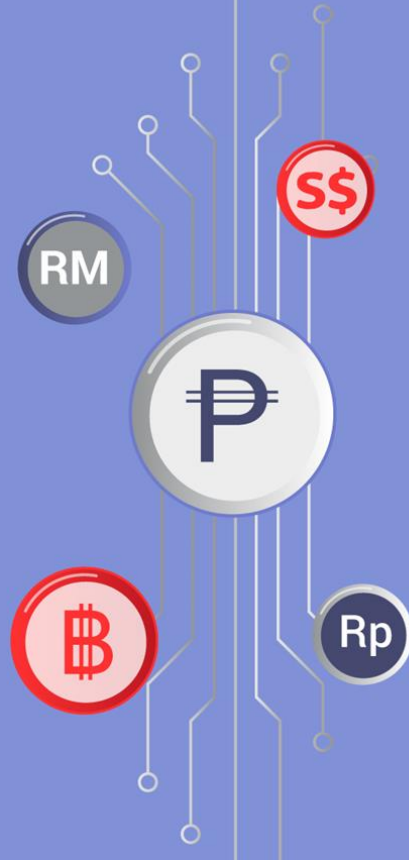


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SEA Fintech Report

January 2022

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Preface

Southeast Asia's FinTech landscape is in a phase of rapid growth. The accelerated digitalization due to the COVID-19 pandemic and new offerings from FinTech players have provided significant tailwinds for the sector. In addition, the changes in consumer behaviors along with supportive regulations have helped to democratize financial services. These digital players are now on an equal (almost) footing vis-à-vis their traditional counterparts. Digital offerings in payments, lending, borrowing, and banking services are seeing encouraging traction across the whole of Southeast Asia. Reflecting on some of these trends, we have summarized the FinTech trajectory so far and its likely evolution ahead.

The content for this report has been developed by conducting several rounds of discussions with industry experts and has been triangulated with our proprietary primary research findings. Accordingly, we have been able to arrive at some interesting insights on this sector

We are thankful to EDBI for their valuable contributions to this report. Their broad network, resources, and expertise in the high-growth technology sectors helped us better appreciate the emerging trends in Southeast Asia FinTech.

We cover 8 themes in this report



1 Robust economic growth and digitally engaged consumers creates massive opportunity to drive innovation in Fintech adoption



2 Learning from case studies, sound regulatory framework and merchant adoption is key to help FinTech growth post achieving critical scale...



3 ...and we are at a critical juncture of FinTech evolution in SEA where regulatory support/clarity is essential to surge ahead



4 e-wallet payments surged 1.5x in 2020 with \$37 Bn market size; currently accounting for only around 2% of overall private consumption expenditure in Southeast Asia. The segment could multiply 3x by 2025



5 Credit distribution is key to fintech profitability, scale up merchant operation, and move the aspiring middle class population up the accessibility ladder which together could account for a sizeable market by 2025



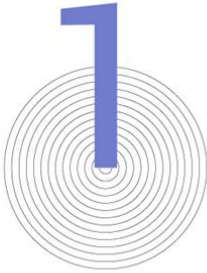
6 Emergence of Buy Now Pay Later (BNPL) schemes offers a viable short-term financing alternative to improve accessibility for consumers and sales conversions for merchants



7 Digital banking reduces overhead costs, creates operational efficiency and offers differentiated value-added services. It is likely to have a USD 150 Bn+ estimated market size by 2025

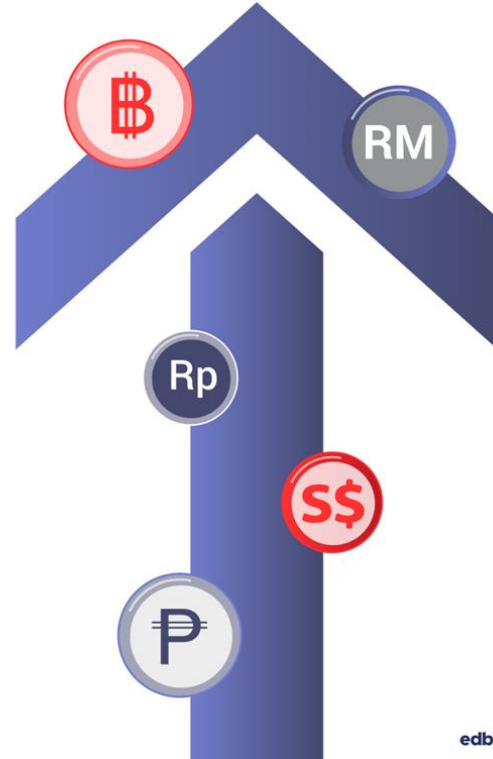


8 Web 3.0. will drive the next step of evolution in digital e-commerce and pave the way for innovations in Fintech



Macro Backdrop

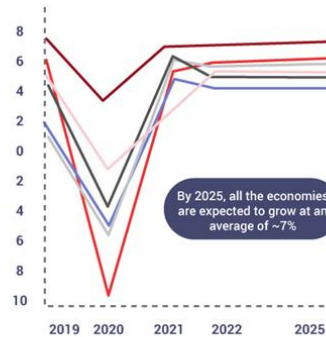
Robust economic growth and digitally engaged consumers creates massive opportunity to drive innovation in Fintech



SEA economies are among the fastest growing globally and are expected to see a strong recovery post pandemic

Gross Domestic Product (GDP) growth 2019-F2025, %

● Philippines ● Thailand ● Malaysia
● Singapore ● Vietnam ● Indonesia



By 2025, all the economies are expected to grow at an average of ~7%

Vietnam, Malaysia and Philippines have a stronger growth outlook- high single digit growth rate over the next 5 years

Private final consumption expenditure As a % of GDP, 2020

Private Consumption Rest of GDP

Nominal GDP (2020, Bn)>>



Highlights

GDP growth:

Vietnam's effective fight against Covid resulted in growth in their economy in 2021. Meanwhile, long lockdown periods in Indonesia, the Philippines, and Malaysia contributed to their declining economy. GDP trends are expected to improve as vaccination rates reach near herd immunity levels allowing the easing of lockdown restrictions.

Private consumption:

The middle-class population accounts for a significant share of private consumption across SEA countries. Higher disposable income, along with rising urbanization are expected to drive sustained retail consumption growth. Since majority of the economies have a young workforce with high digital penetration, there is strong inclination to spend online. Accordingly, spending for new online use cases is expected to grow over time.

The region boasts of a healthy digital funnel, laying out a fertile ground for digital solutions to flourish

Online consumer funnel 2020

Mn of population



Highlights

With more than 400 million internet users and 70% or higher internet penetration levels, SEA presents a massive opportunity for digital solutions to flourish. The region onboarded 50 million online service users and 40 million online shoppers to the digital funnel of SEA in 2020. The sheer size of Indonesia's population has contributed to half of the new online shoppers in SEA from 2019 to 2020.

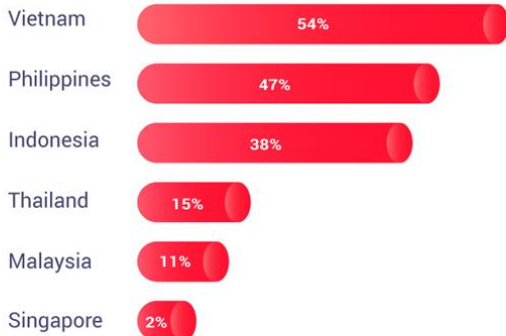
Meanwhile, the rapid expansion of use cases from digital ecosystem players has opened the door to new touchpoints and extend reach beyond metro and tier-one areas. The region will see further growth in the coming years as digital transactions habits continue to get strengthened.

The large unbanked + underbanked population has led to cash dependent economies...

SEA unbanked and underbanked population¹

2020

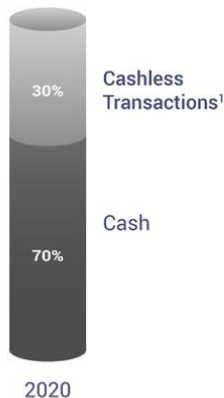
Unbanked



¹Includes cards

SEA Cash vs. Cashless Transactions¹

2020



2020

Note1. ATM, e-wallet etc.

Highlights

Unbanked and underbanked population:

SEA has a high unbanked and underbanked population. More than 70% of the underbanked population is driven by Indonesia and the Philippines. Meanwhile, Malaysia and Singapore lead the region in terms of banked population. Vietnam presents a unique opportunity for fintech players due to its high unbanked population.

Cash vs. Cashless Transactions¹:

Three primary factors are driving digital payment growth in the region. The first two drivers are smartphone penetration and the low cost of mobile data. Vietnam and Singapore have the lowest and highest mobile data cost at 60 cents per gigabyte and \$2.50 per gigabyte, respectively. The average mobile data in SEA is ~\$1 per gigabyte, a mere quarter of the global average cost of mobile data, \$4 per gigabyte. The second factor is marketing campaigns. Shoppers benefit from loyalty discounts and cashback on eCommerce platforms when using the platform's e-wallet. Small shops and traditional markets have also begun using QR codes to acquire online shoppers on consumer tech platforms. Merchants are very conscious of changing consumer behavior who now prefer convenience from contact-less payments. The overall impact has contributed to digital payment adoption for a significant part of the population, including the unbanked and underbanked population.

...creating a massive opportunity to drive strong value in the FinTech space - leading to the entry of a myriad of players across service lines over the years

FinTech Evolution

Value-added services driving Fintech led business model innovation in the financial sector

Evolution

- Digital customer onboarding
- Near instant turnaround time
- Digital repayment, recovery, and collection
- Digital account management
- Integrated services on consumer tech, fintech, and Traditional Bank platforms



Highlights

Digital Payments:

e-wallet has evolved to meet the rapid changes in consumer needs and behavior, in line with the rapid developments of digital payment infrastructure.

Digital lending:

Fintech players began offering alternative lending products and services to the under-served population that does not have access to traditional bank financing or credit products. BNPL products emerged to help reduce checkout friction for consumers and have also led to higher sales conversions for merchants. AI-based loan processing, eKYC, and alternative credit scoring are innovative supply-side developments that helped fintech players achieve scale and provide digital lending products for the masses.

Digital banking:

The fintech sector has reshaped how consumers and merchants transact, borrow, lend, and save. Now, digital banks have unleashed digital financial products and services such as insurtech, wealth tech, and remittance.




2

Case Studies

Sound regulatory framework and merchant adoption is key to help FinTech grow



In United States, China, and India strong government support and clear regulatory framework coupled with financial institution innovation drove FinTech growth...

Stakeholder impact	Initial Catalyst (2010 to 2014)	Growth Driver (2015 to 2018)	Massive Adoption (2019 to 2021)
 United States	Consumers adopted the service extensively due to banking system gap	Merchants then drove rapid adoption and growth	Government support led to ubiquity, pushing banking system to innovate
 China	Consumer Tech drove growth by expanding use cases	Consumer Tech drove change by solving gaps in traditional banks	Consumer personal finance products appealing to younger generations pushed adoption
 India	Government digital initiative initiated financial institution innovation	Banks introduced interoperable payment system	Consumer Tech use cases led to massive adoption

Highlights

United States (US):

The US is an early adopter of consumer technology through home-grown consumer technologies and fintech innovation such as the launch of NFC from Google. Consumer-to-consumer transfers also changed the fintech sector amidst the rise of Apple Pay, Amazon Pay, and PayPal. Banks were slow to implement changes since the legacy banking system relies on automated clearing houses to process transactions.

China:

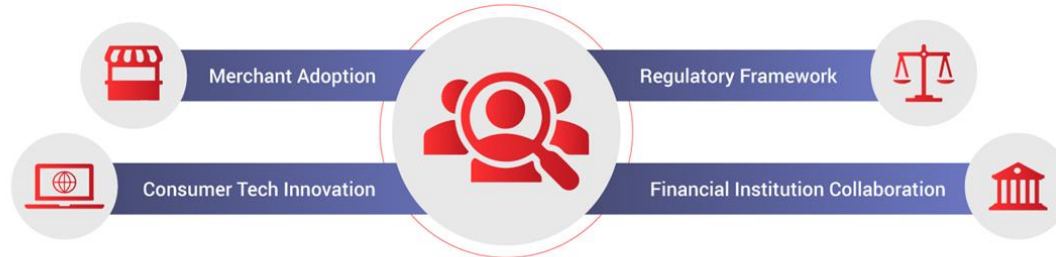
China's payment players acquired digital banking licenses prompting changes in traditional banking to compete with fintech players. Digital bank licenses enabled consumer tech players to develop innovative fintech products such as digital lending for merchants on their platform. Merchants then had instant access to funds transferred from customers, send funds directly to suppliers, and apply for working capital loans. To ensure a non-monopolistic market the government implemented strict rules on scan-and-go payment with daily spending limits.

India:

India's digital payment revolution came about from the Digital India initiative with the release of the Unified Payment Interface (UPI) from the central bank. It resulted in an interoperable payment system connecting a network of registered banks under one mobile app. The UPI system expanded use cases to include eCommerce, bills, travel, and bill charge.

...and we believe that further growth in SEA will hinge on government support to provide the necessary regulatory framework and gain public trust for mass merchant adoption

FinTech Growth



Highlights

Regulatory framework:

A well-functioning fintech sector requires continued monitoring and control by the government to support innovation while also mitigating consumer risks. Healthy, supply-side competition is also a by-product of effective regulation.

Financial institution collaboration:

Partnerships offer both tangible and intangible benefits such as shared resources and knowledge transfer to support mutual growth. Sharing know-how and best practices will help stakeholders achieve scale more effectively and efficiently. Cooperation will also upskill human capital found in both the fintech and banking sectors.

Consumer tech innovation:

Adoption of consumer tech innovation occurs when players solve a problem faced by consumers and merchants. These use cases will drive digital payment acceptance for both sides and lead to payment ubiquity.

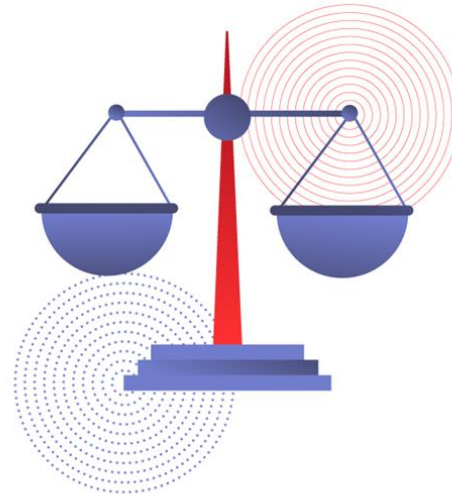
Merchant adoption:

Supply-side agents from financial institutions, fintech players to firms rely on merchant adoption to push their financial products and service to consumers. Similarly, merchants gravitate towards new fintech products and services to improve the point-of-sale experience for customers to increase conversion. Each stakeholder plays a crucial role in fintech innovation, and holistic growth is key to sustainability.



Regulatory Backdrop

Sustainable Financial Services
and FinTech progress through
government support



Unbanked users can hold eWallet accounts (except VN), but there are caps on balance held which limit use cases

eWallets regulatory framework in SEA

Advantage Low  High

	Indonesia	Malaysia	Philippines	Singapore	Thailand	Vietnam
User account limit	Balance: <IDR 10 Mn or \$700	Balance: <MYR 200K or ~\$4.7K	Balance: <PHP 100K or \$2K	Balance: <S\$ 5K \$3.6K	Balance: THB 30K or \$900	Balance: <VND 100 M or \$4.3K
eWallet sign-up	Requires mobile number	Requires mobile number	Requires mobile number	Requires mobile number	Requires mobile number	Requires bank account
Requirements to obtain a license	<ul style="list-style-type: none"> • Paid-up capital of IDR >3Bn at or \$300k • Must place 40% of deposit in Indonesian banks. 	<ul style="list-style-type: none"> • Non-bank EMI: RM1 Mn or 8% outstanding e-money liabilities • Large E-Wallets storing >RM200/user possess RM5Mn or 8% of outstanding e-money liabilities in capital funds 	<ul style="list-style-type: none"> • Minimum paid in capital of PHP100 Mn or \$2 Mn 	<ul style="list-style-type: none"> • Standard Payment Institution License: S\$100K or • Major Payment Institution License: S\$250K 	<ul style="list-style-type: none"> • E-money : 100 Mn Baht • Acquiring : 50 Mn Baht • Payment facilitating : 10 Mn Baht • Accepting e-Payment: 10 Mn Baht • e-Money transfer service: 10 Mn Baht 	<ul style="list-style-type: none"> • Bank License VND 3,000 Bn or \$ 145Mn • Intermediary Payment Service License VND 50Bn or \$2.1Mn

Highlights

User account limit:

User account balance limits exist in every country in the region to address anti-money laundering risks. However, it hinders the expansion of use cases since higher ticket items can't be purchased using an e-wallet.

eWallet sign up:

e-wallet players strive to improve the user registration process through digital KYC and account verification. e-wallet sign-up only requires a registered mobile number and OTP verification for basic e-wallet access. Vietnam is an exception where regulators require e-wallet users to sign up by linking their bank account information, meaning only the banked population can own an e-wallet account

Capital requirements:

As an added layer of user protection, regulators have placed minimum capital requirements and funds to cover operational liabilities of e-wallet players to protect user account balances from e-wallet platform insolvency risk.

Overall market:

The regulations are relatively less stringent in Indonesia. Vietnam and Thailand have regulations which help to mitigate material risks to the traditional banks. Malaysia and Singapore's users benefit from seamless registration and higher user account limit. Countries such as Vietnam and Thailand have the highest minimal capital for e-wallet license requirements while Indonesia has the lowest in the region, a key attraction for players seeking to enter the e-wallet space.

For lending, there are caps on lending and interest amounts along with minimal capital requirements to obtain a license

Advantage Low  High

	Indonesia	Malaysia	Philippines	Singapore	Thailand	Vietnam
Investor lending limit	Lending limit via electronic platform: USD 138,000 / person	USD 11,800 / order	P2P USD 2 Mn for general investors or USD 198,000 for higher investor class. Investments capped USD 40,000 retail investors with <5% of income/year & Income >USD 198,000 <10% income/year.	A minimum of USD 5 Mn	Income based THB <30K <1.5x monthly income THB >30K <5x monthly income Business loan: THB <50Mn	N/A
Borrower lending limit	30% of monthly income	No limit, but depends on the issuer's risk scoring conducted by the P2P operator	P2P lending platform will assess your application and review your profile based on your creditworthiness.	Personal borrowers : 12x of monthly income	N/A	<ul style="list-style-type: none"> • No regulations yet • Personal borrower: Vary from US\$130 to US\$3,860
Interest Limit	Interest limit: 0.8%/day ~ 24%/month (May 2019)	<ul style="list-style-type: none"> • No regulations yet • Average interest: 10% - 18% 	Highest so far: 30%/month	<ul style="list-style-type: none"> • No regulations yet • Average interest: 2-6% 	<15%/year	<ul style="list-style-type: none"> • No regulations yet • Average interest: 1.2-1.5%/month
Capital requirement to obtain license	Paid-up capital requirement is USD 69,000 upon registration & USD 172,000 when applying for license to OJK.	Paid-up capital requirement: USD 1.18 Mn	Lending Company: Minimum paid in capital of \$2 Mn	Lending Company: Major Payment Institution License: S\$250K	P2P platform provider paid in capital: USD 147,000	P2P Lending: No regulation

Highlights

Borrowing limit:

Strict regulation on borrowing limits reduce default risk and NPL rate in the region. Interest rate: Interest rate caps protect borrowers by setting a maximum rate a lender can charge borrowers. There are no interest rate caps in the Philippines on contractual loans. License: Vietnam has yet to release formal regulation for P2P lending. Lending providers and platforms are also subject to strict license requirements. The minimum paid-in capital required to obtain a digital lending license is the lowest in Indonesia. The country is working on a new regulatory framework aimed to make it stricter to obtain licensing for fintech players to safeguard consumers.

4

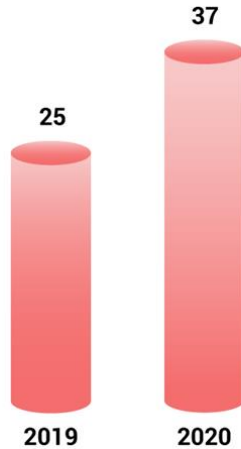
Digital Payments

e-wallet Payments surged 1.5x in 2020; currently accounting for only 2% of overall PFCE, the segment could multiply 3x by 2025

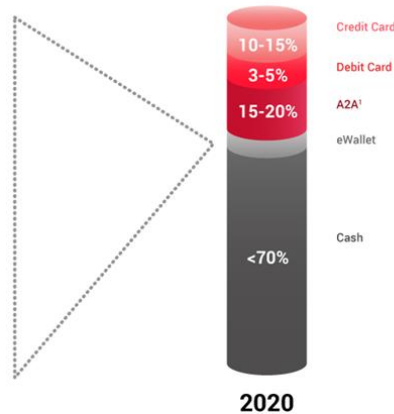


eWallets saw a period of strong growth in 2020 and mix of use cases evolved significantly; however the segment still accounts for a miniscule ~4-7% of payments in the region

SEA e-wallet GTV
2019- 2020, USD Bn



SEA Payments GTV, split-case % of market
2020



Highlights

E-wallet use case:

Most SEA countries rely on cash for service and product transactions. However, in the last five years, the digital ecosystem has seen robust growth from online alternatives, led by the emergence of consumer technology and eCommerce players. As of 2020, e-wallet payments were 4-7% of the overall digital payment market. e-wallet transactions got a significant boost from the pandemic-led lockdown measures across the region. eCommerce and food delivery services were two strong use-cases for e-wallet.

Payments split:

Long lockdown periods pushed traditional cash on delivery users to switch to e-wallet. This was noticeable in the case of the unbanked population who had no access to debit or credit cards. Offline payment touchpoints have also expanded as governments have encouraged the use of contactless payments. Accordingly, the use of QR codes and NFC payments has spread across the metro, Tier 1 and 2 locations in many countries.

e-wallets are facing monetization challenges due to thin margins coupled with discounts/cashbacks...

Ewallet transaction flow and monetization levers

REVENUE LEVERS		
Payment Flow	Transaction	Fee ¹
Merchant to ewallet	<ul style="list-style-type: none"> Recharge Bill payment 	<0.5%
	<ul style="list-style-type: none"> Entertainment Remittance Travel & Ticket bookings 	<1%
	<ul style="list-style-type: none"> Food delivery Ride hailing Ecommerce 	2%
End User to ewallet	<ul style="list-style-type: none"> Deposit fee 	1%
	<ul style="list-style-type: none"> Conversion fee 	1.5%
	<ul style="list-style-type: none"> Internal send and receive fee 	1.5%
COST LEVERS		
Payment Flow	Transaction	Cost
eCommerce eWallet to end user	Cashback and discount	5%-8%
On demand services e-wallet to end user	Cashback and discount	9%-15%

Highlights

Revenue Levers:

High volumes of transactions across use-cases are critical for e-wallet players revenue generation. This helps them to offset the low/no commission fees. Commission fees are unlikely to increase as they are an important driver for continued consumer adoption and use.

eCommerce and consumer technology players face some degree of behavioral challenges from the users' stickiness to promotions and discounts, even beyond the initial, customer onboarding phase. Payment and eCommerce players provide various incentives for customers to make purchases using their e-wallet. Most players run monthly promotional campaigns. The campaigns typically offer shoppers and users discounts and cashback for their next purchase on the platform.

Cost Levers:

Commission fees generated by on-demand platforms average at 7% and 10% for eCommerce platforms use cases. Although the commission fee revenue differs, both use cases still face high cash burn from cashback and discounts that are generally 5% to 15% per transaction..

...and hence are looking at embedded finance and collaboration with Consumer Tech players, to drive up monetization and stickiness

Evolution of e-wallet

Conceptual	Phase 1 – Standalone e-wallet Model	Phase 2- Limited Integration e-wallet Model	Phase 3- Highly Integrated e-wallet Model
Target segment	Time poor, middle class, young professionals, and metro dwellers	Phase 1 + Gen X, upper-middle class, mid-career professionals, and Tier 1	P1 + P2 + Gen Z, college/school students, aspiring middle class, and T2
Service offering	Ride-hailing payments, food delivery payments, phone recharge, delivery	P1 + Broaden use cases and offered payment-as-a-service	P1 + accomodate the whole digital ecosystem
Monetization model	Service commission + float interest	Service commission + float interest+ VAS	Service commission + float interest+ VAS + loan interest
eWallet player evolution	Gojek, Shopee, Line, Momo	Go Pay, Shopee Pay, Line Pay, Momo	Shopee Paylater, Line Pocket Money, Momo Paylater, Go Pay Later

Highlights

Target segment:

e-wallet began by catering to the needs of the middle class, urbanites then expanded to the upper-middle-class and tier one, and finally the aspiring middle class in the tier two region.

Service offering:

e-wallet players extended their reach by offering additional use cases to expand their product and service lines. Players are focused on providing payment as a service through embedded payment systems found throughout the digital ecosystem.

Monetization model:

e-wallet business models initially relied on transaction fees generated from on-demand services, then upped their game by focusing on value-added services such as BNPL. They are now exploring new revenue streams such as loan interest from digital lending products.

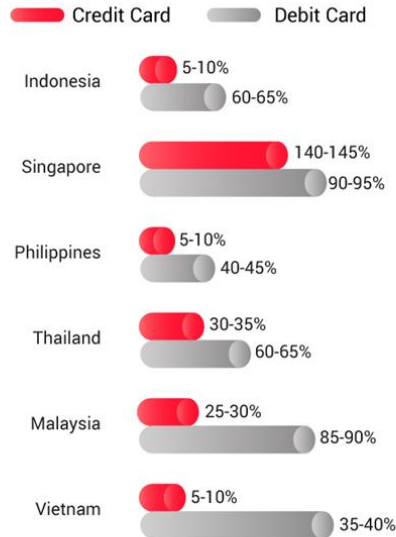
eWallet player evolution:

e-wallet players have evolved as per consumers' needs and the gaps in merchant payment operations. Massive adoption occurred in phase 3 when e-wallet players positioned their core products and services to reduce friction at checkout for players in the digital ecosystem.

Low card penetration in the region offers material opportunity for e-wallets to drive growth of digital payments...

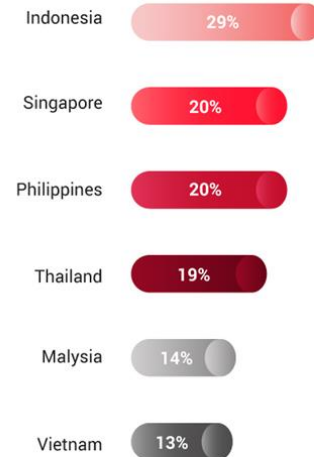
SEA credit card and debit card penetration¹ by country

2020



e-wallet use on eCommerce platform, split by country

2020



Highlights

SEA credit and debit card penetration:

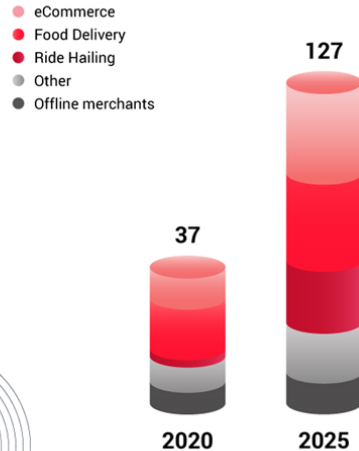
Singapore, Malaysia, and Thailand lead the credit and debit card penetration in the region. Obtaining a credit card is extremely difficult in Indonesia, the Philippines, and Vietnam. The high unbanked and underbanked population in these countries implies that the credit and debit card penetration in these countries is likely to remain low in the foreseeable future.

eWallet use on eCommerce platform:

Meanwhile, inclusive financial products and services offered by e-wallet has led to rapid adoption in countries with low credit card penetration. Regulation in Vietnam requires end users to possess a bank account to open an e-wallet account. In other countries end users only need a phone number to register for an e-wallet account.

...and we expect the segment to multiply nearly 3x by 2025 aided by supply-side scale-up; eCommerce, food delivery expected to dominate the use cases

e-wallet market size split by use cases
2020- 2025 (USD bn)



Trends in digital ecosystem and impact on e-wallet
2020- 2025

Advancement



In-house and
3rd party 3PL

Cloud Kitchen

Digital vaccine passports

Smartphone penetration

QR code acceptance

Impediment



Logistic limitations
in Tier 1 & Tier 2

High platform Fee

Pandemic induced
movement restrictions

Digital banking apps

Tax rise on consumer
tech platforms

Highlights

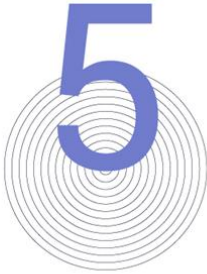
eWallet market size:

SEA's e-wallet CAGR is to grow by ~30% with eCommerce and food delivery use cases alone contributing \$50 billion by 2025. Bills, charges, and offline merchants will double in growth with a forecasted joint contribution of \$30 billion by 2025. Ride-hailing will see strong growth, as movement restrictions are eased over time.

Trends in the digital ecosystem:

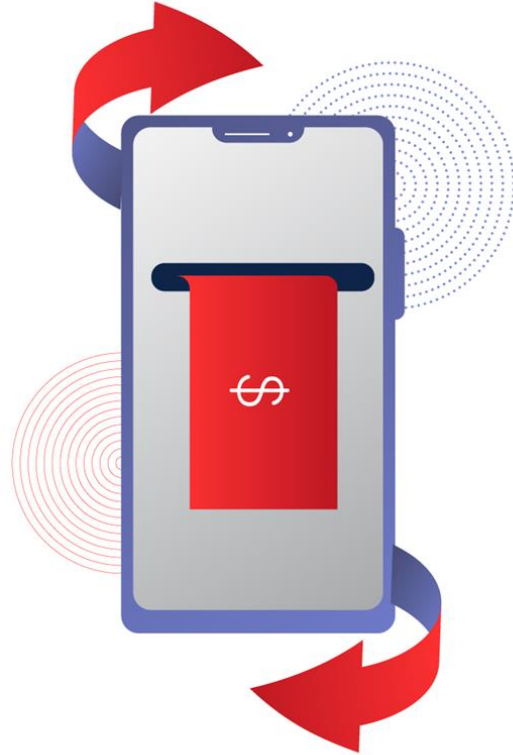
Process innovation of supply-side players is critical for the scale-up efforts of digital ecosystem players. Slow adoption of technology will hinder reach to include regions outside of the metro and Tier 1 region.

5



Digital Lending

Credit distribution is key to fintech profitability, scale up merchant operation, and move the aspiring middle class population up the accessibility ladder



Access to credit is a challenge for large segments of the population and digital lending platforms are trying to solve for this gap...

	Bank Balance Sheet Lending	FinTech Balance Sheet Lending	P2P Lending
Target Segment	Borrowers with established credit and income seeking >5 year payback	Banked with formal income, middle class, seeking 1-3 year payback	Banked with informal income, aspiring middle class seeking <1 year payback
Eligibility	Financial credit scoring + collateral	Financial data (if available) + alternative credit scoring using consumer tech and social media	Alternative credit scoring + matchable investor

Highlights

Bank balance sheet lending:

Banks acquire fund for their lending operation from initial borrowed capital and consumer deposits. Customers with established credit profile and sufficient collateral are primary candidates for bank loans. Bank loans offer longer payback periods ranging from five to ten years depending on use case and borrowers are generally required to pledge an asset/collateral. This is different from fintech's balance sheet lending and P2P players' lending platforms.

Fintech balance sheet lending:


Fintech players obtain capital from institutional investors. Funds distributed on the fintech player's lending platform are from its own capital. These loans are generally small, short-term loans with a tenure of less than a year. Fintech and P2P players process applicants using automated loan processing systems.

P2P lending:


P2P lenders provide a marketplace for investors and borrower to connect. These platforms generate revenue by charging a fee for facilitating the lender and the borrower to fulfil a loan transaction. In the evolved P2P models, loan-originators (typically NBFCs) join the platform to actively market and acquire borrowers for the platform. This model allows the platform to focus more on the supply-side (lenders) part of the lending equation.

...by offering customizable loan products for consumers, enabled through agile processes and alternative credit scoring mechanisms

FinTech Loan Products offer customisation and based on need

	Alternative Credit Scoring	Income based limit	Ride-sharing pool	Rent Advance	Non-degree majors	Informal business
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Bank Loan Products are one size fits all

	Income + Collateral based limit	Private vehicle	Home	University	Business
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SEA bank loan penetration



SEA's digital lending approval rate



Highlights

Credit distribution:

The sheer volume of loans approved quickly accumulates interest and transaction fees since the payback period is generally shorter than banks.

Consumer buying power:

Consumers have additional cash flow leading to a broader range of use cases with the ability to purchase higher ticket items.

Digital ecosystem use cases:

Consumer tech players have access to millions of data points on consumers. They leverage data gathered on consumers to develop an alternative credit scoring system.

Digital lending players:

P2P and crowdfunding rely on investor risk appetite to match and raise funds for borrowers using alternative credit scoring with less onerous eligibility requirements than the traditional bank loan products.

They are also providing opportunities for SMEs to grow, especially for the large informal businesses found in SEA

SME loan needs by sector¹



Loan processing time banks vs fintech

Lender	Average Processing Time
Bank	15-20 days
Crowdfunding platform	7-10 days
P2P platform	5-7 days
Digital Cash Loan Platform	1-3 days

Key Takeaway

- SMEs contribute ~40% to overall SEA GDP
- SMEs in SEA are found in cashflow intensive sectors
- Average SME in SEA have 7 days of working capital

Highlights

SME Sector:

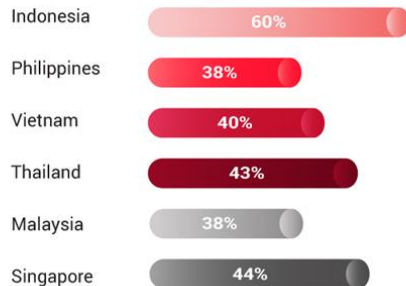
SMEs on average contribute to 40% of SEA's¹ economy. Additionally, the retail trade sector accounts for the bulk of the SMEs in SEA except for Singapore, where more than 50% of its SMEs are in the manufacturing sector. Both sectors have high daily overhead such as the cost of goods and labor expenses.

SME loan needs:

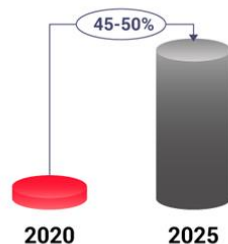
SMEs generally rely on cash payments to reduce overhead costs when paying suppliers and employees. This results in inefficient paper trail bookkeeping to obtain an SME business loan from banks. Furthermore, SMEs require quick access to funds for working capital needs. SMEs in the trade sector need sufficient working capital to fulfill daily inventory needs to avoid stockouts. However, banks typically take 15-20 days to process loan applications.

We expect the SME digital lending segment to see massive growth over the next 3-5 year period driven by online application, processing, and approval system

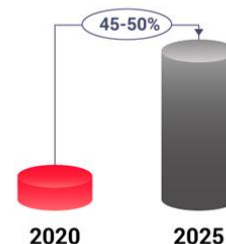
SME pre-pandemic contribution to GDP



SME digital lending growth 2020-2025P



Consumer digital lending growth 2020-2025P



Highlights

Pre-pandemic SME contribution:

On average, SEA SMEs have contributed around 40% of SEA's GDP. Most of these SMEs require working capital, but do not have the option to access these from banks.

Digital Lending Growth:

The automated loan processing systems used by digital lenders materially reduces the processing time. This allows significant volume growth from small-sized loans distributed to many SMEs. Accordingly, digital lending has strong growth prospects in the region.

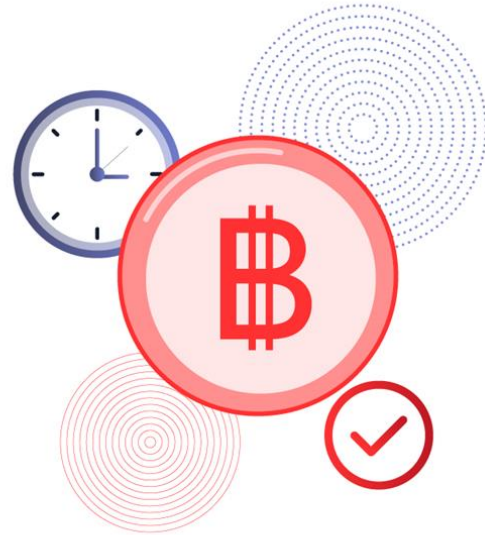
Fintech loan platforms:

Fintech platforms facilitate time-efficient transactions between investors and borrowers. They cater to a wide set of SMEs and leverage alternative datapoints to arrive at the lenders credit profiles.



Buy Now Pay Later (BNPL)

Alternative short-term financing
aims to improve accessibility for
consumers and sales conversions
for merchants



Fintech Players have rolled out extensive BNPL schemes across product and service lines...

Mapping of SEA paylater players and offering

Segment	eCommerce	On-demand	Online Travel	Online lending	Online Lending
Player	Shopee Paylater	Go Paylater	Traveloka	Kredivo	Atome
Use cases					
Food delivery	✓	✓	✓	✗	✗
Ride hailing	✗	✓	✗	✗	✗
Bill pay	✓	✓	✓	✓	✓
Mobile recharge	✓	✓	✓	✓	✓
Online travel	✓	✗	✓	✓	✓
eCommerce	✓	✓	✓	✓	✓
Product					
BNPL on own Platform	✓	✓	✓	✓	✓
BNPL Embedded on merchant site/ other platform	✗	✓	✓	✓	✓
Cash loan	✓	✗	✗	✓	✗
Virtual card	✗	✗	✓	✗	✗
Physical card	✗	✗	✓	✗	✗
Offline merchant	✓	✓	✓	✓	✓
Payment					
Deferred	✓	✓	✓	✓	✓
Installment	✓	✓	✓	✓	✓

Highlights

Segment:

The BNPL landscape in SEA is a mixture of four major segments. Three segments began as eCommerce, on-demand, and online travel platforms. These players have evolved and added BNPL as an additional revenue stream to their core services. The fourth segment is that of pure-play online BNPL players.

Players:

Pure online lending players have offered BNPL services for over five years. Meanwhile, consumer tech lending players have emerged in the BNPL scene in the last 2 to 3 years.

Use case:

Use cases vary based on the initial business model of respective players. Pure lending players offer a similar set of use cases, while non-lending players offer pure lending use cases in addition to their core offering.

Product:

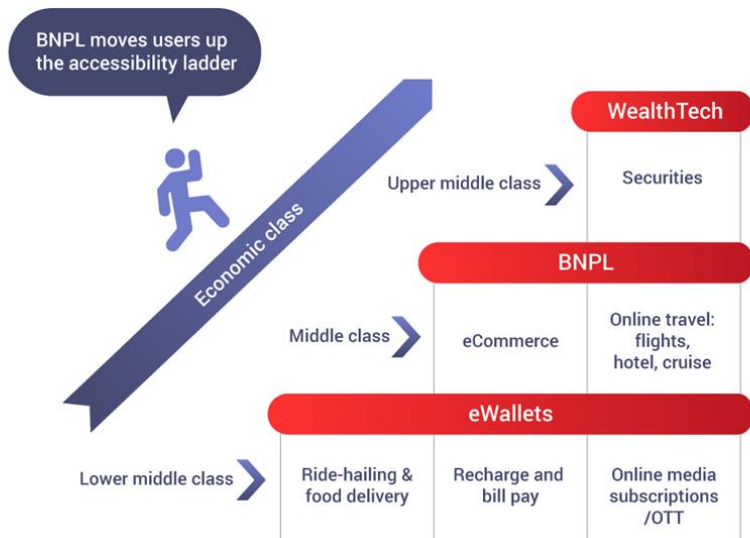
BNPL products have evolved from embedded BNPL at checkout on merchant sites to offline merchant purchases.

Payment:

Most players offer both deferred payments and installment plan options for their users. Currently, on-demand service players focus on deferred payments since core products and services are low-ticket items.

...to help these consumers move up the accessibility ladder

Economic impact of paylater on use case



Highlights

Economic class:

The prevalence of a sizeable middle-income population (along with low banked and unbanked population) in SEA makes the region very suitable for the take-off of loan offerings. BNPL players are well placed to cater to the accessibility part of consumers credit demand.

Consumer segment:

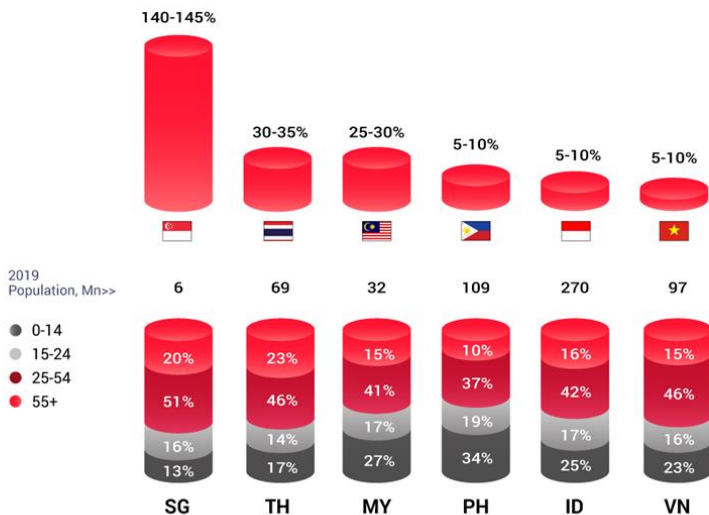
The middle-class segment can be divided into sub-classes i.e. lower, middle, and the upper-middle class. As consumers upgrade from the lower levels to the middle and upper levels, their credit needs evolve from basic (ride-hailing, food delivery and bill payments) to higher-ticket items like eCommerce, travel bookings and investments. BNPL players cater all to all three classes with varying degree of focus.

Use case:

Digital ecosystem players will benefit from higher consumer consumption levels as daily use cases expand. Merchants can increase basket size through bundled services such as vacation packages.

The region boasts of a young and highly consumptive population - however large portions of this population do not have access to organised credit...

Credit cards per capita¹ vs. region population split
2020



Source(s): World Bank, GSQ, RedSeer Analysis

Highlights

Credit card per capita vs. Region population split:

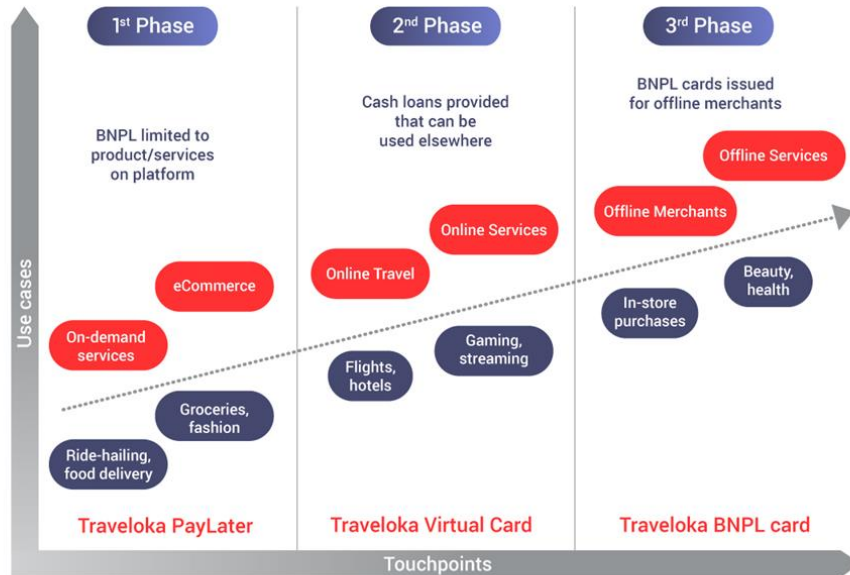
Indonesia, the Philippines, and Vietnam constitute 80% of SEA's population. However, these three countries have the lowest credit card penetration in the region. Hence, there is large unmet demand for credit. The younger, middle-class population has the most potential to move up the affordability ladder within the next five years in line with the expansion of the formal workforce.

Parallels in exposure to banking:

Fintech players have taken measures to introduce organized credit options to consumers such as BNPL, loans and virtual cards. This can help close the lending gap by providing an alternative credit to the under penetrated segments of the population

...and these offerings have evolved fast and extended their use cases to bring in a wider array of purchases under their coverage

BNPL evolution and digital ecosystem adoption



Highlights

BNPL limited to product/services on the platform:

The first phase of the BNPL evolution began when consumer tech and eCommerce platforms offered online merchant financing as a POS solution to increase conversion.

Cash loans utilized on multiple platforms and offline:

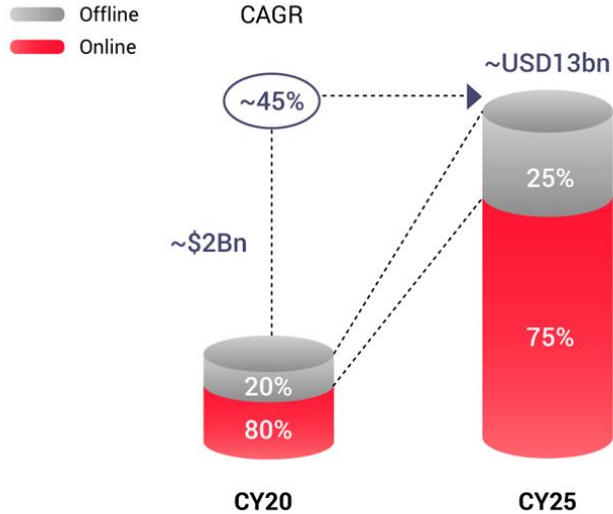
During the second phase, digital BNPL products evolved into a BNPL wallet with features enabling consumers to withdraw cash and pay for online travel, bill pay, and other online services.

BNPL cards issued for offline merchants:

During the third phase of evolution, BNPL products evolved into physical cards for in-store consumer use. Now endless touchpoints are linking offline and online merchants. BNPL card eligibility uses alternative credit scoring and assesses creditworthiness based on users' purchasing behavior from phases 1 and 2. BNPL card offers an alternative payment solution for a significant share of SEA's population.

The growth outlook looks promising – we see a ~USD13Bn market for BNPL in SEA by 2025

SEA BNPL growth outlook
2020-F2025



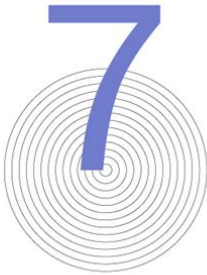
Highlights

BNPL market size:

The BNPL market in SEA is estimated to grow at more than ~45% CAGR between 2020 and 2025. Offline expansion is seen as an important growth driver and this will be led by 1) newer use-cases like offline purchase of high-ticket items such as beauty or repair services, and 2) greater BNPL penetration in the offline merchant base. Accordingly, the Offline share of BNPL is likely to grow from 20% in 2020 to 25% in 2025.

BNPL users:

Currently, there are more than 8 million BNPL users across SEA. Within the next five years, BNPL user base is expected to reach over 46 million new users. Expansion of current BNPL use cases is pivotal to mass adoption. Consumer acquisition will require touchpoint expansion by onboarding offline merchants.





Digital Banks

Digital banking reduces overhead cost, and creates operational efficiency, and offers differentiated value-added services



Consumer expectations demanding convenience and real time changes have helped the growth of digital banks

	 Traditional bank	 Digital Banks
Business Location	Brick and mortar banks with branches	Virtual banks, 100% app based
User interaction	<ul style="list-style-type: none"> • In-person account opening • Face to face financial advisory • Phone-in or in person consultation relationship management services 	<ul style="list-style-type: none"> • Online onboarding • Virtual financial advisory • Chat/Phone-in relationship management services
Online features	<ul style="list-style-type: none"> • Online access limited to monitoring, reporting, & submitting debit/credit card applications • Hybrid wealth management products, • Formal lending products 	<ul style="list-style-type: none"> • Virtual debit/credit card issuance & management • Digital financial products: lending, insurance, wealth management, remittance, payments
Accessibility	Geographically restricted	Internet access dependent
Examples	<div style="display: flex; justify-content: space-around;"> <div>BCA</div> <div>Mandiri</div> <div>VPBank</div> </div>	<div style="display: flex; justify-content: space-around;"> <div>Jenius</div> <div>Tinkoff Bank</div> <div>WeBank</div> </div>
Customers>>	<div style="display: flex; justify-content: space-around;"> <div style="background-color: #e91e63; color: white; border-radius: 10px; padding: 2px 10px;">~22+M</div> <div style="background-color: #e91e63; color: white; border-radius: 10px; padding: 2px 10px;">~4+M</div> <div style="background-color: #e91e63; color: white; border-radius: 10px; padding: 2px 10px;">~6+M</div> </div>	<div style="display: flex; justify-content: space-around;"> <div style="background-color: #e91e63; color: white; border-radius: 10px; padding: 2px 10px;">~3+M</div> <div style="background-color: #e91e63; color: white; border-radius: 10px; padding: 2px 10px;">~13+M</div> <div style="background-color: #e91e63; color: white; border-radius: 10px; padding: 2px 10px;">~200+M</div> </div>

Highlights

Business location and accessibility:

Digital banks operations are almost entirely online, barring the need for an offline administrative office. Hence, these banks do not have expenses related to a brick-and-mortar operations. These banks have lower customer acquisition costs as they acquire customers online. Accessibility to their service is largely dependent on internet connectivity and well-functioning digital banking apps.

User interaction and online features:

Traditional banks rely on human capital to operate branches and maintain customer satisfaction. Standard operating procedures can differ from branch-to-branch leading to a non-uniformed user experience. In contrast, digital banks try to improve customer satisfaction by continuously upgrading their user interface. All their products, services and touchpoints are managed online with 24-hour access and real-time reporting.

Lean operational models enable Digital Banks to be consumer centric and address critical gaps in consumer banking...

Consumer challenges	Digital Banks
 In-person account management (onboarding and changes)	 Simplified online account creation
 Paper-based, requiring posted mail for add-on features (cards, cheques, physical pins, deposit)	 Instant access to account add-on features (cards, cheques, 2FA, digital deposit)
 Lack of/outdated/limited online account management tools	 User friendly platform and interface
 Delayed data and reporting	 Real time data and reporting
 Exhorbant fees and long wait time on international transactions	 International payment solutions
 Limited operating hours	 24 hours access

Highlights

Consumer challenges:

Consumers at traditional banks have multiple pain points, ranging from long waiting times to exorbitant fees. Banking products have a one-size-fits-all design and lack personalization. Limited presence in digitized services and office hour limitations for front-end support leads to troubleshooting delays for consumers.

Digital bank offering differentiation:

The allure of customizable financial services has reshaped the banking experience, especially for millennials. Digital banks have been able to offer the same financial products and services as traditional banks, but with a higher degree of flexibility for consumers. Low transaction costs and features such as consumer-to-consumer transfer help them to onboard the high unbanked (and underbanked) population on their digital banking services. Digital banks also offer streamlined services, 24-hour online support along with an embedded ecosystem that provides access and intuitive account management features.

Numerous players have entered the foray to create efficiency in banking systems

Player	Value proposition	Consumer cohort	Potential Challenges in expansion
Multi-country	Digibank Reputation and trust – DBS and UOB are both Singapore-based banks. Both banks are backed by world-renowned banks	Consumers aged 25-40 with high disposable incomes	Currently requires offline verification – not purely online Slow in adapting features to rapidly evolving industry
	TMRW Multi-sector presence has potential for varied offerings	Consumers aged 18-25 mainly looking to build up savings	Transactions limited to single geography – lacks partnerships for international payments
Locally owned	Tonik Philippines's first digital bank Offer the highest potential transaction limit in the market of up to PHP 450,000	Consumers aged 24 years old on average residing in urban areas	Lack of a national ID makes the verification process difficult
	Timo Vietnam's first digital bank Coffee shop style branches	Consumers aged 20-30 tech-savvy, city dwellers	Reach beyond metro area Must pick up card in a branch not 100% online operations
	Jenius One of the first players in Indonesia; Strong marketing led by educational content for consumers on personal finance	Consumers aged 18-35 with low disposable incomes	Introduction of usage fee can potentially lower user growth

Highlights

Value proposition and focus consumer target:

Up and coming digital banks in SEA offer a unique value proposition to differentiate themselves from traditional banks. Digital banks focus on personalized financial services with unique use cases catered to meet the needs of specific consumer cohorts.

Potential challenges in expansion:

Digital banks without a traditional-parent bank will require high brand building costs to gain market share from digital banks that are subsidiaries of a traditional bank. Disruptions to digital banking app services will block all banking services compared to a traditional bank. Digital banks also require highly skilled human capital to operate their tech-heavy systems. It can be a challenge to find suitable human capital in emerging markets.

Collaboration is necessary to ensure sustainable practice with government support as the key driver to improve access to financial services

	Indonesia	Malaysia	Singapore	Philippines
Governing Body	Bank Indonesia & Financial Services Authority	Bank Negara Malaysia	Monetary Authority of Singapore	Bangko Sentral ng Pilipinas
Objective	Support digital innovation and consolidate existing banks	Support SME and underbanked Promote financial inclusion	Improve customer experience Cost savings to consumers Support SME	Financial Inclusion Support SME
License type	One	One	Digital full bank (DFB) Digital wholesale bank (DWB)	One
License issued & limitation	Issued 7, prepared additional 7	Max 5 licenses	Max 2 DFB Max 3 DWB	Max 7 licenses
Location	One office is required in Jakarta	One office is required, No branches	One office No branches	One head office is required, No branches

Highlights

Regulatory framework objective:

Regulatory framework ensures sustainable practice and the holistic growth of each player in the market. Regulators in the region support digital banking growth to achieve three common objectives. These include onboarding the under-served population, developing innovative financial products and services, and providing access to capital for SMEs.

License types and issued, and limitations:

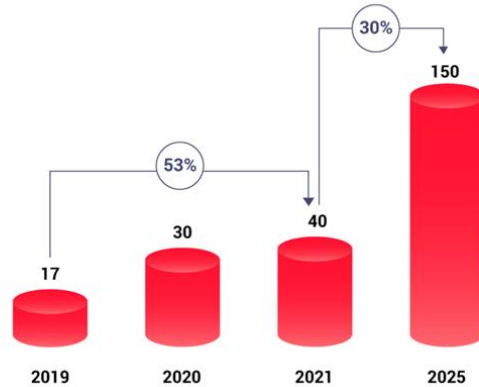
Countries generally offer a single license option except for Singapore that offers Full bank or Wholesale bank licenses. Certain countries limit the number of digital banking licenses issued to maintain equilibrium within the banking sector.

Location:

Another shared requirement found in most regions is the establishment of a physical office for administrative purposes.

Encouraging growth outlook for digital banks

Digital banking transaction value growth outlook
2020-F2025, USD Bn



Highlights

Consumer challenges:

Traditional banks consumers deal with a range of pain points, from long wait times to exorbitant fees. Banking products have one size fits all design and lack personalization for consumers. Lag in digitized services and office hour limitation for front-end support leads to troubleshooting delays for consumers.

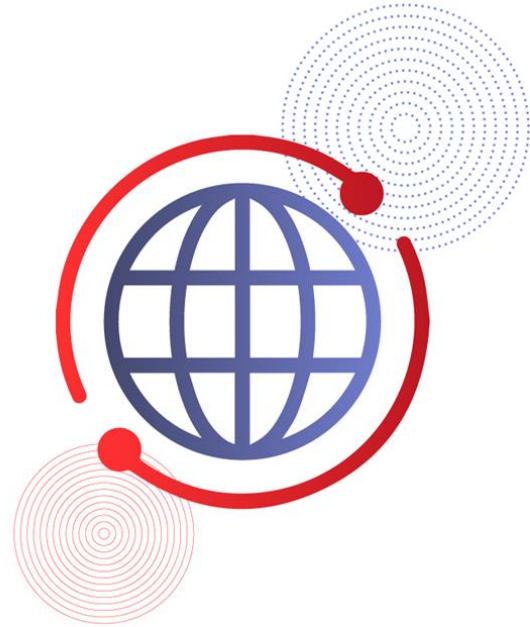
Digital banking outlook:

Going beyond digitized traditional banking products and services is pivotal to the longevity of fintech-based, digital banks. Within the next five years, government-backed digital initiatives aim to scale legacy banking systems to ensure traditional banks are on par with challenger banks to promote product and process innovation. Fintech-based, digital banks must rethink their value proposition now to avoid becoming obsolete. Likewise, traditional banks must approach digital financial services as an opportunity to capture the unbanked population, an untapped source of revenue. Holistic growth for both traditional banks and fintech players is key to a well-functioning financial sector.

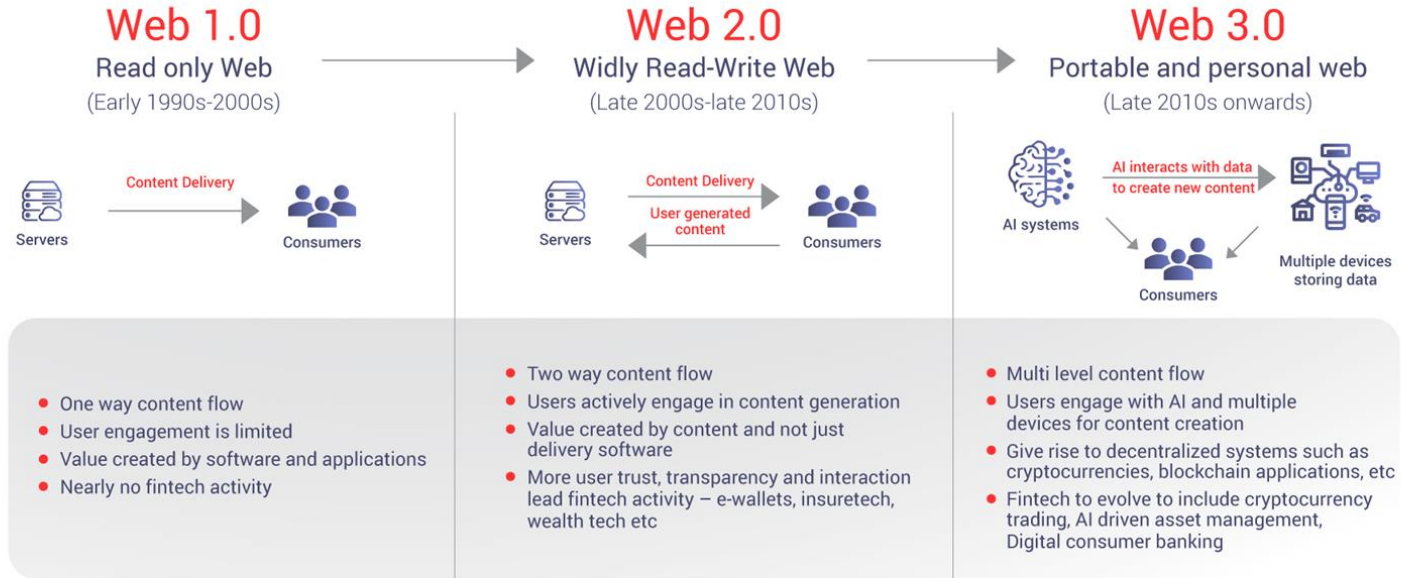


Web 3.0

The next step of evolution
in digital e-commerce to pave way
for innovations in fintech



Web 3.0 is poised to bolster the fintech sector with several new services enabled by the decentralized nature of Internet economy



Acknowledgement to our contributors



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Niraan de Silva

VNLife: Managing Director and Board Member



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OakNorth: Co-Founder and CEO



James Shanahan

Revolut: Singapore CEO



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