Indonesia's Fintech Industry is Ready to Rise

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Executive summary

Indonesia's vibrant fintech industry is on the path to a remarkable future of expanding and diversifying opportunities. The country's compelling market demographics and relatively low formal banking penetration ensure that this high-growth nation of 300 million citizens offers promising fuel for growth, backed by strong stakeholder sentiment, signs of evolving fintech innovation, and clear white space opportunities with significant value yet to capture.

Investing in growth

The number of fintech players in Indonesia has increased six-fold over the last decade, with wealth-tech, fintech-focused SaaS providers, and insurance activities offering an exciting new driving force for industry expansion. Customer engagement also continues to be encouraging, as post-pandemic digital engagement persists into the new normal beyond. The leading payment sector alone was home to over 60 million active users by the end of 2020.

Investors are equally buoyant about market potential, with total deal capital reaching US\$3.2 billion in 2020-2022, almost triple that of the preceding three years. Approximately 60% of all deals funded are in early-stage fintechs, highlighting the impetus behind this dynamic and fast-growing space. This fintech-focused investment forms a compelling proposition as part of Indonesia's wider and energized digital ecosystem, characterized by the rapid growth of digital banks seen over recent years. Traditional banks are now increasingly looking to leverage fintech partnerships as they attempt to strengthen and scale their own business offerings.

Compelling conversations on evolution

Our conversations with fintech founders across Indonesia reveal growing focus on evolving and maturing growth strategies through multi-product expansion. This is framed by an ecosystem where regulatory support in areas such as open banking and Indonesia's SNAP national standards are offering an encouraging boost for industry sentiment. At the same time, collaboration continues to compel forward growth, as legacy institutions look to the capabilities of emerging fintech partners.

The retail landscape itself continues to evolve from the early domination of payment providers. Despite this, there remains significant value to capture in insurance and deposit verticals. Younger consumers represent the most

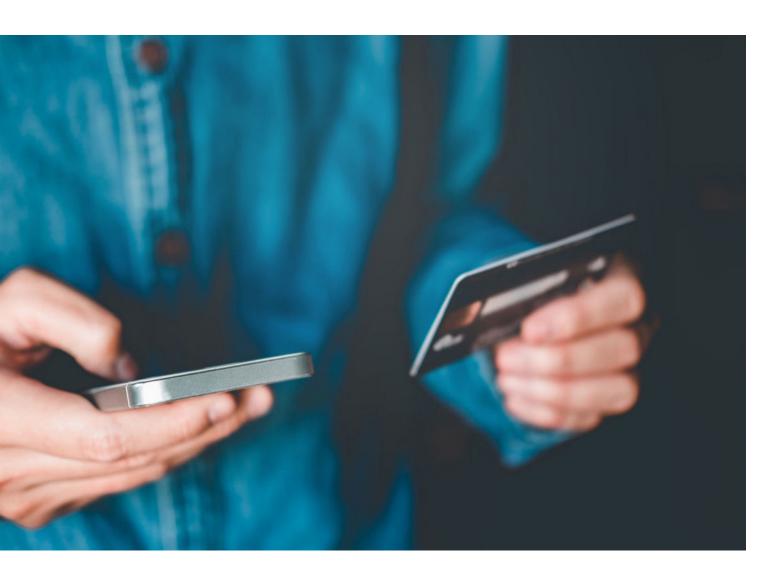
fintech-literate segment, with older age groups comparatively underserved by fintech offerings, indicating an important shift in focus in coming years. Fintech players are viewed favorably across demographics, but traditional advantages in UI/UX are narrowing, and they may need to innovate to maintain favorable market standing. Addressing concerns around cost and security of fintech solutions will also be key.

Indonesia's vibrant SME ecosystem remains a fascinating white space still to capture, with most enterprises in nascent stages of fintech adoption. Expanding adoption of digital payments could offer a powerful driver to unlock early value in this market, although toppling the 'cash is king' mentality will remain a major hurdle. Lending, wealth, deposits, and insurance all provide open opportunities across the SME space. Once again, cost and security will be key areas to address for fintech players.

Learning to win

As it continues to chart enthusiastic expansion, Indonesia's fintech industry has a vital opportunity to capture learnings from other relevant fintech markets around the world. India's Unified Payment Interface (UPI) offers an invaluable case study for fintech stakeholders on how and where interoperable payment systems can power up opportunities, while its digital lending and account aggregator space offers equally helpful insight for embedded finance and seamless data-sharing. The mature US market provides a powerful example of banking-as-a-service (BaaS) with important learnings for Indonesia's own BI-FAST digital payment solution.

Indonesia's sleeping giant fintech ecosystem is on the rise, and when it wakes, the value unlocked will inevitably be substantial. Those stakeholders seeking to maximize their own share of this value should ensure carefully planned strategic priorities which reflect the nuances of the local market, backed by learnings from around the world. In this seminal report, we have identified key considerations for fintech players, incumbent institutions, and regulatory enablers which can help catalyze this growth, and catapult Indonesia's fintech ecosystem into a new era of success.



The Rise of Fintech in Indonesia

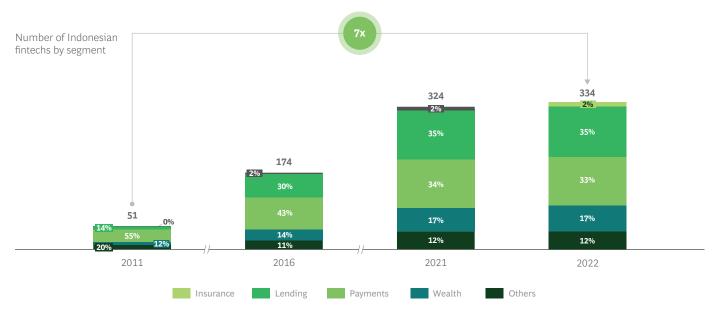
ndonesia's fintech landscape is booming, driven by increasing digital penetration and positive investor engagement across this high-growth nation of nearly 300 million citizens. This is a market with huge fintech potential, with large underserved and underbanked populations, low access to finance in MSMEs, and an open and encouraging government dialogue about leveraging fintech capabilities to bridge the financing gap.

In order to understand this landscape, Boston Consulting Group (BCG) has gathered the voices of key stakeholders, including in-depth interviews with 20 industry leaders, backed by comprehensive surveys of customers and smalland medium-sized enterprises (SMEs) to build a clear picture of the current ecosystem, and its expected evolution.

The number of fintech players in Indonesia increased six-fold over the last decade, rising from just 51 active players in 2011 to 334 in 2022. [Exhibit 1.] While the first wave of growth was dominated by the payment segment, the vibrant modern ecosystem is a diverse landscape driven by lending, payments, and wealth. Wealthtechs, fintech-focused software as a service (SaaS), and insurance activities now represent a new, emerging driving force, with a number of fresh entrants operating in these segments, showing Indonesia's fintech ecosystem is maturing beyond payments to include increasingly sophisticated products and services.

Exhibit 1 - Indonesia's fintech space has seen rapid growth over the last decade

Rapid growth in the number of fintech players

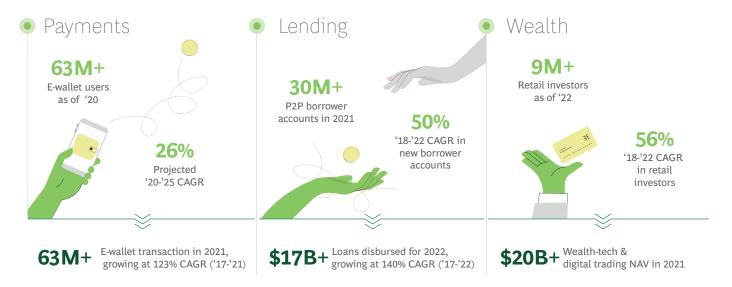


Note: Fintech companies with presence in Indonasia by year founded (incl. those headquartered outside) **Source:** Pitchbook, BCG analysis

Customer engagement with fintech offerings continues to surge. In particular, the payment segment boasts over 60 million active users and is expected to grow at a rate of 26% annually between 2020 and 2025. [Exhibit 2] Meanwhile, in the lending space, there are more than 30 million active peer-to-peer (P2P) borrower accounts. Additionally, the wealth segment is thriving with over 9 million retail investors. Fintech SaaS is also experiencing a surge in adoption, with six million SMEs now using SaaS platforms. This marks a remarkable 26-fold expansion over the previous three years.

Transaction values also continue to grow, with more than US\$20 billion of e-wallet transactions in the period 2017–2021, a remarkable 123% CAGR. Over US\$17 billion in loans were disbursed between 2017–2022, while a net asset value of over US\$20 billion in wealthtech and digital trading took place in 2021.

Exhibit 2 - Customer penetration for payments, lending, and wealth has grown rapidly, driving significant uplift in value

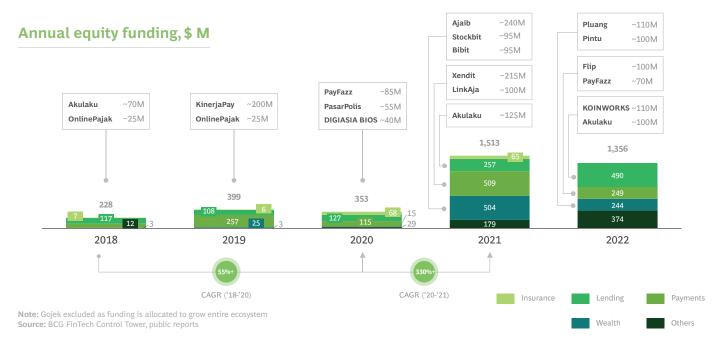


Source: OJK, Statista, KSEI, web searches

Investor sentiment remains encouragingly bullish for Indonesia's fintech journey. Equity funding into fintech soared to US\$1.5 billion in 2021. [Exhibit 3.] While a significant portion of funding went towards payments and lending players, 2021 also represented a breakout year for wealthtech players, who received over US\$500 million in funding. While the year 2022 saw a slight decline in the overall funding value—with global macro-economic concerns affecting investor sentiment—Indonesia still attracted funding of almost US\$1.4 billion, demonstrating the resilience of the ecosystem.

Investment into fintech in Indonesia in the period from 2020–2022 reached US\$3.2 billion, 4.6X the funding seen in the period from 2017–2019, demonstrating strong investor commitment. While a large share of the funding has flowed to more mature companies, 60% of the deal volume has flowed to early-stage companies indicating a strong desire to invest in emerging innovation.

Exhibit 3 - Influx of equity funding fueling growth across lending, payments, and wealth



Investment trends also echo the diversification of Indonesia's fintech market, with lending and payments no longer being the primary areas of interest. While lending and payments remain important, there is increasing

investment into wealthtech, insurtech, and fintech SaaS. Fintech in Indonesia is a rapidly expanding space, with emerging players existing alongside more established products and operators.

Exhibit 4 - Fast growing dynamic space, with >60% deals being early-stage funding deals

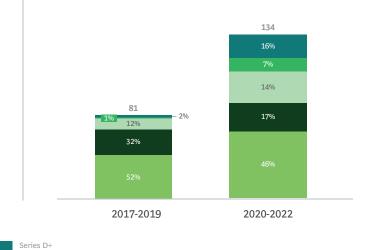
Strong funding growth, with bulk flowing toward Series B and later stage deals...

Total deal capital value in Indonesia, US\$ M



... >60% of deals are Series A and earlier, indicating investments in new innovation

Total deal capital count in Indonesia, number of deals



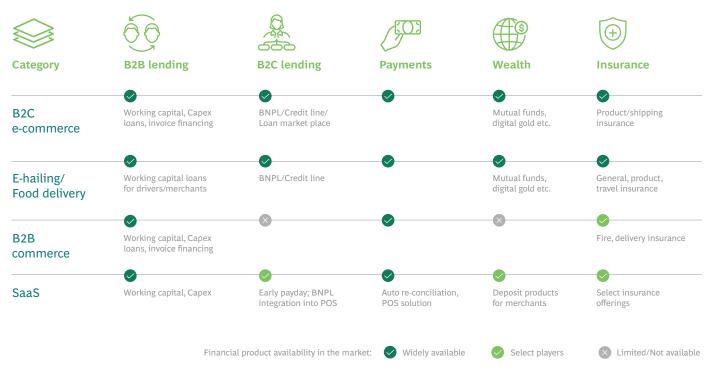
Source: Pitchbook, BCG analysis



A Vibrant and Flourishing Ecosystem

ndonesia's fintech market exists as part of a vibrant digital ecosystem, and one which continues to invest heavily in embedding financial products across existing product flows. [Exhibit 5.] Business-to-consumer (B2C) e-commerce, e-hailing and food delivery, business-to-business (B2B) commerce, and fintech SaaS solution providers all integrate multiple fintech touchpoints across lending, payments, wealth, and insurance.

Exhibit 5 - Unique feature of Indonesian fintech landscape is the widespread embedding of financial products across digital ecosystems for monetization



Source: BCG analysis

There are a number of strategic reasons for this integrated fintech approach. In the first instance, digital ecosystem players can improve customer retention and reduce friction at the point of sale through embedded financial products. Secondly, it expands the share of wallet spend by existing users, and helps digital ecosystem players diversify beyond core business products and services towards higher margins and improved product monetization. Indonesia's buoyant digital ecosystem offers some key examples to represent this:



Exemplar 1: B2C e-commerce. B2C e-commerce platforms commonly provide a range of financial products to different user groups, including B2B lending to merchants (invoice financing), B2C lending (buy-now-pay-later), insurance (microtransaction insurance), and wealth (mutual funds, digital gold).



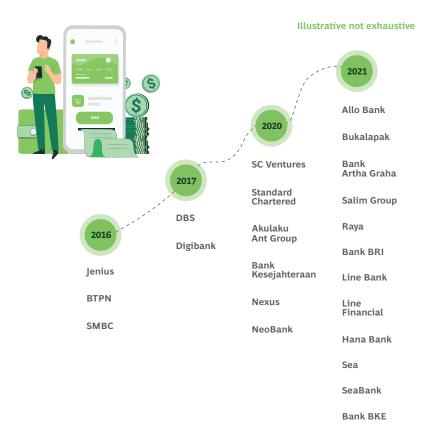
Exemplar 2: e-Hailing. Indonesia's dynamic e-hailing platforms offer numerous financial products, including B2B lending (working capital loans for drivers), B2C lending (buy-now-pay-later), and insurance (travel insurance).

The power of integrated ecosystems is exemplified by the emergence of digital banks in Indonesia, which are frequently backed by established legacy banks, technology companies, and business groups. For established banks in particular, venturing into the digital space provides a chance to revitalize their core banking operations or to provide new solutions to enhance their value proposition. Digital banking enables established players with sizeable user bases to broaden their product range and monetize their captive ecosystems, resulting in a significant opportunity to fortify their revenue streams.

Digital banks have seen phenomenal growth over recent years, as accelerating adoption rates drive increasing market value. SeaBank Indonesia—owned by Singapore-based tech conglomerate Sea Limited—enjoyed 207% year-on-year growth in total assets in 2022, reaching US\$1.4 billion in 2022. Home-grown success story Jago offers another compelling story of growth, with customer numbers rising 71% year-on-year to reach 2.3 million as of the second quarter of 2022. Jago also delivered 3.5X year-on-year growth in loan disbursements, reaching US\$485 million in 2022, thanks to strategic delivery through partnerships and wider digital ecosystems.

Exhibit 6 - Rapid rise of digital banks, backed by existing banks, business groups, tech players ...

... driven by a variety of strategic imperatives





Source: Crunchbase, press search, BCG analysis

There is now a clear trend of traditional banks leveraging fintech partnerships and deploying capital to promising fintech and technology enterprises. This is driven by careful strategic consideration, as legacy financial institutions seek to strengthen and scale existing business lines. Clear examples of this can be seen in the case of multiple BUKI IV banks—those with core capital greater than IDR30 trillion—partnering with e-commerce platforms and P2P lenders to acquire customers for loan products.

Establishing new business lines is also a strategic imperative for legacy banks. For example, through partnering with emerging players such as Ayoconnect, banks can establish open banking and BaaS business lines. In addition, fintech partnerships also allow existing players to build and enhance internal capabilities. For example, banks can leverage credit scoring and digital know-your-customer (KYC) players to improve risk management capabilities and customer journeys.



The Voice of Fintech

e engaged in discussions with over 20 fintech executives occupying C-suite positions or higher, in order to gain insight into the current sentiment surrounding industry priorities, as well as potential developments in the future. Through our research, we have uncovered compelling narratives that offer valuable insights into emerging business priorities, perspectives on partnerships, and the regulatory landscape in Indonesia.

With tightened market liquidity, there is increasing focus on profitability and sustainable unit economics. In this context, startups are rethinking how they do business, moving from growth at all costs to value-based growth. This will have

important implications for future expansion. Business strategies will need to adapt to optimize distribution models and ensure more cost-effective customer acquisition.

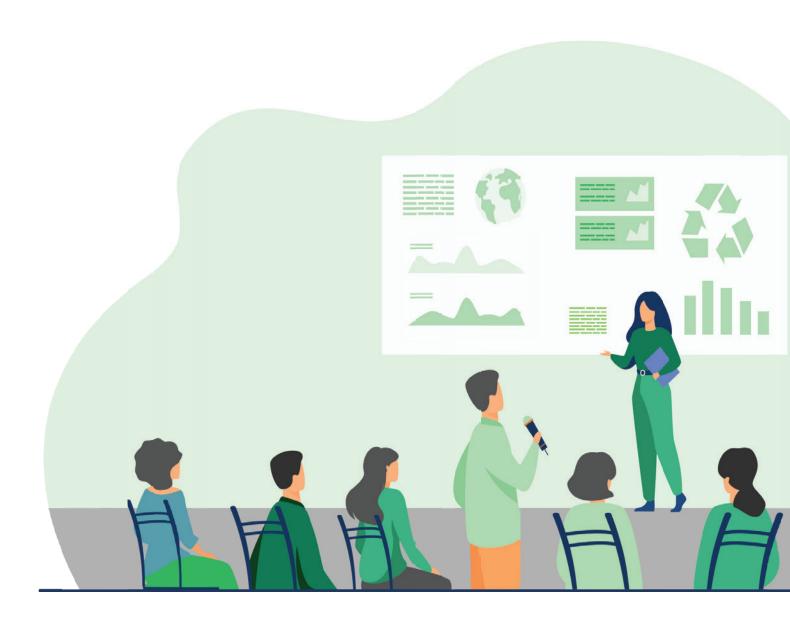
There is also increasing competition in the market, not only from other fintechs, but also established tech firms expanding into the fintech realm, as well as traditional banks looking to provide fintech solutions. Larger tech firms such as Grab, Shopee, and GoTo have the benefit of an established ecosystem, captive user bases and stronger financial means to rapidly scale their presence in the fintech space. Traditional banks have deep coffers and the benefit of lower cost of capital (and higher margins), and

offline presence. In the face of increasing competition, fintechs will need to double down on strengthening their unique value proposition. Partnerships in the broader ecosystem are especially valuable to strengthen distribution and allow for stronger defensibility.

The other important priority going forward will be to plan for talent. In Indonesia, hiring and retaining specialized tech talent has historically been a challenge. As the fintech landscape matures, hiring specialized talent especially in areas such as risk, artificial intelligence and machine learning will be especially important. Similarly, internal governance and senior management roles continue to be

difficult to fill. Fintechs must carefully plan their hiring roadmap and integrate sage talent management practices to win in this landscape.

Across this evolving paradigm, fintech regulation has a very important role to play. Regulation in Indonesia continues to be progressive, nurturing growth through the introduction of initiatives such as the national SNAP standards, as well as fresh regulation to offer guardrails to evolving digital asset adoption. As the industry matures, a progressive setup is expected to support continuing fintech innovation.



Deep Dive 1: Increasing Emphasis on Profitability in the New Paradigm

It used to be all about growth at all cost. But today, the conversations are very different. Focus has shifted to value-based growth, with a lot of emphasis on unit economics.

CEO at a Late-stage Wealthtech

Early-stage fintechs are also experiencing this shifting dynamic. Our runway to find product market fit is much shorter and the burden of proof is much higher to secure growth funding.

CEO at an Early-stage Wealthtech

Multi-product lines expansion has become the norm in the industry, as fintechs are diversifying towards higher-margin products for monetization.

CEO at a Lendtech

With liquidity in the market having tightened, investors have started focusing much more on profitability versus growth at all costs. Investors are increasingly looking for profitability at a company level rather than only at a unit economics level, which is leading to a higher focus on lifetime value per customer, customer acquisition cost and retention rates. As a result, startups are rethinking how they do business as a company. This has important implications for the path forward for Indonesian fintechs, with a strategic need to optimize distribution models and double-down on cost-effective, high-impact routes to access customers.

For early-stage startups, a higher focus on profitability implies that the runway to realizing product-market might need to be shorter. They will need to be a lot more thoughtful, practical, and oriented towards monetization from the get-go. Later-stage fintechs will need to re-evaluate both their product and go-to-market strategies. Product diversification as well as lower-cost acquisition and retention will be critical to realize better unit economics.

Overall, startups will need to establish cost-effective customer acquisition approaches, and focus on high-value customers. Leveraging the broader ecosystem, especially through partnerships, will become especially important in allowing for lower-cost expansion, while facilitating the shift to higher-margin products and diversification of product lines. They'll need to optimize their distribution models beyond digital-only channels and establish cost effective routes to customers to compete with larger players such as banks and financial institutions.



Deep Dive 2: Evolving Regulatory Setup Encouraging Innovation

With comprehensive regulations already in place, the time is ripe to shift towards principle-based regulations to ensure the continued relevance and policies in a fast-evolving landscape.

CEO of a Wealthtech Organization

We see a need to shift from ad-hoc participation models to more structured mechanisms (e.g., direct access, forums) to further unlock participatory evolution.

There's an opportunity to focus on enablement-

data ownership and fast-track approval for new

and advance the overall ecosystem.

based regulations around data sharing, customer

products would enable next-gen product building

CEO at a Lendtech

Some sectors continue to operate in 'grey-zones' and would benefit from strategically designed frameworks, for example areas which have to deal with multiple regulators like open banking and wealthtech.

CEO at a Wealthtech

CEO at Lendtech

Regulators are increasingly receptive to the emerging ecosystem, with forward-looking regulation that positions Indonesia as one of the most progressive landscapes in the

region. Current regulatory structures have fostered growth and innovation across fintech subsectors. [Exhibit 7.]

Exhibit 7 - Strong regulatory clarity & direction around cutting-edge concepts promote innovative business models & attract investment funding

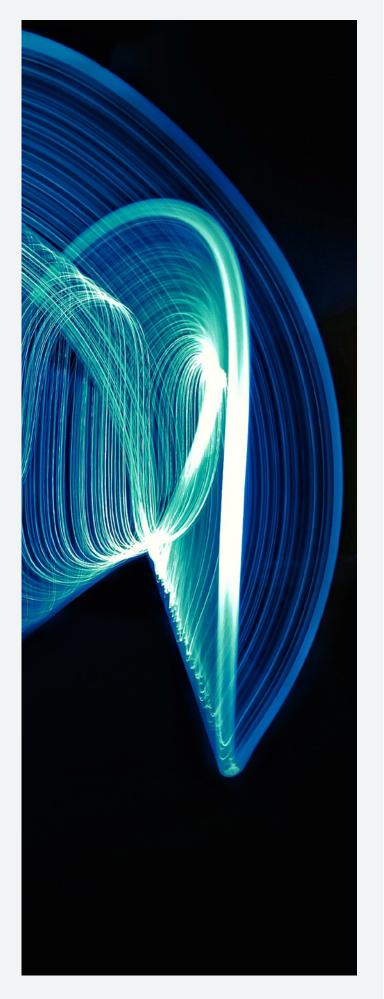
Open Banking Cryptocurrency -**Bank Indonesia BAPPEBTI** 2019: Indonesia Payment 2018: Authorized crypto Systems Blueprint 2025 asset trading Roadmap of open banking standards to be implemented **2019:** Regulatory standards for cryptocurrency exchanges Regulation 2021: BI SNAP - National standard to facilitate open API 2020: Guidelines & criteria cooperation in the payment for approval of crypto-assets >\$300M funding raised Players & funding Ayoconnect **Pintu Brick** Tokocrypto Reku **Brankas Finantier** Ekta Pluang Nobi

Source: Crunchbase, press search, Bank Indonesia, BAPPEBTI, BCG analysis

The Indonesian Payment System Blueprint 2025 roadmap and the SNAP national standard have opened up opportunities for innovation in the open banking landscape. This has spurred the rise of several startups in the fintech space, including Brick, Ayoconnect, Finantier, and Brankas, which have collectively secured over US\$70 million in funding. These developments have facilitated API cooperation and improved interoperability, which is crucial for fostering collaboration between fintechs and legacy financial institutions.

One of the key benefits of the SNAP standard is that it has made it easier for fintechs and legacy financial institutions to work together by standardizing API cooperation in the payment system. This has helped level the playing field for innovation, enabling startups to compete more effectively with established players in the market. Additionally, the fast payment system BI-FAST has also played a significant role in creating a conducive environment for innovation. Its real-time transactions and cross-border interoperability have enabled fintechs to offer innovative solutions to their customers.

The Indonesian government's cryptocurrency regulations have also contributed to a more welcoming landscape for fintech startups. With authorization for crypto asset trading and standards for crypto exchange, the regulations have paved the way for startups such as Pintu, Tokocrypto, Reku, and others to secure over US\$300 million in funding. Fintech founders have recognized the opportunities for further regulation to create a more conducive environment for innovation in the sector. Overall, supportive government policies and regulation has been a key catalyst in the growth of the fintech industry in Indonesia.



Deep Dive 3: Collaboration in a Changing Landscape

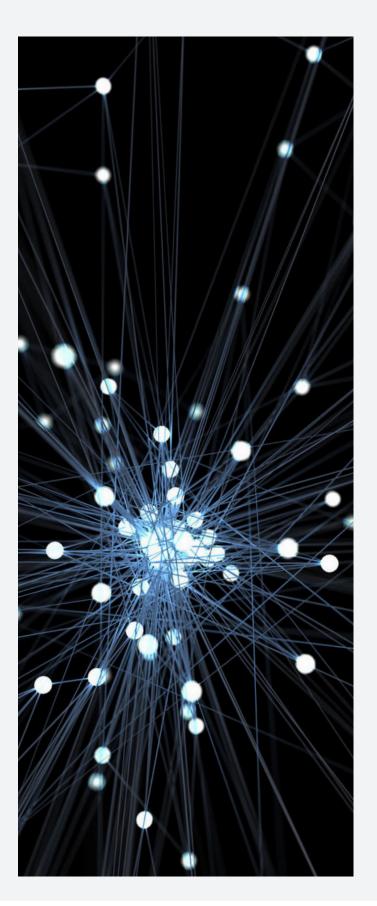
We see opportunity for banks to adopt a strategically designed approach to fintech collaboration, as today most partnerships are largely opportunistic and ad-hoc.

CEO of a Lendtech Organization

There are encouraging signs with regard to partnerships between fintechs and incumbent players. For instance, banks are now more open to partnering with fintech companies in established areas like lending, as well as emerging sectors such as cryptocurrency. Challenger banks, in particular, are actively seeking partnerships with early-stage fintech startups to gain a competitive advantage.

For successful partnerships, startups must adapt their operating models to accommodate for cultural differences and working styles of established players, which may differ from those of startups. Moreover, startups may have to adjust their operating model to leverage the benefits of such partnerships. Simultaneously, incumbent players must make an effort to comprehend the imperatives and difficulties faced by startups when they seek to enter such partnerships. This approach will lead to longer-lasting and more fruitful collaborations.

Overall, there exist numerous opportunities to enhance the fintech ecosystem and establish thriving partnerships across the industry. Fintechs and established players alike are displaying an increasing eagerness to engage and collaborate with one another. Looking ahead, we anticipate a growing number of such partnerships with substantial value creation for both fintechs and incumbents.





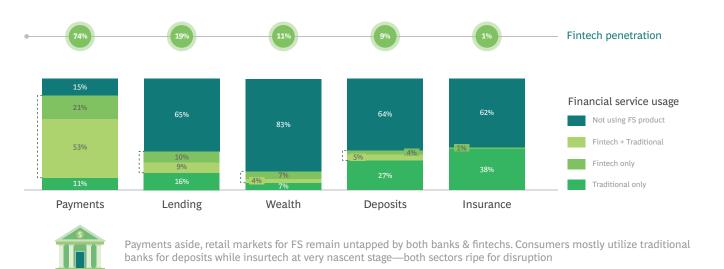
The Voice of Retail

aining a comprehensive understanding of Indonesia's fintech retail customer landscape is crucial for assessing the broader ecosystem. To this end, BCG conducted an in-depth consumer survey of over 1,000 representative respondents from Indonesia.

Overall, we see digital payments as the leading vector for customer penetration in Indonesia, with almost threequarters of respondents utilizing a fintech product. However, the broader retail market for financial services remains largely untapped for both fintechs and traditional financial institutions, with over 60% of respondents not using any lending, wealth, deposits, or insurance products. Despite significant growth in the usage of fintech products, especially in the post-COVID landscape, there is still a significant opportunity to increase overall consumer awareness and adoption. [Exhibit 8.]

Exhibit 8 - Consumer | Payments lead vertical for customer penetration; insurance & deposit plays continue to offer whitespaces

Payments services most widely used with ~74% penetration



Source: BCG SOFTU Survey (Oct-Nov 2022), BCG analysis

Customers utilize traditional banks as their primary provider for deposits and insurance products, with 9% and 1% adoption of products in fintechs for these respective segments, compared to 27% and 38% for traditional banks. This presents a generational opportunity for fintechs to capture share away from banks—particularly given evidence that young consumers are more receptive to

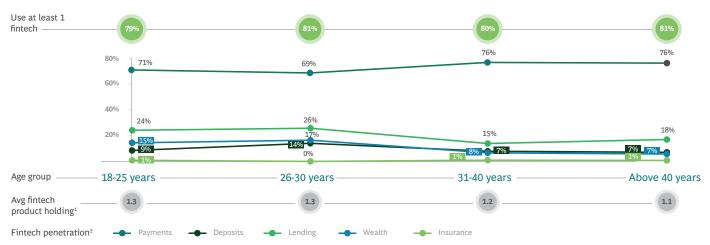
adopting fintech solutions—with both sectors offering significant disruption potential.

Consumers aged 18–30 years comprise the most fintechliterate segment today. [Exhibit 9.] This does present an opportunity for fintechs to capture higher shares of older age groups, particularly in verticals beyond payments.

Exhibit 9 - Consumer | Consumers aged 18-30 years the most fintech literate segment; opportunity to capture higher share of older age groups who remain underserved



As banks remain dominant mode for consumers above 30 years, fintechs can build tailored offerings to expand share of older consumer segments from banks

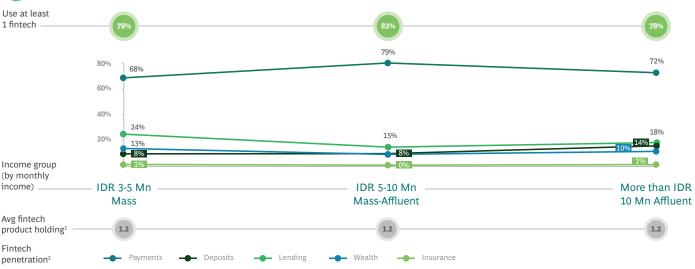


1. Average number of Fintech products used by age group 2. Use a Fintech platform to procure the specified financial product Source: BCG SOFTU Survey (Oct-Nov 2022), BCG analysis

Exhibit 10 - Consumer | Sectors beyond payments continue to offer whitespaces for fintechs across income groups



Significant potential for disruption across all non-payment use cases, where fintech penetration fairs below 25% for all income groups



^{1.} Average number of fintech products used by age group 2. Use a fintech platform to procure the specified financial product **Source**: BCG SOFTU Survey (Oct-Nov 2022), BCG analysis

This demographic reality suggests older consumers remain relatively underserved by fintechs, whose target segment—and by extension value proposition—is mainly angled towards the millennial and Generation Z groups. Fintechs should consider building tailored offerings to capture a share of older consumer segments from traditional

financial institutions. Analysis of the income group distribution of fintech penetration also demonstrates a clear white space for fintechs to capture outside the payment segment, with penetration across these verticals standing at less than 25% for all income groups. [Exhibit 10.]

Exhibit 11 - Fintech players outperform traditional banks on overall usage, but UI/UX arbitrage is closing

Rating of fintechs and banks on key dimensions



Note 1: 1= Poor; 5= Excellent
Note 2: Q: Rate your primary fintech/traditional banks on the following factors (1= Poor, 5= Excellent)
Source: BCG SOFTU Survey (Oct-Nov 2022), BCG analysis

Given the relative penetration of fintech and banking products across demographics, it's important to consider how key product and customer experiences differ across key dimensions of ease of use, onboarding, security, promotions, and access to additional financial services. [Exhibit 11.]

Fintech players have a slight edge over traditional banks in terms of overall usage. They also surpass banks in providing financial incentives, such as promotions and discounts, as well as access to additional financial products through cross-selling and value-added services. While an edge in cross-selling is a source of competitive advantage that fintechs should aim to maintain, overreliance on

incentives could undermine the long-term view of the industry, and non-incentivized usage may be much lower for fintechs

Our research also indicates that the user interface and user experience gap between fintechs and banks is narrowing. Banks are catching up in customer experience metrics where fintechs had previously outperformed them, such as seamless onboarding journeys. To preserve their lead over banks, fintechs need to adopt a more innovative approach to user-friendly delivery while reducing their reliance on incentives and product promotions.

Exhibit 12 - Consumer | Difficulty in choosing app, and concerns on cost and security are key barriers to fintech adoption



Key barriers to fintech adoption (by age group)





Platform differentiation is crucial - crowded space means players need to build unique offerings in order to capture share of non-fintech users



Fintechs need to provide more assurances on safety and security, as trust remains a key concern across age groups – and anchoring on CX is no longer sufficient



Concerns on cost remain top of mind for consumers – but players will need to consider unit economic implications before reverting to price reductions

Source: BCG SOFTU Survey (Oct-Nov 2022), BCG analysis

Encouraging new user adoption is a critical factor in fintech growth. [Exhibit 12.] Our research identifies three key barriers that must be addressed among retail customers.:

- Too many apps to choose from. Customers face initial challenges in selecting the appropriate platform to begin, with a wide array of choices and lack of meaningful differentiation.
- Concerns over safety and security. Customers lack trust in non-traditional institutions, particularly when it comes to holding funds.
- **Higher costs compared to banks.** Customers associate fintechs with higher costs, and would prefer to stick to perceived cheaper alternatives provided by traditional players.

In addition, to drive greater adoption, fintech companies must take into consideration the desires of their customers. According to our survey, consumers have three key aspirations:

- **Assurance on security.** 40% of consumers would like to see concrete assurances on the safety of their funds.
- **One-stop-shop.** 21% of customers want their financial needs addressed in a single app.

• Attractive financial incentives. 26% of consumers want to see lower costs for services through fintechs.

These findings illuminate some important imperatives for the future growth of Indonesia's fintech industry. Firstly, investing in platform safety and security should be a top priority to instill confidence in consumers and alleviate any apprehensions they may have regarding the trustworthiness of financial service providers. Secondly, fintech companies must adopt a multi-product strategy and work towards offering a comprehensive range of financial services to cater to diverse customer needs. Lastly, consumers continue to expect attractive financial incentives from fintechs, and therefore there continues to be a play wherein fintechs can grow their user bases through aggressive pricing.

However, eventually fintechs will have to strike a balance between being attractive through incentives and maintaining sustainable unit economics. While low prices may make fintechs attractive to consumers, it is unlikely that such pricing strategies can be sustained in the long term.

Exhibit 13 - Consumer | Primary motivation to shift to a fintech would be to have assurances on security, arrive at a one-stop shop and sustain financial advantages

Key levers to drive fintech adoption across age groups

Assurance on security



Safeguards in place to keep customer funds secured (e.g., insurance on investments)



of consumers want to have concrete assurances from fintechs on the safety and security of their assets

Source: BCG SOFTU Survey (Oct-Nov 2022), BCG analysis

Build a one-stop shop



Consumers prefer to have one-stop-shop destination which combines various financial/lifestyle needs



~21%

of consumers want their financial needs addressed in one app, and would be less inclined to shift to apps offering single product lines

Attractive rates/financials



Financial considerations top of mind as customers value lower fees/higher rates



~26%

of consumers put financial considerations as top of mind factor, want to see lower cost of services through FinTechs

Deep Dive 1: Payments Powering Adoption

Fintechs are now closing the gap in the volume and frequency of payments processed among consumers using both banks and fintechs for payments. [Exhibit 14.] The number of monthly payments processed by fintechs has now reached 90% that of banks, while the volume of payments processed has reached 80% that of banks, for those customers who use both provider types. The rapidly accelerating adoption and acceptance of e-wallet and Quick Response Code Indonesian Standards (QRIS) payment methods by merchants in Indonesia has contributed to this narrowing gap.

Banks still retain a slight lead on distribution of highfrequency and high-volume payments, however. The proportion of customers who undertake transactions over 10 times per month through bank accounts make up one quarter of bank account transactions, but just 20% of fintechs. The proportion of customers transacting over IDR1 million per month stood at 42% of bank accounts, and 30% for fintechs.

E-wallet players continue to capture the highest usage for fintech payments, owing to widespread acceptance of these payment formats among merchants, backed by fine-tuned customer acquisition and retention models. Enabling smooth bank account transfers has emerged as the next competitive frontier in recent years. Players such as Oy! and Flip have embraced this as a core value proposition, and e-wallet players are also entering this space as customers continue to experience friction in using bank-branded apps for account transfers.

Exhibit 14 - Consumer | Among consumers using both banks and fintechs for payments, fintechs are closing gap in frequency and volume of processed transactions

Fintechs closing gap in payment frequencies and volumes processed

0.9x Proportion of frequency compared to payments through Banks

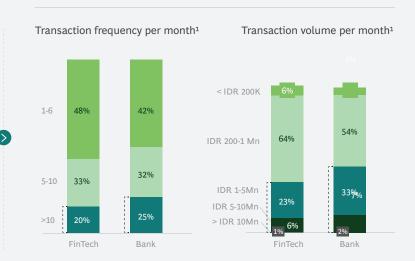
Proportion of volume compared

to payments through Banks

Note: 1. Users that transact with both banks & fintechs Source: BCG SOFTU Survey (Oct-Nov 2022), BCG analysis

0.8x

...with banks holding slight lead on distribution of high-frequency and high-volume payments per month



Deep Dive 2: Low Lending Penetration Offers Compelling Opportunity

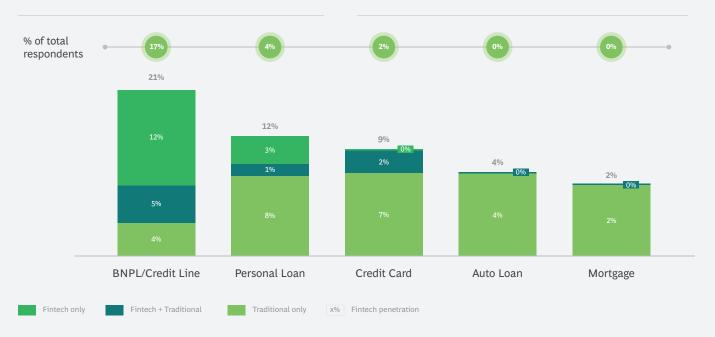
In Indonesia, the market penetration of loan products remains low. Within the penetrated market, traditional lenders remain the preferred channel for the majority of customers. However, the emergence of buy-now-pay-later (BNPL) has increased the reach of lending products in the country. Interestingly, fintech products dominate the BNPL space, with more than half of the respondents using fintechonly options, while roughly a quarter of respondents use both fintech platforms and traditional channels.

Of the 21% of respondents using BNPL, more than half use fintech only, with roughly a quarter using both fintech platforms and traditional channels. In contrast, just 5% of total respondents utilized fintech solutions for other loan products. However, while existing penetration for fintechs beyond BNPL is low, we see a significant opportunity for expansion for fintech players in other segments through disrupting traditional lenders which typically offer lower ease-of-use and limited flexibility.

Exhibit 15 - Consumer | Penetration of loan products remains low; BNPL leading at 21% adoption; traditional lenders remain preferred channel for consumers

BNPL/Credit Line has highest usage with 21% of consumers using the product in the last 12 months...

...except for BNPL/Credit Line, consumers primarily acquire loans through traditional channels.



Source: BCG SOFTU Survey (Oct-Nov 2022), BCG analysis

Deep Dive 3: Shifting Dynamics in Deposits and Wealth

It is evident that traditional banks, which have established longstanding and trusted relationships with customers, will continue to play a crucial role in the financial industry. Most consumers still view banks as a preferred channel for both deposits as well as investments. When segmented by product and income, consumers tend to place more assets in banks, with the portfolio value of customers in banks being 2.3 times that of fintechs for interest-bearing deposits, 1.7 times for mutual funds, and 2.6 times for Indonesian stocks. [Exhibit 16.]

While neobanks are catching up with banks in terms of fund transfer frequency and volume, the average deposit in banks is still 6.6 times that in neobanks. In order to compete with traditional players, neobanks need to explore new ways to attract and retain deposits. [Exhibit 17.] Fintechs and digital banks need to create an enticing proposition beyond

offering a superior customer experience and attractive rates in order to capture a higher share of deposits.

Although banks are preferred when it comes to traditional services, fintechs excel in areas such as cryptocurrency and foreign stock investment where banks are more restricted by regulation. [Exhibit 18.] For example, banks are the preferred option for customers investing in conservative asset classes such as gold in wealth management. However, fintechs are currently the only channel for global stocks and cryptocurrencies due to regulatory limitations, and thus are the only channel for investment in these asset classes. While traditional banks are well-positioned to challenge fintechs' share in these neo-asset classes if regulations evolve, fintechs' early advantage can lead to an enduring disproportionate share in these asset classes.

Exhibit 16 - Consumer | Consumers tend to place more assets comparatively with banks across the board when segmented by product & income

	Investment product	Mass	Mass-affluent	Affluent		Overall
S	Interest-bearing deposits	2.9X	2.0X	1.7X	>>	2.3X
	Mutual funds	2.1X	1.7X	1.3X	>>>	1.7X
	Indonesian stocks	2.2X	1.6X	2.2X	>>>	2.6X
		Traditional to Fintech	Traditional to Fintech	Traditional to Fintech		Traditional to Fintech

^(%) Comparison of portfolio value across asset classes (Traditional to Fintech)¹

^{1.} Compares average portfolio holding of consumers investing through both traditional players and FinTechs for the same asset class Note: Mass segment (IDR 3-5Mn monthly income), Mass-affluent (IDR 5-10Mn monthly income), Affluent (IDR 10Mn and above monthly income) Source: BCG SOFTU Survey (Oct-Nov 2022), BCG analysis

Exhibit 17 - Consumer | Neobanks closing gap in share of fund transfers vs. banks, but need to find ways of attracting and retaining deposits

	Metrics	Mass	Mass-affluent	Affluent		Overall
\$	Average deposits	15.3X	4.3X	7.9X	>>>	6.6X
N N	Fund transfer frequency	1.3X	0.9X	1.4X	>>>	1.2X
	Fund transfer volume	1.0X	1.2X	1.0X	>>>	1.1X
		Bank to Neobank	Bank to Neobank	Bank to Neobank		Bank to Neobank



^{1.} Average deposit, fund transfer size/frequency comparison for consumers who deposit funds with both Neobanks and traditional banks Note: Mass segment (IDR 3-5Mn monthly income), Mass-affluent (IDR 5-10Mn monthly income), Affluent (IDR 10Mn and above monthly income) Source: BCG SOFTU Survey (Oct-Nov 2022), BCG analysis

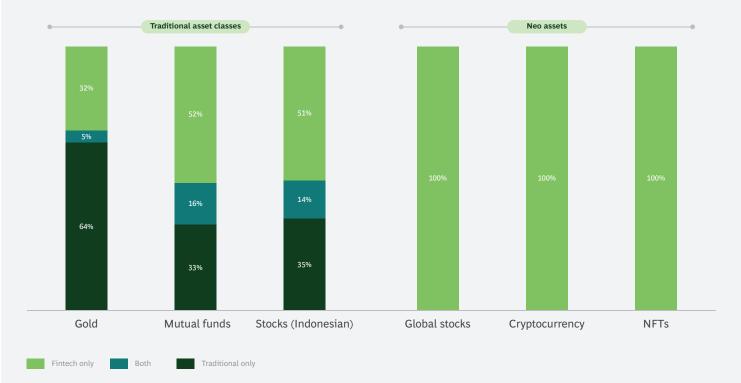
Consumers today attribute their usage of wealthtech platforms primarily to ease-of-use and lower investment costs. [Exhibit 19.] Nearly half of all consumers (49%) attribute their usage of wealthtech to its user-friendly experiences and simple-to-use features, which are often lacking in traditional core banking journeys. Lower investment costs also drive consumers to use wealthtech, as brokerage fees with banks can be prohibitively expensive. Investment apps with zero or minimum brokerage fees have become increasingly popular due to consumers' aversion to high fees associated with banks' investment services.

Interestingly, 32% of consumers rate better safety and security as a key factor in their decision to use wealthtech platforms. This is noteworthy as banks are traditionally viewed as more secure institutions than fintech products. Despite this, the wealthtech segment has managed to build consumer confidence in their safety and security, which has contributed to their success.

Exhibit 18 - Consumer | Traditional players remain preferred channel for gold, mutual funds and Indonesian stocks

Number of users using investment products by channel (banks vs fintech)

% usage channel for users investing in the specific asset class



Note: Traditional players include banks, brokerage houses and wealth management Source: BCG SOFTU Survey (Oct-Nov 2022), BCG analysis

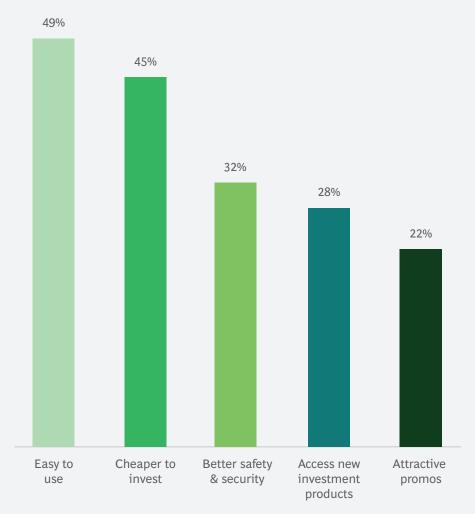
As wealthtechs continue to grow, their focus must shift from primarily chasing user acquisitions to strategically prioritizing and increasing assets under management (AUM). To achieve this, platforms must focus on developing features that encourage regular investments and change users' inherent investment behavior. These

features may include automated trading functions, analyst recommendations, and the ability to follow and copy the trades of successful users to guide decision making. By prioritizing such features, wealthtech platforms can drive user engagement, increase AUM, and ultimately achieve sustainable growth.

Exhibit 19 - Consumer | Low investment costs and better user experience are the biggest acquisition tools for wealth-techs

Top reasons for using wealth-techs to invest

% Ranked as top 2 reasons by consumers



Source: BCG SOFTU Survey (Oct-Nov 2022), BCG analysis



The Voice of SMEs

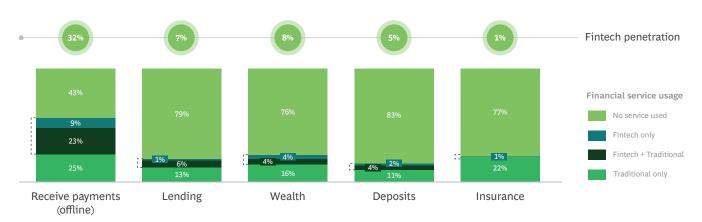
intech adoption among SME consumers is still in its early stages, especially beyond payments, creating significant opportunities for lending, wealth, and deposit players to target untapped markets. [Exhibit 20.]

Compared to the consumer market, fintech players have yet to fully penetrate the SME market, adoption rates in categories other than payments being below 10%. Even in payments, fintech penetration is only about a third of the overall base.

Lending and fintech SaaS products have yet to significantly penetrate across key consumer-facing SME sectors. [Exhibit 21.] The lending sector offers the most consistent picture of low adoption, with a high of 23% in wholesale sectors, to lows of 3% in groceries. There are some more encouraging signs in the software space, although adoption is concentrated around sectors with specialized software needs such as pharmacies, while sectors with B2B2C linkages such as wholesale, and groceries, continue to demonstrate large gaps with value to capture for SaaS players.

Exhibit 20 - SME | SME remains potential white space for lending, wealth, deposit and insurance players to target

Captive opportunity for fintechs to serve businesses across use cases



SMEs remain underserved with captive opportunity for banks and fintechs alike. However, tapping into space requires tailored products and a fundamentally different distribution strategy compared to B2C

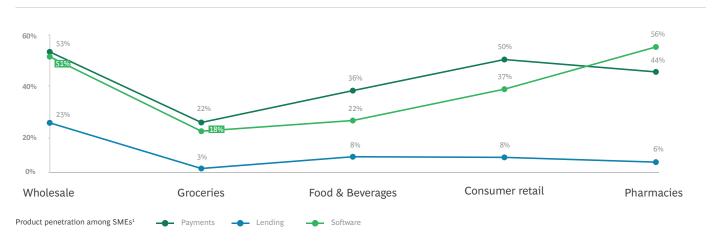
Source: BCG SOFTU Survey (Oct-Nov 2022), BCG analysis

In order to successfully expand in the SME space, fintech players need to rethink their value propositions and deploy tailored products and fundamentally different distribution strategies than those used in B2C verticals. The path to wider adoption is likely to be through wider adoption of digital payments and away from cash. Interventions should focus on digitizing consumers and SMEs in parallel, as both sides of this dynamic will need to be enabled to

support and guide a transition from cash to digital payments. In lending, providers must innovate to overcome inherent risks with regard to lending to SMEs, particularly in less economically mature regions. In the fintech SaaS space, providers will need to educate SMEs on the potential benefits of fintech solution and actively encourage early engagement with products, particularly in online sales and marketing, and accounting solutions.

Exhibit 21 - SME | SaaS and lending remain underpenetrated across key consumer-facing SME sectors

Banks still preferred for traditional products such as lending, with payments the most penetrated fintech product. Software penetration concentrated around sectors with specialized software needs (e.g., pharma) while sectors with B2B2C linkages continue to show white space for SaaS players



1. Number of SMEs using the product relative to total pool of SMEs within the sector **Source:** BCG SOFTU Survey (Oct-Nov 2022), BCG analysis

Deep Dive 1: Powering a Payment Transition for SMES

Cash remains the most widely used method for offline payments to SMEs. [Exhibit 22.] The early stages of digitalization efforts, particularly in tier 2 and 3 cities, have contributed to the continued use of cash. To facilitate a transition away from cash, it is essential to promote the adoption of digital payments. It is imperative that policies and interventions focus on digitizing both consumers and SMEs in tandem, as both parties must be empowered to facilitate a shift towards digital payments.

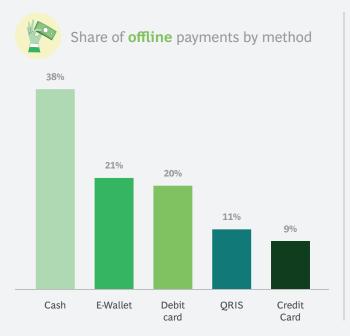
In the online payments space, bank transfers and wallet/ QRIS are the most frequently used methods for online sales at SMEs, while e-commerce platforms are gaining increasing popularity. Although BNPL has been rapidly adopted in recent years, only 2% of consumers use this service for online channel sales.

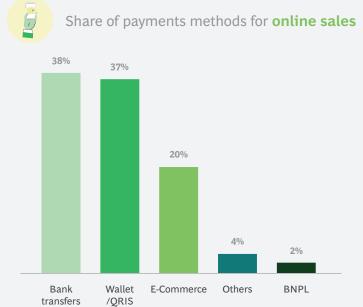
The top barriers limiting fintech adoption revolve around cost of service and security concerns. [Exhibit 23.] These remain top-of-mind for SMEs, with challenges around balancing price considerations with sustainability.

Almost half (49%) of SMEs attribute higher costs of services compared to those offered by banks as the primary reason for not adopting fintech payment solutions, and 17% cite concerns around safety and security. This highlights important implications for fintechs, indicating that encouraging a shift to fintech adoption will require players to address cost and security concerns as a priority.

Focusing purely on costs can create added pressures, as fintechs need to ensure they maintain a sustainable cost model. Players need to actively show SMEs that potentially higher costs—setup costs, transaction fees on inbound payments, or similar—come with wider ecosystem benefits, such as a boost to sales or market potential.

Exhibit 22 - SME | Cash still king for offline payments to SMEs, while bank transfers and e-wallets account for largest payment method for online sales





Note: E-commerce refers to sales processed via stores in aggregator platforms (e.g., Tokopedia) **Source:** BCG SOFTU Survey (Oct-Nov 2022), BCG analysis

Exhibit 23 - SME | Costs and security continue to be top barriers to fintech adoption for SMEs — addressing both will be key in driving the shift



Key barriers to fintech adoption

(SMEs who receive payments purely through traditional channels)



49% "Receiving payments through bank transfers are cheaper and more convenient"

17% "Afraid of poor safety and security"

7% "Don't know how to use or integrate FinTech payments with my business"



Top levers to drive shift to fintech

(SMEs who receive payments purely through traditional channels)



1 "Assurances on safety and security"

2 "Lower cost than existing payment method"

3 "Attractive sign-up promos"

Xxx = % selected by SMEs currently not adopting fintech services for outbound payments Xxx = Ranking of factors which would motivate a shift to using fintech services for outbound payments

Source: BCG SOFTU Survey (Oct-Nov 2022), BCG analysis



Deep Dive 2: Opportunities in the Lending Landscape

The penetration of loan products remains low for SMEs—businesses that do consume loans predominantly utilize traditional channels. [Exhibit 24.] There is a significant opportunity for fintechs to create value by improving financial access for SMEs through expanding the penetration of lending products which currently stands at less than 15% across all loan products.

To achieve this, fintechs must focus on adopting innovative approaches and use of alternative credit scoring techniques for lending to SMEs, particularly in tier 2 or 3 cities, where fragmented data currently hinders access to credit. Access to adjacent, complementary datapoints—either through industry data sharing or from government bodies such as BPIS—will be critical in driving financial inclusion. Lendtech platforms and regulators will need to collaborate to jointly drive this necessary data proliferation.

Exhibit 24 - SME | Penetration of loans remains low for SME, as access to formal financing remains a key challenge faced by small businesses

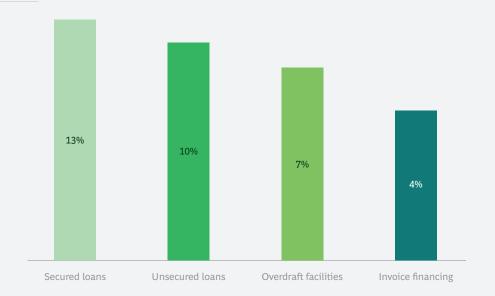


Secured loans most popular among SMEs, but penetration of lending products remain low



Despite rapid rise of lendtechs, long headways remain in driving mass financial inclusion to underserved SMEs

% of total SMEs



Source: BCG SOFTU Survey (Oct-Nov 2022), BCG analysis

Deep Dive 3: Fintech SAAS for SMES Continues to be Nascent

The fintech software space continues to show whitespaces, as penetration remains low across all SME segments. [Exhibit 25.] Online sales and marketing and accounting lead the market for adoption, but penetration stands at less than 20% across even those leading categories.

Our survey reveals that 30% of SMEs are willing to spend on SaaS services. [Exhibit 26.] Of these, micro- and small-sized enterprises make up 84%. Of the SMEs willing to spend on software solutions, more than six in ten of those businesses are willing to spend less than IDR 5 annually.

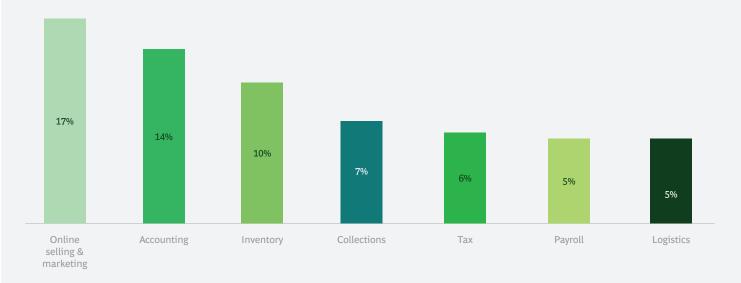
These findings reveal that the appetite to spend on fintech SaaS services remains modest at best.

To unlock demand, it will be crucial to educate SMEs on the benefits and efficiencies offered by these software solutions, particularly among smaller sized businesses. This will require fintechs to enhance their outreach efforts by deploying larger salesforces and adopting tactical approaches, such as providing free trials, interactive demos, training, and support to entice hesitant SMEs.

Exhibit 25 - SME | Software space continues to show white space as penetration remains low across services

Online sales and accounting services are leading categories, but penetration low across SaaS products

% of total SMEs: Software services penetration

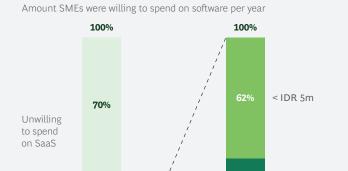


Note: Online selling and marketing refers to tools for selling via online channels (e.g., store builders) Source: BCG SOFTU Survey (Oct-Nov 2022), BCG analysis

Exhibit 26 - SME | SMEs show willingness to spend on software; with tax related solutions being the most preferred



SMEs were most willing to spend less than IDR 5m on software services



22%

15%

IDR 5m - 10m

IDR >10m

Tax, online sales and logistics most popular SaaS products in terms of willingness to spend

Ranking willingness to spend on SaaS from recall

30%

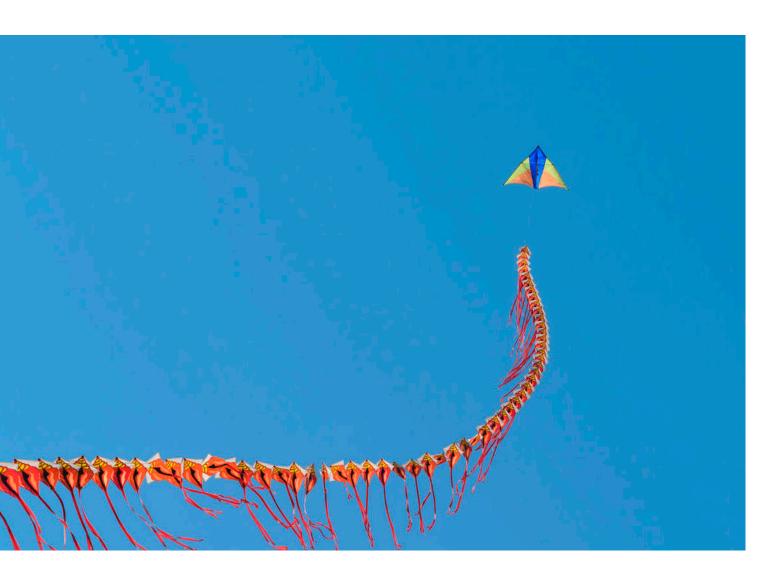
Willing to

spend

on SaaS



Note: 1. Average spend is approximated from expenditure ranges supplied by respondents Source: BCG SOFTU Survey (Oct-Nov 2022), BCG analysis



Learnings from Frontier Markets

rontier markets with deeper fintech adoption can offer valuable lessons to inform Indonesia's fintech journey, and help guide an effective and sustainable future growth strategy. Through analyzing the successes of more established fintech ecosystems, such as India and the USA, Indonesia can learn how to effectively nurture its own fintech industry.

India's adoption of the UPI system provides a clear example of how integrated payment systems can facilitate seamless digital transactions and drive industry growth. Furthermore, India's digital lending and MSME financing growth highlight the potential of digital lending to support smaller businesses.

Additionally, the US' embedded finance ecosystem demonstrates the benefits that open banking solutions can offer, which could serve as early lessons for Indonesia's SNAP implementation. By taking inspiration from these established fintech markets, Indonesia can chart a successful path for its own fintech future.

India's UPI Offers Compelling Lessons



UPI Pilot launched by National Payments Corporation of India (NPCI). Adoption accelerated when demonetization occurred in November 2016.



Open API infrastructure enabled widespread adoption across 30+ banks and over 50 fintech applications.



Launch of UPI 2.0 to pre-authorize transactions and create recurring transactions.



Memorandum signed to introduce UPI-based QR payment system in 10 countries.

UPI has been a remarkable success for India, with transactions valued at more than US\$700 billion taking place by the first half of 2022. As of August 2022, UPI accounted for 70% of all digital payments, with the digitization of payments overall doubling across India since the launch of UPI. There are now more than 350 banks and fintech applications live on the UPI platform. India's UPI system demonstrates that, with the right systems in place, players across tech, fintech, and traditional banks can all be winners:

Tech GooglePay



customers and two billion

Fintech PhonePe



registered users and three billion

Traditional banks Icici Bank



users incorporate UPI in iMobile app.

The success of UPI offers compelling lessons for Indonesia's financial ecosystem, as it looks towards the development and evolution of its own Integrated Payment Interface (IPI) and improved BI-FAST payment system infrastructure.

Collaborative approach. The collaborative approach taken by the government, regulators, banks, and fintech companies in building the UPI ecosystem was critical to its success. As Indonesia looks to build its own payment infrastructure, the government must look to work closely with banks and fintech players to create a unified platform that benefits all stakeholders.

Interoperability. In India, the UPI interface can be used by all banks and fintech companies, regardless of their size. This has made it easier for customers to transact seamlessly across different platforms. Indonesia can learn from this approach and create a unified platform that allows customers to transact across different banks and fintech companies.

Low-cost infrastructure. UPI has been successful in India because it is a low-cost infrastructure that can be accessed by small merchants and individuals.

Focus on user experience. The UPI interface is user-friendly and simple, making it easy for people to use.

Emphasis on security. UPI was built with a focus on robust security measures, including two-factor authentication, device binding, and transaction limits. As Indonesia builds out its payment infrastructure, there must be consideration given to customer protection and fraud prevention measures as account-to-account transactions offer new opportunities for fraud.

The UPI story also carries many lessons for fintech players, especially in terms of new business models and new forms of monetization.

With the adoption of a unified payment paradigm, digital wallet players have the potential to create unique value propositions for their e-wallet offerings beyond the established payments space. This can involve expanding to multi-product lines that leverage merchant networks and datasets, such as utilizing transaction data for lending or shopping data for monetization or insurance underwriting, and using merchants as distributors for financial services. An alternative option would be for wallet players to pivot to enable account-to-account transfers, which will require operators to focus on transaction-linked lending instead of dependency on merchant-discount rates (MDRs).

A unified payment paradigm is also likely to have implications for neobanks and neo-acquirers, allowing for an expanded suite of services. Neobanks could become the primary transaction account for many users, by building seamless transaction experiences with loyalty initiatives upfront. Similarly, neo-acquirers will have the opportunity to grow and enable transaction-linked financial products for merchants. In conclusion, there are several new opportunities for monetization for fintech players, and it is

important for them to remain open to exploration and seizing new opportunities.

As the UPI example shows, as the payment ecosystem in Indonesia matures, numerous new possibilities for value creation will arise; fintechs must remain open and seize new opportunities to create value.

Learnings from India's MSME Lending and Account Aggregator Space

India offers another valuable example for Indonesia's fintech evolution, with learnings from innovation done by B2B e-commerce platforms to allow SMEs to easily access working capital and bridge the supply chain financing gap. The product construct used, the tight integration with B2B marketplaces and leveraging 'consent-based' open data ecosystems to drive SME financial inclusion will find multiple potential parallels for Indonesia.

The B2B marketplace platforms (including players such as Udaan ad OfBusiness) give out 'terms of payment' credit lines to SMEs to help complete marketplace transactions within their ecosystem. The SME then has a specific time period e.g., 60 days to pay off the loan. The credit lines are often pitched as a zero-fee payment product, with the credit cost forming part of the transaction price, similar to the BNPL solutions often seen in the B2C space. The credit line plays the dual role of driving transaction conversion / user retention as well as monetization.

The construct is like the line of credit that suppliers would often give to their large buyers, but now, super charged through a tech enabled model that gives access to much wider base of SMEs. A critical enabler for this model has been the account aggregator framework setup by RBI which allows SMEs to give lenders access to not just their credit histories but a wider set of financial history data points through robust consent based mechanism. This has allowed lending approval rates to improve and enable platforms / lenders to reach a critical mass of SMEs to drive financial sustainability for this product line. Early trends on collections have been positive, even if it would take a few lending cycles for lenders to adjust their credit model and arrive at a true 'pricing-limit' fit.

In Indonesia, which has also seen rapid growth in B2B focused platforms, this product construct is already seeing early traction with players like AgriAku and Bukuwarung. There are three key go-forward implications for players in the ecosystem



Growth opportunity for traditional banks: Outsized opportunity for traditional banks to leverage the funding cost advantage and capture a new growth market. In a B2B BNPL construct, every percentage point of cost can drive large impact on the profitability and scalability of the book.



Early adoption: Potential for SME focused platforms to include this construct early on in their product journey, to drive stickiness and transactions.

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Collaborate on data: Opportunity for open banking and BaaS players to work together with regulators, banks to create the open data network (including leveraging BI-SNAP) to enable scalable credit decisioning.

Lessons from BaaS Journeys in the US

The successful deployment of BaaS and open banking models in the United States offers valuable insight for Indonesia, particularly as BI-SNAP kicks in. There are broadly two archetypes observed for BaaS or open banking providers:

New-age digital connector: API aggregators that connect multiple financial institutions and provide standardized interface to access and integrate data with consent, charging a fee for every API call. Plaid is a prime example of this model, and hosts over 7,000 fintech solutions built into its platform, with over 12,000 financial institutions connecting to over 200 million customers. Plaid was valued at US\$13.4 billion as of its 2021 funding round.

Revived challenger banks: License-holding banks that partner with fintech players can provide a financial services backbone in areas such as loans and deposits, distributed by the fintech platform. These operators charge a combination of set up and infrastructure fees, backed by revenue-share agreements. Green Dot—a US-based fintech and bank holding company—is estimated to have reached 15% of all Americans through its embedded financial service products using this model.

With the impending deployment of SNAP in Indonesia, the U.S. experience can provide valuable insights into the challenges and opportunities faced by players in the financial ecosystem.

New SME SaaS plays: Potential for new SME SaaS players that can aggregate financial information and enable financial transactions with existing bank accounts, sidestepping the need to create new accounts. SNAP will enable a new type of SME SaaS player to enter the market, able to aggregate financial information and enable financial transactions with existing bank accounts, sidestepping the need to create new accounts.

Existing SaaS operators: Opportunity for existing SME SaaS players to integrate with existing financial institutions to improve their own service propositions e.g., integrating with banks to do automated recon, tax filings etc.

Traditional banks: Opportunity for traditional banks to leverage data from other financial platforms to deepen their understanding about customer preferences and financial services usage, helping inform a path to adapt their own offerings to meet customer needs.

The rise of API players in the finance space—Brick, Ayoconnect as high-profile examples—as well as banks' own BaaS plays will also shift industry dynamics.

Niche fintechs: Niche fintech players can offer deposit and payment products that improve retention and data to expand lending opportunities.

Large ecosystem players: Reduced regulatory requirements and improved speed-to-market for large commerce ecosystems to create embedded financial products

Challenger banks: Challenger and tier-two banks will have an opportunity to open up new modes of customer acquisition, offering a low-cost path to growth

Across the wider ecosystem, there will be a growing need to reconsider the norms and standards of responsible data ownership, systems to safely share and store customer data, and appropriate frameworks to prevent misuse.

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Strategic Imperatives for the Fintech Ecosystem

ndonesia's vibrant fintech ecosystem is a sleeping giant with barely tapped potential. Realizing that opportunity could unlock significant value for ecosystem players, economies, and the customer base, boost financial resilience and enhance financial inclusion.

Informing and steering a future path to sustainable growth will require deep ecosystem understanding, and careful consideration of the strategic route forward to maximize value and maintain competitiveness in this rapidly evolving space. That could, and should, be guided by key learnings from successful implementations around the globe.

Through our comprehensive research of financial ecosystems and interventions in markets around the world, we have identified critical imperatives for fintech players, incumbent operators, and regulators.

Strategic imperatives for fintech players

Reorient tech for monetization. Driving monetization and improved unit economics will require a very different set of technology capabilities compared to those built by fintech players for user acquisition and rapid transaction growth. These new capabilities include, but are not limited to:

- AI/ML models to drive cross-selling, hyperpersonalization, and optimization of incentives
- Automation of manual tasks to improve cost structures
- · Enhanced fraud models to prevent leakage
- Integration with multiple additional data sources to drive better risk management

Get the business and product strategy right and do it early. Serving all segments with all products won't work in Indonesia's hyper-competitive banking space, and neither will serving niche customer segments with low-margin products. Fintech players will need to be clear on their target segments, value propositions, and their path to profitability from a very early stage. This will require fintech players to build out key strategic understanding:

- Deep understanding of market landscape, customer segmentation, revenue, and profit pools
- Tailored products embedded deep into existing user flows (B2C) and business processes (B2B)
- Sophisticated 'what-if' modelling to game out impact of business cycles on unit economics
- Strategic design of the operating model to align cost structures with planned scale

Build the distribution and engagement model of the future. True customer acquisition costs—which includes incentive costs to drive transactions—are becoming unsustainable, with companies relying on standard digital marketing and cashback or discount-based schemes. To win in this space, fintech players will need to:

- Build innovative partnerships that drive organic traffic
- Explore offline networks and distribution models
- Leverage social or viral campaigns, particularly in the B2C and at-scale B2B spaces
- Create smart and hyper-personalized gamification to drive engagement

Consider compliance and governance as a capability.

It is important to build a holistic approach towards regulatory compliance and internal governance, rather than treating it as a bolt-on or afterthought to strategic business planning. Achieving this will require a proper regulatory strategy, the right governance structure, and an appropriate suite of technology and data tools and capabilities able to safeguard customers and company interests against both internal and external risks.

Potentially enter into opportunistic M&A for talent and skillset. Specialized talent in areas such as AI, data analytics, and risk management is increasingly important to scaling and maintaining superior products. Players should consider appropriate partnerships or corporate acquisitions to keep pace with the speed of change, minimize shortage of critical positions, and ensure a strategically aligned skills and talent base. This will require a clear and robust assessment of the current talent pool, and identification of gaps where additional talent is required. A tailored approach in pursuing M&A should be leveraged to ensure prudent target-firm assessment and a seamless post-integration journey, considering areas such as cultural fit, operational synergies, and similar.

Strategic imperatives for incumbents

Strategically designed partnership models. Banks will need to shift from exploratory and ad-hoc partnerships to a more strategic approach if they are to establish the right business models for this evolving financial landscape. This must be backed by organization-wide clarity on the priority segments and areas of partnerships, as well as leading and lagging performance metrics being targeted. This strategic shift will require:

- Early engagement of senior leadership
- Building partnership strategy as part of an overall organizational roadmap
- Deeper understanding of the fintech unit economics and the key enablers needed

Transform the operating model. Banks will need to change their people and process models, internal policies, and ways of working to capture value as partnerships develop across the value chain—from external client acquisition to internal capability builds. This will necessitate:

- Defining the right operating and organizational structures, for example establishing the right teams to coordinate with partners
- Adapting critical business processes, such as adapting risk management processes with new credit scoring tools
- Aligning technology enablers and embedding them into existing tools

Seize the initiative. This period of rapid growth and evolution represents a generational opportunity for incumbents to target and capture significant value from the persistent underbanked space in Indonesia. It also offers the chance to regain a lucrative user base from the

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technology space, as fintech players have to temper their rapid growth as new regulations around network arrangements and interoperability come into force. This will require business strategies, technology enablers, and operational models to work together effectively and synergistically.

Capturing the banking opportunity. With significant revenue and profit pools to be captured from BaaS, and growing appetite from fintechs to leverage ready-made banking solutions to expand services, incumbents need to ensure their APIs are ready to integrate with potential partners to seamlessly leverage shared data. This will require significant effort to develop the right technology architecture necessary to connect and compete in an open finance ecosystem—allocating dedicated resources to support testing, compliance review, and standards for data sharing.

Regulatory frameworks for clarity. It is critical that incumbent operators design for an agile and digital-ready workforce by institutionalizing digital governance, revamping support functions, and designing for next-generation technology and delivery. Senior leaders need to establish new ways of working, as companies embrace agile and adopt a 'test and learn' culture to ensure workforces can adjust speedily to changing priorities, while adopting new tools to deliver superior services.

Regulatory enablers

Regulatory frameworks for clarity. Startups continue to innovate at speed, in a landscape where consumer problems and solutions are ever-evolving. Prescriptive, rule-based policies can limit these value-adding activities. Regulators have an opportunity to estabzlish strategically designed regulatory frameworks that minimize gray areas for startups, shifting towards principle-based regulations to ensure relevance and flexibility in the fast-changing environment.

Forums for collaboration. The last few years have highlighted the need, and the benefits, of regulators and fintech players working and interacting closely to create enabling structures for new business models. Efforts

should be engaged to formalize these structures, build structured forums that provide equal and open access to all players, and also empower inter-regulator collaboration to help drive effective and sustainable ecosystem growth.

Open and interoperable networks. Global exemplars such as UPI, as well as local innovations like QRIS, have shown the power of open networks to transform customer experiences. With upcoming innovations like SNAP and IPI, it is essential to establish governance that enables and ensures participation across industry stakeholders while driving consumer adoption to generate critical mass.

Sandboxes to enable innovation. The success of regulatory sandbox programs across developing markets has become a proven model for enabling controlled experimentation and nurturing innovation. Expanding sandbox access to early startups across all categories will be critical to accelerate pace of innovation. In addition, implementing a two-door policy where sub-optimal results can be easily rolled back will allow regulators to control risk while widening room for additional experiments in the sandbox pipeline.

These strategic recommendations provide a roadmap for achieving success in the financial services market, as industry players, government bodies, and regulators work towards strengthening the financial ecosystem in Indonesia, Southeast Asia's largest economy.

Ongoing innovation and dynamic customer habits will continue to transform the fintech ecosystem, meaning that an ability to adapt—for both operators individually and the ecosystem as a whole—will be critical to sustainable success. As Indonesia's sleeping fintech giant continues to stir, the value that can be captured within this ecosystem is bound to increase. The key question is which of the incumbent operators and emerging fintechs will position themselves at the forefront of this financial evolution and emerge as leaders.

How BCG can help

Boston Consulting Group has an extensive financial industry practice built on leading global experience, including a recognized and respected history building partnerships across Southeast Asia. Our pioneering practice includes a fast-growing portfolio of fintech projects and partners, working with both incumbent operators and ambitious emerging players to deliver high-impact intervention and transformation support.

BCG combines cutting-edge technical and functional expertise in areas such as risk management, data science, analytics, and AI, backed by deep industry expertise and a multi-disciplinary team to deliver solutions through world-leading management consulting, technology and design, and corporate and digital ventures. We work in a uniquely collaborative model across the firm and throughout all

levels of the client organization, fueled by the goal of helping our clients thrive. Our experience includes a diverse range of high-impact projects across Southeast Asia.

BCG's extensive Southeast Asian practice also incorporates deep insights into the regional consumer, SME, and corporate landscape. As part of the survey for this report, we captured detailed data on the lending and investment patterns of both retail and SME customers, providing rich insight on needs, trends, and expectations across the region. We invite any interested parties to reach out to the authors directly if you are interested in accessing additional data on any of the topics or learnings highlighted in this report, or learning about other opportunities to partner with BCG to enhance your strategic business direction.

- Conceptualized and built industry-leading payments app in Southeast Asia that now boasts >US\$2 billion valuation
 - Designed growth strategy for major regional fintech player to unlock superapp ecosystem with profitable growth
- Built automated ML-led pricing models for a leading APAC e-commerce platform with >5% revenue growth
 - End-to-end conceptualization and build of a personalization engine to drive cross selling for regional fintech player
- Designed and built advanced risk management platform to drive neobank lending program with 50% to 60% improvement in non-performing loans

- Built and launched multiple digital banks and lending propositions within six months of initiation, with positive unit economics (risk adjusted return)
 - End-to-end design and app build of a retail wealthtech app achieving two million user acquisitions in one week
- Completed a digital wealth business build and launch for a leading diversified financial services company in India
 - Drove integration of two Southeast Asian startups with >US\$10 billion valuation, working across all integration planning efforts, including setting up of synergy workstreams, defining E2E operating model for joint holding company, and ensuring change management plan in place

How AC Ventures can help

AC Ventures (ACV) is an early-stage venture capital firm that helps fintech startups succeed in Indonesia and Southeast Asia. The firm provides a full-fledged value-creation suite that goes beyond capital, offering operational experience, industry knowledge, local networks, and resources to help companies accelerate growth.

ACV's in-house team has extensive experience in building and scaling successful startups, which they use to help their portfolio companies navigate growth challenges. The team's expertise in fintech and related sectors, such as e-commerce and logistics, helps startups stay ahead of the curve.

ACV's vast professional network of investors, regulators, and industry experts is invaluable for fintech startups. This network helps startups secure partnerships, navigate regulatory hurdles, and access new markets. ACV also provides resources such as talent, marketing support, and strategic guidance to help fintech startups achieve early scale. The firm's team works closely with portfolio companies to identify opportunities for growth and develop strategies to capitalize on them.

It has a deep understanding of the local market and is well-positioned to identify promising investment opportunities. It has a track record of successfully investing in Indonesian fintech startups, giving it credibility with institutional investors looking to deploy capital in the region. ACV can help these investors identify promising opportunities, conduct due diligence, and provide ongoing support to their portfolio companies. The firm also offers its limited partners the chance to co-invest in elite fintech startups.

Currently, ACV has over US\$500 million in assets under management, invested across multiple funds, spanning a portfolio of more than 120 companies, including category-leading fintech names such as Xendit, KoinWorks, Stockbit, ALAMI, Payfazz, and more. The firm has a team of over 35 professionals, led by Adrian Li, Michael Soerijadji, Helen Wong, and Pandu Sjahrir, with offices in Jakarta and Singapore.

Methodology

BCG combined a range of analysis techniques to inform this study, including qualitative analysis, quantitative analysis, and detailed customer surveys. Together, the quantitative analysis complements our in-depth interviews to provide a comprehensive picture of the fintech landscape from both an industry and customer perspective.

Qualitative: Qualitative assessments through interviews with fintech leaders

Qualitative research was conducted through in-depth interviews with C-level leaders in the fintech space to understand their perspectives on industry and regulatory trends within the landscape.

Among the key topics discussed were strategic imperatives in today's business climate, key priorities and challenges for senior stakeholders, partnership and collaboration opportunities with traditional banks, and insights on upcoming regulatory changes.

BCG and ACV interviewed over 20 senior leaders across sectors spanning from lending, payments, open banking, wealth to software, spanning startups of different stages of maturity.

Quantitative: Quantitative assessment through surveys

Quantitative insights reflected in this report were gained through two comprehensive surveys targeted towards Indonesian consumers and SMEs respectively.

The surveys sought to assess the usage of financial products by consumers and SMEs across Indonesia, while identifying key learnings as to the types of channels (fintech vs. bank) used to procure financial services, platforms used, assessment of current platforms, product usage and barriers, and levers for fintech adoption.

Consumer survey

Over 1,000 respondents across Indonesia participated in the consumer survey. Respondents were selected to capture a diverse range of age groups, wealth bands, occupation, and geographical areas. The consumer survey respondent pool is derived from the proportion of Indonesian population who are smartphone users. Additionally, respondents were selected to maintain a baseline threshold of financial literacy, with all participants using at least one form of financial product to ensure relevance to our study.

SME survey

Over 600 SME owners across sectors and regions in Indonesia, covering micro-, small- and medium-sized businesses, were covered by our survey. The SME survey respondent pool is derived from an overall market size of ~15–20 million SMEs, reflective of the number of SMEs in Indonesia with a digital presence. Respondents were similarly selected to maintain a baseline threshold of financial literacy, with all SMEs surveyed using at least one form of financial product.

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