

FinTech in ASEAN 2024: A Decade of Innovation

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Foreword

ASEAN stands at a pivotal moment in its financial evolution, with the FinTech sector playing an integral role in transforming economies and societies.

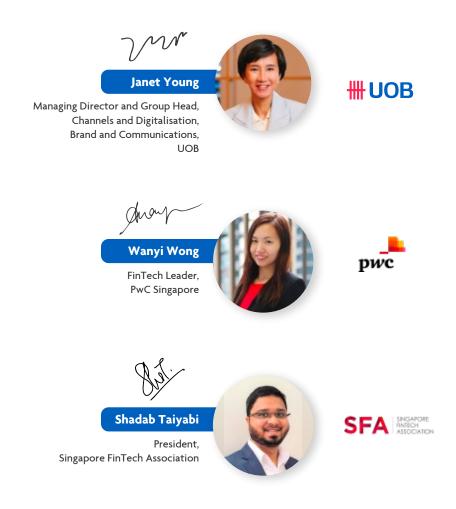
Over the last decade, ASEAN FinTech funding has grown significantly, having surged by more than 10 times (9M* 2015 vs 9M 2024) and recording a peak of nearly US\$6.4 billion in 2021. While global funding trends have become volatile, the region's FinTech sector has displayed remarkable resilience.

Even in 2024, as global FinTech funding faces a third consecutive year of decline, ASEAN has held steady - down less than 1 per cent year-on-year. In stark contrast, funding in North America and Europe have plummeted by over 35 per cent.

As we navigate an era of rapid digital innovation and economic uncertainty, this year's *FinTech in ASEAN 2024: A decade of innovation* report takes stock of the region's remarkable progress, while also looking toward the sector's future.

From the early days of regulatory sandboxes to the rise of digital banking and blockchain, we explore how ASEAN has become a hub of innovation. We also look at the promise of generative AI and quantum computing, acknowledging their potential to revolutionise financial services, enhancing aspects like customer experience and cybersecurity.

The journey of FinTech in ASEAN has been one of resilience and adaptability. With continued collaboration and commitment to innovation, we believe that ASEAN will unlock new opportunities and build a more inclusive and dynamic future.



Executive summary



ASEAN-6 FinTech funding remained stable

Despite global economic pressures, FinTech funding in the ASEAN-6 economies dropped by less than 1 per cent year-on-year in 2024, showcasing the region's resilience.

Early-stage FinTechs dominate investments

Over 60 per cent of total FinTech funding in ASEAN for 2024 went to early-stage start-ups, reflecting strong investor confidence in innovation and the sector's potential to address market needs. Such a momentum may bode well for the long-term adaptability of ASEAN's FinTech landscape, as fresh ideas continually get backed.



Shifting country dynamics

Thailand took second spot for total FinTech funding in ASEAN this year - with Ascend Money's US\$195 million mega deal. Meanwhile, Indonesia's funding share declined due to fewer large-scale investments.



A decade of growth

ASEAN FinTech funding has surged more than 10 times since 2015 (9M 2015 vs 9M 2024), fuelling growth in sectors such as payments and alternative lending. These sectors make up more than half of ASEAN's total funding at US\$6.5 billion and US\$4.1 billion respectively during the last decade.



Peeking into the future

Beyond more favourable macroeconomic environments, FinTechs worldwide are poised to grow even further with three technologies - Gen AI, blockchain, and quantum computing - potential catalysts to reshape the financial ecosystem.

Resilience in the face of decline

Introduction

The global FinTech landscape has faced significant challenges in recent years, with geopolitical trends and economic tightening leading to a sustained reduction in funding.

In ASEAN, the situation is no different, with investments into FinTech expected to decline for the third consecutive year. However, there are signs of resilience.

In this chapter, we review FinTech investments in ASEAN's six biggest economies: Indonesia, Malaysia, the Philippines, Singapore, Thailand and Vietnam - also known as 'ASEAN-6'.

The remaining four ASEAN nations have not been included in the funding analysis.

Global investments in Tech sector expected to maintain at 2023 levels, with AI the only sector to see growth

Where the funding is going

- Global VC investment into tech¹ declined 19 per cent year-on-year to US\$204 billion in 9M 2024.
- Amidst the funding decline, the Artificial Intelligence (AI) industry continues to post strong growth, receiving US\$72 billion for 9M 2024. This makes up ~35 per cent of total investments into tech.
- Investments into AI is set to surpass the FinTech sector for the first time as investors scaled back on FinTech, with a decline of 42 per cent year-on-year to US\$39.5 billion for 9M 2024.
- Generative AI (Gen AI), a subset of AI, has experienced substantial global funding growth, with a 38 per cent year-on-year increase from US\$16.1 billion to US\$22.2 billion (9M 2023 vs 9M 2024).

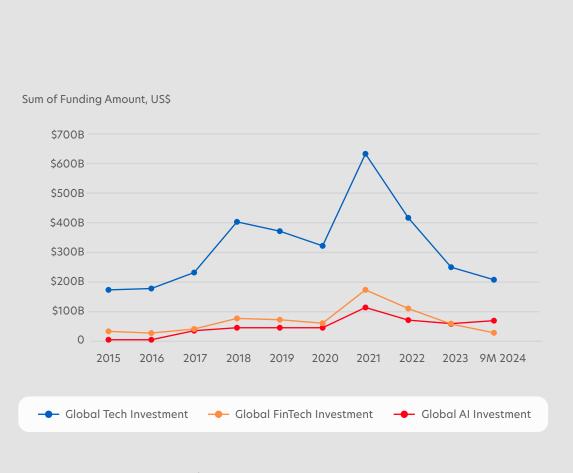


Figure 1 | Global tech funding trends, 2015 to 9M 2024

ASEAN's FinTech funding shows resilience despite global downturn

- Global FinTech funding declined 28 per cent year-on-year to U\$\$39.6 billion in the first three quarters of 2024.
- Funding in North America and Europe, the two largest economic zones for FinTech, fell by more than a third as inflation and geopolitical concerns continue to persist.
- ASEAN-6 countries experienced a year-on-year drop of less than 1 per cent, suggesting resilience and stability.
- Only countries in the rest of the world regions (South America and Africa) registered a 15 per cent year-on-year growth.

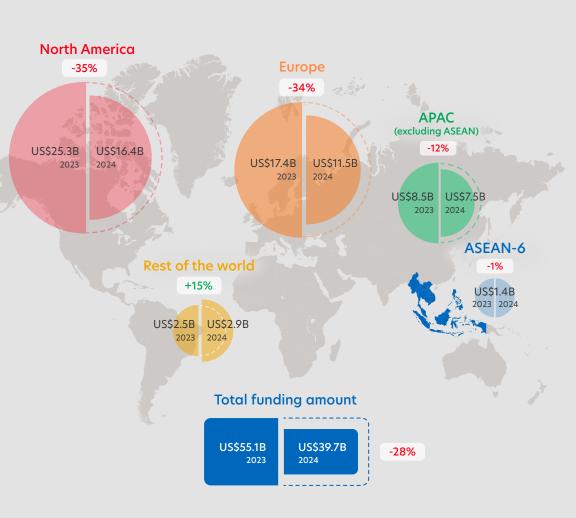


Figure 2 | Global FinTech funding trends, 9M 2023 vs 9M 2024

ASEAN funding has surged over tenfold since 2015, with sustained investor interest in early stage FinTechs

- Total funding received from 2015 to 9M 2024 stands at US\$20 billion, excluding undisclosed deals.
- FinTech investments into ASEAN-6² dipped slightly by 1 per cent for 9M 2024 compared with the same period last year.
- Seed- and early stage investments make up more than 60 per cent of total FinTech funding in the region, boosted by two mega deals from GuildFi (US\$140 million) and Longbridge (US\$100 million). These deals suggest that investors may be willing to bet on innovation at the foundational level, potentially due to the promise of future returns.
- The backing also suggests that ASEAN is still a breeding ground for new FinTech ideas, which is a sign of long-term health.
- The share of investments into late stage firms declined as a cautious economic environment hampered exit opportunities.
- Average deal size increased by 8 per cent year-on-year from US\$13.8 million to US\$14.2 million in 9M 2024. Furthermore, the Federal Reserve's interest rate cut in September is expected to potentially revive venture capital interest.

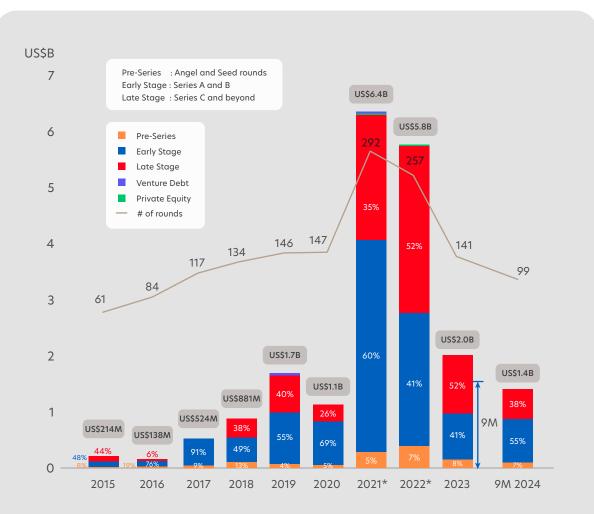


Figure 3 | ASEAN-6 FinTech funding trends, 2015-9M 2024

*Outlier years due to exceptional Fed rate cuts

Cautious optimism as Federal Funds rate eases

The Federal Reserve's recent interest rate cut on September 2024, the first since third quarter 2019, may encourage a shift towards more favourable economic conditions for venture capital investments. As shown in Figure 4, lower interest rates typically lead to cheaper debt and greater investor interest in venture capital, higher valuations and improved exit opportunities.

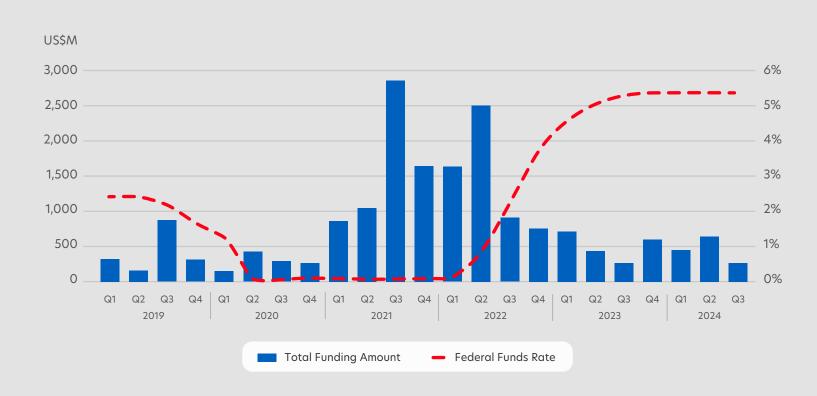
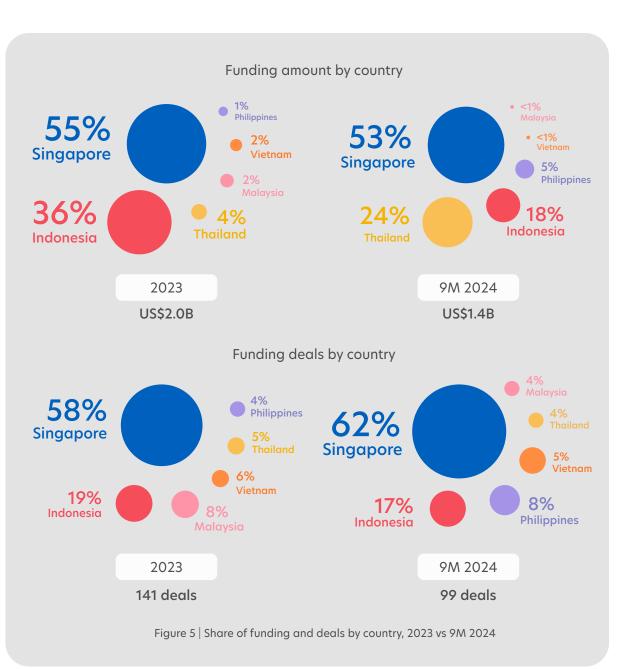


Figure 4 | ASEAN-6 quarter-on-quarter funding trends vs Federal Funds rate, 1Q 2019 - 3Q 2024

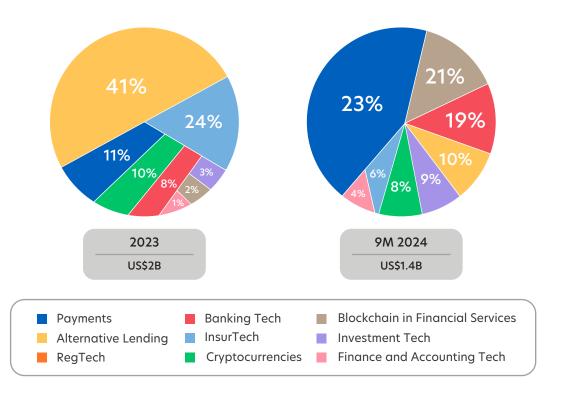
Singapore and Thailand lead FinTech investments in the region

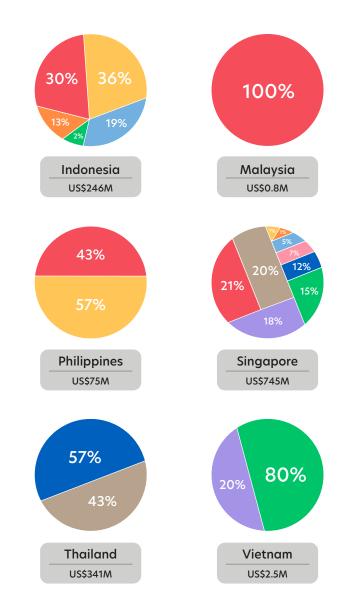
- Singapore and Thailand accounted for three quarters of the total FinTech funding in the region for 9M 2024.
- Indonesia, the perennial second place holder, dropped to third this year as it saw a reduction in its share of the funding pie with no mega deals. On the other hand, Thailand was propped by Ascend Money's US\$195 million mega deal.
- The Philippines, driven by Uno Bank's US\$32 million deal, pulled away from Malaysia and Vietnam to sit at fourth.



Payments and Blockchain in financial services lead funding numbers; alternative lending firms decline

- Payments continued to lead funding numbers for 9M 2024, attracting 23 per cent of total FinTech funding in ASEAN-6.
- Blockchain in financial services came in a close second, receiving 21 per cent of the funding totals, while banking tech round up the top three, supported by ANEXT Bank's US\$148 million mega deal.
- Alternative lending FinTechs faced a reversal of fortunes, with the funding share dropping to 10 per cent as high interest rates continue to weigh down on the lending business.





Early stage FinTechs secured more backing this year

- > Half of the top 10 FinTech funding rounds went to early stage FinTechs.
- Three firms in the Blockchain in Financial Services sector made the top 10 list for the first time, with GuildFi from Thailand securing a mega deal of US\$140 million.
- Average funding amount declined by 30 per cent, from US\$129 million in 2023 to US\$90 million in 9M 2024.

2024	Company	Category	Funding stage	Round name	Funding amount US\$ (M)
	Ascend Money	Payments	Later stage	Series D	195
	ANEXT Bank	Banking Tech	Later stage	Series D	148
	GuildFi	Blockchain in Financial Services	Early stage	Series A	140
	Longbridge	Investment Tech	Early stage	Series A	100
\bigcirc	Superbank	Banking Tech	Later stage	Series C	73
	Partior	Blockchain in Financial Services	Early stage	Series B	60
	SDAX	Cryptocurrencies	Early stage	Series B	50
	NIUM	Payments	Later stage	Series E	50
\bigcirc	Qoala	InsurTech	Later stage	Series C	47
	Sygnum	Blockchain in Financial Services	Early stage	Series B	40
Average funding amount: US\$90M					

Table 1 | Top 10 FinTech funding rounds in ASEAN-6, 9M 2024

023	Company	Category	Funding stage	Round name	Funding amount US\$ (M)
\bigcirc	Kredivo	Alternative Lending	Later stage	Series D	270
	Bolttech	InsurTech	Early stage	Series B	246
\bigcirc	Investree	Alternative Lending	Later stage	Series D	231
	Singlife	InsurTech	Later stage	Series D	133
\bigcirc	TrustIQ	Alternative Lending	Later stage	Series D	105
	Aspire	Banking Tech	Later stage	Series C	100
	Advance Intelligence Group	Alternative Lending	Later stage	Series E	80
<u></u>	Thunes	Payments	Later stage	Series C	72
۲	YouTrip	Payments	Early stage	Series B	50
	Roojai	InsurTech	Early stage	Series B	42
	Average funding amount: US\$104M				

Table 2 | Top 10 FinTech funding rounds in ASEAN-6, 2023

ASEAN's growing unicorns

The emergence of unicorns in ASEAN highlights the region's rapid growth and maturing digital ecosystem. These billion-dollar FinTech companies reflect investor confidence as well as ASEAN's potential to nurture high-value, scalable ventures.

- Singapore hosts the highest number of FinTech unicorns in ASEAN-6, followed closely by Indonesia.
- Companies like Bolttech and Matrixport in Singapore achieved unicorn status within one to two years, indicating strong demand and investor confidence in InsurTech and blockchain finance.
- Others like Indonesia's Akulaku and Vietnam's MoMo took longer yet still successfully capitalised on local market needs and addressed financial access gaps, especially in lending and payments.
- Almost half the FinTech unicorns are in the payments category, with alternative lending and blockchain in finance firms in second and third place respectively.

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Fintech companies across the region have experienced impressive growth over the past decade. From the mid-2010s to 2022, abundant global liquidity, viable business models and promising growth prospects fuelled a wave of investment into ASEAN fintech companies. It was during this period where most of the FinTech unicorns in the region got their status.

Runn Sachasiri Senior Vice President, Market Expansion and CEO's office, Nium

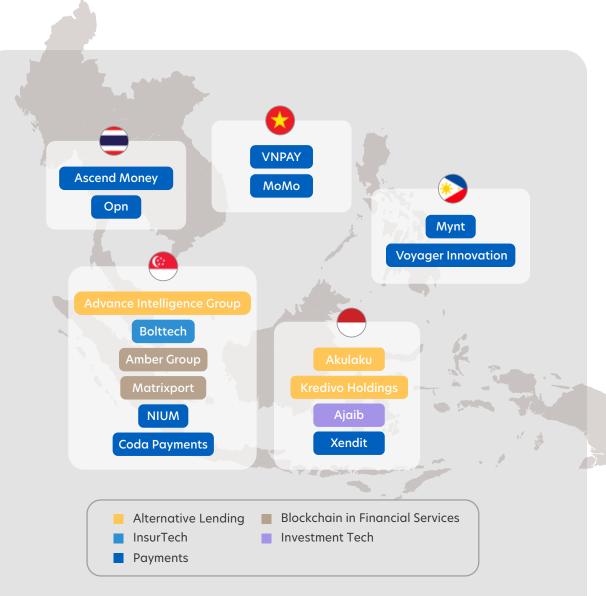


Figure 7 | List of ASEAN-6 unicorns

*A unicorn is a privately held start-up company valued at over US\$1 billion, often backed by venture capital and characterised by rapid growth and high market potential.



FinTech has evolved from a buzzword into a significant driver of change within the financial ecosystem. It has contributed to not just economic growth, but also redefined access to financial services and reshaped consumer behaviour.

This chapter maps the evolution of FinTech in the region across three pivotal phases: from the foundations laid in 2015, through a period of acceleration starting in 2017, to the current phase that focuses on emerging technologies and sustainability.

Each phase highlights how FinTech firms have adapted to market demands amidst technological advancements, while enabling consumers to navigate an increasingly digital financial landscape.

Phase 1

Foundations of FinTech growth (2015 - 2017)

By 2015, ASEAN had reached an important inflection point in its digital development, where three key enablers propelled the region's FinTech industry: the rise in internet access, supportive government policies, and a surge in investments.



Rise in internet access

The region experienced a surge in internet penetration, with countries like Singapore, Malaysia, and Thailand clocking over 70 per cent internet access in urban areas.

This digital infrastructure can be perceived to have laid the groundwork for FinTech start-ups to scale their services, specifically mobile-first solutions aimed at underserved populations. With nearly 260 million internet users in 2015³, ASEAN was projected to be the fastest growing internet market in the world in the next five years, adding an estimated 3.8 million new users each month to hit approximately 480 million users by 2020.

Supportive government policies

Recognising FinTech's potential to enhance financial inclusion and drive innovation in the financial sector, ASEAN governments introduced supportive policies. A major milestone was the introduction of regulatory sandboxes, starting with the Monetary Authority of Singapore's (MAS) sandbox in 2016.

This initiative allowed FinTech firms and financial institutions to test innovation solutions within a controlled environment, fostering early stage experimentation.



Surge in investments

Globally, FinTech investments rose to US\$43.7 billion in 2015, up from US\$18.9 billion the previous year. Within ASEAN, FinTech investments reached US\$213.8 million, up from 2014's US\$34.7 million. This capital inflow contributed to increased collaboration between traditional financial institutions and emerging FinTech firms.

These foundational elements - the rise in internet access, policy frameworks, and capital investment - set the stage for FinTech growth in the following years.



Growth of digital payments in ASEAN

The rapid growth of e-commerce in Southeast Asia, particularly through platforms like Lazada, Shopee and Tokopedia, created a fertile environment for the rise of digital payments.

Specifically, e-commerce sales clocked US\$10.9 billion in gross merchandise value (GMV) in 2017, up from US\$5.5 billion in 2015⁴. FinTech start-ups leveraged this opportunity by offering digital wallets and other electronic payment methods, which would have contributed to a broader acceptance of cashless transactions. This readiness enabled QR-based payment systems to thrive, as customers sought similar convenience in physical stores.

For instance, in Thailand, the launch of PromptPay in early 2017 simplified payments by allowing users to make instant transfers using their mobile phone numbers or citizen IDs. In a similar vein, Singapore's PayNow was rolled out in July 2017 to offer an enhanced funds transfer experience between retail customers of participating banks.

No more sandcastles in the air

The Monetary Authority of Singapore and Bank Negara Malaysia rolled out their regulatory sandboxes in 2016.

A sandbox allows financial institutions and FinTech players to test relevant innovations, and provides adequate safeguards to contain any consequences of failure.

In 2017, the Bank of Thailand (BOT), Bank Indonesia (BI) as well as the Philippines' Bangko Sentral ng Pilipinas (BSP) introduced their regulatory sandboxes to help foster FinTech innovation.



Emergence of alternative lending platforms

Peer-to-peer (P2P) lending platforms, such as Singapore-based Funding Societies, started to gain traction in 2015. These entities were set up to help address some of the challenges that SMEs and underbanked individuals face in accessing credit.

In January 2016, Funding Societies launched Modalku in Indonesia, to help provide microloans to SMEs within the country and drive financial inclusion. By using alternative credit scoring methods, such platforms enable new opportunities for previously excluded populations across ASEAN.

Phase 2

Acceleration and maturation (2017-2022)

Building on the robust foundations established in previous years, ASEAN's FinTech sector entered a period of acceleration between 2017 and 2022. During this time, FinTech moved from being a disruptive force to becoming a critical component of the financial services landscape.



Key technological shifts

Technological advancements, such as the proliferation of AI-driven solutions, played a crucial role in the region's FinTech growth. In 2016, robo-advisory platforms such as Singapore's StashAway and Kristal, as well as Indonesia's Bibit, emerged as useful tools for retail investors. These platforms tapped AI to provide personalised financial advice based on user data, making wealth management more accessible to a broader audience. Another popular entrant, Endowus, entered the Singapore market in 2017.



Blockchain and cryptocurrency growth

The rise of blockchain and cryptocurrencies also fueled this phase. For example, 2017's cryptocurrency boom - a stunning 32 times growth in total market capitalisation (from US\$16 billion to a peak of US\$535 billion in 2018)⁵ - sparked regional interest. However, regulators remained cautious and measured.

In 2018, Thailand's Project Inthanon explored the use of blockchain for cross-border payments, while Singapore implemented the Payment Services Act (PSA) in 2019 which provided regulatory clarity for digital token services, including cryptocurrency exchanges.



As FinTech adoption accelerated, the sector matured, and regulatory frameworks became even more sophisticated, supporting the rapid scaling of digital financial services.

COVID-19 and digital payment adoption

The global pandemic accelerated the adoption of digital payments across ASEAN, with mobile banking transactions spiking in 2020. That same year, Malaysia alone saw three million new mobile banking subscribers, with the value of mobile banking transactions doubling to US\$110 billion versus 2019⁶.

Governments across the region responded by fast-tracking digital payment adoption; the Philippines, for instance, launched the Digital Payments Transformation Roadmap, aiming for 50 per cent of transactions to be digital by 2023.

Phase 3

Emerging technologies and sustainability (2022 - Present)

In recent years, ASEAN's FinTech industry has shifted the spotlight towards emerging technologies and sustainability. This phase reflects a maturation of the sector as companies increasingly integrate innovations into their service offerings.

Some examples include AI, big data, and quantum computing. At the same time, sustainability has emerged as a core concern, with regulators and businesses beginning to embrace green finance initiatives.

Blockchain technology - a key highlight of phase two - continues to evolve into a crucial driver of innovation in the FinTech sector. Blockchain's decentralised nature enables more secure and efficient financial transactions, making it particularly valuable for cross-border payments, digital identity verification, and decentralised finance (DeFi) solutions.



AI and big data transform financial services

Al is increasingly being used to transform the way financial institutions operate, from automating investment strategies to enhancing fraud detection systems. Some key examples include:

Robo-advisors and personalised investment

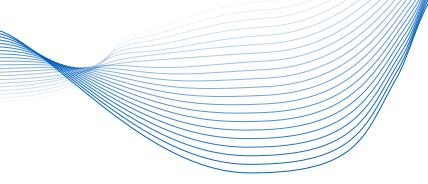
Companies like Singapore's Endowus and Thailand's Robowealth are using Al-driven robo-advisors to provide tailored financial advice. These platforms analyse customer data to recommend personalised investment strategies, adjusting portfolios based on real-time market trends and individual risk profiles.

Fraud detection and cybersecurity

Al-powered fraud detection systems, such as those from Tookitaki, help financial institutions combat fraud by monitoring transaction patterns and blocking suspicious activities in real-time. Similarly, Advance.ai provides eKYC and fraud prevention solutions across ASEAN, using machine learning to enhance identity verification.

Enhanced customer experience

The Philippines' Tonik Bank employs AI-driven chatbots to streamline customer service, offering real-time support for tasks such as account inquiries and transaction assistance. This automation improves customer engagement, ensuring prompt service while reducing operational costs.



Sustainability and Green FinTech

Driven by both global and local demand, green finance has emerged as a key trend in ASEAN's financial ecosystem. For example, in Singapore, the country is committed to issuing up to S\$35 billion green bonds by 2030⁷, which will be delivered by the Government as well as statutory boards. As the region continues to navigate economic challenges and capitalise on emerging technologies, FinTech firms are poised to lead the way – in terms of fostering financial inclusion and harnessing the power of emerging technologies to shape the future of finance.

Similarly, Malaysia's SRI Sukuk framework has appeared to encourage companies to fund environmentally sustainable projects. Such innovations are perceived to reiterate ASEAN's commitment to aligning financial growth with sustainability.

Lessons from a decade of growth

> Expansion in a diverse region

Expanding successfully across ASEAN's different markets requires careful planning and a strong understanding of local nuances. Multi-country growth may also divert resources and create operational challenges.

> Emergence of a robust talent ecosystem

ASEAN seems to have built a self-sustaining tech talent pool. Former employees from early FinTech ventures are launching their own start-ups - driven by access to capital and supportive regulations.

Navigating complex regulatory landscapes

FinTechs have learned the importance of having dedicated regulatory expertise to ensure adherence to local legal standards - crucial for sustainable operations within ASEAN.

> Partnerships with incumbents

Traditional banks across the region are increasingly open to collaborating with FinTechs. These partnerships have enriched the product features and services available to consumers.

> Funding realities and value propositions

The funding landscape has shifted from rapid growth to a more deliberate investing environment. This makes it even more competitive for FinTechs to secure capital, but companies with a distinct value proposition will have an edge.

Insights from the frontlines

Expanding into multiple countries too early can be operationally overwhelming, particularly in a region as diverse as ASEAN. Strategic focus is key to success.

> **Greg Kransnov** Founder, Tonik

Building a multi-country business in ASEAN presents numerous challenges, especially in FinTech. Founders need the right blend of ambition, resilience, vision, and open-mindedness to convince investors to support and scale their ventures across the region.

> Liu Gen Ping Partner, Vertex Ventures

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There is a significant shift in consumer behavior towards FinTech solutions and mobile apps for a wide range of financial needs, from daily transactions, savings, wealth and long-term financial planning. This generation prefer digital-first experiences and prioritise speed, security, convenience and frictionless user experiences.

> Bernard Chan Deputy CEO, Atome Financial

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Operating in multiple regulatory environments can be complex, particularly with varying policies on data security across different regions. FinTechs should prioritise building dedicated compliance teams and hiring regulatory experts to stay informed and ensure their operations meet all legal requirements.

> Abhi Sharma Chief Financial Officer, Coda Payments

We are witnessing a full tech talent cycle in Southeast Asia, as former employees of companies that rose in the past decade are now starting their own business. To sustain this tech talent cycle, it is crucial to maintain momentum. A combination of accessible capital and supportive regulatory developments will encourage more FinTech alumni to transition into founders.

Tan Yinglan

Founding Managing Partner, Insignia Ventures Partners

The biggest challenges will be regulatory changes, cybersecurity threats, and competition. FinTechs need to stay flexible and secure while keeping up with fast-changing regulations.

> **Eric Barbier** CEO, Triple-A

Vietnamese banks, for example, have increasingly collaborated with FinTechs like MoMo to provide integrated services. These partnerships have helped broaden the reach of FinTech, making financial services more accessible to customers.

Nguyen Manh Tuong Vice Chairman & CEO, Momo Thailand's commercial banks are highly innovative and aggressive in their approach to FinTech. For FinTechs in the country, competing with these incumbents is challenging, as many banks have created 'digital twins' that operate like agile start-ups.

> Chondalet Khemarattana President, Thai FinTech Association

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Customers increasingly expect customer centric value propositions and hyper-personalised experiences. While trust remains a key factor in adoption of new services, consumers know to do their own research before dipping their toes in. This has impacted how FinTechs have positioned ourselves - becoming regulated, working with top tier banks and vendors, lawyers, etc.

> **Dr. Rahul Banerjee** Co-Founder and CEO, Bondblox

Over the last decade, we have experienced both a FinTech funding boom and a downturn. The reality is that if a FinTech company lacks a clear value proposition and is not positioned to dominate its niche, it becomes much harder for them to secure investment. However, start-ups with strong business models tend to raise significant capital.

> Danny Toe Founder and Group Chief Executive Officer, ADDX

Catalysing the future of ASEAN FinTech

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As FinTech in ASEAN and across the globe matures, the sector may enter a new era driven by unique technological advancements. Three technologies, Generative Artificial Intelligence (Gen AI), quantum computing, and blockchain are emerging as potential catalysts for transformation, capable of transforming how financial services are conceived, delivered and experienced.

These technologies seem to promise more than just incremental improvements by enabling breakthroughs that can alter core aspects of the financial ecosystem.

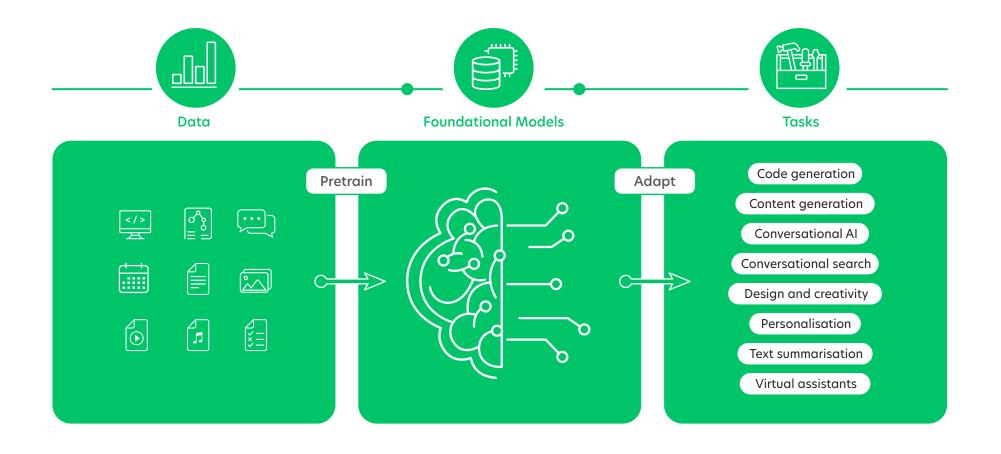
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The future of banking will be driven by advances in AI. There will also be a significant rewiring of regulatory approaches in the world of quantum computing and quantum internet.

> Sopnendu Mohanty Chief FinTech Officer

Personalising financial experiences with Gen Al

Gen AI refers to algorithms that can generate new content, such as text, images, or even complex data sets, based on the input data they have been trained on. The technology has already disrupted various industries such as publishing and design, and is set to be used more widely in the FinTech space.





Enhanced customer experience

Gen AI has the potential to significantly enhance customer experience in the financial sector. By leveraging machine learning algorithms, FinTech companies can analyse vast amounts of customer data to provide personalised financial advice and services.



Fraud detection and risk management

With the rise in scams, reliable and accurate fraud detection is a critical priority for financial service providers. Traditional rule-based systems often fail to detect sophisticated fraudulent activities. Gen Al can improve fraud detection by identifying unusual patterns and anomalies in transaction data.

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From pricing and underwriting, where real-time data enhances decision-making, to automating claims for a seamless customer experience, every link in the insurance value chain stands to benefit from AI. And as we adapt to emerging risks, the opportunities for AI-driven solutions, such as advanced cyber protection, are growing—delivering access to protection that few could otherwise afford. This is the promise of AI in insurance: a more responsive, informed, and resilient industry for the future.

> Rob Schimek Executive Director, Bolttech



Automated financial planning and innovative financial products

Al-driven financial planning tools can provide individuals and businesses with detailed and actionable financial plans. These tools can analyse financial data, predict future trends, and simulate different economic scenarios.

For instance, an AI-powered financial advisor can help users plan for retirement, manage debt, or optimise their investment strategies. By automating these processes, Gen AI can make financial planning more accessible and efficient, allowing users to make informed decisions with ease.

Al is set to become more advanced in tailoring financial products, predicting customer needs, and enhancing risk management. This evolution is poised to reshape the ASEAN FinTech landscape with highly accurate, personalised financial insights.

> Oscar Reyes Chief Commercial Officer, GCash

Blockchain's next big leap

- Blockchain technology is perceived to hold significant promise for the future of FinTech, one that might lead to its broader adoption across ASEAN.
- For starters, its decentralised approach eliminates the need for intermediaries and is designed to make transactions faster and more cost-effective while enhancing security.
- In fact, one of the most promising applications is the facilitation of real-time, low-cost cross-border payments. This is vital for a region with high remittance volume and a rapidly growing e-commerce market. By removing intermediaries, blockchain can significantly reduce transaction costs and processing times, creating new opportunities for businesses and individuals alike.

As blockchain continues to mature - from a speculative technology primarily associated with cryptocurrency, to a vital tool with multiple applications in mainstream finance - there seems to be a shift in industry perception.

The continuous development of blockchain's scalability and transaction speed, paired with its enhanced security, makes it even more attractive for financial institutions and even consumers.

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Blockchain and asset tokenisation have the potential to enable seamless connectivity between public and private networks, allowing money and assets to move at the speed of the internet.

However, there are still concerns around resilience, efficiency, regulation, and security. Once addressed, this could pave the way for more financial applications, benefiting businesses, communities, and users alike.

Kell Jay Lim Regional Head of GrabFin, Grab



Driving broader adoption: Can blockhain become a trend?

Blockchain's influence is expected to grow, with its benefits such as enhanced security and cost savings becoming more apparent. As mentioned, tokenisation may enable more financial products to be available to a wider range of investors, while innovations like DeFi and asset-backed tokens will bring value propositions (a key trait mentioned on page 20) – further attracting individuals and institutions.



Asset tokenisation: A game-changer in financial markets

Asset tokenisation involves converting real-world assets (stocks, real estate and commodities for example), into digital tokens on a blockchain. Tokenised assets can be traded quickly and securely on blockchain platforms, enabling more liquid and transparent markets.

For the FinTech sector, this trend may be a means to introduce a new asset class that would democratise finance - where individuals can invest in tokens that represent a fraction of a high-value asset - boosting aspects like financial inclusion. Digital cash and digital assets will become dominant for specific use cases, enabling a new wave of business models and opportunities for ASEAN FinTech and beyond.

> Aaron Seabrook Chief Operating Officer, Marketnode

Quantum computing: Solving complex problems

Quantum computing offers elevated processing power, enabling financial institutions to tackle challenges beyond the capabilities of classical computers. By leveraging quantum mechanics to process information in new ways, it holds the potential to transform key areas within FinTech.



Optimising investment strategies

Quantum computing has the potential to disrupt investment strategies by solving complex optimisation problems efficiently. For instance, quantum algorithms can analyse large datasets to identify the optimal allocation of assets in a portfolio. This can lead to more effective and profitable investment strategies, enabling financial institutions to maximise returns and minimise risks.

Enhancing cryptography

The advent of quantum computing presents both challenges and opportunities for cryptography. While quantum computers can potentially break traditional encryption methods, they also offer the possibility of developing quantum-resistant cryptographic algorithms. These new algorithms can provide enhanced security for financial transactions, ensuring the integrity and confidentiality of sensitive data.

Quantum computing will benefit FinTech by enabling faster or even real-time risk assessments in fields such as consumer credit, collateralisation, etc. On the flip side, it may also weaken existing industry encryption standards and expose legacy solutions to greater security risks if left unchanged.

Heng Yu Lee Founding Partner, DWF Labs



Risk analysis

With regards to risk, quantum computing can significantly improve risk analysis by processing and analysing large volumes of data simultaneously. This capability allows financial institutions to develop more accurate and comprehensive risk models.

Besides, quantum computers can simulate complex market scenarios, assess the impact of various risk factors, and predict potential outcomes with greater precision. This can lead to better risk management strategies, enabling financial institutions to mitigate risks more effectively and make informed decisions.

Though the full potential of quantum computing remains uncertain, FinTechs can begin leveraging quantum algorithms to develop applications, even without dedicated quantum hardware or infrastructure.

Gen AI, quantum and blockchain: Catalysts for ASEAN's FinTech future

While blockchain, Gen AI, and quantum computing have immense potential on their own to transform FinTech, an equally powerful catalyst may lie in tapping their combined potential. Together, these technologies can help to address key challenges in financial services while unlocking new possibilities:

Enhanced security and fraud detection

Gen Al's ability to detect and predict fraudulent patterns, coupled with blockchain's immutable ledger, can help reduce fraud risks in real-time transactions. Quantum computing, on the other hand, can further enhance encryption, enabling quantum-resistant cryptographic techniques that secure blockchain networks against future threats.

Highly optimised financial operations

In tandem, blockchain's efficiency in transaction processing, Gen AI's automation of complex tasks, and quantum computing's computational power can revolutionise financial operations. For example, blockchain-based smart contracts can streamline settlement processes, while Gen AI can analyse vast amounts of transaction data to optimise processes. At the same time, quantum computing can perform real-time calculations to optimise portfolios or risk assessments on a massive scale.

> The combination of these three technologies will potentially push the boundaries of financial services, offering solutions that are faster, more secure, and more intelligent than ever before.



Collaborating for success

As with any major technological shift, the path forward is not without challenges. Regulators will need to develop frameworks that ensure the safe and ethical use of AI while maintaining consumer trust. Quantum computing, with its capacity to upend traditional encryption methods, may force the financial sector to rethink its approach to data security.

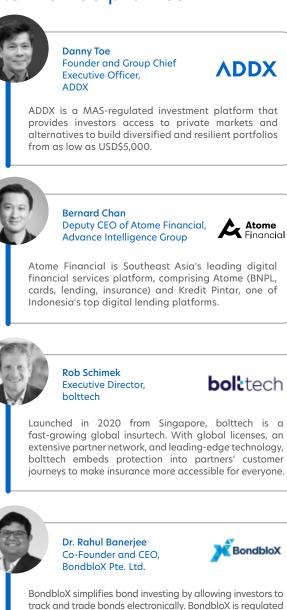
However, these challenges are not insurmountable, and they present a unique opportunity for ASEAN to take the lead in shaping the global FinTech landscape.

The region is known for its collaborative spirit, observed from areas such as economic integration, regional policy coordination and other initiatives aimed at fostering connectivity, especially within the digital and financial sectors.

This is crucial as ASEAN moves into the next phase of FinTech innovation. By investing in talent, fostering public-private partnerships, and maintaining a forward-thinking regulatory approach, ASEAN can harness the full potential of Gen AI, quantum computing and blockchain.

In embracing these catalysts, the next decade will be defined by the institutions that can successfully integrate these technologies into their business models, unlocking new opportunities for growth, efficiency, and inclusivity.

Interviewee profiles



by MAS as a Recognised Market Operator and our investors

include Citi and MassMutual Ventures.



Abhi Sharma Chief Financial Officer. Coda Payments

integration on publishers' websites.

Heng Yu Lee

Founding Partner, DWF Labs

Lito Villanueva

Founding Chairman. **Fintech Alliance Philippines**

Inclusion Officer, Lito Villanueva.

Founded in 2011, Coda brings over a decade of expertise

in delivering monetisation solutions that drive revenue

growth for its partners. Coda is trusted by over 300

publishers - including industry gignts Activision Blizzard.

Electronic Arts, and Riot Games - to arow revenue, profit margins, and customer engagement by connecting them to over 10 million paying customers worldwide. Coda also offers channel, platform and payment solutions such as Custom Commerce, its 100 per cent customisable web

store, and Codapay, which offers direct payments

DWF Labs is the new generation Web3 investor and market maker, one of the world's largest high-frequency

cryptocurrency trading entities, which trades spot and

FinTech Alliance PH is the Philippines' premier diaital FinTech industry association comprised of over 100

corporate members collectively generating more than 95

per cent of digital retail financial transaction volume in

the country today, led by its Founding Chairman and

RCBC Executive Vice president and Chief Innovations and

derivatives markets on over 60 top exchanges.



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DWFLABS

ALLIANCE.

Wilson Beh President. FinTech Associaton of Malaysia **FAOM**

FinTech Association of Malaysia, is a non-profit association founded in 2016. Our main objectives are to accelerate innovation in the financial sector, connect entrepreneurs and start-ups, and be the catalyst of national policies, legislation and regulations in FinTech.



Oscar Reves Chief Commercial Officer. GCash

G) GCash

GCash is the Philippines' number one Finance Super App and largest cashless ecosystem. Its mobile wallet operations are handled by G-Xchange, Inc. (GXI), a wholly-owned subsidiary of Mynt, the first and only US\$5 billion unicorn in the Philippines.



Kell Jay Lim Regional Head of GrabFin,

Graa

Grab, a leading superapp in Southeast Asia, operates across deliveries, mobility, and digital finance. Grab enables millions to order food, send packages, hail rides, and access financial services through one app.



Tan Yinglan Founding Managing Partner, Insignia Ventures Partners

INSIGNIA VENTURES PARTNERS

Insignia Ventures Partners is an early-to-growth stage venture capital firm founded in 2017 investing in Southeast Asia's most influential technology companies. Portfolio companies include GoTo (IDX: GOTO), Appier (TSE: 4180), Carro, Ajaib, Fazz, Shipper, Tonik, Flip, Super, and many other technology market leaders.

Aaron Seabrook Chief Operating Officer, Marketnode



MO

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Marketnode, backed by Euroclear, HSBC, SGX Group and Temasek, is Asia-Pacific's trusted and neutral digital market infrastructure operator. At Marketnode, we operate two flagship platforms, Gateway and Fundnode.

> Tuong Nguyen Executive Vice Chairman and CEO, MoMo

MoMo is the number 1 daily payment, engagement, and financial solutions Super App in Vietnam, serving every aspect of Vietnamese daily lives. Our homegrown proprietary technology platform and innovative, customer-centric products are loved and trusted by



Runn Sachasiri Senior Vice President, Market Expansion and CEO's office, Nium

over 30 million users and 150,000 merchants.



Nium enables real-time cross-border payments in more than 100 currencies across 220 markets. With licenses in over 40 countries, Nium offers seamless, compliant global payments and card issuance solutions.



Shin Wee Chuang Founder and CEO, Pand.ai



Pand.ai is a Singapore-based AI start-up building custom AI/GenAI solutions for large enterprises across customer service, digital sales, marketing, legal, and HR. Our clients include Allianz, Bangkok Bank, CIMB, and MSIG.



Chonladet Khemarattana President, Thai FinTech Association

Thai FinTech Association is a non-profit organisation dedicated to sustainable growth in Thailand's fintech industry. Its vision, 'Transforming Finance for All', focuses on advancing FinTech through global and local networking.

Greg Krasnov Founder, Tonik

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TFA

Tonik is the first digital-only neobank in the Philippines, providing loan, deposit, and payment products to consumers on a highly secure digital banking platform. The neobank operates based on the first digital bank license issued by the Bangko Sentral ng Pilipinas (BSP).

Tonik is led by a team of retail finance veterans who have previously built and scaled multiple retail banks and fintechs across global emerging markets. It is backed by top international investors, including Sequoia India, Point72 Ventures, and Mizuho Bank. Tonik's tech stack is integrated in partnership with world-class banktech vendors including Mastercard, Finastra, Amazon Web Services, Google, Genesys, and Daon. Tonik operates out of hubs in Singapore (HQ), Manila, and Chennai.



Triple-A

Triple-A, a multi-licensed digital currency financial institution, empowers businesses to transact globally in both traditional and digital currencies, volatility-free. It reduces costs while enabling fast, 24/7 payments, optimising cash flow management.



Liu Gen Ping Partner, Vertex Ventures



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.



Sopnendu Mohanty Chief FinTech Officer

Sopnendu Mohanty, currently the Chief Fintech Officer at the Monetary Authority of Singapore, is responsible for creating development strategies, public infrastructure, and policies around technology-driven innovation. Mohanty has over two decades of public and private sector experience in technology, operations, digital Finance, and investment strategies.

Mohanty extensively engages with global technology and financial services ecosystems and has championed notable collaborative public goods like API Exchange (APIX), Singapore Fintech Festival, Payment Rails, Data exchange platforms, and experimental programs like Project Ubin. In addition, Mohanty advises many international global advisory bodies on Fintech, Innovation and Inclusion. Within five years of his leadership, Singapore has become a leading global Fintech hub producing unicorns and home to many vibrant fintech companies.

He has co-authored several patented works in the application of digital technology in Finance and won many industry recognitions.



Resilience in the face of decline

¹ The term tech funding in figure 1 includes sectors in FinTech, Consumer Tech, Enterprise Applications, High Tech, HealthTech, Food and Agriculture Tech, Blockchain Tech and Retail Tech provided on data platform Tracxn. It does not include companies in hardware, manufacturing, transportation and construction.

² The term 'funding' in this chapter includes all disclosed funding rounds categorized 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).

From disruption to development: 10 years of FinTech evolution in ASEAN

^{3&4} According to the e-Conomy SEA Spotlight 2017 report by Google and Temasek, Southeast Asia's internet user base was 260 million in 2015 and projected to grow to 480 million users by 2020. The report also estimates that e-commerce sales of first-hand goods will reach US\$10.9B in gross merchandise value (GMV) in 2017.

⁵ In a ScienceDirect's article titled *Returns, volatility and the cryptocurrency bubble of 2017-18,* in 2017 the total market capitalisation of the four major cryptocurrencies: Bitcoin, Ethereum, Ripple and Litecoin, shot from \$16 billion to a peak of \$535 billion, an annual growth rate of just over 3200%.

⁶ In an ISEAS-Yusof Ishak Institute article by Nafis Alam (2021/128 "Malaysia's Regulatory Framework: A Catalyst for FinTech Adoption"), the author puts Malaysia's mobile banking transactions to MYR460 billion (USD 110Billion) in 2020, more than doubled from MYR200 billion (USD 48.7 billion) in 2019.

⁷ The Singapore Green Bond Framework, laid out in the *Singapore Green Bond Report 2023* by the Ministry of Finance, Singapore mentions that the country has committed to issuing up to \$\$35 billion of green bonds by 2030.

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	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.	Investment Tech	RoboAdvisors	Companies that provide automated investment and advisory services with little or minimal human intervention. Also includes companies that provide
Banking Tech	Banking Tech	Companies which provide Tech solutions primarily for banking industry including software, innovative			white label robo advisory platforms/software.
j da	hardware, and Te	hardware, and Tech-enabled services. Also includes digital banks.		Wealth Management Platforms	Companies providing wealth management platforms.
Blockchain in Financial	Blockchain in tea Financial Services inc	Companies which leverage the blockchain technology to cater to the financial sector. Also includes companies providing financial services related to NFTs.		Remittance	Companies providing cross-border money transfer solutions and services to consumers and enterprises.
Services				Forex Tech	Companies which provide tech solutions, including internet-first platforms and software for forex market
Cryptocurrencies	Cryptocurrencies	ocurrencies All companies that provide bitcoin and other digital currency products and services.			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	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.		Mobile Payments	Companies offering solutions to make and (or) accept payment via mobile.
	Internet First Insurance Platforms	Companies which provide tech platforms to consumers for purchasing and managing their insurance.	RegTech	RegTech	Companies offering a range of tech products primarily for financial institutions and regulators for efficient implementation and monitoring of financial regulations.
	Employer Insurance	Companies which provide employers with solutions for managing employee insurance benefits.		n do not include invest	tegories based on Tracxn's taxonomy for the FinTech practice area. Iments into Grab and Gojek (as their core business is categorized as

transportation and delivery), but we have included Grab Financial Group's US\$300 million raise in 2021.

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Sopnendu Mohanty, Chief FinTech Officer Monetary Authority of Singapore

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ADDX, Advance Intelligence Group, Bolttech, Bondblox, Coda Payments, Gcash, Grab, Marketnode, Momo, NIUM, Pand.ai, Tonik and TripleA.

Associations:

FinTech Alliance PH, Malaysia Fintech association and Thailand Fintech association.



WOB

UOB is a leading bank in Asia. Operating through its head office in Singapore and banking subsidiaries in China, Indonesia, Malaysia, Thailand and Vietnam, UOB has 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. Today, 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.

For nearly nine decades, UOB has adopted a customer-centric approach to create long-term value by staying relevant through its enterprising spirit and doing right by its customers. UOB is focused on building the future of ASEAN - for the people and businesses within, and connecting with, ASEAN.

The Bank connects businesses to opportunities in the region with its unparalleled regional footprint and leverages data and insights to innovate and create personalised banking experiences and solutions catering to each customer's unique needs and evolving preferences. UOB is also committed to help businesses forge a sustainable future, by fostering social inclusiveness, creating positive environmental impact and pursuing economic progress. UOB believes in being a responsible financial services provider and is steadfast in its support of art, social development of children and education, doing right by its communities and stakeholders.

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The 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/

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