: 559 / SG: 1,013 / TH: 665 / VN: 750

Explore the data Embedded finance in ASEAN



Have they used such an app?

- An average 70 per cent of respondents reported using such apps.
- > Usage in Thailand and Vietnam is highest at 83 per cent.
- Singapore's lower usage may be due to a more mature financial ecosystem and the high penetration of credit cards.

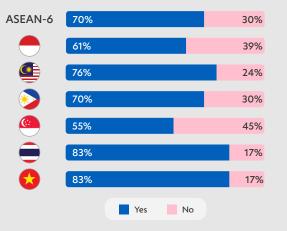


Figure 12 | Usage of embedded finance apps across ASEAN-6

Question:

Have you used an app like this?

Base: All. Total: 4,313 / ID: 652 / MY: 674 / PH: 559 / SG: 1,013 / TH: 665 / VN: 750

Snapshot of embedded finance in ASEAN

How often do they use it?

74 per cent of consumers who use apps with embedded finance use them at least once a week - with the highest in Vietnam at 85 per cent.

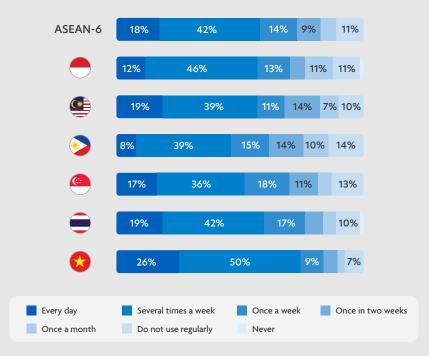


Figure 13 | Frequency of usage of embedded finance apps across ASEAN-6

Question:

How often do you use such an app?

Base: Respondents who have used apps with built-in financial services. Total: 3,031 / ID: 396 / MY: 514 / PH: 391 / SG: 554 / TH: 551 / VN: 625

Why do they use it?

Payment convenience is the main reason driving usage across ASEAN, except in Singapore, where users favour rewards points and discounts.

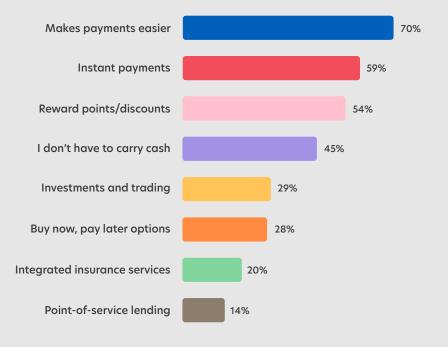


Figure 14 | Reasons for using embedded finance apps across ASEAN-6

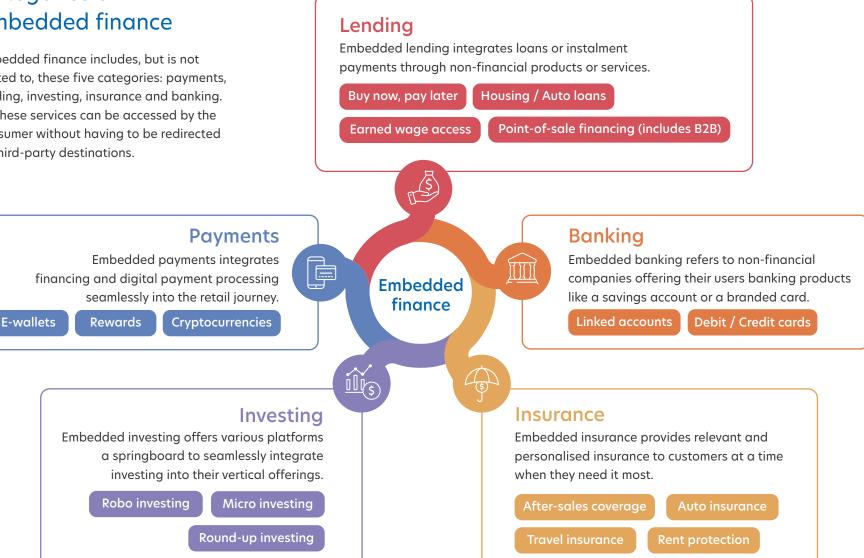
Question: For what purpose do you use integrated apps that have built-in financial services?

Base: Respondents who have used apps with built-in financial services. Total: 3,031 / ID: 396 / MY: 514 / PH: 391 / SG: 554 / TH: 551 / VN: 625

Embedded finance

Categories of embedded finance

Embedded finance includes, but is not limited to, these five categories: payments, lending, investing, insurance and banking. All these services can be accessed by the consumer without having to be redirected to third-party destinations.



Embedded payments and rewards

Payments are the bedrock of FinTech applications – and by extension, embedded finance. End-to-end payment processes allow consumers to complete their online purchases via their preferred payment method. Businesses are also seeing how embedding such processes and owning the entire value chain can contribute to better customer engagement and revenue streams.

In our survey, 70 per cent of those who use embedded finance apps say that these apps make payments easier (see Figure 14). Payments via e-commerce platforms is also on the rise, with more than one in two respondents using this method (see Figure 15), no doubt fuelled by the rise in online shopping since the pandemic. On the rewards front, the estimated US\$200 billion⁴ global market for rewards solutions is expected to converge with FinTech to offer more value to customers, disrupting traditional loyalty programmes with embedded variations and even crypto and stock rewards.

In the following page, we look at how two companies are embedding payments and rewards into their product offerings.

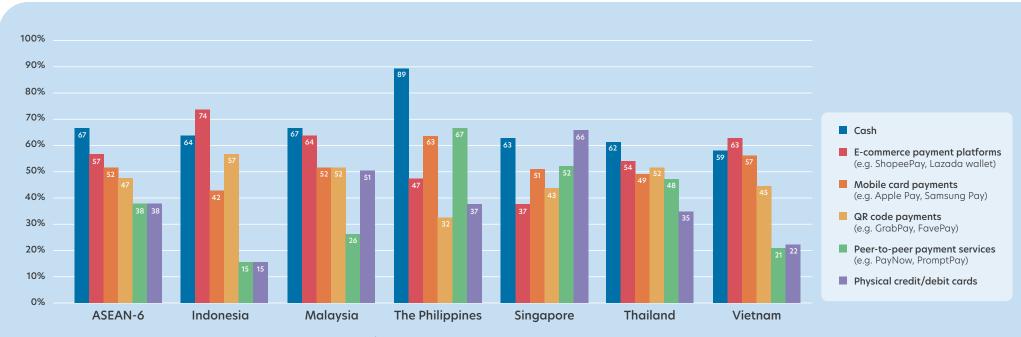


Figure 15 | Payment methods most used across ASEAN-6

Question:

People are increasingly turning to new payment and transaction services. Which of the following have you used in the last six months?

Base: All. Total: 4,313 / ID: 652 / MY: 674 / PH: 559 / SG: 1,013 / TH: 665 / VN: 750

Case studies: Embedded payments and rewards



Setel by Petronas is Malaysia's first fuel e-payment application that works on smartphones and the Apple Watch. Using Setel, consumers can pay for fuel from inside their car, earn Mesra rewards points when paying at a variety of retail partners, track their monthly fuel spending and download receipts for easier claims.

Setel users can also pay for street parking via the app, or opt for automated parking payments at selected parking lots. For electric vehicle drivers, Setel can help locate the nearest EV charging station and pay for the charge.

In addition, customers can get instant quotations and purchase customised motor insurance right from the Setel app.

66

We started by observing customers' behaviour pain points at the petrol station and introduced an enhanced refuelling experience. Through continuous engagement with our customers, we also look for new ways to elevate their experience with us that extends beyond fuelling. Setel has and will continue to expand the mobility ecosystem through introduction of new services that complements our customers' journey of ownership and maintaining their vehicles. Embedded finance is a natural default to enable a seamless transaction with us.

> Mazlin Erawati CEO, Setel



The Kris+ app, powered by Singapore Airlines (SIA), allows users to enjoy exclusive deals, lifestyle privileges and bonus miles online and at retail partner outlets in Singapore and overseas.

Kris+ started out as KrisPay, a mobile wallet developed by the SIA group to extend customer loyalty beyond flying. Back then, users were required to pay and accrue KrisPay miles via several steps that involved getting in and out of the app - a cumbersome customer experience. To solve this, the team redeveloped the app as Kris+, a lifestyle rewards digital platform with embedded Apple/Google Pay functionality in 2021.

With Kris+, customers can now pay and accrue miles in one seamless process. Users can even make partial payments with their accrued miles, a benefit that was non-existent previously.

Featuring its partner merchants, the app also allows users to book hotels and make restaurant reservations.

66

When we first started, we were looking for solutions to extend the KrisFlyer loyalty programme outside of flying and into customers' daily lives. We were also looking at how we could enhance our digital capabilities and be more innovative in the non-air, lifestyle spaces. That was how Kris+, SIA's very own lifestyle digital platform, was born.

Jeanette Lee General Manager of the SIA Lifestyle Ecosystem and Head, Kris+



Embedded lending

Embedded lending refers to loans offered directly by non-financial brands to consumers, bypassing the role of traditional lenders. Usually, the credit limit is lower for unsecured loans, and the risk of default is dependent on the business model - some embedders work with banks or enablers to disperse the loan, while others take on the risk themselves.

Buy now, pay later (BNPL)

A common example of embedded lending in action is on the checkout page of merchant apps or e-commerce platforms. Along with various ways to pay, users are offered the option of splitting their bill into monthly instalments, to be repaid via a BNPL service.

Our research found that while traditional credit card instalment plans are favoured by 42 per cent of respondents across ASEAN-6, BNPL has room to grow especially in Indonesia, where 42 per cent say they have used or intend to use BNPL services (see Figure 16). As roughly half the population in Indonesia are unbanked⁵, with limited access to traditional financial products like credit cards, BNPL platforms offer users a way to better manage their monthly cash flow.

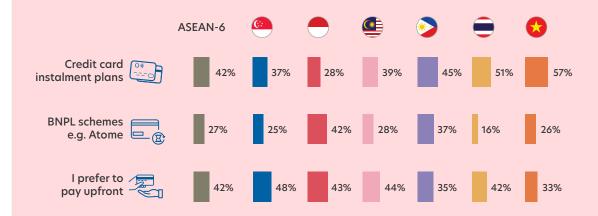


Figure 16 | Preferred pay later methods across ASEAN-6



Question:

Some retailers offer the option of pay later plans for purchases (electronics, fashion items, etc). Which pay later methods have you used or intend to use?

Base: All. Total: 4,313 / ID: 652 / MY: 674 / PH: 559 / SG: 1,013 / TH: 665 / VN: 750

Case studies: Embedded lending



Given the increased interest in the BNPL market, it is expected that digital banks will try to capitalise on the embedded finance trends through their own apps, and on partner platforms. Enter TMRW by UOB, a digital bank which aims to optimise the customer experience through Al-driven insights and a smart savings tool.

TMRW's strategy to adapt their BNPL payment scheme to the rise of e-commerce activities is best exemplified through TMRW Pay. With TMRW Pay, customers can enjoy deferred payment services with zero interest and fees for the first 90 days, instant credit approval, a TMRW digital bank account and debit card.

In Indonesia, TMRW has worked with partner platforms like Garuda and Dinomarket to offer TMRW Pay to the platforms' users. This strategy has allowed TMRW to attract 3-4x more young professionals to their app, while keeping them digitally engaged.

> We see more industries converging, where banks are orchestrating embedded finance plays across ecosystems, be it payments, lending, or even insurance. As a result, things become more intuitive relative to the customer's experience.

> > Arvid Swartsenburg Head of Digital Strategy, UOB TMRW Digital Group



Leading BNPL player Atome was first launched in Singapore in 2019 and now operates in 10 markets across Southeast Asia, Greater China and Japan. The company aims to empower shoppers by giving them time flexibility in terms of payments.

On the other hand, merchants who partner Atome can use their model of flexible payments to drive sales from new customers in the market. Currently, the company has over 15,000 partnerships with leading online and offline retailers across the beauty, fashion, fitness, lifestyle and homeware industries.

To enter new markets, Atome leverages partnerships with existing ecosystems by embedding themselves into them, as well as going directly into the market and serving customers. The former strategy has helped it overcome market entry hurdles such as language barriers, cultural preferences, and legal and regulatory framework issues.

> Verticals and channels are going to see digitalisation and that is where embedded finance is going to play a key role. Atome is industry agnostic, and we are excited about the prospects of proliferation across all industries, from healthcare to retail to F&B and travel/hospitality.

> > Umair Javed Head of M&A and Corporate Development, Advance Intelligence Group



Earned wage access

Earned wage access (EWA), also known as instant pay or on-demand pay, is a financial service provided by employers to employees – usually hourly wage workers – by giving them access to their accrued salary before the end of their pay cycle. While the United States and Europe lead the EWA scene, it is growing rapidly in ASEAN.

There are two main types of EWA models - the partnership model, and the managed services model. In the partnership model, EWA providers give employees early access to their wages (employers reimburse them after), but the employer is still responsible for paying out the balance of the wages on pay day. In the managed services model, employers outsource the entire payroll function to the EWA provider, and the EWA provider manages both the early accessed wages and the eventual payout on payday.

EWA is increasingly seen as a form of employee benefit. For employees, EWA helps to cover expenses by providing them with financial flexibility, reducing their need to rely on other methods of obtaining cash such as high-interest payday loans and avoiding late credit card and bank overdraft fees.

There are, however, some caveats to EWA for service providers and recipients. Some EWA service providers, for example, might be considered lenders due to their business models and hence charge fees for their services. Generally, the credit risk of EWA service providers is relatively certain, as the wage advance is secured by employers.

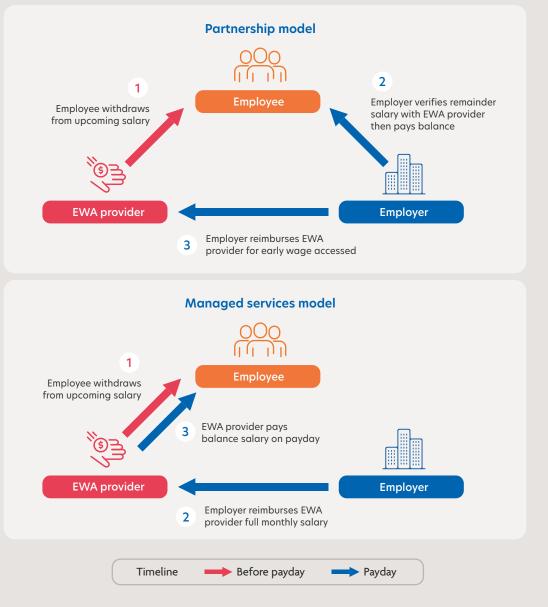


Figure 17 | The two main models for EWA are the partnership model (top) and the managed services model (bottom)

Case studies: Earned wage access



Paywatch is a South Korean and Malaysian-based EWA startup that lets workers withdraw part of their wages before payday and receive the remaining amount on the actual day.

It partners with banks that are willing to provide low-cost financing. When employees withdraw their earnings before payday, bank partners will provide financing based on how much work has been completed to date.

While Paywatch first tested and incepted the EWA concept in South Korea, the company found that ASEAN offered a much stronger product market fit. Their clients (usually larger corporations) use EWA to show care for the wellbeing of their employees. The tailor-made approach has also helped clients ease their retention problems. These valuable features are expected to be applied to Hong Kong and new markets. SAVII Financial Power at Work

Philippines-based SAVii aims to provide holistic financial assistance to salaried borrowers. The company works with over 100 corporate partners and supports over 400,000 employees by providing the latter with safe, convenient, and affordable loans and advances on salaries, useful for personal and emergency financial necessities.

Such EWA options not only help employees with no prior access to formal credit, but also lets them avoid unlicensed money lenders. The company believes that in emerging markets where there is a large unbanked or underbanked population, salary-linked finance is the safest path to financial inclusion.

SAVii also provides other related services such as mental health support, on-demand financial education, and insurance products.

EWA is about improving the financial wellbeing of employees. We never allow users to access more than 50 per cent of their earned wages at any given time. In Malaysia, employers usually opt for employees to access between 25-35 per cent of their earned wages.

> Alex Kim Co-founder, Paywatch

The key to embedded finances is being able to do something different than what you can do on the open market. In this regard, what we do is work with corporations to embed ourselves within those organisations to provide better financial products to their employees.

> Liam Grealish Co-founder and CEO, SAVii



Embedded investing

Embedded investing is changing the way companies engage and work with traditional investment firms. It offers embedders a springboard to seamlessly integrate investing into their vertical offerings. Retail investors can then conveniently invest in a range of products without leaving their favourite social media, payments, or lifestyle platform. Robo-advisors and micro-savings enablers - which we will cover in our case studies - are viable starting points as they have a relatively low barrier to entry. Digital investing is a sizeable market: In our survey, two in three respondents have used digital platforms to invest. Around one in five people have used robo-advisors and/or micro-savings platforms, with Malaysia and Vietnam registering the highest usage for micro-savings platforms at 28 per cent. As financial literacy and digital penetration continue to grow, usage of such investment platforms is expected to rise.

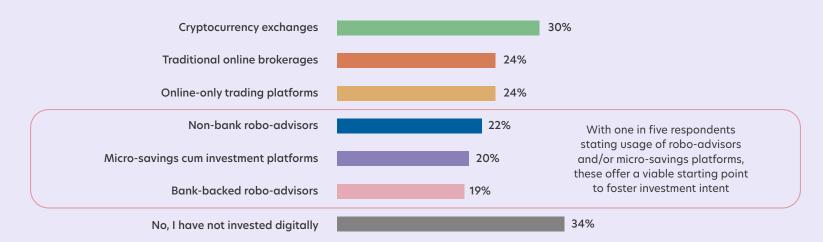


Figure 18 | Digital investment platform preferences in ASEAN-5 (data for the Philippines was not available)



Have you invested using digital trading and wealth management platforms? If yes, which are the type of platforms that you have invested your funds in?

Base: All (excluding the Philippines). Total: 3,754 / ID: 652 / MY: 674 / SG: 1,013 / TH: 665 / VN: 750

Case studies: Embedded investing



Australia-based Raiz, with its micro-investing app of the same name, is attracting users who wish to invest through round-ups, recurring investments and lump sum deposits.

Having expanded its operations to Malaysia and Indonesia, Raiz enables users to invest the rounded-up amounts of daily purchases into a diversified portfolio of exchange traded funds (ETFs), helped by its ability to track credit and debit cards, as well as bank accounts.

Users can even pair this micro-investing strategy with a recurring investment plan or if there is additional cash, to consider a lump sum investment.

> Raiz has helped kick-start the investment journey and savings habit of many users. Through its micro-investing platform and automated round-up feature, the technology makes it easy for anyone to start investing in small amounts, even if it is just your spare change.

> > Aidi Izham Chief Executive/Executive Director, Raiz

HUOB Asset Management



UOBAM Robo-Invest is Singapore's first robo-advisory service on a mobile wallet (Singtel Dash). It is designed to help customers invest in portfolios with a focus on Environmental, Social and Governance (ESG) factors, based on risk appetite and a view for the long-term.

UOBAM's partnership with Dash is part of the firm's strategy to be present in popular platforms to reach out to a wider audience. From UOBAM's experience, an embedded experience is only successful when a seamless user journey ensues. This can only be achieved when API connectivity is obtained and ready for partners to adopt.

Being API-ready allows UOBAM to achieve greater reach and flexibility when it comes to working with partners and their platforms - thus increasing its pool of potential partnerships.

Once enablers and embedders are digitally ready, then positioning for regulatory requirements and delivering on services can follow.

6(

We want to be present in the places and platforms where people are converging. We want to be where consumers are and look at opportunities from that angle.

> Rachel Ong Deputy CMO, Head of Digital Business, UOB Asset Management



Embedded insurance

Embedded insurance is the offering of relevant and tailored insurance to customers whenever they need it most.

By integrating insurance within consumer platforms, consumers can enjoy the convenience of context-specific coverage along their purchase journey. For insurers and businesses, this presents a strong value proposition for customers, besides enabling significant opportunities for brand building, increased revenue and forging customer loyalty over the long-term. From our research, there has been a 7 percentage point increase in the average number of people purchasing insurance online across ASEAN-6, with insurance provider sites and apps coming out tops as the preferred platform (58 per cent).

However, embedded insurance platforms such as e-commerce apps and travel sites are showing promising signs in five out of six countries (Malaysia, Thailand, Vietnam, Indonesia, and the Philippines), where respondents appear to be more receptive to purchasing insurance through them.

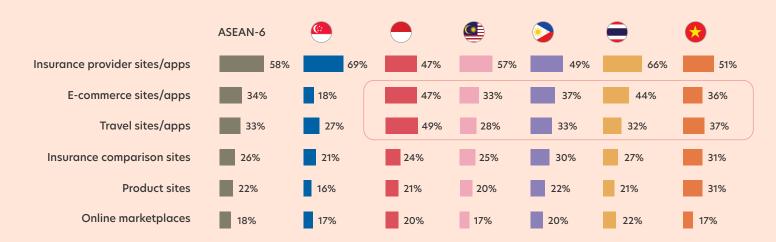


Figure 19 | Online insurance platforms used by respondents across ASEAN-6

Question:

Which platform(s) did you purchase the online insurance from?

Base: Those who have purchased insurance online. Total: 2,223 / ID: 260 / MY: 365 / PH: 201 / SG: 547 / TH: 391 / VN: 459

Case studies: Embedded insurance

CARRO

Singapore-based Carro is Southeast Asia's largest online automotive marketplace. It has a strong presence in Asia Pacific across countries like Singapore, Indonesia, Thailand, Malaysia and Vietnam.

Carro's services extend across the whole spectrum of the car ownership experience, including financing solutions, insurance products, and maintenance and repair services. The company has pioneered unique services such as contactless online car purchases, car rental subscriptions, as well as usage-based insurance in partnership with various insurance providers and distributed by its subsidiary, Genie Financial Services.

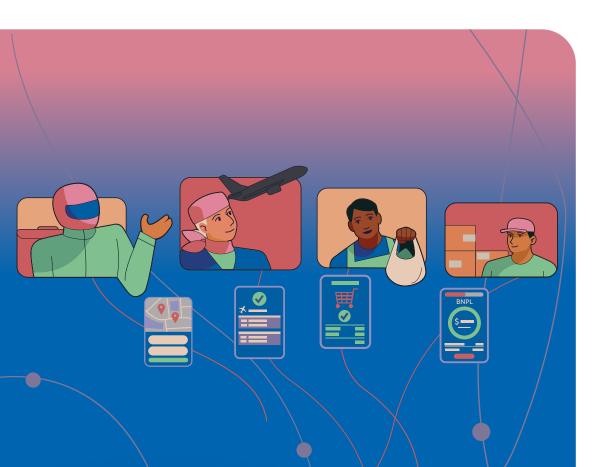
The company intends to diversify its range of service offerings, specifically in the embedded segment, to further tap benefits and any future developments. With Carro, our customer's car journey doesn't end when they drive out the door, because we believe in being there for every step of the way. By offering ancillaries like insurance, motor workshops and financing, we continue to provide a lifespan's worth of value for them and their car – a one-stop solution for all their auto needs.

> Joolin Chuah Chief of Staff, Carro

Explore the data

Case studies of embedded apps





Looking ahead: What's next for embedded finance?

Modernising traditional industries

Currently, much of the embedded finance in ASEAN is seen in ecosystems such as e-commerce and retail, food delivery and mobility, and superapps like Grab and Gojek. However, many industries in Southeast Asia have yet to be digitised, such as education, healthcare, agriculture, property and logistics. FinTechs play an important role in supporting small and medium-sized enterprises from these largely untapped segments in finding new business opportunities and staying competitive in the digital age. Building a portable, secure FinTech product that can be scaled across multiple industries quickly will open doors for profitable partnerships.

In addition, as digital natives mature and a larger percentage of customers become more proficient at using technology, this will widen the pool of consumers and businesses who are open to leveraging financial services via digital platforms. The fundamental shift in consumer behaviour will continue to fuel the usage of embedded financial services.

Southeast Asia is still emerging. There are still many industries – education, healthcare, logistics – that need to be digitised. FinTech (in these verticals) is the most glaringly obvious right now, which is why there's so much focus on that and so much capital pouring in.

Justin Hall Partner, Golden Gate Ventures

Monetising virtual worlds

The heightened anticipation around Web3 and the metaverse is paving the way for gaming and digital asset companies to enter the FinTech fray. Understanding how cryptocurrencies and digital tokens can be embedded within a user's journey in the virtual world is imperative for financial players to remain relevant amid a rapidly changing world.

Take for example, NFTs. They are no longer just unique JPEGs without utility, with recent developments showing how they can be used as part of P2E (Play-to-Earn) games⁶. *Axie Infinity*, an NFT-based online video game developed by Vietnamese game studio Sky Mavis, recorded US\$3.5 billion⁷ in NFT transactions in 2021 which at that time, accounted for two-thirds of the blockchain gaming space's total transaction volume.

Another fast-growing development concerns the monetisation of virtual worlds. Metaverses like Decentraland and The Sandbox allow players to purchase, rent and sell lands, and transactions are done via respective native cryptocurrencies. The likes of PayPal and Mastercard have also lent some form of credibility to the future of cryptocurrencies by allowing people to purchase crypto assets through their respective products.

As more institutions and businesses stake a claim in the world of blockchain and the metaverse, mainstream adoption is underway. This is a space to watch.

Regulation must keep pace with industry changes

As non-financial entities begin offering financial services, should they be subject to the same stringent regulations as financial institutions, or should they self-regulate? How can existing regulations better keep up with fast-evolving business models and the democratisation of finance?

In an embedded finance relationship, the minimum requirement is for the financial institution or provider to be regulated and become a "sponsor" of the partnership⁸. While the bank or financial entity is accountable to the non-financial partner, there are legal and compliance obligations that must be fulfilled by both parties. Some regulatory examples would be KYC guidelines for the user, and other transactional rules that may vary by country.

Consistent and meaningful dialogue between regulators and the expanding ecosystem players will be key to this transition. Rather than lift regulations for non-financial companies, enacting an adaptable and tailored layer of directives could maintain some form of accountability as well as reliability. Regulators across ASEAN face tough decisions and will need to balance out access to financial services, while ensuring that consumers are not disadvantaged in that process.

56

Regulators need to ensure that regulations remain competitive and not overly complex, so that businesses can adapt and comply with these regulations.

Jeanette Lee General Manager of the SIA Lifestyle Ecosystem and Head, Kris+ 56

Regulation across various areas, from digital bank licenses to open finance sandboxes and cryptocurrency rules, is making it easier for more complex and impactful FinTech companies to be built.

> Tan Yinglan Founding Managing Partner, Insignia Ventures Partners

Indonesia

Opportunities in FinTech continue to abound, albeit having a lower adoption rate in the country

- e-Wallets have become increasingly popular for both online and offline transactions. More offline merchants have started to apply a "no-cash" policy, accepting only cashless payment methods from their customers.
- In January 2022, the Financial Services Authority (OJK) completed the licensing process for all peer-to-peer (P2P) lending platforms, a major achievement given the large number of P2P lending platforms established. As of 3 March 2022, there were 102 licensed P2P lending platforms.

The recognition of digital banks as a subcategory of commercial banks in Indonesia has helped fuel mergers and acquisitions (M&A) activities even more, as it provides further legal certainty on the OJK's approach in relation to digital banks

- It is likely that "backstage" enablers e.g, payment gateways and APIs in the payments sector, credit scoring in the lending and investment sectors, and e-KYC - will start to receive more attention.
- There will also be further M&A activities as FinTech groups continue to add more licensed entities into their ecosystems to increase the breadth of their product offerings within Indonesia.

Quick Facts

- Population size (2022)
- Median age (2022) : 31.1 years
- Internet penetration rate (2020) : 54%
- Smartphone penetration rate (2020) : 77% (2025 est. 88%)

: 276 million

FinTech Regulators

- Bank of Indonesia (Payments)
- Otoritas Jasa Keuangan (Financial Services Authority)

Regulatory Sandbox

• Yes

FinTech Associations

- Indonesian FinTech Association
- Indonesian Sharia FinTech Association
- Indonesian Joint Funding FinTech Association



Malaysia

Malaysia becomes the second ASEAN-6 country after Singapore to issue digital banking licences to five successful applicants

- Malaysia will issue its digital bank licences in a phased approach across two stages: First, 'Restricted' licences with lower paid-up capital, then 'Full' status licences once milestones are met without supervisory concerns.
- Both SEA Group and GXS Bank also made BNM's pick after having secured Singapore's digital bank licence.
- Both consortia led by AEON and KAF Investment Bank respectively are licensed under the Islamic Financial Services Act.

BNM continues to promote a progressive and inclusive financial system

- As there is no FinTech-specific legislation in Malaysia, BNM or the SC regulate FinTech industry participants to the extent that it engages in a regulated business or activity falling within their respective jurisdictions.
- The BNM also laid out major developmental and regulatory priorities for the next five years (2022-2026) in a new financial sector roadmap (Blueprint 3.0). Some of these goals will include supporting technology and data-driven innovation, improving the financial sector's competitiveness as well as ensuring financial intermediation stays effective to meet the economy's future demands.
- To promote the P2P financing and equity crowd-funding (ECF) markets, authorities also play a part by increasing their investment through the Malaysia Co-Investment Fund ("MyCIF") allocating MYR50 million and MYR30 million in matching grants for P2P financing and ECF respectively.

Opportunities for FinTech growth in Islamic Banking as market remains nascent

- Amid firmly established local banks with Islamic financial offerings, Malaysia's FinTechs are making gradual progress in a vibrant Islamic finance market.
- Malaysia has yet to see funding rounds beyond the hundred-million-dollar ticket size for Islamic FinTech companies as the sector finds ways to bring its offerings to scale.

Quick Facts

- Population size (2022)
- Median age (2022) : 29.2 years
- Internet penetration rate (2020) : 90%
- Smartphone penetration rate (2020) : 86% (2025 est. 92%)

: 33 million

FinTech Regulators

- Bank Negara Malaysia (BNM)
- Securities Commission Malaysia (SC)

Regulatory Sandbox

Yes

FinTech Associations

• FinTech Association of Malaysia





The Philippines

Initiatives from BSP to support the continued growth and maturity of FinTech in the Philippines

- PESONet and InstaPay were named as Prominently Important Payment Systems (PIPS) pursuant to the National Payment Systems Act. PESONet is a batch electronic fund transfer service and is a viable alternative for checks and recurring payments. InstaPay is a real-time, low-value payment substitute for cash transactions.
- A third phase of sustainability-related regulations recently launched, with the release of draft guidelines on the integration of sustainability principles in banks' investment activities. It sets out the expectations on the integration of sustainability principles in banks' core strategies, governance, and risk management frameworks, especially in the areas of credit and operational risks.
- Financial institutions were urged to adopt robust control measures against cyber attacks on retail electronic payments and financial services (EPFS) due to the increasing shift to digital channels.

Opportunities for FinTech growth as developments have been slow but steady

- To date, some 66 per cent of Filipinos remain unbanked, catapulting the Philippines to fourth place among the world's most unbanked countries. This environment is highly conducive for FinTech platforms to flourish and address the financial divide.
- FinTech firms that provide micro, small and medium-sized enterprises (MSMEs) solutions and / or enablement, such as NextPay, will also be highly relevant. With over 99 per cent of business enterprises in the Philippines classified as MSMEs, MSME survival is critical to the national economy.
- The Philippine Stock Exchange (PSE) is reportedly planning a cryptocurrency exchange. Meanwhile, the Union Bank of the Philippines (UnionBank), is piloting a new digital asset custody service in partnership with digital asset specialist Hex Trust.

Quick Facts

- Population size (2022)
- Median age (2022)
- Internet penetration rate (2020) : 50%
- Smartphone penetration rate (2020) : 78% (2025 est. 86%)

: 112.5 million

: 24.1 years

FinTech Regulators

- Bangko Sentral ng Pilipinas (BSP)
- Securities and Exchange Commission
- Insurance Commission

Regulatory Sandbox

Yes

FinTech Associations

- FinTech Philippines Association
- FinTech Alliance.PH



Singapore

Launch of four digital banks boosts financial services landscape

- Singapore's first digital wholesale bank, Green Link Digital Bank went live in June 2022, with ANEXT Bank launching just a week later. Both banks aim to provide MSMEs with innovative financial services.
- > In September 2022, the country saw both Trust Bank and GXS Bank launch their range of financial products as competition in the digital banking space heats up.

ESG and cross-border payments continue to feature heavily on regulator's agenda

- Singapore aims to become the regional green finance hub by promoting sustainability through Green Finance Action Plan and ESG Impact Hub. These initiatives will help drive collaboration between ESG FinTech startups and solution providers, financial institutions and real economy stakeholders.
- After the success in linking its payment system PayNow with Thailand's PromptPay, Singapore looks set to continue with linkages to India's Unified Payment Interface and Malaysia's DuitNow.

Tighter regulations around cryptocurrencies and BNPL

- The Financial Services and Markets Bill 2022 was introduced to tighten cryptocurrency regulation on companies that have a local presence in the market but offer digital token services outside of Singapore.
- Published guidelines on 17 January 2022 instruct the market to halt the advertising of offerings to retail investors in public spaces, citing concerns about the "risky" nature of such investments. Operators of crypto ATMs were forced to shut down their machines after the MAS outlawed cash-to-crypto terminals.
- The industry code of conduct announced on 20 October 2022 by a working group that includes SFA, BNPL players and under the guidance of MAS, sets the guidelines for BNPL operation with the aim to protect consumers.
- Published consultation papers on 26 October 2022 propose measures to reduce risks to consumers from cryptocurrency trading and enhance standards of stable coin-related activities.

Quick Facts

- Population size (2022)
- Median age (2022) : 35.6 years
- Internet penetration rate (2020) : 92%
- Smartphone penetration rate (2020) : 88% (2025 est. 93%)

: 5.45 million

FinTech Regulators

• Monetary Authority of Singapore

Regulatory Sandbox

• Yes

FinTech Associations

• Singapore FinTech Association



Thailand

Regulatory developments continue apace, with new rules on cryptocurrencies and digital assets

- The Bank of Thailand (BOT) intends to jointly develop a payment system with commercial banks and has developed a cross-border prototype with the Hong Kong Monetary Authority.
- Public trials for the BOT retail central bank digital currency to commence in late 2022.
- Regulatory Regime for Digital Assets: Additional requirements for the issuance of real estate-backed digital tokens with the aim of bridging a gap in regulations between real estate-backed digital tokens and real estate investment trusts.
- > Implementation of the Personal Data Protection Act in June 2022.
- > Thailand's central bank plans to allow banks to invest more than a current limit of 3 per cent of their capital funds in FinTech, except for digital assets.

Initiatives by the BOT to develop its policies and direction for repositioning the Thai financial sector in the new landscape

- Open competition expands the business scope and provides more flexibility to the financial sector as well as new entrants to the market, open infrastructure allows more financial service providers to access key infrastructure at fair and reasonable costs, open data enables better utilisation of data to support the development of better financial services while ensuring appropriate data governance.
- Around THB 2.5 billion is set aside for digital development projects, subject to be financed by the Digital Economy and Society Development Fund, in the 2022 fiscal year.
- > On 2 February 2022, eight digital projects worth a combined THB 1 billion were approved, which will be pursued by the Digital Economy Promotion Agency.

Quick Facts

- Population size (2022)
- Median age (2022) : 39 years
- Internet penetration rate (2020) : 78%
- Smartphone penetration rate (2020) : 81% (2025 est. 89%)

: 70 million

FinTech Regulators

- Ministry of Finance (Financial Services, Securities)
- Bank of Thailand (BOT)
- Securities and Exchange Commision (SEC)
- Office of Insurance Committee

Regulatory Sandbox

Yes

FinTech Associations

• Thai FinTech Association



Vietnam

Vietnamese FinTechs have shown great potential, contributing to ASEAN's FinTech growth

- > The FinTech ecosystem in Vietnam is developing fast, with more than 200 companies in operation.
- > E-wallets and online payments are the leaders, followed by P2P lending and blockchain entities.
- Over 2022, the e-wallet market will be fiercely competitive, possibly promoting e-wallet providers to merge into a few top superapps in order to dominate the market.

Increased Government intervention to revolutionise legal and regulatory frameworks and develop a Regulatory Sandbox

- Vietnam is the only ASEAN-6 country which does not have a regulatory sandbox at the start of 2022. It is also one of the few that does not have established regulations and legal frameworks.
- Previously, Vietnam had a "wait and see" approach where regulators played an observant role. In 2022, the State Bank of Vietnam announced plans to develop a regulatory sandbox for FinTech companies as it looks to gather feedback on draft regulations for the sector.

Quick Facts

- Population size (2022)
- Median age (2022) : 31.9 years
- Internet penetration rate (2020) :70%
- Smartphone penetration rate (2020) : 62% (2025 est. 85%)

: 99 million

FinTech Regulators

- State Bank of Vietnam (Finance matters)
- Ministry of Public Security (Data privacy and cybersecurity)

Regulatory Sandbox

• Proposal Stage

FinTech Associations

• Vietnam FinTech Club



Interviewee profiles



Scott Krivokopich 1982 Ventures

1982 VENTURES

Co-founder and Managing Partner,

1982 Ventures is the leading seed fund investing in FinTech start-ups in Southeast Asia. 1982 Ventures focuses on being the first port of call for FinTech founders and the first money in.



Umair Javed Head of M&A and Corporate Development, Advance Intelligence Group (Parent company of Atome)

Founded in 2016, Advance Intelligence Group is one of the largest independent technology startups headquartered in Singapore and leverages innovative technology and partnerships to build an ecosystem of products and services serving consumers, enterprises and merchants.



Joolin Chuah Chief of Staff. Carro

CARRO Genie

CARRO is SEA's #1 online car marketplace providing innovative, full-stack car ownership services. Genie Financial Services is a subsidiary that provides competitive auto financing options.







Justin Hall Partner, Golden Gate Ventures

Wilson Beh

President, FinTech Association of Malaysia

FinTech Association of Malavsia (FAOM) is the national FinTech platform founded in 2016. Its

main objectives are to accelerate innovation in

the financial sector, connecting entrepreneurs

and startups in their initial steps and be the

Golden Gate Ventures is a venture capital fund in

Southeast Asia founded by Silicon Valley natives.

Since 2011, the firm has launched four funds,

managing a portfolio of US\$250M AUM across

more than 60 companies. Our mission is to

empower the audacious: we believe in

empowering founders who are risk-takers, who

dare to challenge the norms, and who leverage

technology to change the way the world works.





INNOVEN

Ben Cheah Partner, InnoVen Capital

InnoVen Capital is Asia's leading venture debt platform providing debt capital to high-growth venture-backed startups with a portfolio of over 300 market leaders from a range of industry verticals in Asia.

Tan Yinglan



Founding Managing Partner, Insignia Ventures Partners

Insignia Ventures Partners is an early-stage technology venture capital firm founded in 2017 investing in Southeast Asia's most influential technology companies, including unicorns Carro, Ajaib, and GoTo and category leaders Payfazz, tonik, and Flip.



Jeanette Lee General Manager of the SIA Lifestyle Ecosystem and Head, Kris+



Kris+ by Singapore Airlines is a lifestyle rewards app that brings payments, rewards and its group assets KrisShop and Pelago under one platform, offering the best miles earn rate across dining and retail partners in Singapore.



paywatch

Alex Kim Co-founder, Paywatch

Paywatch is the only earned wage access provider in Asia partnered with major banks and recognised by the UN for its commitment to promoting financial inclusion.



Weisheng Neo Partner, Qualgro

Qualgro is a leading tech venture capital firm in Southeast Asia, in areas such as Data, AI, and Software. We invest across Southeast Asia, mainly at Series A and B.



Ouest

James Tan Managing Partner, Quest Ventures

Quest Ventures is a top venture capital firm in Asia. Its portfolio of 100+ venture-backed companies operate in more than 150 cities across Asia, creating employment and advancement opportunities for more than 4,400 employees, while its Enterprise and ESG efforts directly impact thousands more.





raiz

Aidi Izham Chief Executive/ Executive Director, Raiz

Raiz (ASX:RZI) is a multi-award-winning micro-investing platform with operations in Australia and Southeast Asia. With Raiz, users can automatically invest the virtual 'spare change' from their daily purchases into diversified portfolios. Since launching in 2016 Raiz has achieved solid growth, amassing more than 3.1 million downloads, over 3,080,000 signups, and over 671,000 active monthly customers with close to A\$1 billion Funds under Management as at 30 September 2022. Raiz is ramping up its growth strategy across Asia Pacific, with offices in Malaysia and Indonesia with plans to expand into Thailand and Vietnam.



Liam Grealish Co-founder and CEO, SAVii

SAVII Financial Power at Work SAVii was founded in 2016 to empower hardworking Filipinos through the salary link. Today, SAVii delivers financial power at work to 100+ corporate employer partners through safe and affordable customized financial solutions paired with education - designed to enhance employee wellness. They have over 450,000 employee customers, and are taking their first steps into India this year.



🗲 Setel

Mazlin Erawati CEO, Setel

Launched in January 2020, Setel is a mobile platform that aims to make everyday life simpler and better by innovating for better, inclusive mobility. Setel is delighting customers at Petronas stations nationwide with a seamless and customised retail-on-the-go experience, now joined by online merchants and retail partners.



 \cap

Frank T. Troise Managing Partner and CEO, SoHo Advisors

SoHo is APAC's leading merchant bank for Sustainability and FinTech. The firm's advisors consist of leading investment bankers, operating executives and policy-makers.



Chonladet Khemarattana President, Thai FinTech Association

Thai FinTech Association (TFA) is a non-profit organisation established in 2016 with the purpose to encourage the cooperation from stakeholders in all sectors to develop Thai FinTech industry for sustainable growth internationally. The association also acts as a liaison between FinTech companies and the government, including its various regulatory arms.



Arvid Swartsenburg Head of Digital Strategy, UOB TMRW Digital Group

UOB TMRW is a digital platform serving all of UOB's customers. UOB TMRW provides digital adaptive banking through a data-driven digital banking experience that is simple, seamless and personalised.





UOBAM With more than 35 years of experience in fund management and an extensive local presence in Asia. UOB Asset

Management manages more than \$\$33

Deputy CMO. Head of Diaital Business.



vertex

Liu Gen Ping Partner, Vertex Ventures

billion in clients' assets.

Rachel Ona

Vertex Ventures Southeast Asia and India invests in high-growth startups seeking their first round of institutional venture capital funding in Southeast Asia and India, with a primary focus on Singapore, India, Indonesia, Thailand and other emerging hubs of innovation across the region. It has a long and strong track record of investing in early-stage startups and building champions like Grab, Patsnap, 17Live, Nium, FirstCry, Licious, AsianParent, Validus, Warung Pintar, and others.



Nguyen Huu Tuat Co-founder and CEO of NextPay Group, Vietnam Fintech Club

Vietnam FinTech Club (VietFinTech) is a VIETFINTECH voluntary and self-governed body established under Decision No. 119/QĐ-HHNH of the Vietnam Banks Association. Its mission is to create an ecosystem that enables Vietnam to leverage the potential to become a world-class FinTech Hub.

Appendix

Staying resolute: ASEAN funding braces for winter

¹ The term 'funding' in this chapter includes all disclosed funding rounds categorised as 'pre-series', 'early stage rounds', 'late stage rounds', 'private equity' 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). Our tabulations do not include investments into Grab and Gojek (as their core business is categorised as transportation and delivery), but we have included Grab Financial Group's US\$300 million raise last year.

² The countries included in ASEAN's FinTech funding count here are Cambodia, Indonesia, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam. Brunei Darussalam and Laos were not included as there were no funding rounds recorded between 2018-YTD 2022, based on Tracxn data.

³ The number of FinTech firms set up and in operation in this year's report differs from last year due to a significant recategorisation of some companies into the FinTech vertical on data platform Tracxn. As more companies expand their services into different areas of FinTech (for example, NFT firms), these companies will be retrospectively added to the tally.

Finance everywhere: Businesses try on FinTech

⁴ In a Business Wire article (2020/09 Global Loyalty Programs Market Analysis, Trends, and Forecasts, 2019-2024 by SpendEdge), the report by SpendEdge states that the global market for loyalty programmes is expected to grow over \$200 billion by 2024.

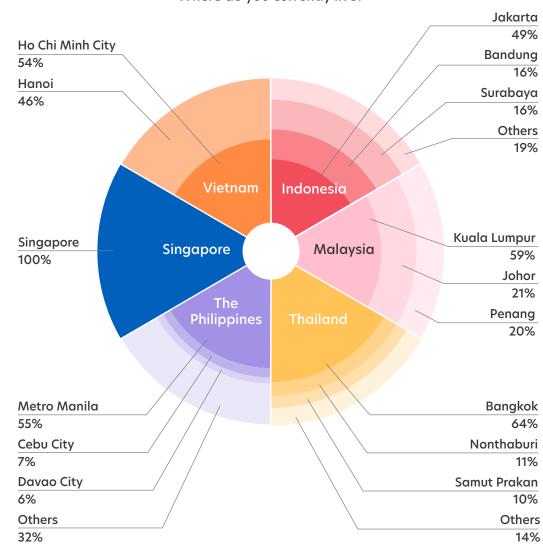
⁵ In an ISEAS-Yusof Ishak Institute article by Irni Rahmayani Johan (2022/5 Tackling the Challenges of Financial Inclusion and Illegal Lending in Indonesia), the author puts Indonesia's unbanked numbers at 51 per cent or 92 million adults, with a further 26 per cent underbanked.

⁶ In NFT-driven P2E games, the in-game assets are usually in the shape of NFTs that are minted by game developers. The virtual items can be earned or purchased by players and can be traded for fiat money.

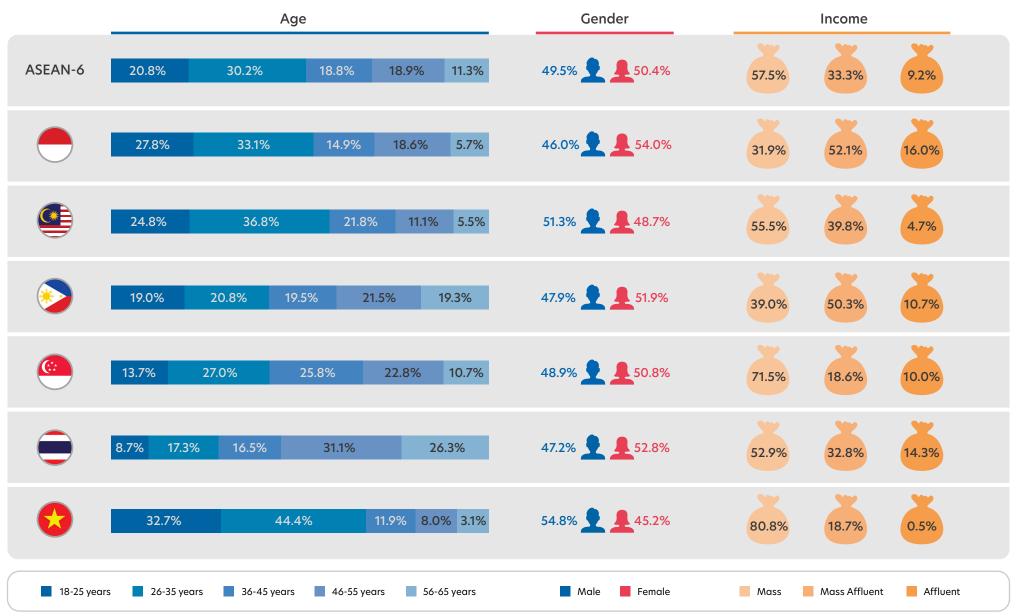
⁷ According to NonFungible.com's *Yearly Trends Report 2021,* Axie Infinity led the blockchain gaming space with US\$3.5 billion in NFT transactions - four times more than second-placed NBA Top Shot (US\$827 million). Despite the bearish outlook for cryptocurrencies this year, Web3 games and metaverse projects are still attracting large investments, including US\$150 million in funding for Sky Mavis.

⁸ The role of a financial institution or provider as a 'sponsor' of the embedded partnership is described in a report by Goldman Sachs, titled *The embedded finance journey: Innovation that differentiates the customer experience*. The report briefly mentions the current regulatory environment for participants within an embedded finance relationship.

Survey respondents



Where do you currently live?



Survey respondents

Taxonomy and definitions

| Categories | Tracxn classification | Focus | 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. | Investment Tech | 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. |
| | Crowdfunding | Online platforms where people, organisations raise money from the masses, for various projects and causes. | | RoboAdvisors | Companies that provide automated investment and advisory services with little or minimal human intervention. Also includes companies that provide white label robo advisory platforms/software. |
| Banking Tech | Banking Tech | Companies which provide Tech solutions primarily for banking industry including software, innovative hardware, and Tech-enabled services. | | | |
| | | | | Wealth Management | Companies providing wealth management platforms. |
| Blockchain in Financial Services | Blockchain in Financial Services | Companies which leverage the blockchain technology to cater to the financial sector. Also includes companies providing financial services related to NFTs. | | Platforms | |
| | | | Payments | Remittance | Companies providing cross-border money transfer solutions and services to consumers and enterprises. |
| Cryptocurrencies | Cryptocurrencies | All companies that provide bitcoin and other digital currency products and services. | | Forex Tech | Companies which provide tech solutions, including internet-first platforms and software for forex market which includes currency exchange and currency investments. |
| Finance and Accounting Tech | Finance and Accounting Tech | Tools or software for automating functions of finance and accounting department of an organization. | | 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. |
| 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. | | Mobile Payments | Companies offering solutions to make and (or) accept payment via mobile. |
| | Employer Insurance | Companies which provide employers with solutions for managing employee insurance benefits. | RegTech | RegTech | Companies offering a range of tech products primarily for financial institutions and regulators for efficient implementation and monitoring of financial regulations. |

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

Acknowledgements

UOB

Group Channels and Digitalisation

Janet Young Managing Director and Head **Group Strategic**

Senior Vice President

Assistant Vice President

Wendy Wan

Andrew Low

Vice President

Lim Jing Wen

Communications and Brand

Arthur Leong Executive Director

Jane Goh First Vice President

Lennie Chan First Vice President

Damien Neo Vice President

Mcken Wong Assistant Vice President

Henry Wat Manager

Yang Kun Senior Officer

PwC Singapore

Wanyi Wong FinTech Leader

Conal McMahon Head, Market Intelligence and Insights

Shu Ning Lim Director, Financial Services

Singapore FinTech Association

Shadab Taiyabi President

Reuben Lim Chief Operating Officer UOB Tech Start-up Ecosystem information, insights and events: www.uobgroup.com/techecosystem

UOB general FinTech enquiries: techecosystem@UOBgroup.com

A big thank you for supporting this report and contributing valuable insights to FinTech in ASEAN:

VCs and funding partners: 1982 Ventures, Golden Gate Ventures, InnoVen Capital, Insignia Ventures Partners, Qualgro, Quest Ventures, SoHo Advisors, Vertex Ventures

FinTech embedders/enablers:

Advance Intelligence Group, Carro, Kris+, Paywatch, Raiz, SAVii, Setel, TMRW, UOB Asset Management

Regional FinTech associations: FinTech Association of Malaysia, Thai FinTech Association, Vietnam FinTech Club

About

WOB

UOB is a leading bank in Asia with a global network of around 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: Aa1 by Moody's Investors Service and AA- by both S&P Global Ratings and Fitch Ratings. 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 www.uobgroup.com.



At PwC, our purpose is to build trust in society and solve important problems - this is at the core of everything we do from the value we provide to our clients and society to the decisions we make as a firm.

Our services started with audit and assurance over a century ago. As times change and the issues faced by businesses and individuals evolved, we have developed specialised capabilities in tax, advisory and consulting to help you address emerging new challenges across focus areas like ESG, sustainability and climate change, digital transformation, cyber security and privacy, data, mergers and acquisitions, and more. In Singapore, we have more than 3,500 partners and staff to help resolve complex issues and identify opportunities for public, private and government organisations to progress. As part of the PwC network of nearly 328,000 people in 152 countries, we are among the leading professional services networks in the world focusing on helping organisations and individuals create the value they are looking for.

Find out more and tell us what matters to you by visiting us at www.pwc.com/sg.



The Singapore FinTech Association (SFA) is a cross-industry non-profit organisation. Its purpose is to support the development of the FinTech industry in Singapore and facilitate collaboration among the participants and stakeholders. The SFA is a member-based organisation with over 800+ 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. Well-connected globally, the SFA has signed over 70 international Memorandum of Understanding (MoU) to lay the network for its members and ecosystem.

For more information visit https://singaporefintech.org.

Important notice and disclaimers:

This publication is for general information and discussion only. It does not constitute an offer, an invitation to offer, a solicitation or a recommendation to enter into or conclude any transaction and shall not be copied or relied on by anyone. Nothing in this document constitutes accounting, legal, regulatory, tax, financial or other advice. The information contained in this publication, including any data, projections and underlying assumptions, are based on certain assumptions, management forecasts and analysis of known information and reflects prevailing conditions as of the date of the articles, all of which are subject to change at any time without notice. While the information provided herein has been obtained from sources believed to be reliable as at the date of printing, United Overseas Bank Limited ("UOB"), PricewaterhouseCoopers Risk Services Pte. Ltd. ("PwC Singapore") and Singapore FinTech Association ("SFA") and their respective employees make no representation or warranty whether express or implied, and accept no responsibility or liability for its completeness or accuracy. The views expressed in the articles within this publication are solely those of the authors' reflect the authors' judgment as at the date of the articles and are subject to change at any time without notice. As such, UOB, PwC Singapore, SFA and their respective employees accept no liability for any error, inaccuracy, omission or any consequence or any loss/damage howsoever suffered by any person, arising from any reliance by any person on the views expressed or information in this publication.

uob.com/fintech2022

