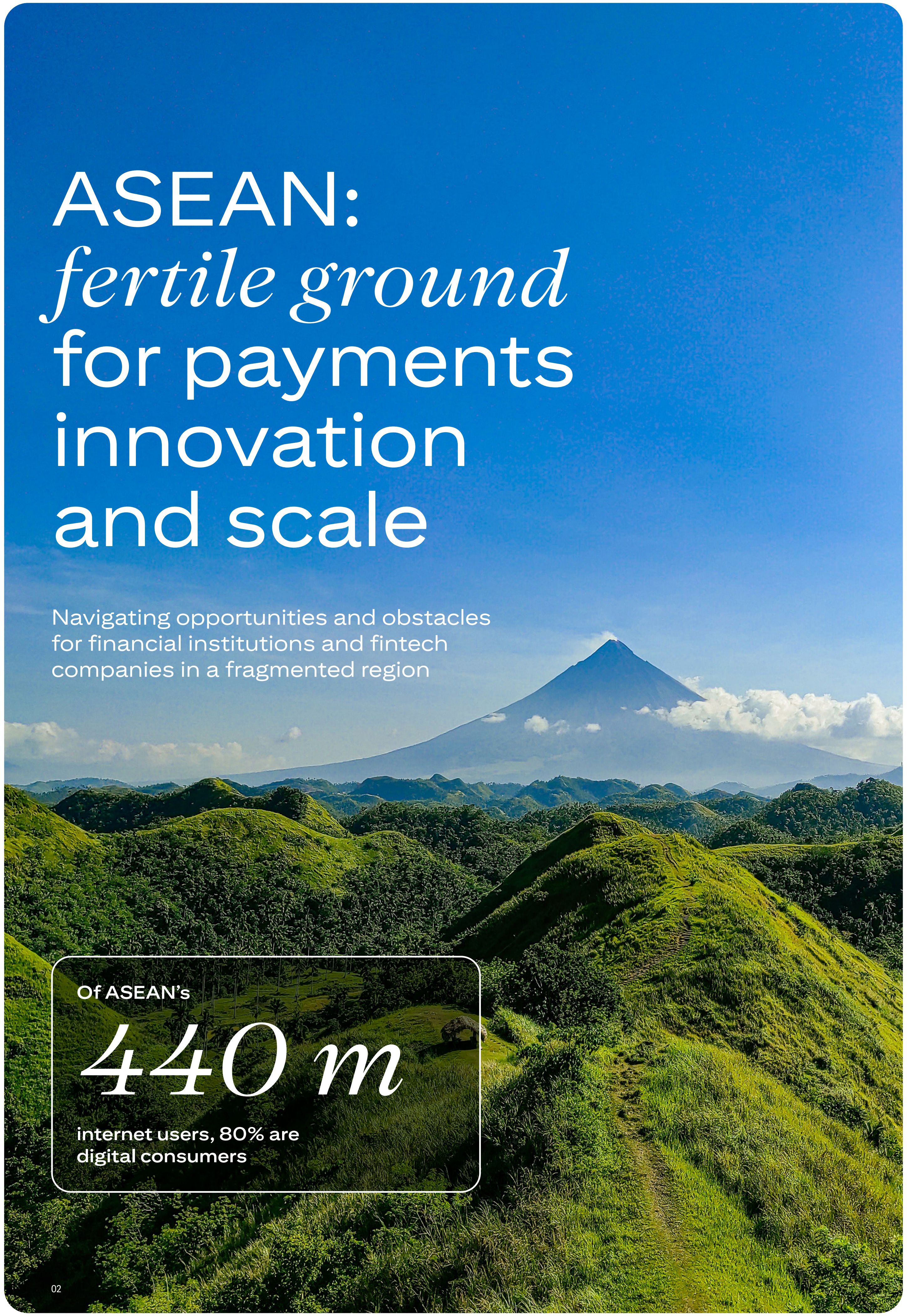
citi

Tomorrow's transactions

Navigating ASEAN's payments *revolution*



ASEAN: *fertile ground* for payments innovation and scale

Navigating opportunities and obstacles for financial institutions and fintech companies in a fragmented region

Of ASEAN's

440 m

internet users, 80% are digital consumers

The financial institution and fintech space in ASEAN is among the most exciting and fast-changing corners of the treasury world.

The patterns that shape consumer behavior worldwide are most sharply defined here. Customers demand that financial services be a seamless part of their digital lives. In ASEAN jurisdictions such as Indonesia and the Philippines, this digital expectation has been a powerful engine for inclusion, bringing millions into the financial mainstream as more prosaic brick-and-mortar models are leapfrogged. ASEAN has *440 million internet users*, 80% of them are digital consumers; the region is on track to be a *US$1 billion digital economy* by 2030.

The financial institutions and fintechs who serve this emerging consumer force must provide new and dynamic business models. Citi is proud to help them do so: we work with our clients to connect the dots, anticipate change and galvanize economies as they grow.

ASEAN is fertile ground for growth in cross-border payments activity. There is a compelling demographic picture of youth, growing middle class wealth and widespread comfort with digital finance. Bringing these things together, there is *great potential* here not only for innovation but scale.

The opportunity for clients in ASEAN is far bigger than just payments. Front-to-back solutions offer transformational possibilities. Citi has an innate understanding of what liquidity solutions, payments and trade finance really mean: not just mundane matters of cash management but real transactions touching real lives, creating wealth and delivering efficiency to businesses. This understanding helps the bank support its clients on their treasury journeys.

With that opportunity comes challenge. ASEAN has a fragmented regulatory environment, and a client trying to build business in Vietnam will have very different options and hurdles to one in Singapore or the Philippines.

But financial institutions and fintechs with the right support from a multinational partner will be aligned with a vibrant, growing market. Citi is ready to help them take advantage.

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Digital reach helps Indonesia find *its voice*

How instant payments drive financial inclusion and institutional impacts

> "Indonesia has become a prominent player in ASEAN's digital economy, reaching US$77 billion last year, up 22% from 2021 and accounting for nearly 40% of the total transaction value of the ASEAN digital economy"

Yoanna Darwin

Country Head for Treasury and Trade Solutions in Indonesia at Citi

Indonesia is a story of a country fulfilling its potential. Home to more than 40% of Southeast Asia's population, digital innovation is meeting the challenges of an underbanked population spread across 17,000 islands, bringing consumers into the mainstream and creating enormous institutional opportunity as it does so.

Indonesia is now the largest economy in Southeast Asia, with US$1.38 trillion of GDP and economic growth of 5.3% in 2022, the strongest level for nine years, due to commodity-related exports and a recovery in private consumption.

That, in turn, has a significant impact upon how liquidity flows in the domestic market.

Digitalization helps to move away from an old and fragmented model requiring physical bank premises, made up of over 100 active banks and thousands of branches across the country. At the retail level, 77% of people are expected to have mobile wallets in 2025 – an important engine of financial inclusion backed firmly by the state, which launched QR code standards (QRIS) in 2019 followed by BI-FAST, the country's instant payment network, in 2021 to facilitate the trend.

77%

of people are expected to have mobile wallets in 2025[6]

"Indonesia has become a prominent player in ASEAN's digital economy, reaching US$77 billion last year, up 22% from 2021 and accounting for nearly 40% of the total transaction value of the ASEAN digital economy," says Yoanna Darwin, Country Head for Treasury and Trade Solutions, Citi Indonesia. "The government has issued Indonesia Payment Systems Blueprint 2025, with its vision to reinforce the integration of the national digital economy and finance, as well as to foster digital transformation within the banking industry."

While that is essentially a consumer story, it does have significant institutional impacts. Digital native companies at the heart of the retail digital story have their own needs for transaction banking solutions, including round-the-clock liquidity management. Companies like these must maintain multiple accounts to serve the country's population, but also need to be able to pool their funds efficiently without conducting multiple operations.

Citi has found cash optimization and liquidity access to be key for clients with complex operations and appetite for efficiency. "Clients want to optimize their cash," says Yoanna. "They want 24-7 access to cash so that they can conduct payment activities instantly, whenever they need to, be it domestic or cross-border."

Indonesia is also benefiting from activity in the commodity sector, which increasingly embraces both upstream and downstream operations. The country is well on its way to mainstream electric vehicles, due to its bountiful nickel production, and it has successfully built ecosystems around commodities where once it was purely a miner.

That, in turn, creates treasury needs, as foreign direct investment (FDI) arrives in the country from China, South Korea and Japan. Each arriving company needs assistance in its establishment, cash and trade operations, capex and financing.

This activity also brings with it a need for supply chain financing, such as helping suppliers within those chains to get swifter access to finance than they would ordinarily receive when working on 60- or 90-day payment terms. And increasingly, supply chains must be assembled with environmental, social and governance (ESG) credentials in mind.

"Citi globally is committed to realizing US$1 trillion for sustainable finance by 2030," Yoanna says. "We continue to facilitate financing that has positive impacts including providing financing incentives for clients with sustainable suppliers. We will continue to support our clients in their transition agenda."

Vietnam's *supply chain boom* mirrors payments progress

New legislation promises ease of digital business

The global geopolitical landscape has triggered a fundamental shift in supply chains, with tensions in the ASEAN region leading to a focus on rebuilding trust and resilience within regional networks. As companies seek to address uncertainty and risk, they are actively diversifying their regional networks and adopting the "*China plus one*" strategy.

This shift has propelled ASEAN, particularly Vietnam, into the spotlight as a key destination for investment, attracting an influx of US$27.72 billion in 2022, of which over US$22 billion has already been disbursed. The momentum for FDI to Vietnam remains strong in 2023, notably from Japan, Korea, Singapore and the Greater China Region.

US$27.72

in FDI in 2022

Despite Vietnam's numerous advantages and opportunities for attracting FDI investment, there are significant challenges that must be addressed. Rising costs, constrained infrastructure and limited land availability, as Vietnam endeavors to match China's deeply integrated supply chain networks, pose real obstacles for the Vietnamese government.

Vietnam seeks to support FDI enterprises within a synchronous and sustainable economy. It is conscious of the challenges it faces, and actively seeks to address concerns raised by multinational companies.

Citi has actively played a vital role in collaborating with groups in Vietnam, including the Banking Working Group, Economist Committee, Vietnam Business Forum and Policy Dialogue, to propose initiatives and solutions aimed at creating an effective legal framework to ease business operations and enforce business laws.

Citi has been closely working with these groups to provide feedback on laws on cybersecurity, e-transactions and credit institutions, as well as a decree on personal data protection. These are substantial steps by the government towards facilitating digital transformation and supporting the growth of e-commerce.

The issuance of a new Amended Land Law, expected to pass the National Assembly in October, will establish a better regulatory framework for land clearance, construction and building to support FDI.

"We have great expectations for the new law and believe it will address the barriers we face in fully embracing digitalization," says Thuy Lai, Country Head for Treasury and Trade Solution, Citi Vietnam.

ESG issues are also a priority for the Vietnam government, which seeks to drive ESG investment in the country as well as sustainable development among corporations.

Parallel to these developments, Vietnam is witnessing a trend towards instant payments, with volumes through NAPAS, a national payment system, nearly doubling year-on-year in 2022. This reflects the nation's progress in embracing digitalization, even in industries like industrial production, where consumers can now purchase not only everyday goods but also heavy-duty equipment like elevators online.

Recognizing the needs of FDI enterprises in seeking effective finance solutions, Citi has launched financial services to optimize business operations, support efficiency and facilitate cost-saving for businesses. One such offering is the 24/7 USD Clearing service, designed to enable clients to make US dollar payments across 1,500 global financial institutions, 24 hours a day, 7 days a week, including holidays, without the need for implementing new technology or proprietary channels.

"We are sincerely grateful to the Vietnam government," says Thuy Lai, "as they have displayed an open-minded approach and a willingness to listen when we propose best practices and share our ideas."

> "We have great expectations for the new law and believe it will address the barriers we face in fully embracing digitalization"

Thuy Lai

Country Head for Treasury and Trade Solutions in Vietnam at Citi

The Philippines sees corporate digital adoption as vital for *future growth*

Favorable regulations can enable corporates to digitalize B2B flows

"Citi is well placed to provide digital solutions, from integration options to processing high-volume payments and driving efficiency in reconciliation workflow through proprietary reporting capabilities"

Arlene Nethercott

Country Head for Treasury and Trade Solution in Philippines at Citi

The Philippines, one of the most dynamic Southeast Asian nations, has embarked on a digital payments transformation journey. Further digitalization in the financial industry could spur social and financial inclusion and overall banking efficiency.

The National Retail Payment System Framework in the Philippines was launched by BSP in 2015, and the progress it has made since then is extraordinary. Digital payments accounted for 1% of transfers in 2013; in 2022 they stood at 42%.

42%

digital payments as a percentage of transfers in 2022

Digital adoption in the Philippines has largely been prevalent in the retail segment, rather than institutional channels. Filipinos spend more time on the internet than others worldwide, and e-wallets have grown dramatically, with current adoption figures already surpassing the projected subscriber base of 76 million users by 2025.

Two domestic payment services, GCash and Maya, are already well entrenched in the payments eco-system, while the PESONet interbank funds transfer service connects banks and mobile money operators. Furthermore, the Covid-19 pandemic compelled more people to make the shift to digital systems, as traditional channels of payments and transaction processing were not easily accessible.

The Bangko Sentral ng Pilipinas (BSP), the Philippines central bank, wants digital payments to be the driver of greater financial inclusion, in a country where banking penetration is just 56%. To that end, the central bank has been supportive of the push for digital payments, authorizing more than 250 payment system operators, rolling out payment rails, designating payment system infrastructure and working to develop suitable governance of this rapidly-growing segment.

The foreign exchange (FX) market in the Philippines is a beneficiary of high remittance flows from overseas foreign workers: the country received US$38 billion of inbound flows in 2022, among the highest in the world. This provides an opportunity for the Philippines to be a driver of digital innovation in cross-border payments and collections.

There is a huge opportunity for the corporate sector to increase digital adoption across a number of transaction processes given that it is currently less entrenched than the retail segment. There is still widespread use of cheques in the Philippines, and a requirement for physical official receipts. Banks like Citi are working on alternate digital solutions that are faster, simpler and more efficient, wherever possible.

"Citi is well placed to provide digital solutions, from integration options to processing high-volume payments and driving efficiency in reconciliation workflow through proprietary reporting capabilities," says Arlene Nethercott, Country Head for Treasury and Trade Solution, Citi Philippines. Citi is ranked first in PESONet outgoing payments and commands a market share of 20% by value, she says.

The use of digital infrastructure in place of large volumes of cash and check collections can also address the costly burden associated with the network required to aggregate collections on a nationwide basis.

"For corporates, digitalization collections is more challenging, and it has remained paper based for the majority of B2B transactions," says Nethercott. "This remains a space for digital solutioning for both regulators and the banking industry."

Thailand—an instant payment *standout*

Citi's Payments Express infrastructure shows strength of Thai innovation

> "Speed and less friction are the keys to growing business in the Thailand market"

Prakasit Permnak

Acting Head and Sales Head for Treasury and Trade Solutions in Thailand at Citi

Thailand is a standout for instant payments, not only within ASEAN but worldwide.

Its PromptPay real-time proxy payment service is among the fastest-growing instant payment services in the world: its 70 million registered users are roughly equivalent to the entire Thai population, and it logs as many as 1.4 billion transactions per month, climbing 30% year-on-year.

1.4 bn

PromptPay transcations per month

There are lessons from PromptPay's success for others in the region: the importance of institutional backing, and the merit of convenience. PromptPay is promoted by the Bank of Thailand, the government, financial institutions, corporates and end consumers, all of whom are attracted by its simplicity and pace. QR codes linked to the system are ubiquitous in Thai shops and markets, while corporates find the reconciliation easy.

"Speed and less friction are the keys to growing business in the Thailand market," says Prakasit Permnak, Acting Head and Sales Head for Treasury and Trade Solutions, Citi Thailand.

Success at such a rate brings challenges too, and Bank of Thailand is now trying to enhance the system's capacity, in terms of transactions per second: in recent months demands on the system have exceeded that capacity, causing downtime.

Citi will soon launch its own instant payment infrastructure, Express, to which Thailand will be the first country to migrate in a further endorsement of Thai prowess in digital payments. The new system will provide Citi with the ability to lift its own transactions per second to over 5,000, while adding new features and products such as transaction status enquiry, automated information exchange APIs, and a refund API with multiple partial refunds support.

Cross-border transfers in and out of Thailand remain restricted, but the Bank of Thailand is trying to relax regulation to ease the flow of customer transfers. An example of this is its new Know Your Business (KYB) scheme, allowing banks to do due diligence with clients under a less onerous document-checking regime, which should make overseas remittances more straightforward. In addition, clients can also leverage Citi's Worldlink Payment Services, an end-to-end solution allowing local currency transfer across 140 currencies worldwide, to support their cross-border needs.

One common pain point for treasurers is collection, as many companies still receive cheques. Changing that behavior to a digital solution will save money and time. The Bank of Thailand is promoting digitization and is open to working with both banks and multinationals.

Another fixture of the Thai cash management landscape is the burgeoning wealth management sector. Technology has put investment tools and market access into the hands of the mainstream, while a new generation of investors with ambitious expectations of yield is entering the market. New startups, including fintechs, have arrived, further democratizing access for mass affluent consumers.

All of this creates increasing payments and collection activity, and links with a parallel trend for the development of API technology in Thailand: interfaces that help clients get into the ecosystem of their customers' lives, often in areas such as insurance, leasing or investment.

Citi holds co-creation workshops with clients to generate ideas about ecosystem development and digitalization. "This is very important for them: they can adopt our ideas to grow their businesses," says Permnak.

"We have arranged these workshops for more than 30 clients in Thailand in the past few years. We get involved with key stakeholders in clients' organizations, identify the pain points and find the right solutions for their sustainable growth."

Singapore—a payments *battleground* for banks and fintechs

Innovations around cross-border payments and new technologies abound in Singapore

Singapore is a nation built upon the efficient movement of capital and trade, so it is little surprise to find many of the key themes around ASEAN payments being played out in the city state.

One of them is the changing competitive environment for payments, in which banks are steadily losing market share to fintechs. Citi's Future of Payments survey found that a remarkable 89% of respondents, all of them financial institution clients, expect to lose at least 5-10% market share over the next five to 10 years. Over half expect to lose more than 10% share. It is worth highlighting that Asia remains the largest and fastest-growing market for payment revenues, and there remains much opportunity for new business growth.

Fintechs, which are quick to adapt and often offering a superior client experience to legacy banks, are the fastest-growing segment of the financial institution world in Asia, and Singapore is home to many of them. The Monetary Authority of Singapore (MAS) has been at the forefront of encouraging investment and innovation in fintech.

Banks have other challenges besides the competitive threat. They are weighed down by legacy systems, compliance costs and emerging regulations. But the scale of the overall pie in the payments space is growing sufficiently to allow banks a sustainable business if they adapt.

"It is important that banks have a focused, client-led payment strategy, including an understanding of where their competitive advantages lie," says Avesh Naicker, Asia Pacific Head, Client Success Management – Financial Institutions, Treasury and Trade Solutions, Citi. "Clarity of the investment priorities is a critical factor for success, particularly given the costs associated with maintaining technology infrastructure and regulatory commitments."

Both sides of the industry, banks and fintechs, face challenges which can be alleviated by collaborating with the right partner. Citi's platform provides its clients with the scale and reach of over 100 markets, 120 currencies and 280 clearing systems globally, allowing clients to free up investment capacity, better manage risk and deliver on their strategic priorities faster.

89%

of financial institutions expect to lose market share in future

"Having partnered with a number of successful fintechs, we recognize the importance of our role as a core infrastructure provider, delivering technology resilience and the evolving demands around client experience," Avesh says.

Partnership between fintechs and Citi helps not only with their clearing and settlement needs internationally, but also in dialogue with regulators, who know and trust international banks.

Singapore, which has found success in being a hub for many key financial and trade roles, is a natural home for innovation in cross-border payments. One constant ambition is for a more frictionless experience in the movement of money, particularly within ASEAN. There are reasons to be optimistic about this, evidenced by developments such as the MAS and Bank of Thailand launching the world's first cross-border linkage of instant payment systems in 2021.

Other areas of innovation and focus include dealing with cybersecurity threats, and improving the quality and processing of data so as to avoid unnecessary payment delays.

But not everything needs to be built anew: for large banks like Citi, impressive cross-border payments businesses can be built upon existing rails like Swift, rather than requiring the adoption of distributed ledger technologies, for example.

Asia will be the fastest-growing market for payments worldwide over the next five to 10 years, because the middle class of ASEAN is growing at a faster rate than anywhere else. Singapore will be at the heart of that growth.

> "Having partnered with a number of successful fintechs, we recognize the importance of our role as a core infrastructure provider, delivering technology resilience and the evolving demands around client experience"

Avesh Naicker

Asia Pacific Head, Client Success Management – Financial Institutions, Treasury and Trade Solutions, Citi

Inclusiveness and accessibility lead Malaysia's payment *ambition*

Sustainability, digital and inclusivity at the heart of national payments priorities

> "If I take a snapshot of where we were four years ago and where we are now, I see more adoption of wallets, more instant payments, and the evolution of the payments system from a cash to a digital basis"

Abdul Jalil Jalaludin

Country Head for Treasury and Trade Solutions in Malaysia at Citi

Malaysia is one of the more sophisticated and inclusive markets in ASEAN, and the central bank's Financial Sector Blueprint serves as a guide for the future of digital payments in Malaysia.

The latest blueprint, which covers 2022 to 2026, has two central messages relevant to multinational treasurers: digital channels and sustainability. A profound digital evolution has taken place in Malaysia during the last four years, and it continues: the digital payments market is projected to reach US$22.23 billion in 2023, with an expected CAGR of 17% to 2027 when the market is expected to hit US$41.74 billion.

$22.23 bn

forecast for digital payments market in 2023

"If I take a snapshot of where we were four years ago and where we are now, I see more adoption of wallets, more instant payments, and the evolution of the payments system from a cash to a digital basis," says Abdul Jalil Jalaludin, Country Head for Treasury and Trade Solutions, Citi Malaysia. The commitment to digital financial services is demonstrated by the introduction of five digital challenger banks in Malaysia, intended to promote inclusivity in banking including the rural population. The regulator has built an open infrastructure, allowing banks and non-bank payment intermediaries to be equal participants.

"The whole client expectation of payments has evolved too," Jalaludin adds. "Corporates expect transparency, immediacy and frictionless payments."

The blueprint specifically calls for "faster, cheaper and more accessible cross-border payments", and connectivity with the rest of the world is a priority. Citi shares best practice with the regulator, using the bank's payments experience gleaned around the world. This extends into assisting clients in Malaysia with liquidity structures, navigating regulatory frameworks when they want to make investments offshore, or repatriate dividends and offshore payments to head offices or

regional treasury centers.

The cross-border payments ambition is significant because of the development of supply chains through ASEAN. Where Thailand stands out for its automotive supply chain, Malaysia shines in the semiconductor industry. This brings opportunities around trade finance and payments. Creating a more potent e-commerce supply chain is another Malaysian ambition.

On the sustainability side, Bank Negara Malaysia wants to see not only a greener society but a more inclusive one, and it sees the democratization of financial services as central to this ambition.

To this end, Citi is working on ideas around leveraging data. "A lot of friction historically has been around the need to verify and validate on the basis of paper," says Jalaludin. The use of scanned images and technologies such as Docusign in authentication helps with this process, and was honed during the Covid-19 pandemic. "When everyone was working from home, enabling that digital front end was the key piece," Jalaludin says.

"The financial institution space is going through a phase of massive transformation. This is most apparent in ASEAN, which presents unique opportunities due to its demographics and rapid pace of technology adoption. We see both banks and fintechs driving exciting new innovations and business models in these markets"

Aashish Mishra

Asia Pacific Head of Financial Institutions & Fintech Sales, Treasury and Trade Solutions, Citi

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