

DIGITAL CHALLENGER BANKS

A DESIRE • A DREAM • A VISION

November 2020

SFA

SINGAPORE
FINTECH
ASSOCIATION



FinTech Control Tower

By **BCG** BOSTON CONSULTING GROUP **Expand** A Company of THE BOSTON CONSULTING GROUP

“

Champions aren't made in
gyms. Champions are made
from something they have
deep inside them -
a desire, a dream, a vision

Muhammad Ali

”

After speaking with over 40 founders and venture builders over the past few months, what is clear is the drive, passion, motivation, vision and optimism they live by. The title of this report seeks to encapsulate this spirit, coming from a quote of the boxer Muhammad Ali

BCG FinTech Control Tower

Foreword

It has been five years since Singapore started its Smart Financial Centre journey, and four years since the set up of the Singapore FinTech Association (SFA). Today, Singapore is one of the leading FinTech hubs in the world with 1,000 FinTech firms employing over 10,000 people. Every four out of five FinTech firms operating in Singapore are a member of SFA.

There are three defining characteristics of the Singapore FinTech ecosystem. First, Singapore is one of the most open countries to talent, and attracts entrepreneurs from all over the world to start their journey or set up a new regional base for their growing venture. Second, the majority of FinTech firms are B2B-oriented, due to Singapore's position as a leading international financial centre and more than 7,000 MNCs residing here. Third, most of the FinTech firms operate beyond Singapore, either regionally due to the growing emerging economies or internationally to support the business of international banks.

The new Digital Bank License regime will likely define the next phase of FinTech development in Singapore. We have much to learn from Digital Challenger Banks from other countries. We also foresee many of the successful Digital Bank License applicants in Singapore partnering with existing FinTech firms rather than creating from scratch. Further, the new digital banks will look to scale beyond Singapore.

The Singapore FinTech Association and BCG Expand FinTech Control Tower have come together to produce a "Digital Challenger Banks" reference guide, to help you navigate the exciting and dynamic Digital Challenger Banks landscape in Singapore and the region.

*Hock Lai Chia, President,
Singapore FinTech Association*

*Pauline Wray, Managing Director,
Global Lead BCG Expand FinTech Control Tower*

BCG FinTech Control Tower



Singapore FinTech Association

SFA is a cross-industry and non-profit organization.

It's purpose is to support the development of the FinTech industry in Singapore, and to facilitate collaboration among the participants and stakeholders of the FinTech ecosystem in Singapore.

The SFA is a member-based organization with over 800+ corporate members. It represents the full range of stakeholders in the FinTech industry, from early-stage innovative companies to large financial players and service providers.

To further its purpose, the SFA also partners with institutions and associations from Singapore and globally to cooperate on initiatives relating to the FinTech industry. The SFA have signed over 60 international memorandum of understanding (MoU) in more than 40+ countries and are the first U Associate organisation to be affiliated with National Trades Union Congress (NTUC). For further information visit <https://singaporefintech.org/>



Boston Consulting Group

Boston Consulting Group partners with leaders in business and society to tackle their most important challenges and capture their greatest opportunities. BCG's diverse, global teams bring deep industry and functional expertise and a range of perspectives to spark change through leading-edge management consulting as well as data science, technology and design, digital ventures, and business purpose. We work in a uniquely collaborative model across the firm and throughout all levels of the client organization to deliver results that help our clients thrive



BCG Expand FinTech Control Tower

BCG Expand FinTech Control Tower (FCT) is a research focused unit developed jointly by the Boston Consulting Group (BCG) and Expand Research. The FCT identifies initiatives, technologies, and companies that matter most in today's FinTech ecosystem and assess their impact.

This is completed using our internal platform that can ingest data from multiple sources and apply a proprietary taxonomy combined with a rigorous framework, resulting in a highly accurate and globally complete FinTech dataset. We engage directly with financial institutions, regulators, industry stakeholders and innovators, putting us at the forefront of the latest research and FinTech trends

About this document

This document has been developed in partnership with BCG Expand FinTech Control Tower – a subsidiary of the Boston Consulting Group – and the Singapore FinTech Association

The report covers five sections:

- A taxonomy of Digital Challenger Banks
- Global growth trends
- Regional variances and regulatory drivers
- Go-to-market strategy
- Singapore and potential future state

The FinTech Control Tower defines Digital Challenger Banks as providers challenging the incumbent landscape. The report does not cover digital-only initiatives from traditional banks

This report is informed by interviews with founders of Digital Challenger Banks, senior executives at local incumbents, perspectives of regulators and the Singapore FinTech Association, the primary industry body headquartered in Singapore



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Executive Summary



Executive Summary

Digital Challenger Banks have become a global phenomenon and are poised to disrupt the status quo in Southeast Asia

Since 2015, there has been a 200% increase in the number of Digital Challenger Banks globally, of which 45% are in Americas, 35% are in EMEA and 20% are in APAC. Four models of Digital Challenger Banks may be observed: they are differentiated by 1) ownership of a banking license 2) partnership model and 3) entity, where they are either FinTechs or corporates that are not from the financial services sector

Landscape

Different models of Digital Challenger Banks are prevalent in each region, in part influenced by policymakers. While regulatory initiatives are driven by different factors, two main approaches to licensing are observed. Regulators either adopt vehicles to facilitate the existing licensing process, or provide Digital Bank / Virtual regulations tailored for a new breed of firms

Regulatory

The go-to-market strategy of Digital Challenger Banks is primarily driven by the maturity level of their market and entity type: start-ups or corporate-backed. Consequently, they have different product strategies, launching with either a transactional or credit business. Few Digital Challenger Banks are currently profitable. For the ones that are, interest income and their ecosystem strategy are key drivers

Strategy

Singapore & SEA

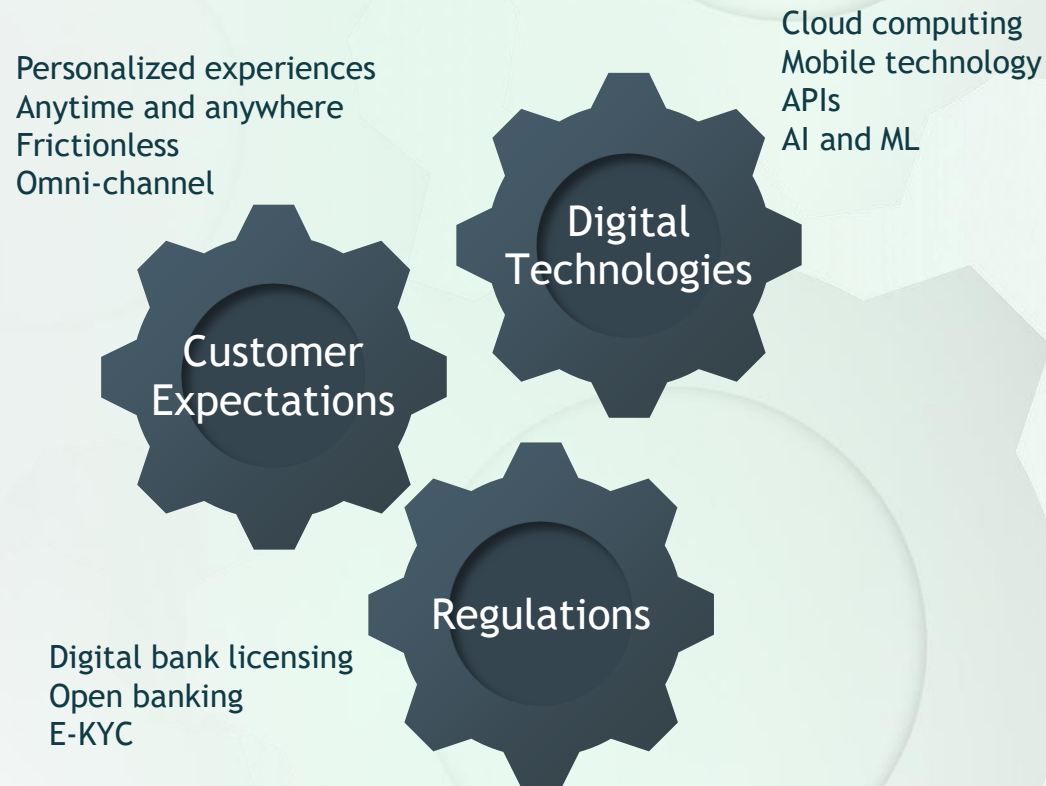
Singapore is first in SEA to issue Digital Bank licenses, enabling non-traditional providers to enter the banking sector. Successful applicants will offer strong value propositions combining non-financial and financial services. They tap into a fast-growing region that will be the sixth-largest economic block globally by 2030. With a significant part of the population remaining unbanked, the opportunity for new banking providers is tremendous

The Rise of Digital Challenger Banks

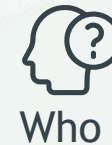


Banking is evolving as new providers and innovative models emerge

Shifting customer expectations, advancement in technologies and regulatory developments...



...are changing the "Who", "What" and "How" of banking



Who

Start-ups and non-FI corporates as banking providers
Specialized "as-a-service" roles across the banking stack



What

Innovative products that solve for underserved and unbanked
Personalized services and features enhancing value add



How

Fully-digital offering with 24/7 availability
Embedded provisioning at the point of customer need

Five main traits that characterize Digital Challenger Banks



Channel

Provide digital-only and mobile-centric services, available, anytime and anywhere



Experience

Design great user experiences, personalized engagements, fast and hassle-free services



Platform

Leverage cloud-native, open architecture tech stacks, enabling advanced analytics and partnerships



Culture

Operate as a technology-first company, emphasize lean and agile working environment



Brand

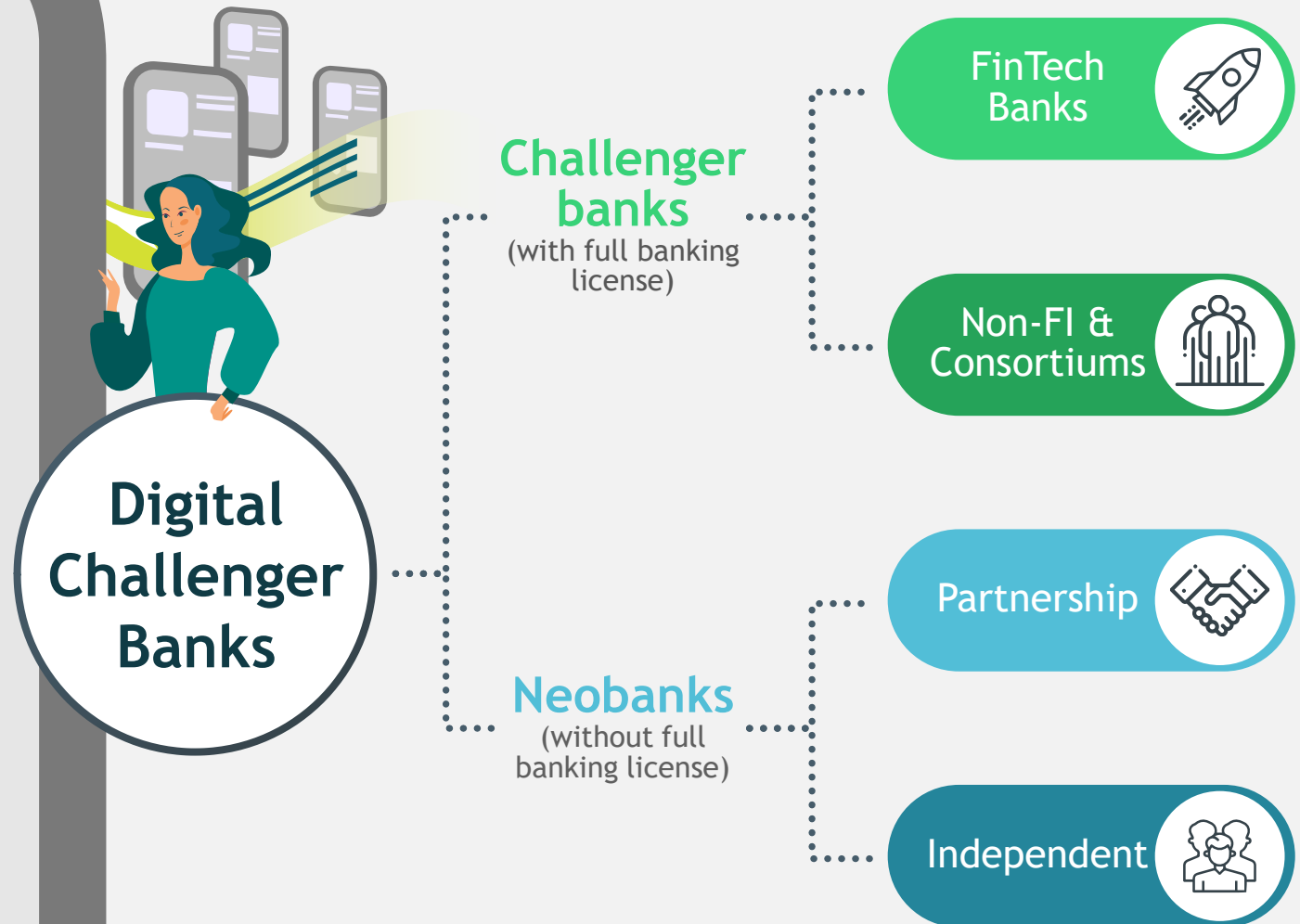
Develop an emotional brand affinity with community of users, engage via non-traditional media channels

Globally, we observe four models of Digital Challenger Banks

Digital Challenger Banks include **Challenger Banks** and **Neobanks**:

Challenger Banks hold a bank license and can be further differentiated by their entity type: FinTech Banks versus an established Non-Financial Corporate or Consortium

Neobanks on the other hand do not have a bank license, and instead partner with a bank license holder or leverage another license type to provide "bank-like" features



1. Digital Challenger Banks as defined here excludes Direct Banks or Digital Banking businesses of traditional incumbent banks 2. Payments / lending / investment specialist FinTechs are excluded
Source: BCG FinTech Control Tower

Digital Challenger Banks

Challenger banks

(with full banking license)

FinTech Banks

71 firms

Non-FI & Consortiums

20 firms

Partnership

115 firms

Neobanks

(without full banking license)

Independent

40 firms

Challenger Banks - FinTech Banks

Recently founded firms that have acquired a full banking license and are permitted to provide a full range of banking products and services



GRASSHOPPER BANK

Acquired license on July 2019



Acquired license on Dec 2018



STARLING BANK

Acquired license on July 2016



monzo

Acquired license on April 2017



Acquired license on May 2020



XINJA
HOW MONEY SHOULD BE

Acquired license on Sept 2019

Selected examples

Source: BCG FinTech Control Tower

Digital Challenger Banks

Challenger banks (with full banking license)

FinTech Banks 71 firms

Non-FI & Consortiums 20 firms

Neobanks (without full banking license)

Partnership 115 firms

Independent 40 firms

Challenger Banks - Non-FIs & Consortiums

Large established non-financial corporates from industries such as Telco, Social Media, e-Commerce, Ride-Sharing and others, that have gone on to acquire a full banking license

kakaobank

Parent: Kakao, Social Media

WeBank
微众银行

Parent: Tencent, Social Media

网商银行
MYbank

Parent: Alibaba, E-Commerce

orange
bank

Parent: Orange, Telecom

K bank

Parent: KT Corp, Telecom

XW 新网银行

Parent: Xiaomi, Consumer Electronics

Digital Challenger Banks

Challenger banks (with full banking license)

FinTech Banks 71 firms

Non-FI & Consortiums 20 firms

Neobanks (without full banking license)

Partnership 115 firms

Independent 40 firms

Neobanks - Partnerships

Firms that partner with a bank license holder, either directly or via an intermediary processor, to provide banking products and services

chime

Bank Partner: Bancorp, Stride bank

tide

Bank Partner: Clearbank

aspire

Bank Partner: DBS

up

Bank Partner: Bendigo and Adelaide Bank

Dave

Bank Partner: Evolve Bank & Trust

KOHO

Bank Partner: Peoples Trust

Selected examples

Source: BCG FinTech Control Tower

Digital Challenger Banks

Challenger banks (with full banking license)

FinTech Banks 71 firms

Non-FI & Consortiums 20 firms

Neobanks (without full banking license)

Partnership 115 firms

Independent 40 firms

Neobanks - Independent

Firms that have acquired an electronic money, payments or securities license and provide "bank-like" services. Some are FinTechs that specialized in lending or investments prior to extending into banking



License: EMI Registered Agent



License: Money Service Operator



License: Payment Institution



License: Broker-Dealer



License: Broker-Dealer



License: Broker-Dealer

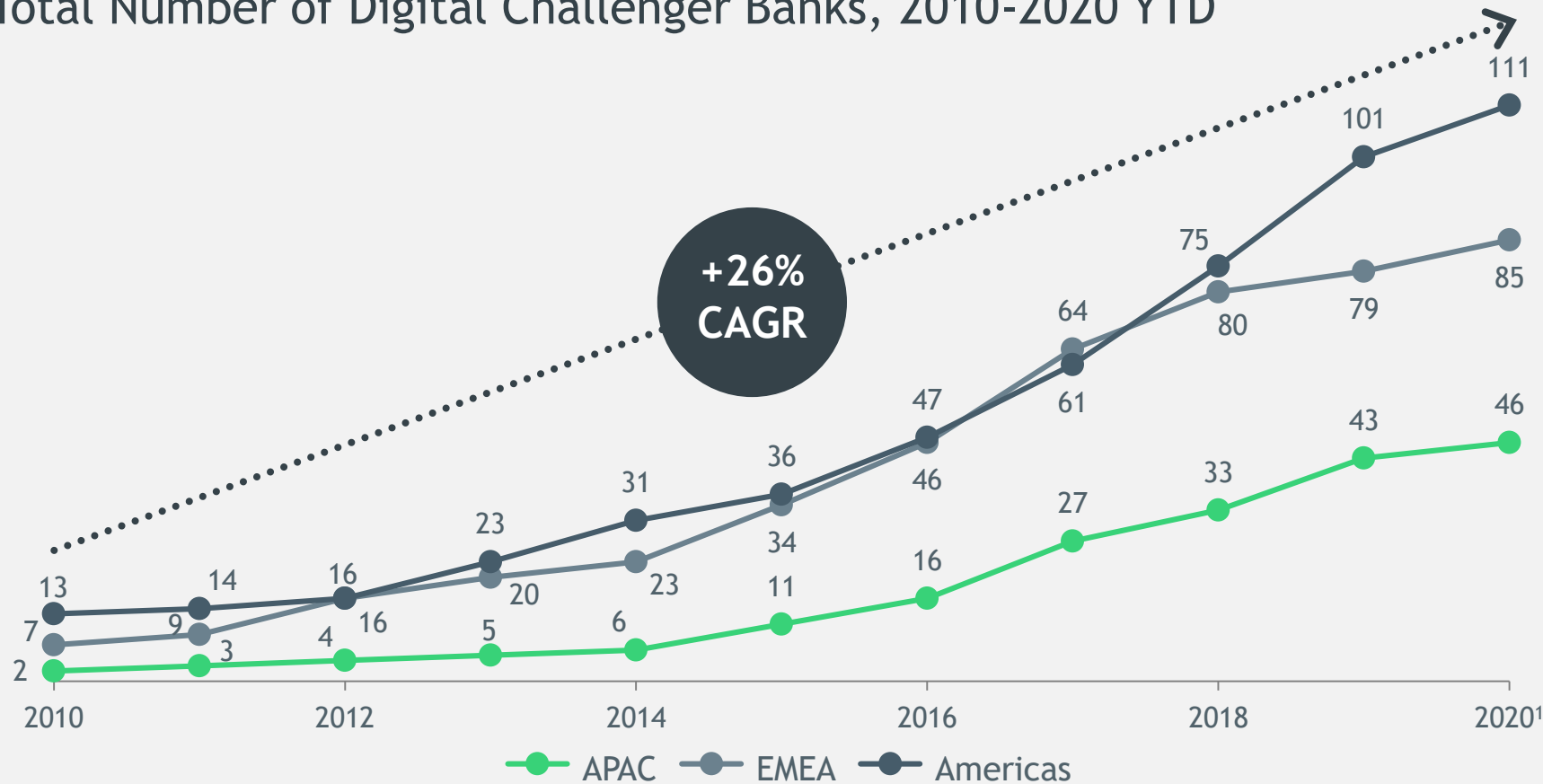
Selected examples

Note: "Bank-like" refers to the functionalities of holding, transferring and spending money. Independent Neobanks may offer these through a cash management account. Independent Neobanks may work with licensed entities for processing, card issuances and account capabilities

Source: BCG FinTech Control Tower

Globally the number of Digital Challenger Banks has increased rapidly, particularly from 2015

Total Number of Digital Challenger Banks, 2010-2020 YTD



200%

increase in
number of Digital
Challenger Banks
since 2015

Growth in part
encouraged by regulators
introducing Digital Bank
related policies

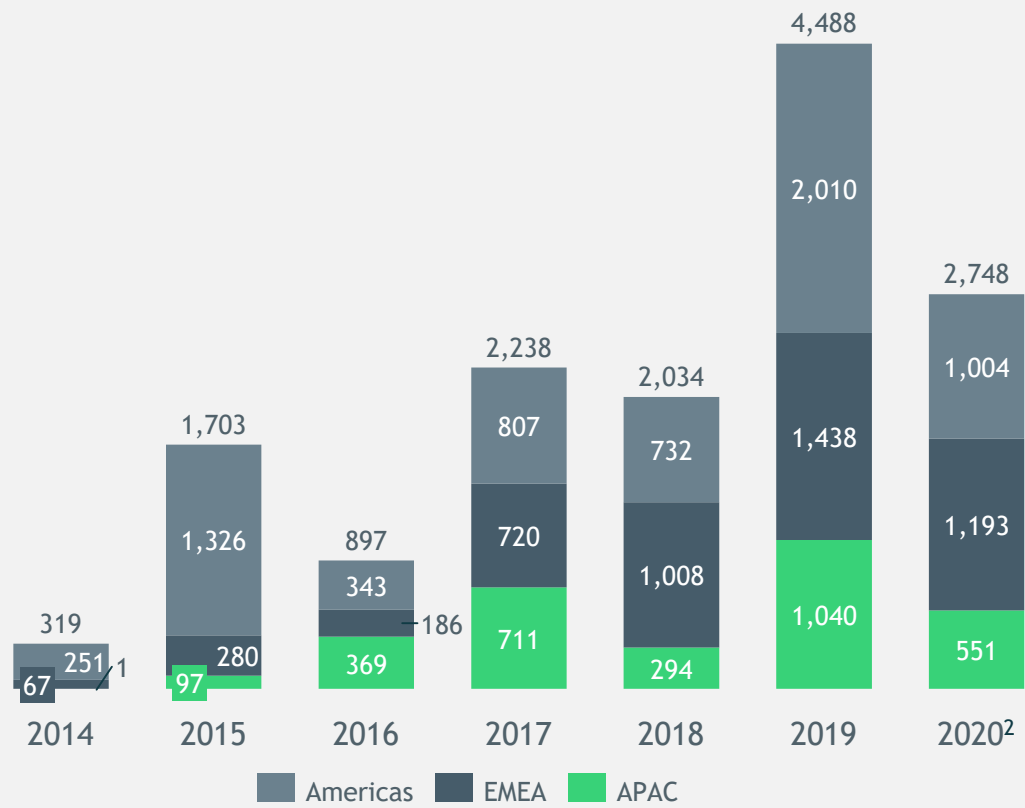
45%

are based in
Americas, 35% in
EMEA and 20% in
APAC

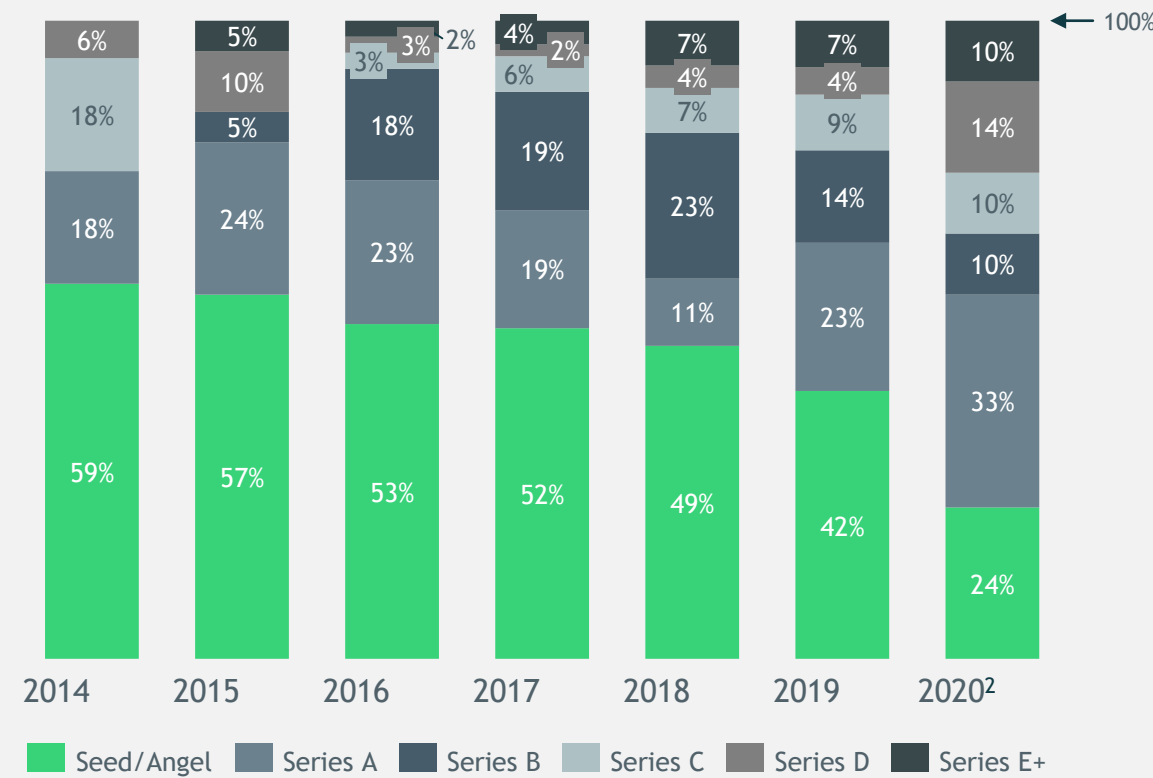
UK and Germany-based
players comprise more
than half of the total in
EMEA, while the US and
Australia have the most
number in their
respective regions

Total equity funding has reached ~USD14B, with majority of rounds in early stage¹

Equity funding by region (USDM),
2014-2020 YTD



No. of funding rounds by stage (% share),
2014-2020 YTD

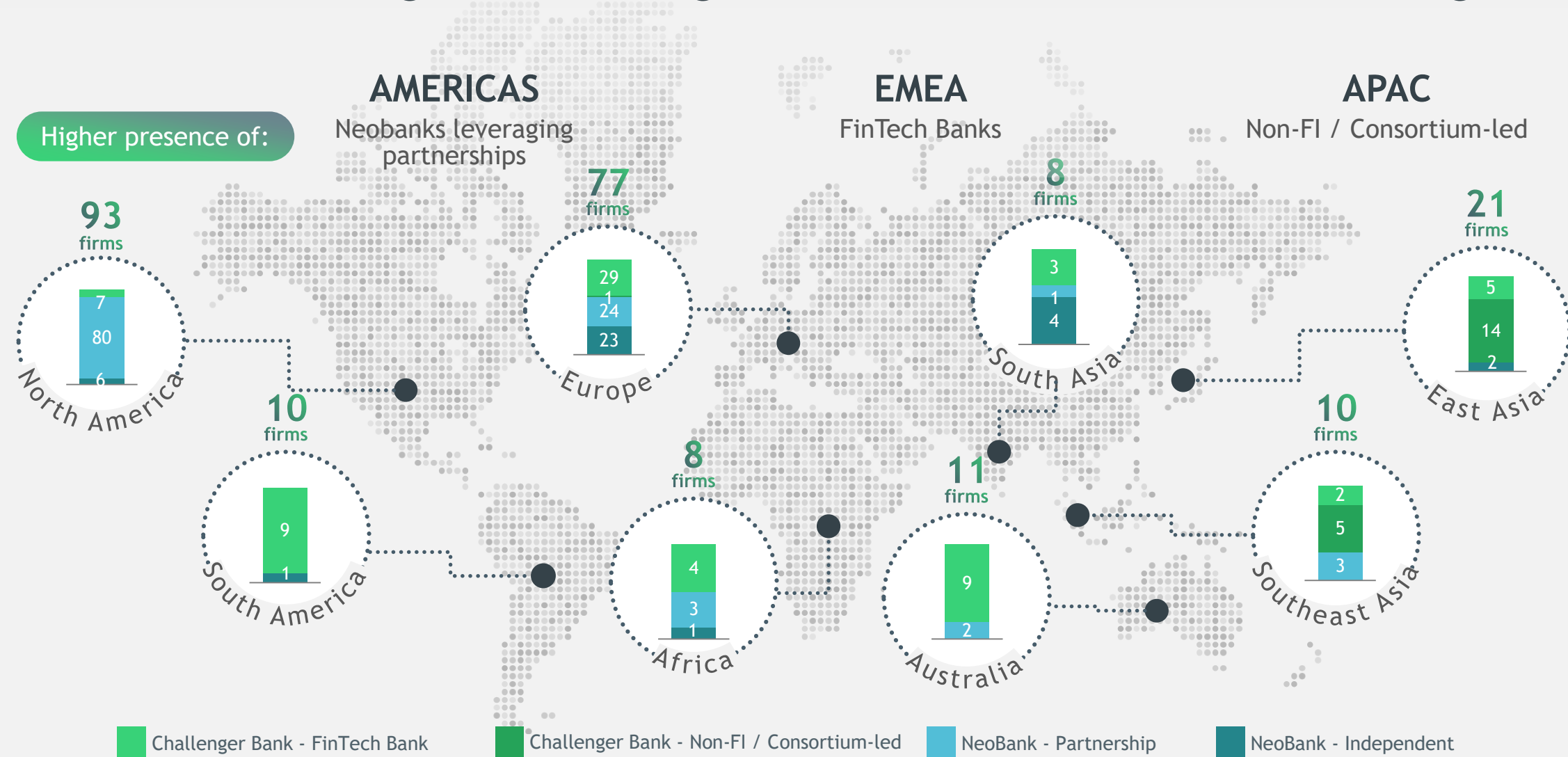


1. Early-stage funding include Seed, Series A and B 2. As of Aug 2020
Source: BCG FinTech Control Tower

Regional Variances and Regulatory Drivers



Distribution of Digital Challenger Bank models varies across regions



Note: Selected examples. Imminent issuances of 5 MAS Digital Bank Licenses included for Southeast Asia
Source: BCG FinTech Control Tower

Factors unique to each market have encouraged the rise of different Digital Challenger Bank models



USA



UK



AUSTRALIA



SINGAPORE



HONG KONG

OBSERVATIONS ON PREVALENT DIGITAL CHALLENGER BANK MODEL

Higher presence of Neobanks leveraging bank partnerships

Higher presence of FinTech Banks

Higher presence of Non-FI / Consortium-led

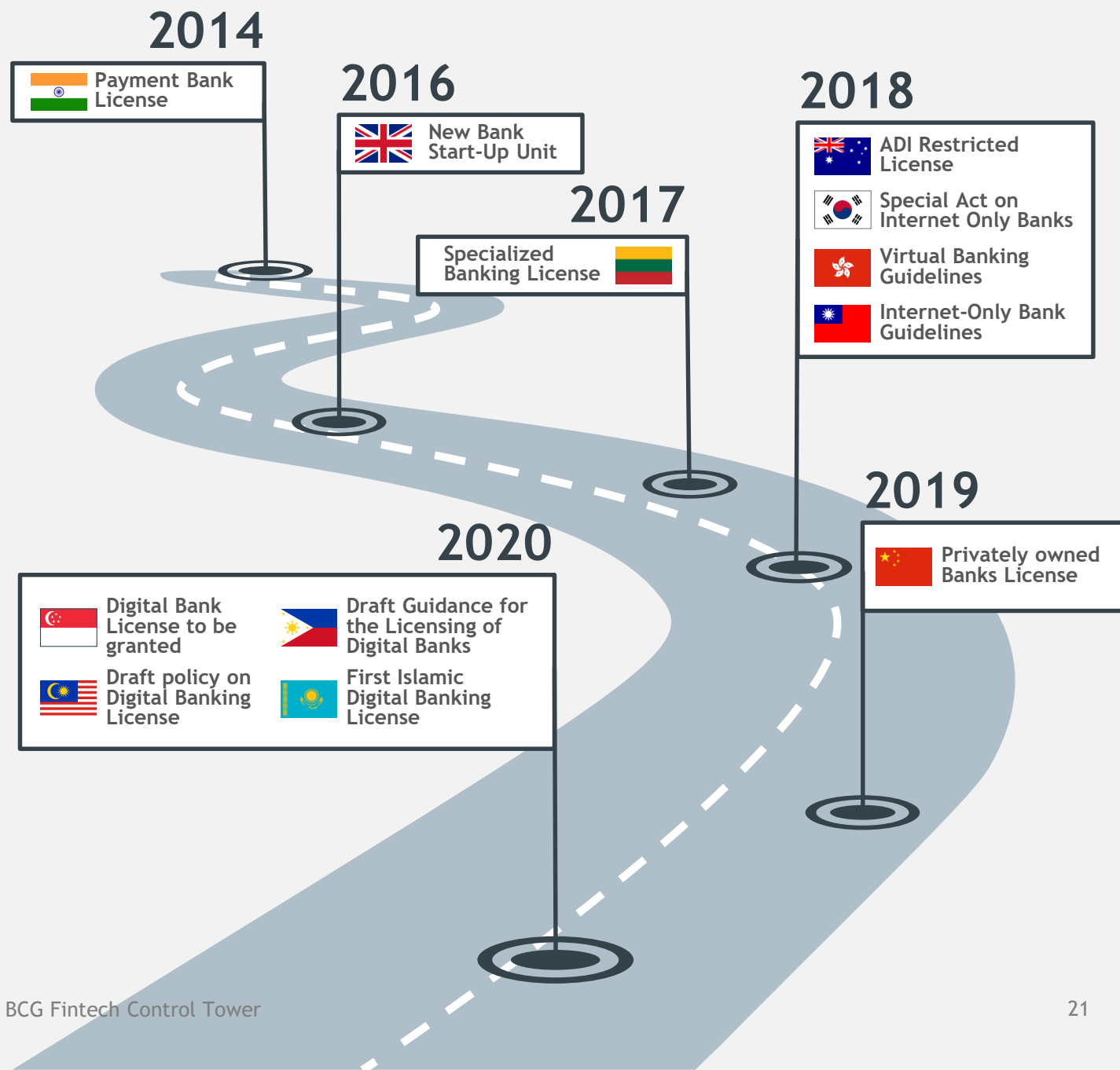
POTENTIAL DRIVING FACTORS

- Digital Bank licensing regime not developed
- Fragmented regulatory landscape; difficult to obtain a bank license
- Durbin Amendment allows some Neobanks to charge higher interchange fees
- Availability of Banking-as-a-Service providers partnering with FinTechs to go-to-market

- Presence of Digital Bank licensing regime with an open path to application
- Mobilisation approach allowing firms that do not meet the full requirements on day one to apply - e.g. lower upfront capital requirements
- Lower interchange fees, incentivizing firms to launch credit products that require licensing

- Presence of Digital Bank licensing regime with a calibrated approach that encourage entry of well-resourced Non-FI firms - e.g. high capital requirements
- Presence of "Super-Apps" / Tech Giants with financial services expertise

Regulators are increasingly active in bank licensing, facilitating the entry of new players

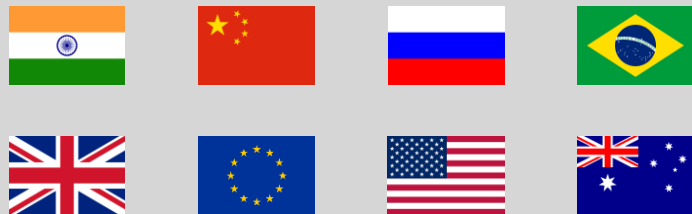


Source: BCG Fintech Control Tower

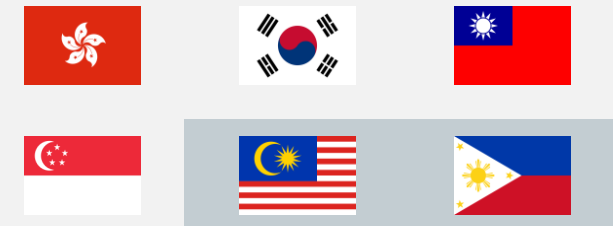
Regulators' approach is split between a dedicated and a non-dedicated licensing framework for Digital Challenger Banks



Most jurisdictions apply existing banking laws and regulations to Digital Challenger Banks, which face the same licensing procedures and requirements as traditional applicants. However, there may be initiatives designed to facilitate market entry of these new banks, such as the 'New Bank Start-Up Unit' in the United Kingdom









Some jurisdictions have specific licensing frameworks designed for Digital Challenger Banks, where licensing requirements can differ from traditional banks. These include restrictions around physical branches, ownership, sustainability of businesses plans and technology-related elements



Draft stage

Global comparison of licensing requirements

	Non-Dedicated Licensing Framework		Dedicated Licensing Framework			
Licensing Requirements						
Cap on the number of licenses granted	-	-	✓	-	-	✓
Controlling stake owned by locals	-	-	-	-	-	✓ For Digital Full Bank license
Possess track record in technology	-	-	✓	-	✓	✓
Viable & Sustainable Business plan ¹	✓	✓	✓	✓	✓	✓
Market segments restrictions	-	-	-	✓ Retail and SMEs only	-	✓ SMEs & Non-Retail for Digital Wholesale Bank license
Financial inclusion value proposition	-	-	✓	✓	-	✓
Transitional measures to facilitate entry						
Transition scheme for minimum paid-up capital	-	✓	-	-	-	✓
Caps or restrictions on products offered during transition	✓	✓	-	-	-	✓

1. Applicants to Singapore's Digital Bank Licenses must demonstrate path-to-profitability

Note: Non-exhaustive

Source: BCG FinTech Control Tower

Initiatives launched to facilitate entry of Digital Challenger Banks

UNITED KINGDOM

New Bank Start-Up Unit



AUSTRALIA

Restricted Authorized Deposit-Taking Institution (RADI) License



SINGAPORE

Digital Full Bank License



Description	<p>Optional mobilisation phase which allows new banks to partially operate before becoming fully authorised.</p> <p>After this transitional period, if successful, new banks are granted with a full banking license. If not, the authorisation is removed</p>	<p>New banks can apply for a restricted license, i.e. an authorization granted for a transitional period during which they will perform a limited range of business activities governed by a smaller set of regulatory requirements.</p> <p>If successful, new banks are granted with a full banking license (ADI license). If not, they must cease all activities and liquidate their business.</p>	<p>A Digital Full Bank (DFB) has to pass through a phased-in approach where it can perform activities on a limited scale with restrictions on business scope and deposit-taking activities, but does not have to meet the paid-up capital requirement in full.</p> <p>This transitional period will demonstrate the applicant's ability to meet its commitment & the regulator's supervisory requirements.</p>
Restrictions	<p>The Authorisation letter drafted by regulators will list tailor-made restrictions the bank is subject to, adapted to its respective business limiting the amount of business it can undertake (e.g. deposit amount)</p>	<p>Specific legal restrictions on the:</p> <ul style="list-style-type: none"> Maximum size of deposits; Minimum capital adequacy and liquid holdings; Product and services offerings 	<p>Specific legal restrictions on the:</p> <ul style="list-style-type: none"> Maximum size of deposits; Business which is limited to simple credit and investment product, Deposit accepted from the public
Time frame	<p>The Authorisation is granted for a period of 12 months</p>	<p>The RADI license can be granted for a maximum period of 2 years</p>	<p>Expected to be fully functional within 3-5 years from commencement of business</p>

“

The Restricted ADI license is the middle ground between the willingness to introduce new players and to maintain important prudential standards¹



”



1. APRA adds: “APRA’s licensing ‘mission’ is not to licence as many new banks as it can, as quickly as it can. Rather, our mission is to facilitate the launch of viable entities. At the risk of stating the obvious: challenger banks can only make a difference to the competitive dynamic of the Australian market if they survive and thrive”
 Note: The Australian Prudential Regulation Authority (APRA) is an independent statutory authority that supervises institutions across banking, insurance and promotes financial system stability in Australia
 Source: FinTech Control Tower

Open banking and e-KYC policies have enabled the acceleration of Digital Challenger Banks

Open Banking

Facilitates exchange of data among banks and third-party financial service providers through the use of APIs, making it easier to build applications and services

e-KYC

Enables KYC process to be completed through digital means, facilitating onboarding of new users via mobile/online platforms

How does it act as an enabler?



Reduce time to launch a bank

Ability to offer underlying functionality/products that existing banks provide via APIs, allowing new players to go-to-market in a much shorter amount of time



Enable marketplace strategies

Customers can have access to products and services from partnering/competing banks by allowing the latter to digitally and securely access their financial information



Build better products

By gaining access to and aggregating account details at other banks, players have a holistic view of the financial health of their users and can launch more personalized products



Make branchless banking feasible

Enables remote onboarding of customers by allowing completion of KYC process in a digital-only manner



Save operational cost

Reduces operational overheads by eliminating inefficient and costly physical onboarding process



Reach underserved / unbanked segments

Reach and on-board parts of the population which may be difficult to access with a physical network

Go-to-Market Strategy



Go-to-Market Strategy | Five Key Considerations

Value proposition



How does the value proposition of Digital Challenger Banks differ from traditional banks

Target segments



What are the target segments of Digital Challenger Banks

User acquisition



How do Digital Challenger Banks acquire users

Product strategy



What products do Digital Challenger Banks offer and in what sequence

Path to profitability



What are the success factors of currently profitable Digital Challenger Banks

Value proposition | Digital Challenger Banks provide affordable and accessible financial services with improved customer experience



Pricing

Digital Challenger Banks typically generate better unit economics by leveraging a modern technology stack, and through better product pricing can pass on value to customers



Accessibility

Deliver full suite of services through mobile device and engage with customers digitally, improving accessibility to financial services for the unbanked and underbanked population



Experience

Strong focus on customer experience, leading to greater personalization, ease of use, and a wider variety of product features, creating a stronger proposition for users

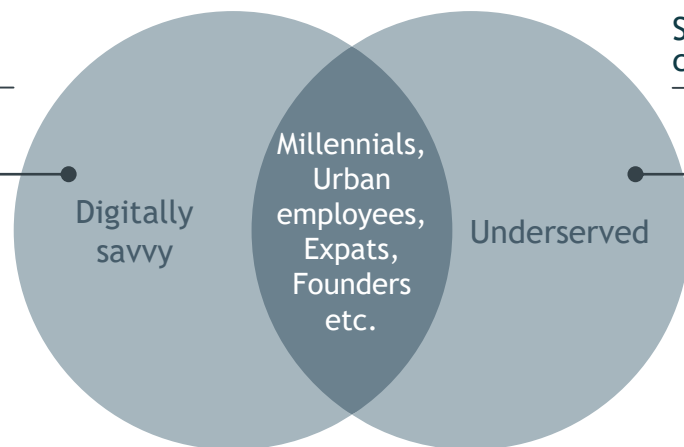
Target Segments | Start with digitally savvy and the underserved in mature markets

High digital expectations and are quick to adopt

Digital Natives & Digital Immigrants

Specific pain-points neglected by incumbents

SMEs/MSMEs, individuals with poor credit history, lower income etc.



By enabling users to open a US account even before arriving to the country, the expat community is Rayo's main target segment. Moreover, they account for one of the wealthier customer segments with an average salary of \$100k



EXAMPLES:

Revolut

Young (age 25-35), digital savvy professionals and frequent travelers

monzo

Young (age 20-30), metropolitan and digitally-savvy

N26

Millennials (age 18-35 years old) and digital natives

chime

Young (age 25-35) and lower income (\$35K-\$70K a year)

kakaobank

Digitally-savvy (age 30-50) and urban employees

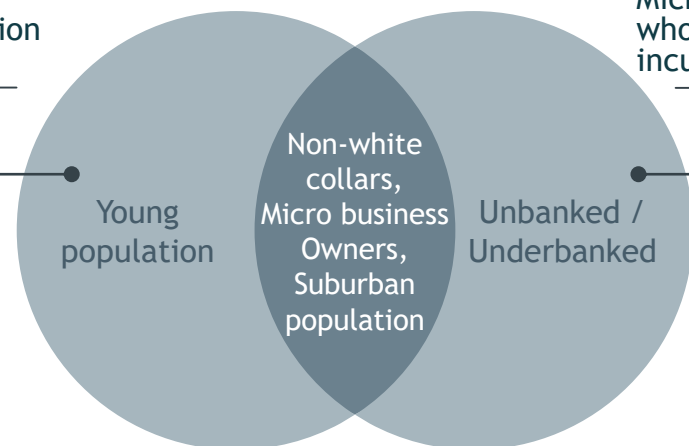
Target Segments | Focus on the opportunity of financial inclusion in emerging markets

Low income and low financial literacy

Young and suburban population often rely on cash

Lack access to affordable banking services

Micro business, low-income individuals who cannot afford services by incumbent banks



EXAMPLES:



Unbanked and underbanked individuals and MSMEs



'Long tail' customers, MSMEs and farmers in China



Unbanked and underbanked individuals



Unbanked individuals



Frequent travellers, economically active and socially mobile

“
77% of Weilidai customers are engaged in non-white collar services
”



Digital Challenger Banks launched by start-ups differ significantly from those backed by corporates



Start-up

Young company building a new brand in banking. Launched Neobanks and Challenger Banks (FinTech Banks)

- Build brand and customer base from scratch
- Offer free products / services to quickly gain market share
- Prioritize valuation over profit in the early stages

Revolut N26 chime



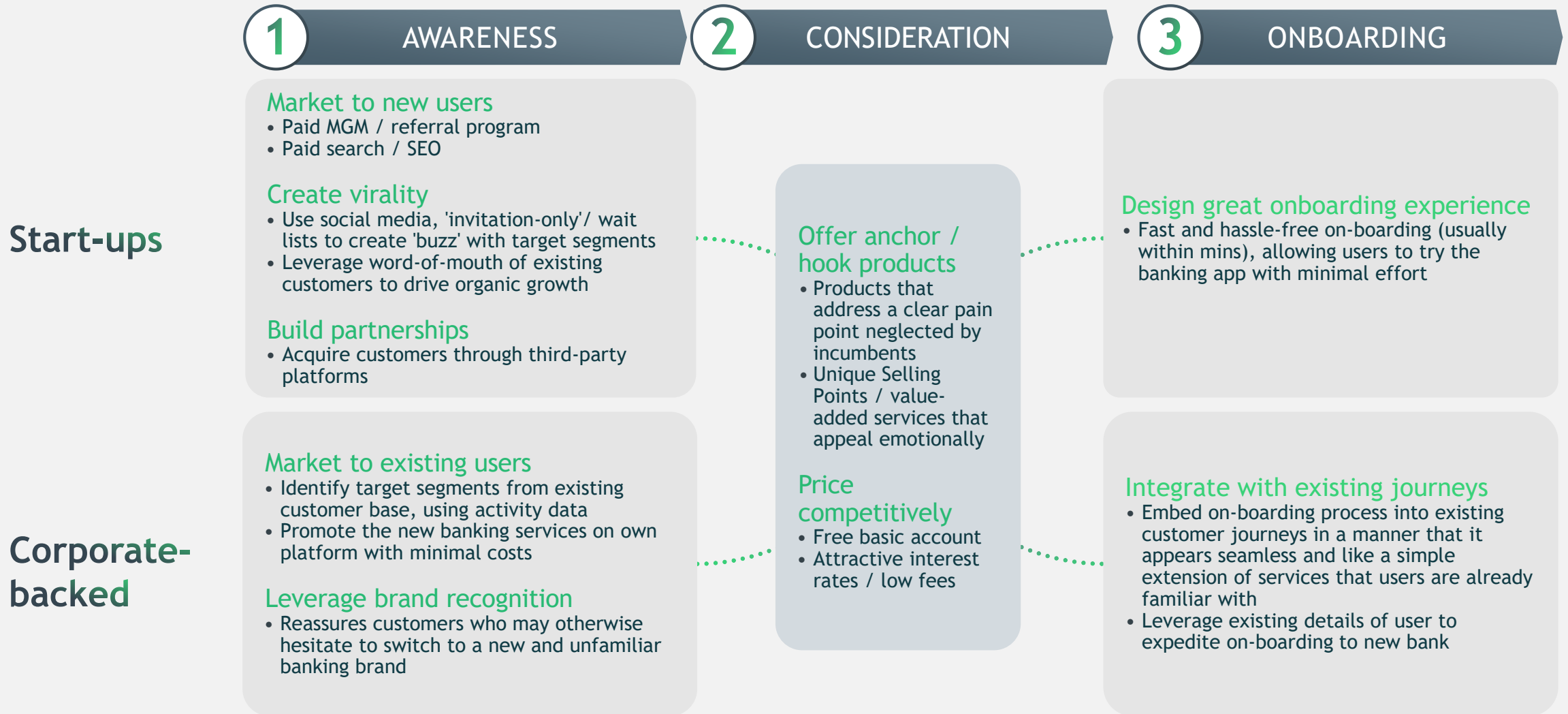
Corporate

Established firm outside financial services entering banking. Launched Challenger Banks (Non-FI & Consortiums)

- Inherited strong brand recognition and large customer base
- Focus on high margin banking products to monetize customer base and data
- Prioritize profitability early-on

kakaobank WeBank 网商银行 MYbank

User Acquisition| Start-ups and Corporate-backed Digital Challenger Banks differ on generating awareness and onboarding customers



“

Volt is leveraging partnerships to attract new customers at a lower acquisition cost. As most Australians are multi-banked, enabling customers to view their complete financial universe via the corporate partner's app or web will provide a better user experience and allow corporates to deepen engagement with their customers

VOLT

”



“





























80% of our customers are acquired through our TymeKiosks, conveniently located in Tyme's key partner retailer, PicknPay. Although Tyme offers a complete digital experience, Tyme attributes its strong customer growth to its physical presence in the retailer and its Ambassadors who facilitate awareness of the products



”



Product Strategy | Digital Challenger Banks typically launch with a transactional or credit business

	 Revolut	 monzo	 N26	 chime	 kakaobank	 WeBank 微众银行	 网商银行 MYbank
Launch year	2015	2015	2015	2014	2016	2014	2015
 Payments	 Year 1	 Year 1	 Year 1	 Year 1	 Year 1		
 Current account	✓ Year 3	✓ Year 3	✓ Year 2	P Year 2	 Year 1	 Year 1	 Year 1
 Savings account	✓ Year 4	P Year 4	✓ Year 3	P Year 3	 Year 1	 Year 1	 Year 1
 Lending	P Year 6	✓ Year 5	P Year 3	✓ Year 7	 Year 1	 Year 1	 Year 1
 Insurance	P Year 4	P Year 6	P Year 3			P Year 2	 Year 1
 Investments	✓ Year 5	P Year 6	P Year 2		P Year 4	P Year 2	P Year 2

Start-ups typically launch with a transactional business

Corporate-backed firms launch with Accounts and Lending business

 Starting product category  Existing product  Partnership

Note: Webank and Mybank are backed by Corporates with pre-existing payments business

Source: Company announcements, BCG FinTech Control Tower

Product Strategy | Start-ups and corporate-backed firms are incentivized by different factors



Business priority

User acquisition

- Venture-funded start-ups have a strong focus on growing user base quickly, especially in the early stages
- Payment products typically have lower barriers to adoption (easy to understand and solves a clear pain point)

Monetization

- Typically already have access to a large customer base
- Lending products offer high profit margins and are complementary to existing services offered (e.g. online shopping)

Branding And Trust

Build new brand

- Payments is a high touchpoint product with many moments of truth, aiding in brand building
- High transaction nature allows for generation of rich data sets, which helps to rapidly gain insights on customers and the market

Leverage established brand

- Brand familiarity and trust enable attraction of deposits, which helps fund lending business
- Multi-dimensional and large existing user data (spending habits, credit history, financial portfolio etc.) from broader ecosystem enables cross-selling and better credit risk assessment

Licensing requirements

Start with payment license (or the equivalent)

- Go-to-market quickly with a payment license, before moving to acquire a full banking license or partner with a license holder

Start with banking license

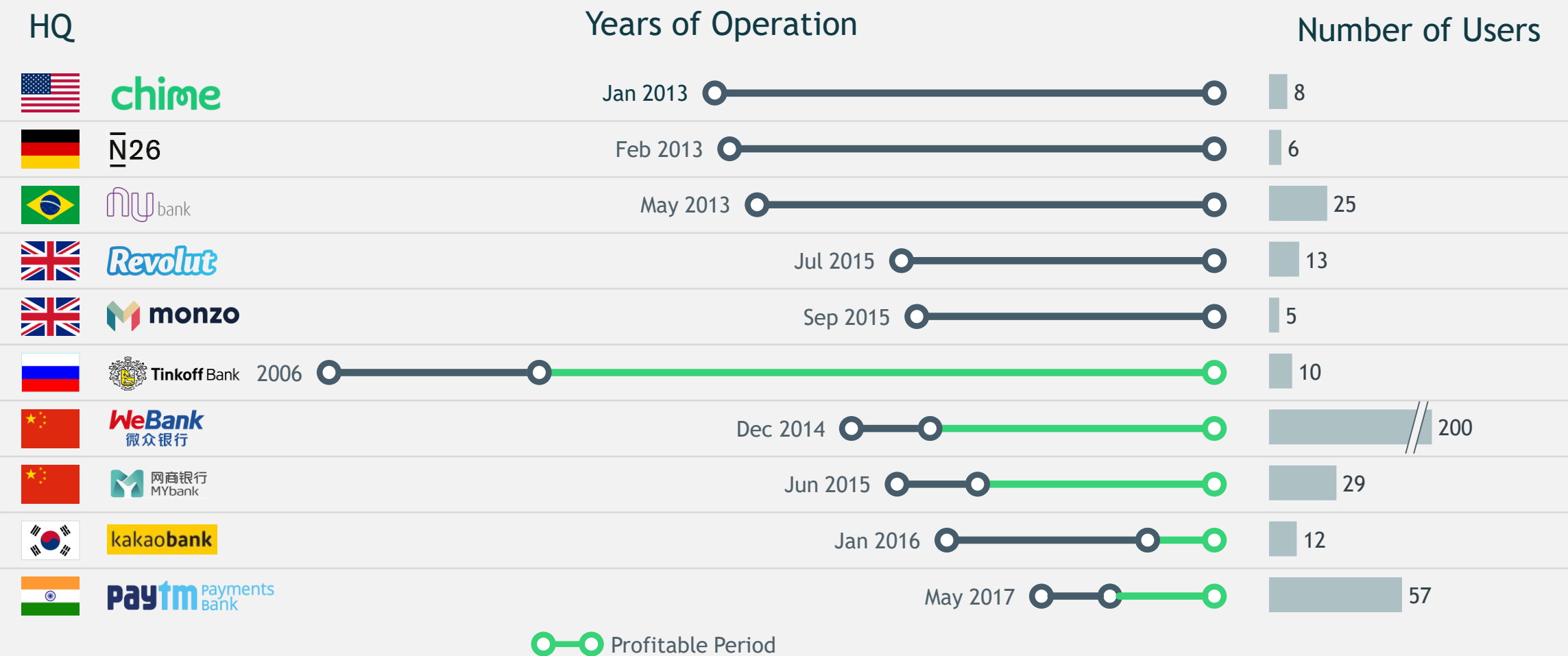
- Go-to-market after acquiring a full banking license in order to collect deposits and provide lending products

Top 10 Digital Challenger Banks in terms of number of users



Note: Including joint venture of players from multiple industries
Source: BCG analysis

Path-to-Profitability | Few Digital Challenger Banks globally are profitable today



1. Top 10 Digital Challenger Banks in terms of users (Consumers)
Note: Indicative timelines and not to scale
Source: BCG FinTech Control Tower

Path-to-Profitability | Digital Challenger Banks leverage fees and interest-based revenue models

Revenue Stream

Description



Transaction fees

Collect fees when transaction amount exceeds a certain limit.
Earn merchant fees when users pay with their bank card



Subscriptions

Users can upgrade from a Standard (free) plan to Premium (paid) plans typically with a monthly subscription fee, generating a more stable revenue stream for the Digital Challenger Bank



Marketplace model

Gain revenue share or referral fees by offering services of third-party partners through the Digital Challenger Bank's platform



Credit products

Earn interest income from lending products, funded by deposits collected from users at the cost of interest paid

Start-ups with a primarily fee-based model have been expanding into interest-based streams

Fee based
revenue
streams



Interest
based
revenue
streams

Digital Challenger Banks typically have a lower cost structure as compared to traditional banks

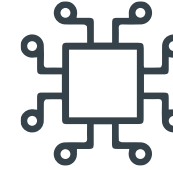
App-Centric



Lower communication costs as SMS and outbound calls are replaced with in-App notifications and Chatbot

Less operational costs associated with manual processing

No-Legacy



Lower infrastructure and set-up costs by leveraging the Cloud

Modern technology stack reduces IT maintenance and product development costs

Branchless



No infrastructure and staff costs associated with having a network of physical branches

Low

High

Cost Advantage

Case studies on path-to-profitability



Source: BCG FinTech Control Tower

START-UPS



Working towards breakeven, growing user base and expanding into overseas markets



Tinkoff

Strong focus on profitability since launch, creating a “Super App” of financial and lifestyle services



Highly profitable and pursuing an “Open banking” ecosystem approach, backed by Tencent

kakaobank

Achieved profitability in just the third year of launch, part of Kakao's ecosystem

CORPORATE-BACKED

Profitable

Path-to-Profitability | Interest income and ecosystem strategy are key contributors to profitability

High Contribution from Fee-Income

Monzo's revenue is mainly composed of fee-based income from transactional services, subscriptions and marketplace model

Costly Unit Economics

Associated with high variable costs that drive fast customer growth, resulting in more losses as user base scale



High Contribution from Interest-Income

Tinkoff started with a credit card product and has now become the 2nd largest credit card issuer in Russia. Despite having launched other banking products, lending remains core to Tinkoff for customer acquisition and revenue

Early Focus on Profitability

Tinkoff has not pursued a free / low-fee model to attract users, achieving better unit economics earlier on than other Digital Challenger Banks

Ecosystem Approach

Tinkoff is pursuing a "Super App" concept to further drive customer transactions and engagement



High Contribution from Interest-Income

Kakaobank's loan book has grown constantly year-on-year since launch, and interest income is the major driver of Kakaobank's profitability

Low Customer Acquisition Costs

Kakaobank leverages KakaoTalk, a popular Korean chat platform, for user acquisition at low cost and has a high Monthly Active Users of 80%

Ecosystem Approach

Kakaobank has been extending its product offerings through collaborations with related Kakao Group's companies, to drive more diversified revenue streams



High Contribution from Interest-Income

WeBank focuses on high volume / small ticket-sized lending products, which are a key contributor to its profitability

Low Customer Acquisition Costs

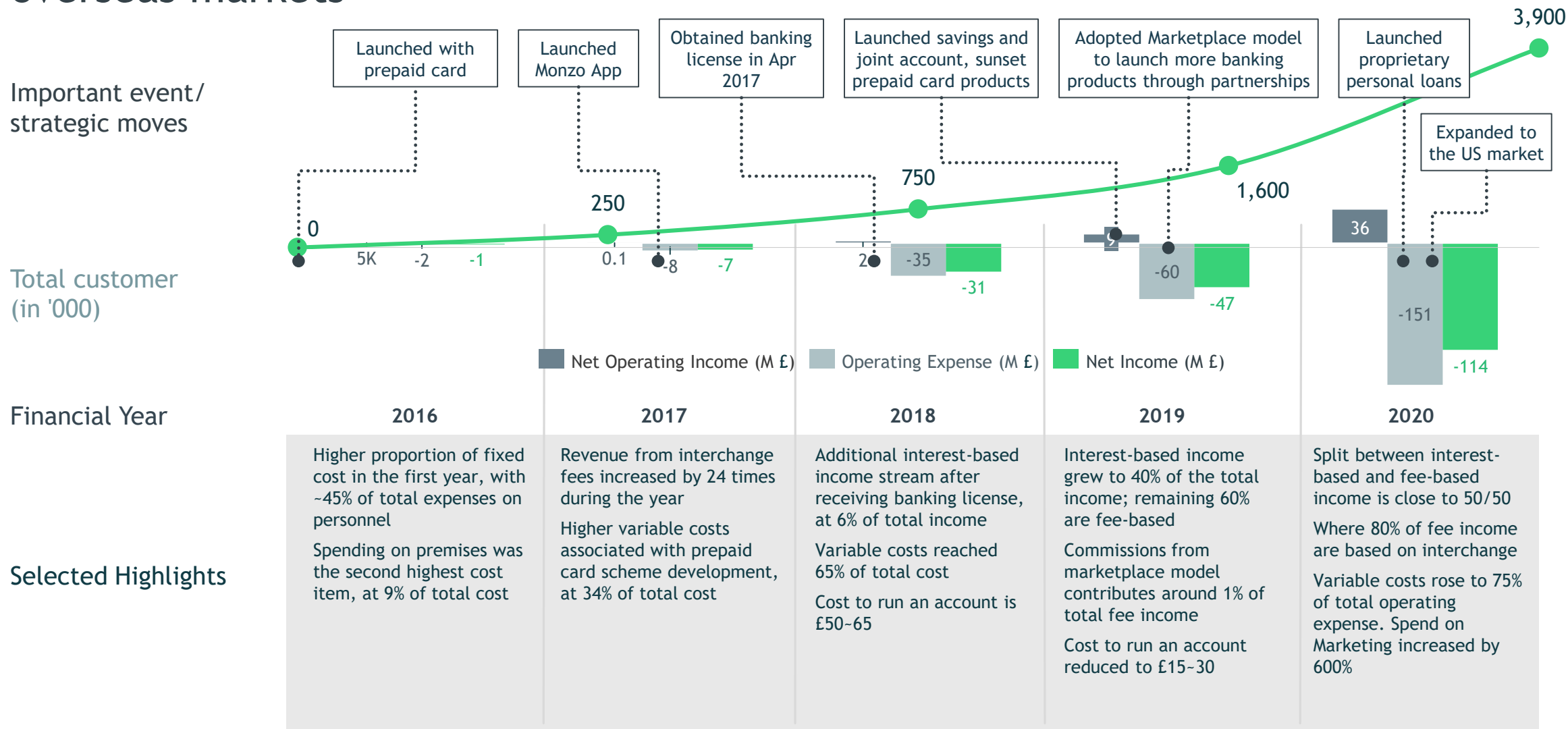
WeBank leverages the extensive user base and assets of WeChat and broader Tencent ecosystem for user acquisition, allowing them to bring down the customer acquisition cost significantly

Ecosystem Approach

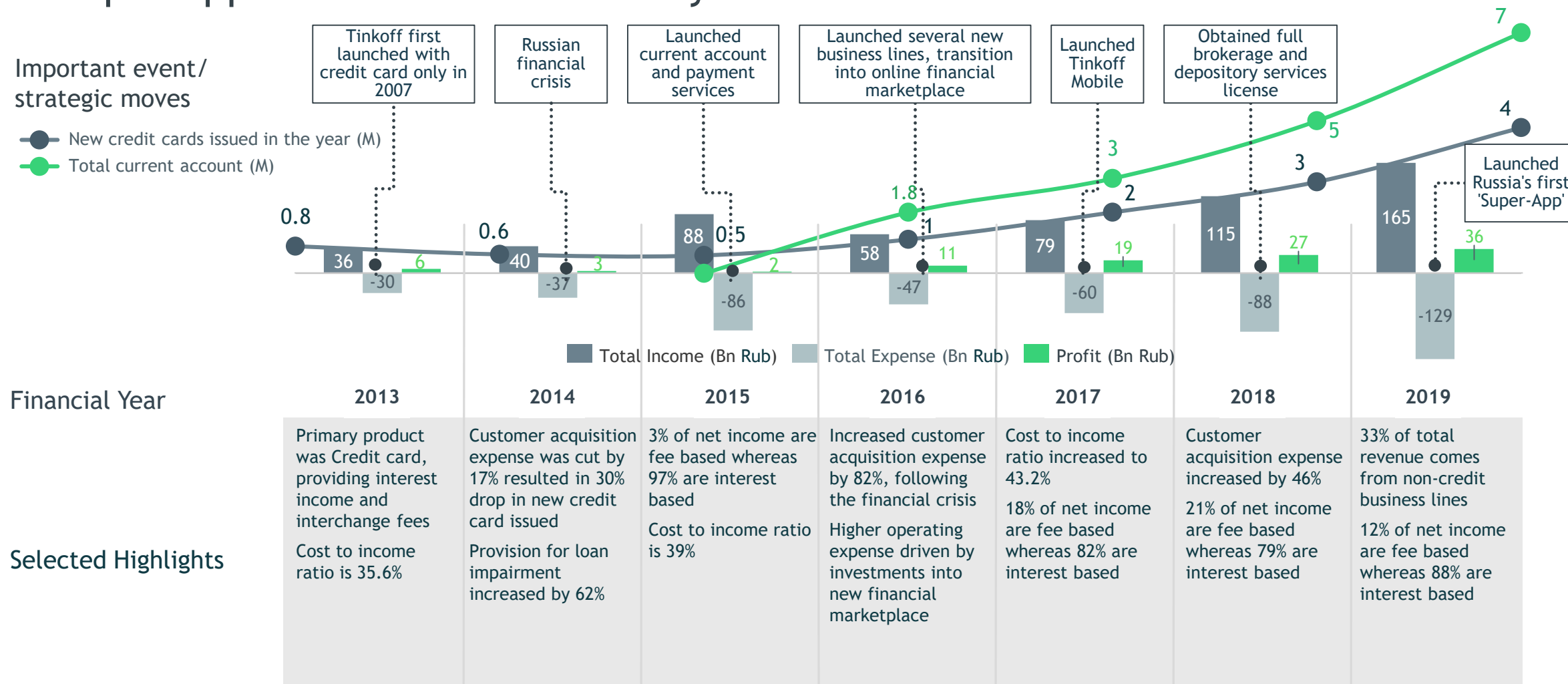
WeBank leverages Tencent's ecosystem to reach customers in a variety of scenarios and uses 'social data' generated from its ecosystem to do credit scoring



Monzo is working towards breakeven, growing user base and expanding into overseas markets



Tinkoff has strong focus on profitability since launch and are seeking to create a "Super App" of financial and lifestyle services



Note: Tinkoff was launched in 2007

Source: BCG FinTech Control Tower, company annual reports, press releases

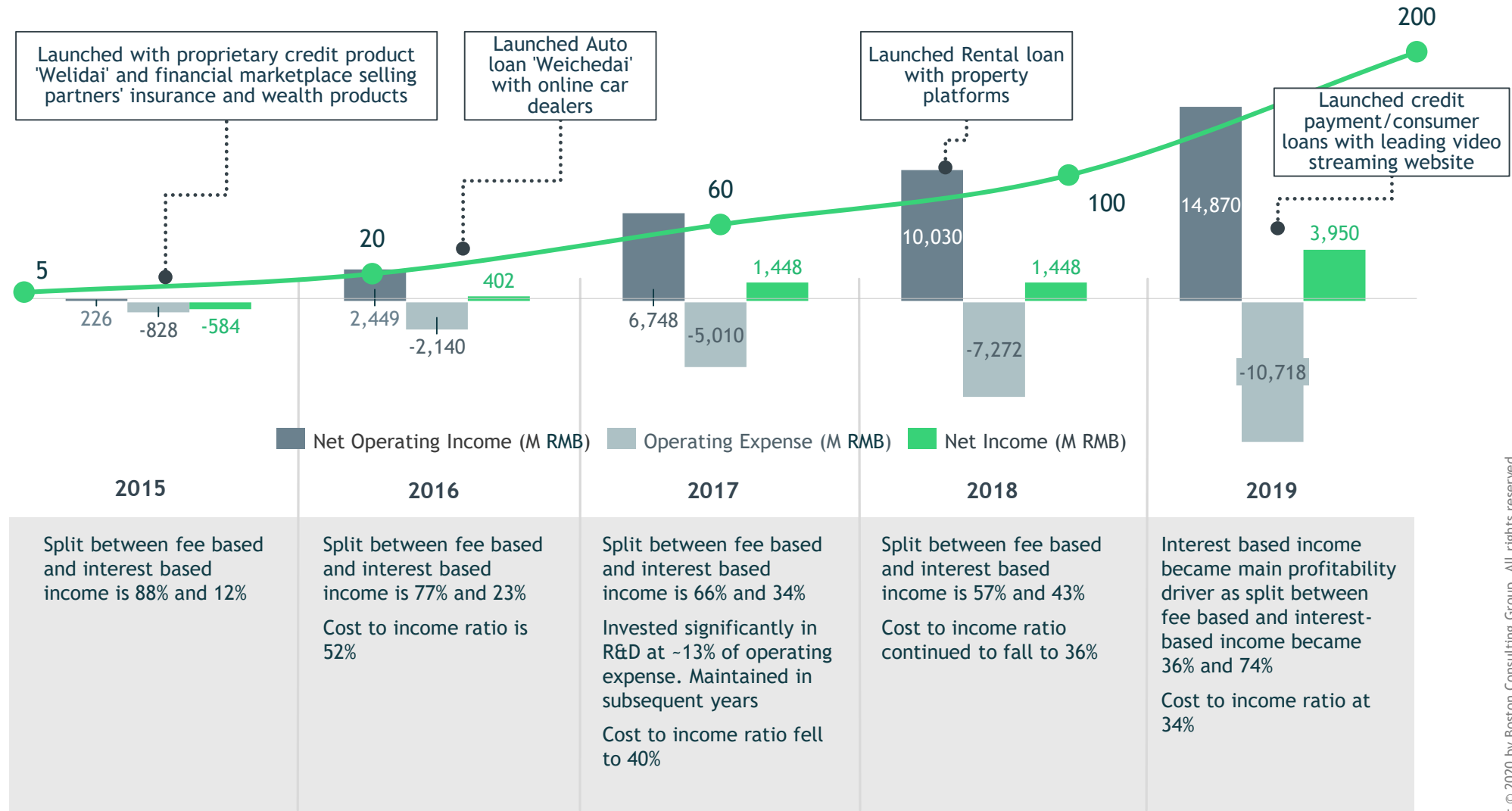
WeBank is highly profitable and pursuing an "Open Banking" ecosystem approach

Important event/
strategic moves

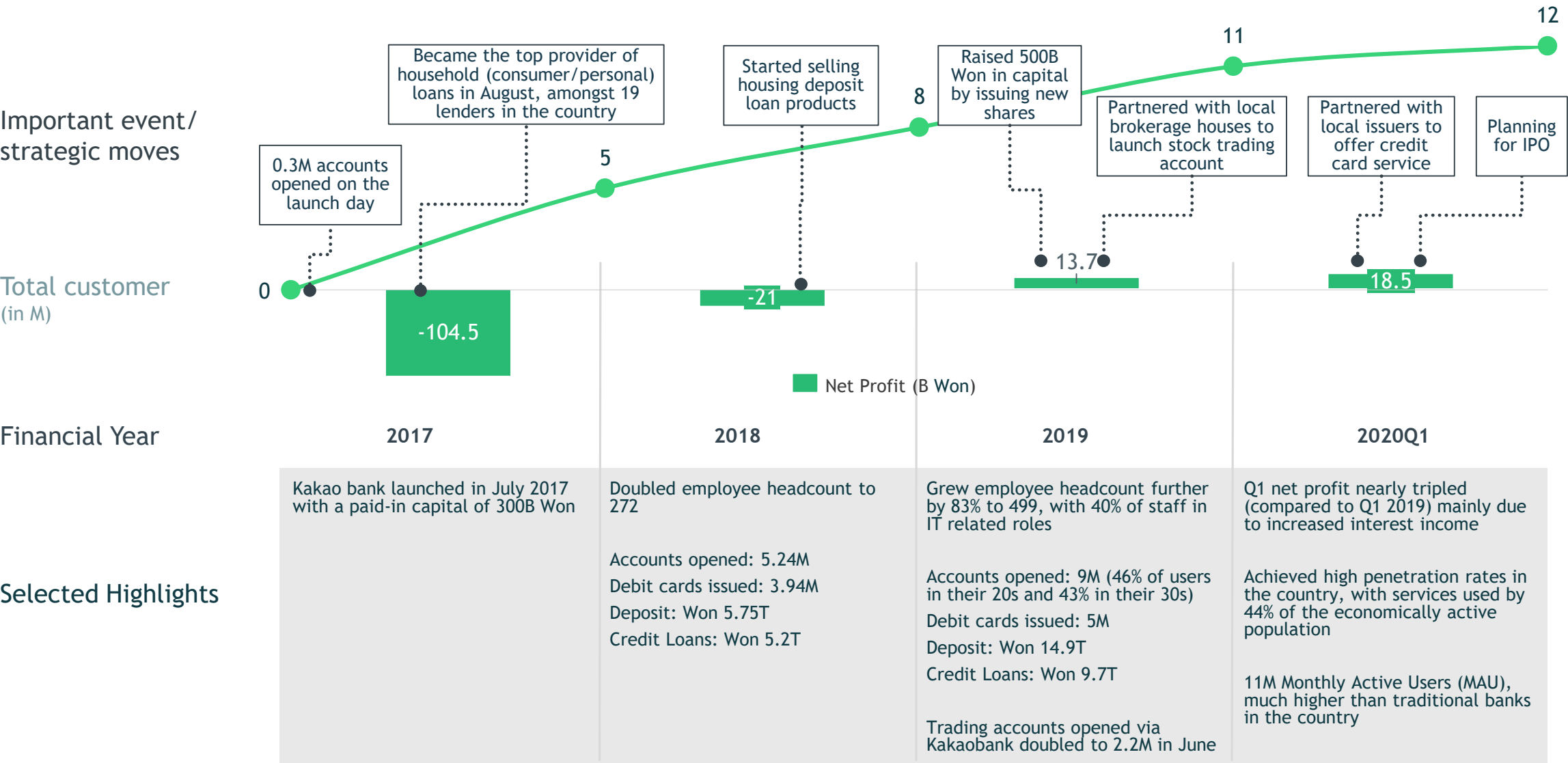
Total customer
(in M)

Financial Year

Selected Highlights



Kakaobank achieved profitability in the third year from launch

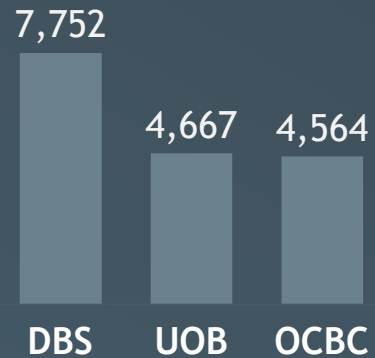


Source: BCG FinTech Control Tower, company website, press releases

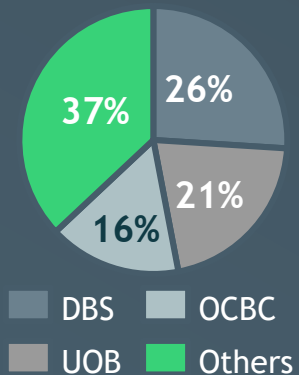
Singapore and Potential Future State



Income of SG incumbent banks in 2020H1 (SGDM)



SG incumbent banks own 63% of local market share in loans



Source: MAS; company reports; bank investor presentations; BCG FinTech Control Tower

Singapore's incumbent banks have been upgrading their technology capabilities to cater to a new generation of digital savvy customers

SG incumbent banks have invested in digital banking...



Launched digital banking solution DBS Digibank in Singapore in March 2016

Launched Digibank in India in April 2016 and in Indonesia in August 2017



Launched mobile payment app OCBC Pay Anyone in 2014

Launched mobile-led banking solutions in Indonesia and Malaysia, and has plans to set up a digital bank in Indonesia



Launched digital banking app UOB Mighty in November 2015

Launched digital bank TMRW in Thailand in February 2019 and Indonesia in August 2020, with plans to also launch in Singapore, Malaysia and Vietnam

...with rising adoption

1H20 versus 1H19 PayNow Transactions -

Retail: 2X increase

Corporates: 6X increase

1H20 versus 1H19 PayNow Transactions -

Retail: 2.4X increase

Corporates: 8.9X increase

1H20 versus 1H19 PayNow Transactions -

Retail: 2.6X increase

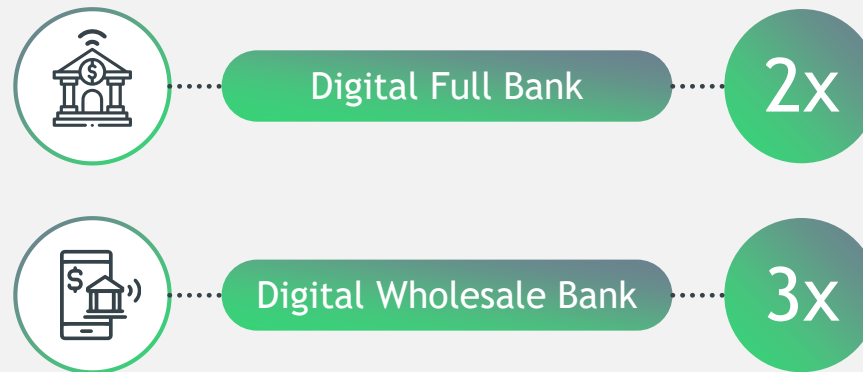
Corporates: 8.7X increase

As a first-mover in Southeast Asia, the Monetary Authority of Singapore is granting five Digital Bank Licenses by the end of 2020

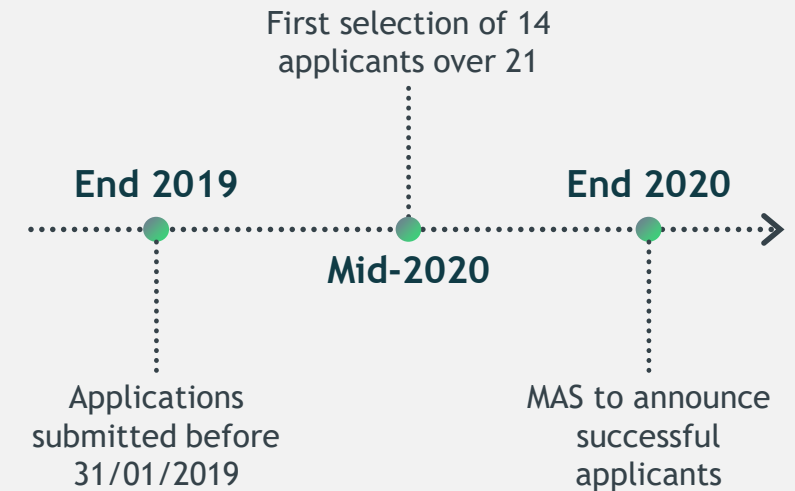
3 Main Objectives

- 1 Improve Financial Inclusion
- 2 Drive Innovation
- 3 Encourage Competition

Two Types Of Licenses



Timeline



Strong market interest with 21 applications for the Digital Bank Licenses



The Monetary Authority of Singapore will issue two Digital Full Bank (DFB) Licences and three Digital Wholesale Bank (DWB) Licences at the end of 2020

Digital Full Bank License

A DFB will be allowed to take deposits from and provide banking services to retail and non-retail customer segments



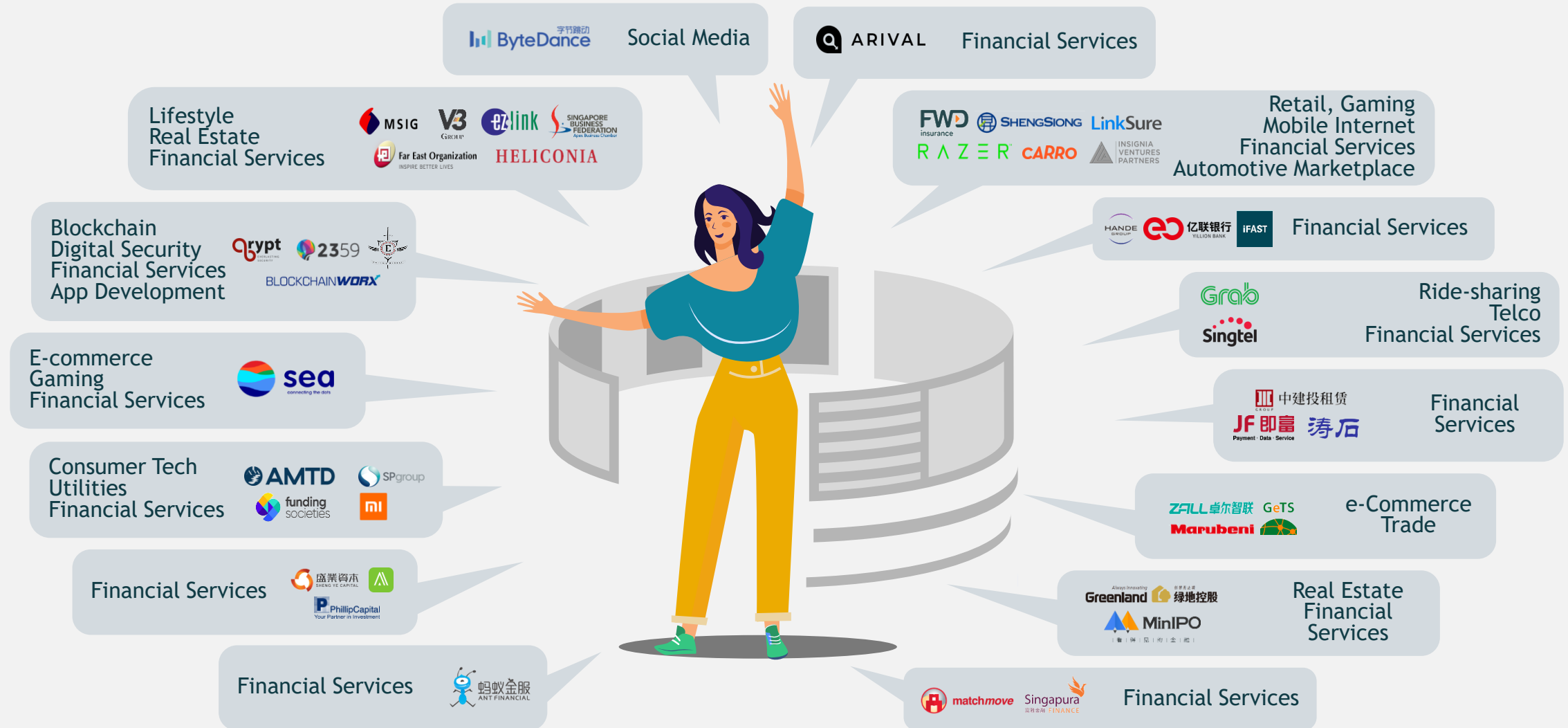
Digital Wholesale Bank License

A DWB will be allowed to take deposits from and provide banking services to SMEs and other non-retail customer segments



Note: Known applicants, 14 applicants have been shortlisted in June 2020 (not yet disclosed)
Source: News reports; company announcements; BCG FinTech Control Tower

Applicants possess a track record in financial services or other industries, forming consortiums in joint bids



Consortiums can bring a strong combined value proposition

Note: Relative ratings considering local applicants 1. Online media includes gaming; Ride-Sharing includes Food-Delivery 2. Access to Consumers/SMEs considers existing customer relationships and ability to distribute new offerings to them 3. Digital Usage by provider to interact with customers 4. Richness of data include spend behavior, geolocation, consumption etc.
Source: BCG FinTech Control Tower



Consortiums leverage shared capabilities for crucial competitive advantages



Capabilities

Customer base

Large user base that are digital native
High mobile penetration



Scenario-based services

Services cover multiple aspects of customers' everyday life
High level of usage and stickiness



Data

Multiple user touch-points online
Large volumes of multi-dimensional data



Acquiring

Activating

Monetizing

Do not need to educate users to go-digital
Able to reach and on-board customers rapidly and cheaply, especially in the initial stage
Assess to larger customer base via presence in various markets

Able to embed clear & contextual incentives to drive adoption and reinforce brand recognition & loyalty
Can create synergy through cross-platform collaborations or pursue an ecosystem strategy

Better able to personalize propositions and monetize user data through effective cross-selling and up-selling
Can leverage multi-dimensional data to enhance anti-fraud and credit risk assessment capabilities, driving down operational costs

Competitive advantages

“

International players view Singapore as a strategic gateway to the region due to the availability of capital, favorable business environment, strong technology and banking talent pool, a robust licensing application and vetting process provide successful applicants a credibility "brand premium"

”

“

While the Singapore market alone is relatively small, the large underbanked and unbanked population in the region is a huge opportunity. With an emerging middle class and a young and digitally engaged demographic, neighboring countries are attractive markets for digital services



FinTech Control Tower

”

SEA is a great opportunity for the future of banking and FinTech

Tech/FinTech companies (including some digital bank license applicants) have been using Singapore as their regional base of operations, tapping into the regional economic opportunity in SEA



Selected examples

Tech/eCommerce



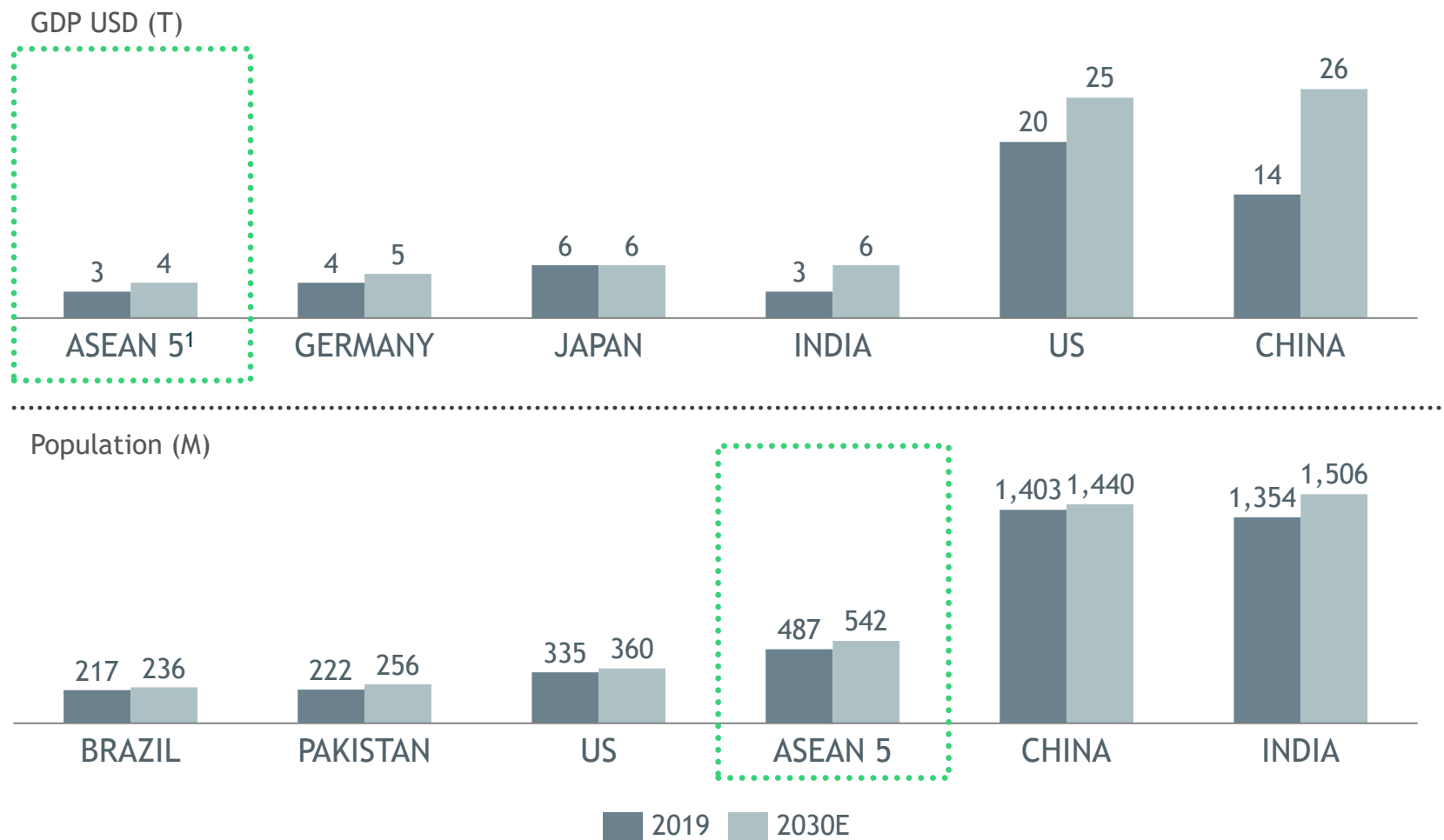
FinTech



Digital Challenger Banks



Opportunity in SEA is tremendous as the market is set to grow rapidly

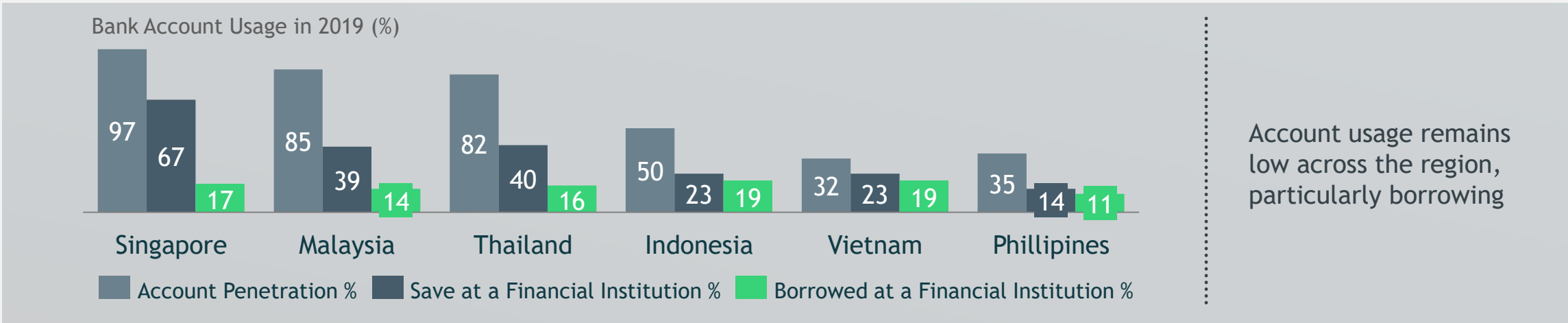
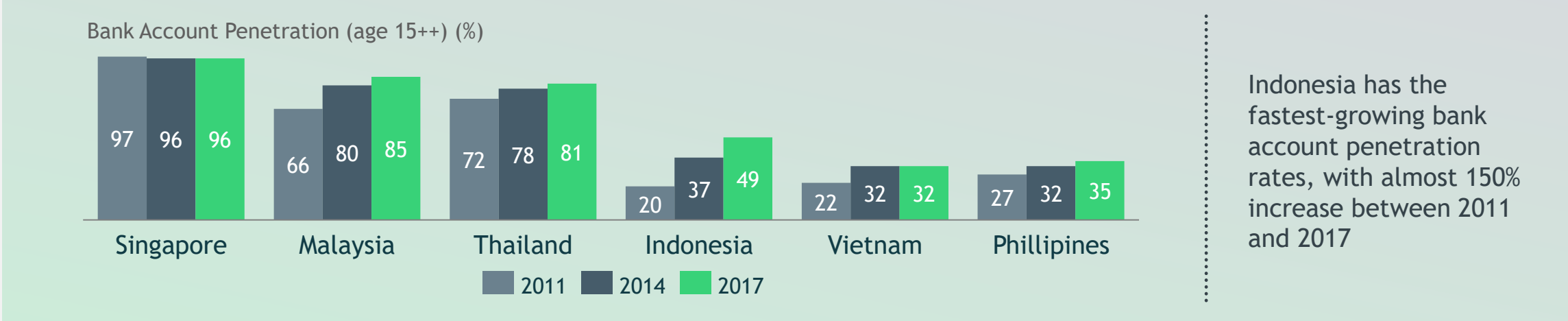


1. ASEAN 5 includes Indonesia, Malaysia, Philippines, Singapore and Thailand

Source: IMF; BCG Analysis, BCG FinTech Control Tower

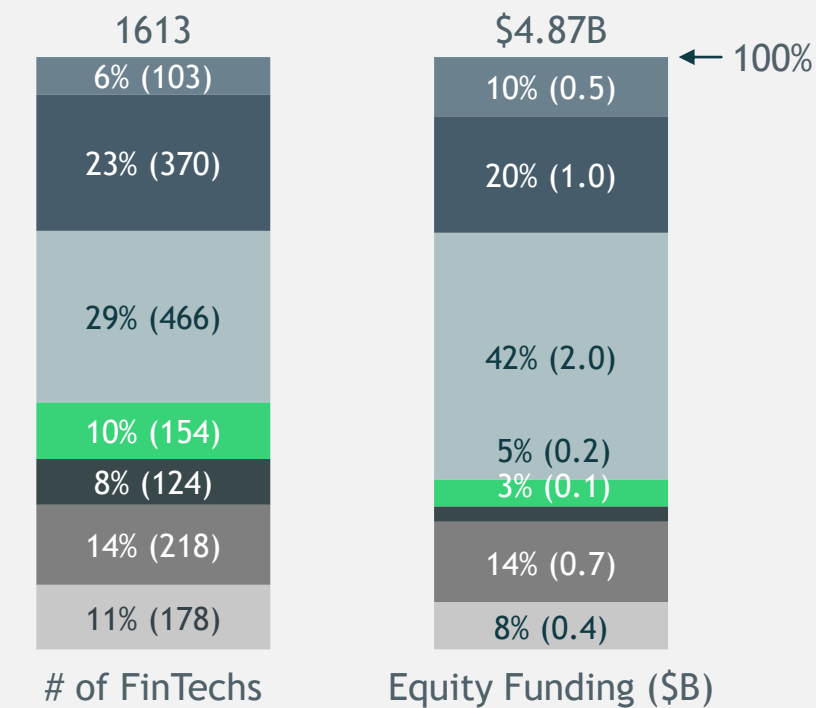
GDP for major SEA countries (Indonesia, Malaysia, the Philippines, Singapore and Thailand) could reach **USD 4.3trn by 2030**, which would make it the sixth-largest economic block globally. **By 2030, SEA's population of 542m people will be behind only the EU, India and China**

Banking penetration in SEA, which varies across countries, is growing but remains low

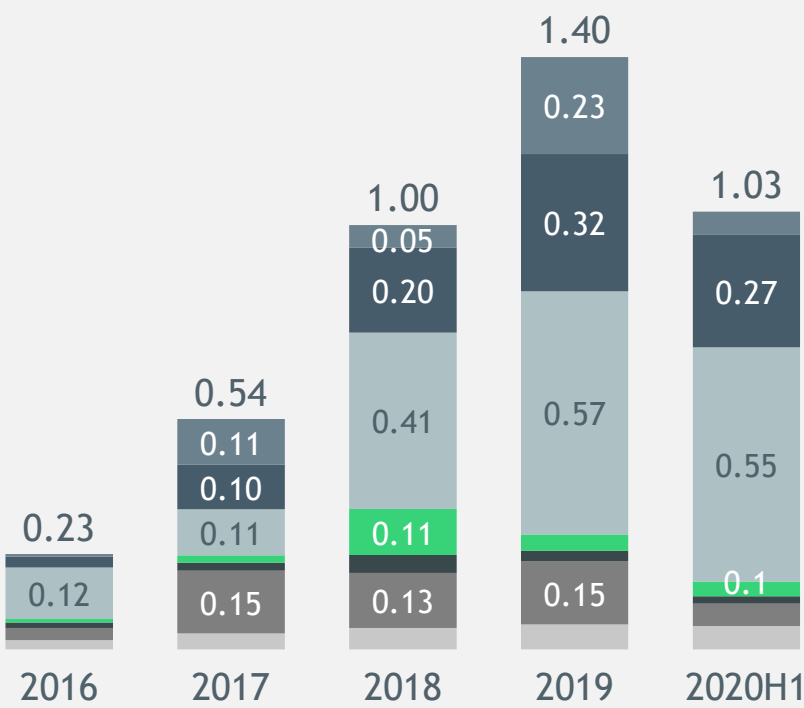


SEA has emerged as a FinTech hotspot, with bulk of funding going to Payments & Lending

Number of FinTechs & Total equity funding by Products since 2000, SEA (\$B)



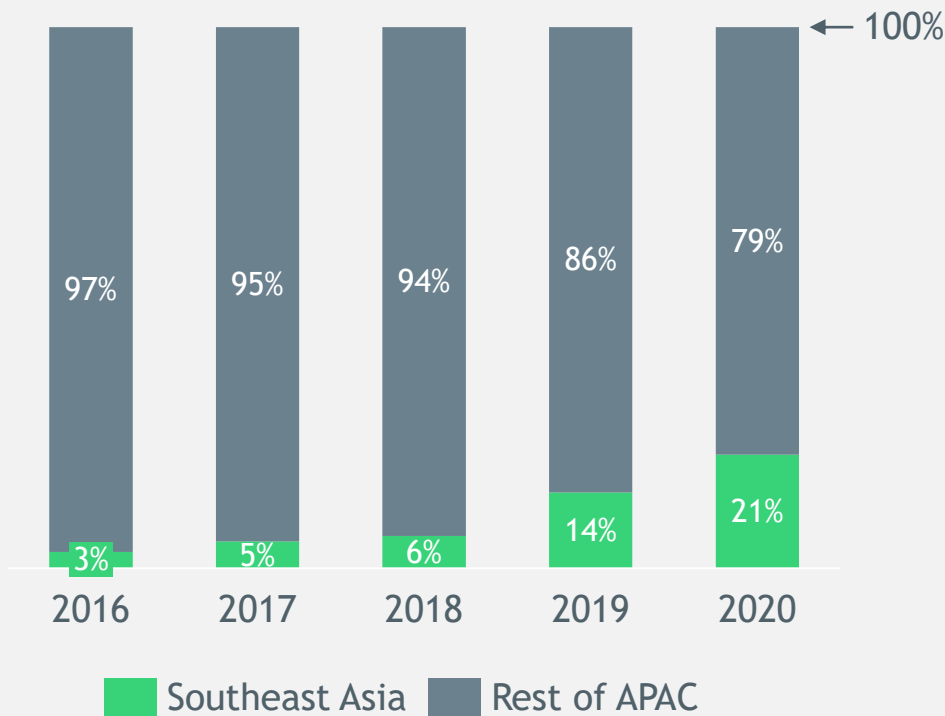
Annual equity funding in SEA by Products (\$B) 2016-2020H1



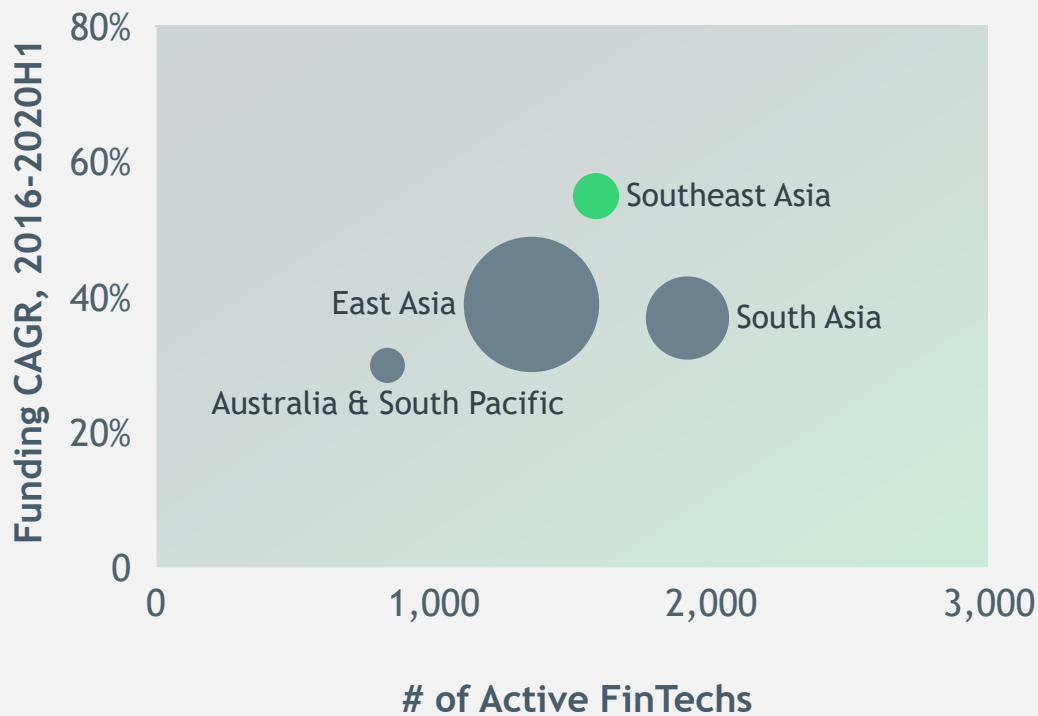
Insurance Lending & Crowdfunding Payments Retail Accounts Support Technology Trading & Investments

FinTechs in SEA are gaining an increasing share of equity funding in APAC, and growing faster than any other area in the region

SEA equity funding vs rest of APAC, excluding Ant Financial¹ (% , \$B)



Cumulative equity funding CAGR² in APAC by region, 2016-2020H1, excluding Ant Financial¹

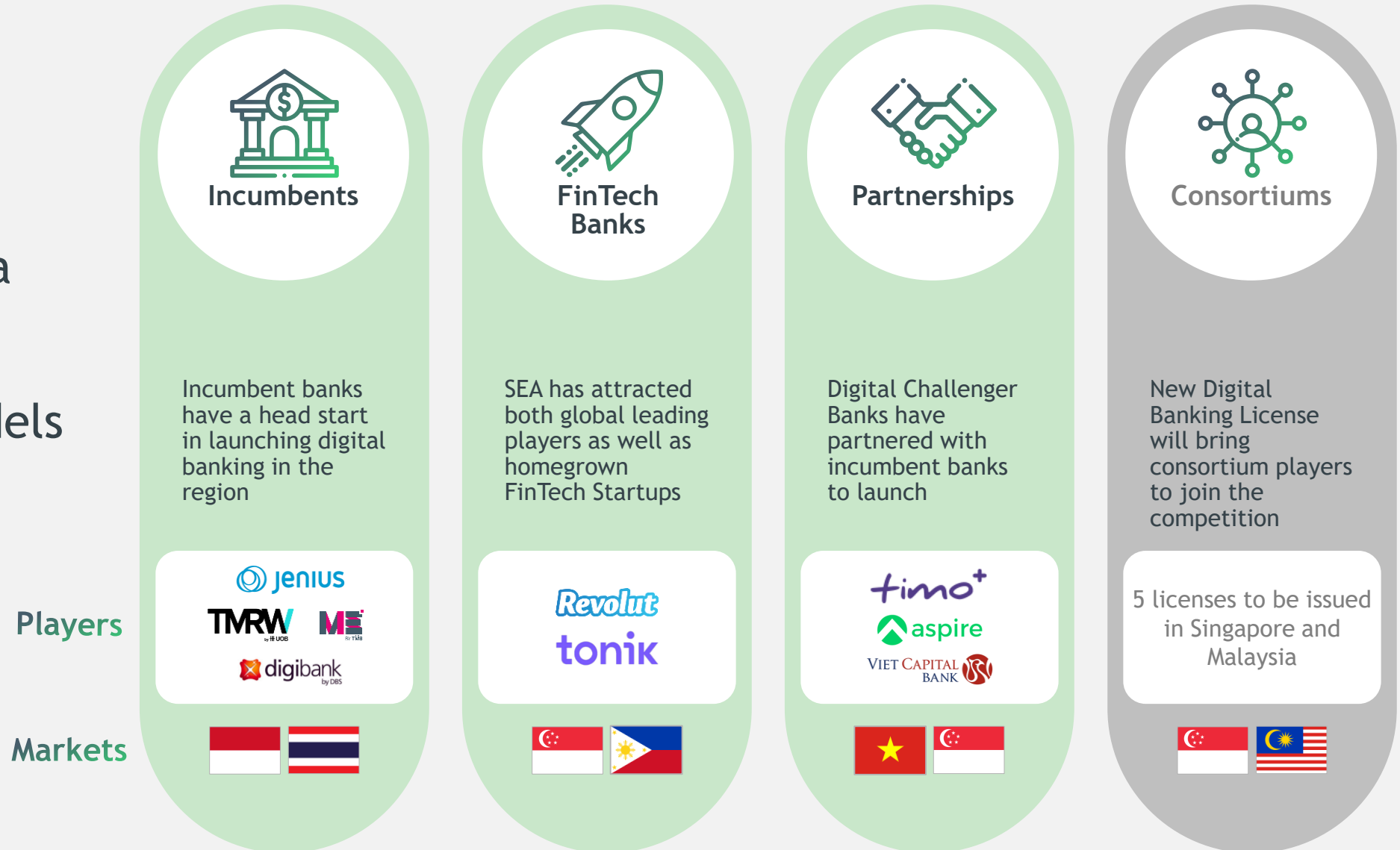


1. Excluding Ant Financial funding rounds (\$4.5B, 2016; \$14B, 2018)
2. Size of bubble represents total equity funding
Source: BCG FinTech Control Tower

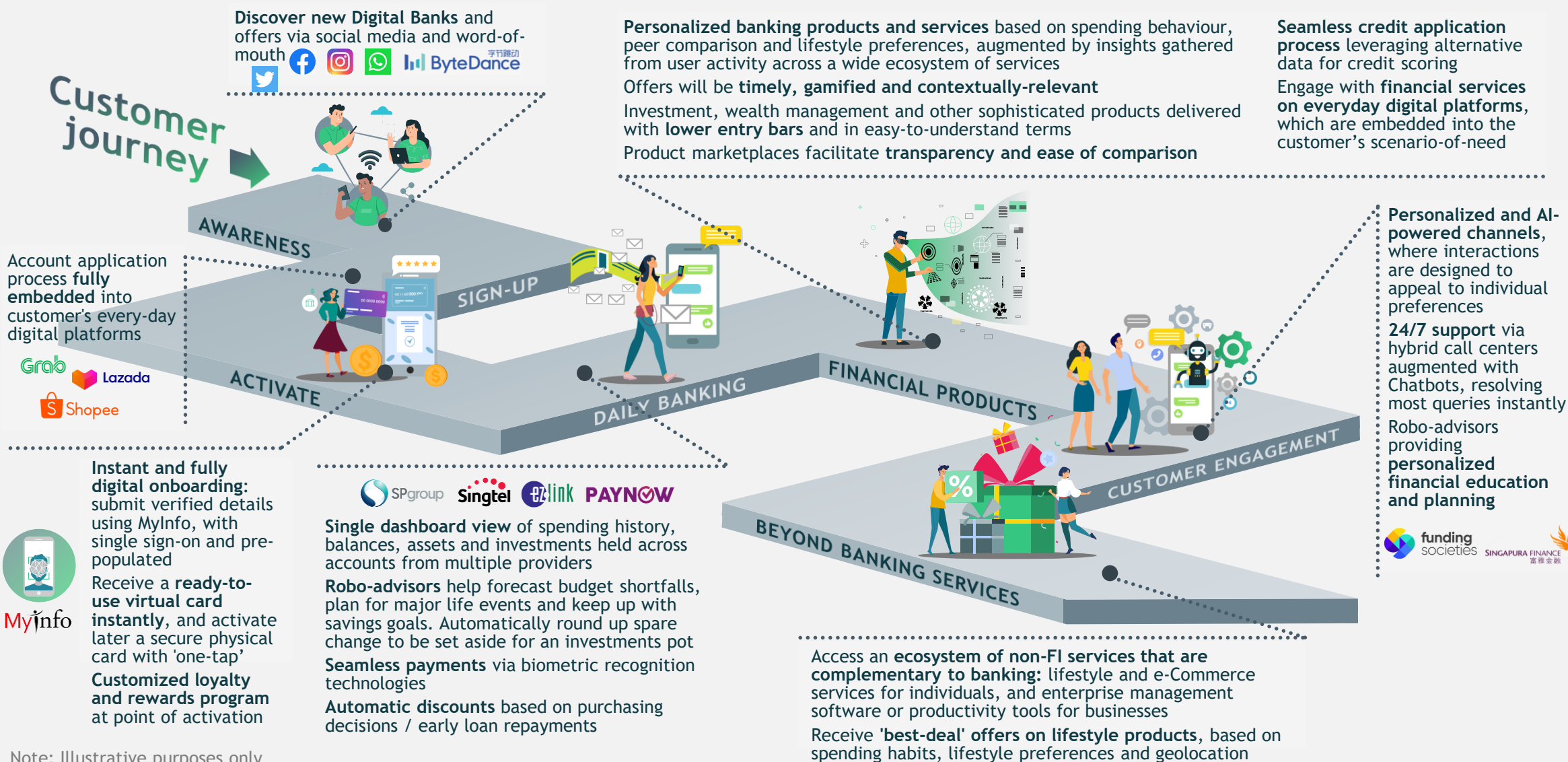
The future of banking in SEA will consist of a myriad of providers and innovative models benefiting customers

Current landscape that is rapidly evolving...

...with new players entering



The future of banking in Southeast Asia has already begun



Note: Illustrative purposes only
 Source: BCG FinTech Control Tower

Profiles



Digital Challenger Banks



Incumbents



Technology Enablers





Banks and SME software ecosystems are disconnected. At Aspire we are connecting banking services with SaaS and creating an integrated solution. As financial operating system layer for businesses.



Andrea Baronchelli
CoFounder and CEO of Aspire

What is the founding vision of Aspire?

Aspire is building better banking products for a new generation of digital-savvy business owners and entrepreneurs who are not satisfied with existing offerings and who are unfairly underserved by incumbents.

How does Aspire differentiate itself from others ?

Aspire put together a unique proposition combining business account streamlined payment functionalities such as expense management, corporate cards and cash flow insights together with flexible and fast credit offerings which is essential for SMEs. Lending is a segregated part of Aspire's business model which is funded by alternative funds and financial institutions with a unique risk appetite for SMEs, rather than from customers deposits like a bank.

What are Aspire's expansion plans in the near future ?

Aspire operates its credit business in collaboration with local credit partners across Singapore, Indonesia, Vietnam, Thailand with a particular focus on e-commerce, green energy and logistic ecosystems. Recently Aspire launched its transaction business banking product live in Singapore and in beta in Indonesia. Aspire will continue to build functionalities around its customer needs supporting their end-to-end cash flow management from revenues pay-in, to credit cash advances and expenses management.



Building a scalable marketplace banking infrastructure for SMEs to use third party financial services



2018

Founded



USD 41.5M

Funding Raised



10k+ SMEs

Users (Aug-2020)



4

Countries (Singapore, Thailand, Vietnam & Indonesia)

Products offered:



Business account



Business card



Loans



Intl. transfers



FX

Source: BCG FinTech Control Tower, company websites, press releases / research



Aspire provides banking services to SMEs to aid their growth

Tools and features for SMEs and start-ups

Instant account opening - 5 minutes account opening with business management in real time

Auto Categories - Automatic tagging of expenditure with labels

Fast credit line - Takes 5 minutes for application and 48 hours for approval with immediate drawdown

Card Management - Provides real time spend notifications with advanced fraud protection

Currencies - Transacts in over 40 currencies at real exchange rate

Accounting integration - Allows direct linking of transactions to accounting software Xero

Rewards - Offers 1% cashback on marketing & SaaS spend

Support - In-app, call or email chat option

Real time features - Customised reminders and can schedule future transfers



Partnerships:



To allow low-cost international money transfer services directly on their transaction accounts



To offer corporate cards to SME customers. Aspire will use NIUM's API solution for card issuance



To provide business owners with working capital loans of up to SGD 100k within 3 hours of application



Our priority is to provide a solution that is nimble and flexible, and most importantly that works in real-time.



Eric Mouilleron
Founder and CEO of Bankable

Why did you decide to found Bankable?

Bankable started 10 years ago as one of the first BaaS companies, to help traditional banks evolve from rigid layers of legacy systems to more flexible & modular architectures leveraging Bankable's platform. Around 2011, with the rise of mobile use, Bankable saw a tremendous opportunity to provide a comprehensive platform combining seamlessly core banking and processor features for a wide range of customers (individuals, SMEs, etc.)

What is Bankable's partnership model?

Bankable relies on partner banks for their licenses. It is a one stop shop: FinTechs can simply work with Bankable rather than reach out to each individual bank, freeing up their capacity to focus on other parts of their work, like their go-to-market strategy, clients or distribution channels. Bankable also acts as an integration and service layer giving FinTechs access under a single contract approach to a fully serviced model integrating all the necessary financial and ancillary services for the implementation and operation of financial programs (FX, global payments, AML & Fraud management solutions and control frameworks, card manufacturing, online KYC solutions, etc.)

Has Bankable looked towards expanding in APAC, in which BaaS is far less common than in the US or EMEA?

Bankable recently signed a partnership with Visa to explore its goal of serving clients across the U.S., EMEA and APAC via a single contract. There is demand in APAC for an end-to-end solution, especially something with a good front-end experience, which Bankable is now building. The team is excited by APAC's appetite to be a first-mover, and to improve on already good IT systems.



Provides full turnkey payment solutions under a BaaS model



2010

Founded



1

Round of funding in May 2019 with Visa as sole investor



N/A

Users (Sept-2020)



5

Countries (UK, Europe, USA, UAE, Singapore)

Products offered (as-a-service):



Current account



Payment Cards



Loans



Intl. transfers



FX



Virtual Accounts & wallets

Source: BCG/Expand FinTech Control Tower, company websites, press releases / research



Bankable provides white-label payment and digital banking solutions

White-label solutions and APIs helping corporates and FIs deploy their own solutions

Virtual Ledger Manager -
Unlimited virtual accounts with enhanced cash management and reconciliations

Payments processing -
Allows payment processing for accounts, virtual accounts, wallets & cards

Payment cards -
Deploy global corporate or consumer cards with expense management and youth spending capabilities

Digital banking -
Launch a Digital Bank with multicurrency account and payment features

KYC and AML plug-ins -
Provides access to online compliance services

Payment channels
Includes domestic ACHs, international bank transfers, cards, cash at branches or partner stores and alternative payment means

E-wallets -
API to manage payments flows for marketplaces in multiple currencies



Partnerships:



Enable Visa members to leverage Visa products and innovation (multi-currency, tokenization, etc.)



Use of Plaid's API to connect with their users' bank accounts worldwide



Gain access to Euro payment rails and power Agency Banking solutions



Technology and Mobile are game changers for Banking. They enable more services to be delivered at a fraction of the cost.



Cédric Jeannot
Co-Founder of Be Financial Group

What is the founding vision of Be Mobile?

Be Financial Group (B2B - parent company) started as a technology company focusing on building tech that can be used to quickly launch a digital banking platform. Be Mobile (B2C) focuses on underbanked and unbanked segments in Africa facilitating cross border micro-payments, remittances, cash management and micro-lending.

What was the bank's customer acquisition strategy?

With Be Mobile being a mobile-first offering, most of the customers are targeted online. In cases where this cannot be done, an "Agent feature" is adopted where an agent initiates the KYC verification and then directly downloads the app from app store for the customer in remote parts of the country. Receiving payments is expensive due to infrastructure costs: to combat this, merchants are incentivised to use the Be Mobile Platform which also helps in word of mouth marketing.

How has Be Mobile differentiated its offering?

The "Bank in a Box" includes a multitude of services, which makes opening an account within minutes possible with a state of the art e-KYC process where only a photo of an ID is required. Also, the cost of remittance is extremely low compared to other players operating in the region with no foreign exchange fees. The "Send money", "Request money" (Micro-Payments using QR code) feature allows users to send money instantly to any customer which is available to the recipient in a matter of seconds.

A bank for unbanked and underbanked Africans



2019

Founded



N/A

Funding Raised



N/A

Users (Sept-2020)



African Countries

Products offered:



Payments



Intl. transfers



FX



Be Mobile offers banking services like money transfer to Africans through a mobile phone

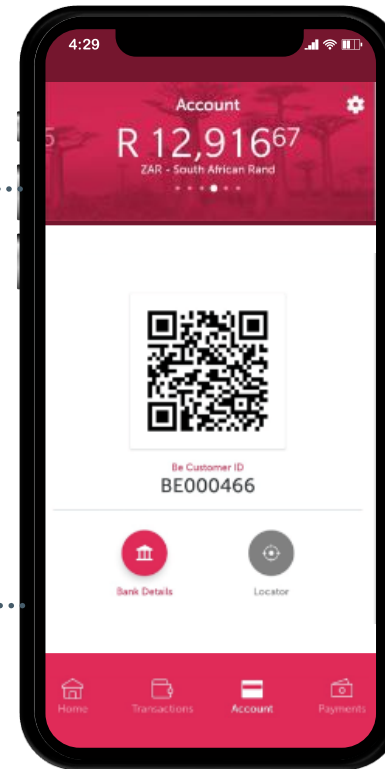
Tools and features for retail customers

Remote Account opening -

Opening an account is free from mobile phone by taking a selfie and a photo of passport or official ID

QR code payment-

Users can make payments by scanning QR codes or using only a phone number at partner shops and transfer and request money instantly for free



Remittance -

Send money overseas at a fraction of cost and receive money in a bank account or at a cash collection point

FX services -

Supports these currencies: USD, EUR, GBP, CAD, MUR, ZAR, KES, MGA, MWK, MZN, SCR, TZS, UGX, ZMW

Core Banking System:



Be Financial Group, holding company of Be Mobile



bunq's focus since inception in 2012 has been to create products users love to use. By saving time, money and CO2 we make our user's life easy.



Gerald Gruber

Head of Business Development of bunq

How does bunq's vision and strategy differ from other Digital Challenger Banks in the EU, such as Revolut and Monzo?

bunq is famous for its focus on users. We make life easy and help our users save time, money and CO2. By having an intimate bond with our users, we have a great community that gives us insights in how we can make products that people love.

How has bunq fared in the face of Covid-19?

bunq is modern on every front; in our products, in our technology and in our organization. When Covid-19 began it was easy for us to work from home whilst continuing to deliver great services for our users, without any interruptions. On top of that, bunq has been advocating sustainable business models for years. As such, bunq has a healthy business based on subscription revenues. This allowed us to continue to serve our users with lots of new great features, such as easy budgeting, via two new bunq updates, and lots of other great things that make life easy.

As with many new players, bunq has recently moved into the mortgage lending space. Is it fair to consider that lending is key to the long-term viability of a Digital Challenger Bank?

bunq is actually the first European Challenger Bank to offer mortgages, which is something that we are incredible proud of and something that hit the headlines a while back when it was announced. We believe long-term viability stems from our mindset of sustainability. Our subscriptions really are at the core of that.



Provides Open API to individual and business users to develop their own apps for financial services



2012

Founded

2014

Dutch banking license



USD 111M

Funding Raised (fully pledged by founder)



N/A

Users
(Sep-2020)

\$788M

User Deposits
(Sep-2020)



30

Countries (European Union)

Products offered:



Current account



Debit /Credit Card



Saving account



Intl. transfers



Open Banking API

Source: BCG/Expand FinTech Control Tower, company websites, press releases / research



bunq is a fully mobile bank for personal and business users

Tools and features for business and retail customers

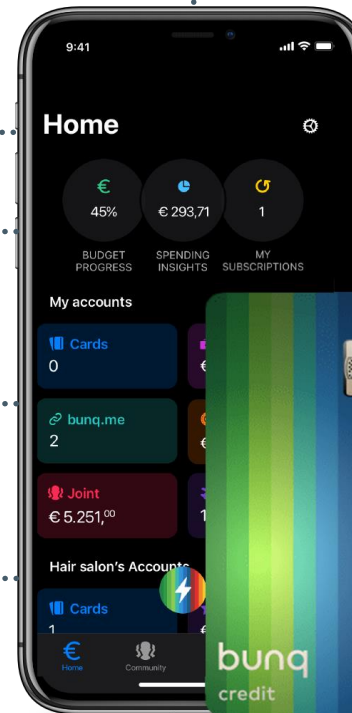
Onboarding - 30 second sign-up directly via phone

Multiple sub accounts - each with unique IBAN... for easy budgeting

ZeroFX - save up to 3% on fees for non-Euro spend

Personal payment link - the easiest way to get paid

Freedom of choice - bunq is the only bank in the world that lets you decide how your money is invested



App control - In-app savings automation, card management and easy budgeting helping users save money

Accounting - Auto VAT calculation, invoice scanning, real-time bookkeeping and many other features that save time

Trees - Become CO2 free simply by using your bunq Card. On average users can be CO2 free in just 2 years!

Maestro and Mastercard - Up to 3 cards are included in a Business subscription, so users can pay anytime, anywhere

Core Banking System:

Developed in-house

Partnerships:



TransferWise

To enable customers to make fast, low-cost international payments at real exchange rates



mastercard

Use its network to speed up the growth of bunq's card offerings in Europe



To provide AI-powered identity verification and user re-authentication



edenprojects.org

Tree to be planted for every €100 of spend



How has DBS transformed banking in Asia ?

DBS embarked on its digital transformation programme in 2014, and it has since been recognised as one of the most comprehensive for a bank anywhere in the world, encompassing journey thinking, culture change, and a measurement methodology that quantifies the impact of its digital transformation on its bottom-line. Its digital transformation encompasses:

- Being digital to the core - being a technology company that does banking instead of a traditional bank looking to digitalise: owning its technology - now 90% insourced -- and being cloud-native.
- Embracing journey thinking - embedding ourselves in the customer journey through digital innovation or ecosystem partnerships, so that banking is simple, seamless and effortless.
- Becoming a 29,000-person startup - effecting culture change to inculcate a start-up mindset and encourage a spirit of experimentation and innovation driven by data

The new architecture enables DBS to leverage APIs to establish simple and speedy connectivity. In 2017, DBS launched the world's largest API platform for a bank to enable developers and businesses to plug into their technologies. Beyond APIs, DBS has built up capabilities that combine predictive analytics and customer-centric design to transform data into hyper-personalised, intuitive, and unobtrusive insights that simplify the way customers manage their finances and investments. The bank has been embedding itself in the customer journey through digital innovation or ecosystem partnerships, so that banking is simplified, seamless and effortless for customers.

Are you seeing the new entrants as a threat ?

New entrants into any market indefinitely increases competition. In addition, it is likely that they will be free from the burden of legacy and have access to large resources. However, it may not be easy for new entrants to be successful in the short or medium term because of a few factors:

1. There are no obvious underserved segments in Singapore - the banking market is not a large market and banking penetration is high, at over 98%;
2. Incumbents, including DBS, have made credible strides in their own digital offerings over the past few years and new entrants may not find it easy to create very differentiated offerings;
3. Once the players reach a certain minimum size, the capital requirements are sizeable, and the onus for regulatory compliance will create challenges and;
4. Regulators seem unwilling to support predatory pricing.

How have you transitioned into engaging with physical customers digitally?

At the time of writing, the Covid-19 pandemic continues to impact countries globally. As governments impose movement restrictions, the nature of banking has had to undergo rapid transformation. Managing this requires efficient and resilient systems in place, not only to address exponentially increased demand for digital banking services from customers. DBS is well-positioned to cater for this, having begun its digital transformation ahead of many of its peers, enabling it to implement or enhance various processes to provide even more comprehensive banking services to businesses and individuals. Its digital transaction offerings, which have been continuously refined throughout the years, saw a significant uptick in usage. Its market leading DBS PayLah! everyday app saw a 26% y-o-y increase in usage as more customers turned to digital payments. Outgoing retail PayNow transactions across its mobile apps doubled in 1Q20, from 1Q19, reaching 16.4 million transactions, while outgoing corporate PayNow transactions increased six-fold over the same period, to 905,000.



A phygital model implemented in every cycle of consumption



1968

Founded



N/A

Funding



Over 11M

Users (Dec 2019)



16

Countries (APAC 13, EMEA 2, Americas 1)

Products offered:



Current account



Loans



Intl. transfers



FX



Insurance



Mutual Funds



Mortgages



Investments

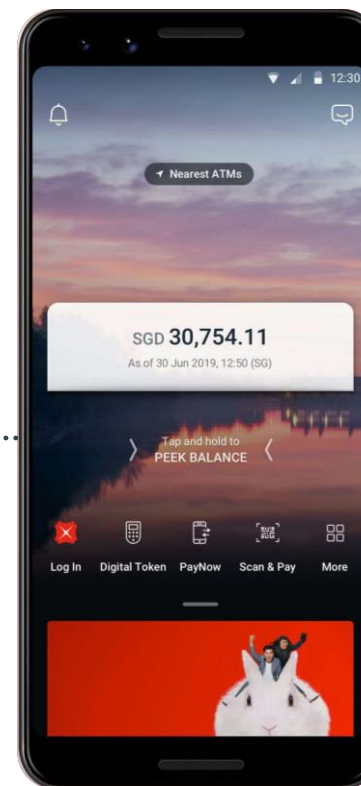
Source: BCG/Expand FinTech Control Tower, company websites, press releases / research



DBS : Embedding itself into the customer journey I/II

DBS' focus on the customer journey not only improves customer experience, it also allows DBS to create simple, suitable products for the mass market, products which would have been bespoke to affluent customers in the past. As of end-2019:

DBS digiPortfolio, an in-house hybrid human-robo investment solution introduced to retail customers in late 2019. Starting at a low investment amount of only SGD 1,000, retail customers can now instantly gain access to a diversified portfolio that provides exposure to various stock markets and asset classes with no pre-qualification necessary. The portfolios comprise carefully selected exchange traded funds (ETF) and are reviewed quarterly in alignment with the DBS Chief Investment Office's views. DBS has also simplified the fee structure to eliminate sales charges, transaction or custody fees. Democratising access to financial investments is key not only to reducing the wealth inequality gap but also ensuring the communities DBS is in are well-covered for retirement as lifespans increase



In a similar vein, DBS provides digital insurance solutions, making it easy for customers to obtain cover for important areas of their lives with minimum fuss. One such area is cancer cover, which can be purchased online without the need for a health check

In 2019, also expanded the number of partners on DBS PayLah! app to provide a wider range of everyday services, encompassing transportation, food, shopping, entertainment and bill payments - with an increase of SGD 1B in total transactions

Partnerships



As of end-2019, DBS expanded the number of partners on its PayLah! app to provide a wider range of everyday

services, encompassing transportation, food, shopping, entertainment and bill payments - with an increase of SGD 1B in total transactions. Ecosystem partnerships with e-commerce, telecommunication and loan aggregator companies in Indonesia and India also showed promising outcomes, contributing to more than 30% of unsecured loan origination for digibank Indonesia and adding more than 50,000 new accounts to digibank India. DBS Property and Car Marketplaces generated over SGD 500M in loans across Singapore, Taiwan and Hong Kong markets

Continued to have one of the world's largest banking API platforms, with over 500 published APIs. This has allowed DBS to accelerate its API connectivity with more than 400 partners across various industries

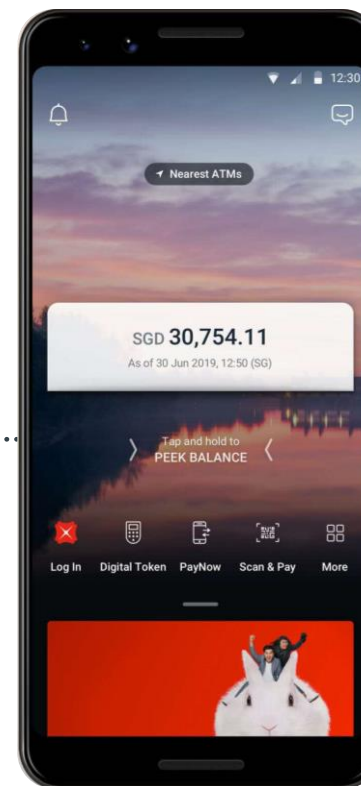
Source: BCG/Expand FinTech Control Tower, company websites, press releases / research



DBS : Embedding itself into the customer journey II/II

DBS' focus on the customer journey not only improves customer experience, it also allows DBS to create simple, suitable products for the mass market, products which would have been bespoke to affluent customers in the past. As of end-2019:

In India and Indonesia, DBS has 3.25M digibank customers - customers who opened accounts with DBS using their smartphones. The ability to offer banking in a phone aids financial inclusion, especially in large geographies, where many remain underbanked. Our ecosystem partnerships with e-commerce, telecommunication and loan aggregator companies in these two markets also showed promising outcomes. These partnerships added more than 50,000 new accounts to digibank India in 2019. Over in Indonesia, the digibank Personal Loan service offers an in-principle credit decision in less than 60 seconds for both served and underserved segments of the populations. This digital journey continues to leverage on the algorithmic lending and credit score model based on telecommunications data built the year before and contributed to more than 30% of unsecured loan origination for the market



For corporate customers, developed and launched DBS MAX, a seamless and instant payment collection solution for merchants across Singapore, Hong Kong and India. Saw rapid adoption of the solution with more than 7,000 merchants generating approximately 200,000 transactions over a short 10-month period

Convenient payment and collection solutions for customers have resulted in a reduction in physical cash transactions, with retail banking achieving a 14% reduction and corporate banking achieving a 23% reduction in physical cash transactions at branches



Fidor offers an end-to-end solution that covers a client's business, technical, operational and customer journey needs.



Ge Drossaert
CEO of Fidor

What is Fidor's founding vision as a venture bank?

Fidor was founded in 2009 as the world's first 'FinTech bank', with a vision of giving consumers a more connected, personal and rewarding banking experience. To do so, it developed FidorOS, a digital banking platform powered by open APIs which allows digital brands, developers and FinTechs to plug into its platform to offer their own financial products.

How does Fidor differentiate itself from other Digital Challenger Banks?

Fidor provides a true end-to-end solution. The Fidor Group has expertise in financial services, consulting, API and Open Banking and customer engagement. It leverages this to guide clients from designing their own Digital Challenger Bank to recruiting their first 1,000 customers and eventually using Fidor's technology to run their own bank.

Fidor also offers partnership opportunities via inception workshops, Fidor Digital Platform and Fidor Market. Fidor Market is a direct-to-consumers digital store for FinTech, InsureTech and TradeTech offerings that allows clients to market new products without having to build everything themselves.

What are some of Fidor's winning factors?

Fidor's technology and methodology allow clients to quickly launch any digital offering while ensuring their long-term business success. For example, each project begins with a comprehensive feasibility process, through which it aligns with stakeholders on the scope, objectives and feasibility of building a Digital Challenger Bank. Fidor also leverages the experiences of building its own bank, as well as other Digital Challenger Banks that it has created with clients.



Helps design, build and run Digital Challenger Banks along with running a challenger bank itself



2009

Founded

2009

EU banking license



USD 148.5M

Paid by Groupe BPCE to acquire Fidor



380k

Account holders
(Jan 2019)

~1M

Registered community
users (Jan 2019)



3

Countries (Germany, Singapore & UAE)

Products offered:



Current
account



Cards



Saving
account



Loans



Core
Banking
platform



Fidor offers digital banking services as well as white-label banking solutions

Tools and features for retail clients and financial, retail and telecom institutions

Off-the-shelf banking products - Ready to deploy modules for current account, physical and virtual cards, payments and P2P, credit products and more

Payments - Manage payment flows and card & account management

Flexible payments - Licensing or Pay-as-you-grow options available

Core Banking Agnostic- FidorOS plugs into any core banking system



Digitalizing - Plug the FidorOs into existing infra to go digital, or launch a new bank using the white-label solution

Open Banking - API infra compliant with PSD2 and open banking directives

Credit and partner offerings - Credit card, quick loans, social lending and more. Marketplace offering crowdfunding, trading, etc.

Quick onboarding - Digital onboarding in less than 5 minutes

Plug-in marketplace - Provides FinTech, InsureTech and TradeTech products for a client's customers

Instant payments - 60 second P2P payments and instant SEPA, ACH payments or country-specific transfers

Core Banking System:

FidorOS built in-house

Partnerships:



Integrated Konsensus' Third Party Providers identification platform into FidorOS



Collaborated to launch a new AI-powered chatbot for banks

8

Partnered with Eight Inc. to jointly design the customer experience for Fidor's marketplace



There is a real opportunity to better serve SMEs and help drive financial inclusion across Southeast Asia.



Kelvin Teo

Co-Founder and Group CEO of
Funding Societies | Modalku

Why did Funding Societies decide to team up in a consortium to apply for a Digital Wholesale Banking License?

Our consortium is comprised of Funding Societies, AMTD Group, SP Group (“Singapore Power”) and Xiaomi Corporation. By combining our strength, network and expertise, we bring to bear a highly competitive offering to serve SMEs. With a shared vision to be the engine of growth for SMEs, we look to meet SMEs’ holistic needs across all their life stages in Singapore, Southeast Asia and Greater China through technology and innovation, accelerating financial inclusion.

What is different about the licensing approach in Singapore?

In Singapore, the MAS has taken a calibrated approach, with 2 digital full bank and 3 digital wholesale bank licenses to be granted. The application process is characteristically rigorous, whereby applicants must demonstrate clear value propositions to meet under-served needs and a “path towards profitability” attested by a Big 4 audit firm. The approach finely balances the need to encourage innovation and minimise the risk of unhealthy competition and banks.

How will FinTech evolve in the SEA region?

While FinTech is a relatively young space in SEA compared to other parts of the world, it is increasingly viewed as a critical channel for governments to reach SMEs and consumers, including government financial support. In addition, FinTech presents an alternative form of financial services in complement with incumbent financial institutions. Overall, FinTech would progressively contribute to financial inclusion, expand the pie and drive societal growth.



Specialize in all forms of short-term SME financing, funded by individual and institutional investors



2015

Founded

Launched in Indonesia in 2016 and Malaysia in 2017



USD 40M

Series C Funding



170k

No. of registered investors

SGD1.8B

Total loans funded (Oct 2020)



4

Countries (Singapore, Malaysia, Indonesia and Thailand)

Products offered:



Term Loans



Trade Finance



Micro Loans

Source: BCG/Expand FinTech Control Tower, company websites, press releases / research



Funding Societies | Modalku is a leading SME digital financing platform in Southeast Asia

Tools and features for SME borrowers, and individual and institutional investors

Business loan -
Flexible unsecured term loan for SMEs across sizes and sectors, ranging from SGD \$3k to \$1.5m

Revolving credit line -
Flexible and ready credit to SMEs

FS Bolt -
As the name suggests, fast micro loan, over both web and mobile app, with minimal documentation

Invoice finance -
Upfront cash of up to 80% of invoice value and up to SGD \$1m

Property-backed business loan -
Enable cheaper financing for SMEs and more secure investment for investors

Seamless investor experience -
Sign up via MyInfo in 2 minutes, single-sign on, mobile app and auto invest bots

State-of-the-art security -
Fingerprint login, advanced encryption, auto-logout etc.

Digital process -
End-to-end digital process including digital signing, with offline options based on SMEs' digital savviness



Partnerships,
Singapore examples:



Serve new-to-loan SMEs or top-up to bank loans



Serve merchants within partner ecosystem



Grasshopper plays a role in providing resources to entrepreneurs, including matching investors with companies and partners with funds, and other stakeholders that lead to an entrepreneur's success.



Judith Erwin
CEO of Grasshopper Bank

What was the vision behind founding Grasshopper as a venture bank?

Grasshopper seeks to support all entrepreneurs and their investors. This includes venture-backed companies, bootstrapped innovation companies as well as emerging managers and VC/PE firms. These potential clients may not yet have a true banking partner during their earliest days. Such companies face three main pain points: (i) long turnarounds in opening traditional bank accounts due to AML and KYC, (ii) expensive wire transfers fees charged by banks, whereas Grasshopper's system means that such same-day transfers cost \$1 instead of \$25 usually charged by banks, and (iii) lack of expertise in the VC ecosystem as well as capital management.

Why apply for a Digital Banking Licence?

Rather than simply relying on interchange revenue or small deposit fees as Digital Challenger Banks do, Grasshopper has multiple revenue levers such as the ability to lend and charge interest funded by inexpensive deposits. This allows the bank to build a sustainable business model. The banking license also enables Grasshopper to offer the full spectrum of banking products and services an entrepreneur may need throughout their company's journey. It's a bank you don't need to grow out of (unlike many fintech players). Grasshopper applied for a license in October 2017, when regulators had never been confronted to similar players in the past. Hence, the OCC and the FDIC really inspected how Grasshopper conduct loan monitoring or ensure cybersecurity and overall compliance. Eventually, Grasshopper received approval in April 2019, in part due to its board's experience in the banking industry.

What is Grasshopper's business model to ensure profitability?

While traditional banks often have high fixed costs, which make it difficult to shrink business during downturn, Grasshopper operates on a largely variable cost structure. In terms of profit, its income comes from the arbitrage between the deposits our clients make and the loans they take. Other revenue pools include foreign exchange, letters of credit, credit and debit cards and currently exploring a subscription model in the future.



Delivers digital banking solutions to innovation economy companies and the venture capital firms that back these companies



2016

Founded

2019

Full banking license



USD 133M

Funding Raised



~200

Users (Nov 2020)



1

Country (United States)

Products offered:



Current account



Saving account



Loans



Intl. transfers



Money Market account



Grasshopper Bank provides commercial banking products and services to businesses

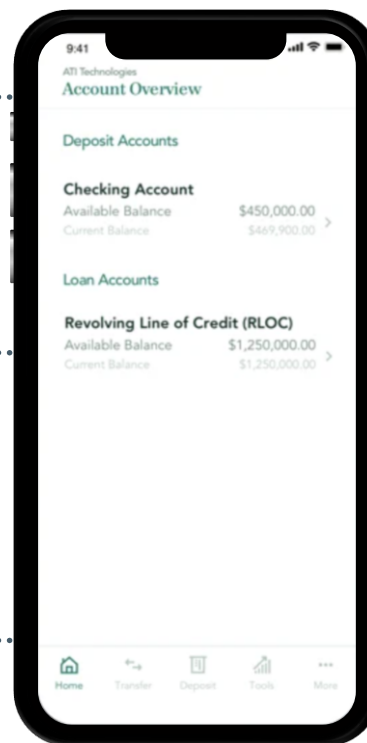
Tools and features helping businesses and their investors to manage financial operations efficiently

Checking account - No min. balance and with online banking, ACH and bulk payments facility

User friendly interface - Provides easy money transfer service, account location information and shows up-to-date account activity

Forecasting tools - Shows various business expenses scenarios and its effects on fundraising and operations

Value added services and products - Standby Letters of Credit and other loans and facilities for startups and VC & PE firms



User controls and oversight - Allows for management of user roles and permissions by setting limits and restrictions

Quick check deposits - Provides 24/7 mobile check deposits into checking and savings account

Enhanced Security - Multi factor authentication ensures account safety and privacy

'Free banking' - No minimum deposit required, transaction charges or hidden fees, and free domestic and international wire payments

Core Banking System:



Selected Temenos for its cloud-native, interoperable and open API architecture

Source: BCG/Expand FinTech Control Tower, company websites, press releases / research



“

Hay has had the benefit of working with great technical partners, allowing it to concentrate on its strengths rather than hygiene factors, bringing something truly special to market, in a remarkably short time.

”

Jason Latham
CTO of Hay

What was the founding vision behind Hay?

Hay was founded with the aim of building world-leading digital infrastructure that provides Australians with a mobile-first money solution, and that puts control back into their hands. Ultimately, Hay's aim is to bring fast, simplified, mobile banking to users.

What is Hay's acquisition strategy for its target customers?

Hay attracts a strong following of millennials and young professionals, because of its digital offering, instant service and modern interface. Hay provides a truly world-class customer experience: customers may securely open an account in under 5 minutes. We provide personal financial management tools focused on managing cost of living and budgeting, and charge zero monthly account fees, foreign transaction fees or currency conversion fees. Equally important is our back-end: we have a robust transactional infrastructure which facilitates design and features iteration. This allows us to service our customers' needs transparently, efficiently and securely.

Could you tell us about the Hay-as-a-Service platform?

Before we could build Hay we had to look at the requirements that would suit the product and experience we wanted to deliver. We couldn't find what we were looking for so we decided to build rather than buy and partner with best-in-class suppliers. Hay-as-a-Service (HaaS) is the result. A cloud-native, micro-services, API-first platform built for flexibility, scale and speed. This enables our clients to provide a fully managed offering, whereby services can be bundled and orchestrated to support their bespoke system requirements. We also assist clients with payment processing and management, provide customized data analytics and insights and help with customer onboarding via anti-money laundering checks and e-KYC checks, among other features.



Uses the New Payment Platform to provide instant money transfer service with real time notifications on user's smartphone / wearable device



2018

Founded



2019

Granted AFSL (Australian Financial Services license)

Awaiting approval for a RADl (Restricted Authorized Deposit-taking Institute license), which will open the way for it to become a fully-fledged Challenger Bank



AUD \$10M

Expected amount raised in Series C



10k+

Users (Sep-2020)



2

Countries (Australia, United Kingdom)

Products offered:



Current account



Prepaid card



Saving account



Intl. transfers

Source: BCG/Expand FinTech Control Tower, company websites, press releases / research

Hay provides an app-based digital transaction account with prepaid Visa card to retail users

Tools and features for individuals

TinyBig Rewards - Rewards users by giving 1% cashback on everyday purchases \$10 or less for the life of their account for 1 referred open account.

Zero fees - Charges no setup, foreign transaction, currency conversion, monthly, transfer, withdrawal or dishonour fees

Instant account opening - Allows users to open a fee-free account in 5 minutes

Founding member benefits (now closed) - First 10,000 account holders will receive a limited-edition card and early access to features

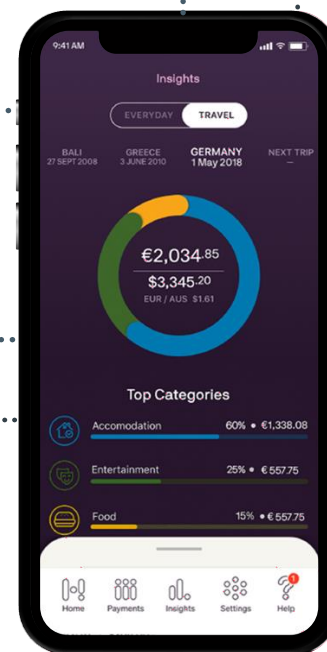
In app card security features - Allows freezing, un-freezing of physical and digital cards instantly with a swipe

Enhanced safety - Provides real-time fraud monitoring and turning on/off contactless and magnetic stripe payments

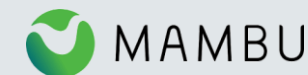
Real time notifications and chat support - Provides real-time push notifications and human chat support without waiting

Spending insights - Categorises transactions and provides spending analysis

Smart travel mode - Tracks overseas spending, shows balance in local currency and Australian currency, and provides detailed transaction data



Core Banking System:



Incorporated Mambu's API-first, core-banking platform into its custom-built ecosystem, to allow it to develop a wider suite of digital banking products this year

Partnerships:

FEATURE SPACE

Selected Feature Space's ARIC Risk Hub to help identify and prevent fraudulent financial activities on its mobile app



AWS to supply cloud computing services



“

Our priority is to make it simple and cost effective for businesses to expand globally while going local everywhere around the world.

”

Joel Yarbrough
VP Asia Pacific at Rapyd

What is the founding vision of Rapyd?

Rapyd is a “FinTech-as-a-Service” platform that provides both a global payments network to unlock all locally-preferred payment methods around the world and a product platform that enables B2B customers to collect or disburse funds, manage multi-currency wallets, issue payment cards, complete compliance obligations, and build new solutions from simple eCommerce and B2B payments, to marketplaces and super-apps.

What is the interest in Digital Challenger Banks in Southeast Asia?

On the small business side, SME’s are truly underserved in Southeast Asia which is where digital banking can solve real problems, particularly around access to credit. On the retail side, there is a lot of hunger amongst a fairly tech-savvy mass market for new solutions that are mobile-first and respect peoples’ familiarity with technology to provide service in a way that is just as real-time, social, and innovative as the people in this region.

Is there a “Brand Premium” associated with Singapore?

Singapore provides a great location, access to capital, access to talent and a positive regulatory climate that makes it a great place to anchor and build a business. The ASEAN region overall has a lot of interaction and positive internal competition that builds extends that Singapore spirit, and has built a vibrant region overall.

Locally-preferred payments in over 100 countries accessible via a single integration with built-in compliance, fraud, and foreign exchange management



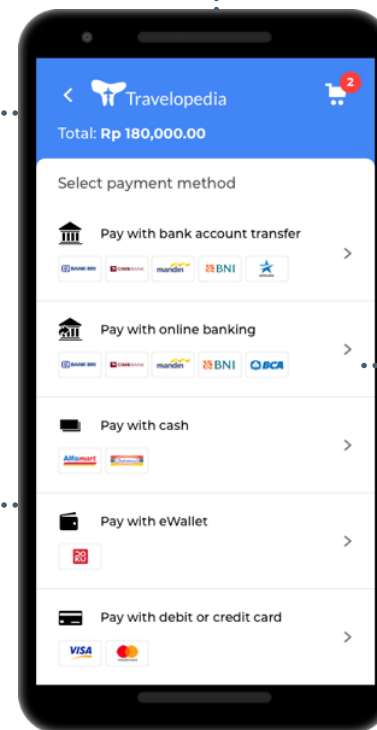
Rapyd provides FinTech and payment capabilities embedded into client's applications

Tools and features for banks, e-commerce companies and marketplaces

Global Network - Portfolio of e-wallets, bank transfers, cash and local cards available via a single network

Seamless money transfer- Accepts and disburses payments to over 900 payment types in over 100 countries

Built-in compliance and fraud prevention - Integrated monitoring and rules platform to manage risks and offer identity verification, AML / CTF, sanction screening, and transaction management tools



Advanced client portal - Provides real time transaction initiation, reporting, and monitoring

Offline to Online - Connects to over 2m ATMs and stores across the globe

Simplified local and cross border commerce- Provides fast and easy FX, settlement in over 65 currencies

Partnerships:



To launch a business wallet and a complementary Mastercard payment card for real estate salespersons of ERA Singapore



To expand worldwide payment and payout capabilities for clients and make entry into new markets faster



To expand PayMyTuition's payment options so as to receive tuition funds in local currency via Rapyd's single API



2016

Founded



USD 170M

Funding Raised



N/A

Users (Aug-2020)



100+

Countries

Products offered:



Collect



Issuing



Disburse



Wallet



When building the bank, 20% of my energy was spent on technology aspects and 80% on risk, compliance and customer support.



Joaquin Ayuso
General Manager at Rayo

What was the vision behind founding Rayo?

Rayo is a Digital Challenger Bank for expats and immigrants in the US to ease their access to financial products. It allows users to open a US account before arriving to the US. Rayo realized that the expat community was largely underserved even though they account for one of the wealthier customer segments with an average salary of \$100k. It is also a large segment with a population of more than 10 million that makes it an attractive segment. Rayo wanted to create an offering that would remove the need to transfer money across borders, and act as a global bank account that can be used to make payments in multiple currencies with a global account balance.

Who are the partners Rayo relies on?

Rayo does not have its own banking license and rely on a bank partner for deposit accounts. Rayo has built the front end, providing functionality using APIs. It has built a ledger on top of bank partner stack that allows it to plug into other finTechs for loan, credit card, investment products, etc. Customers see one brand Rayo but the license is held by all these different partners for various products.

What is Rayo's business model?

Unlike many other start-ups, Rayo does not offer premium products and non-banking services from the get-go. As Rayo focuses on immigrants and expats, it offers services from partners such as relocation services, visa consultants, and investment advisors. In FI services, the margins are very thin, these additional services enable Rayo to have additional profit streams.



A bank for immigrants and expats to US



2020

Founded

Partner bank - to be announced soon in US



N/A

Funding Raised



N/A

Users (Aug-2020)



1

Country (United States)

Products offered (in beta phase):



Current account



Debit /Credit Card



Saving account



Loans



Intl. transfers



FX

Source: BCG/Expand FinTech Control Tower, company websites, press releases / research



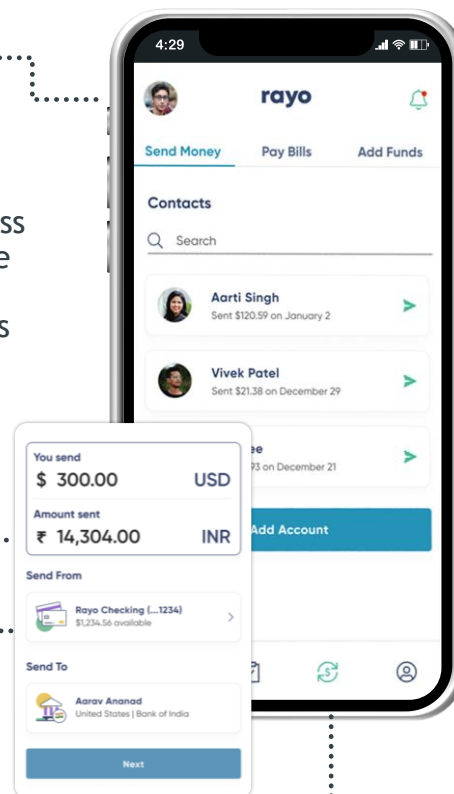
Rayo Bank offers tailored banking products to immigrants and expats in US

Tools and features for retail customers

Account -
FDIC insured deposit account and checking account

Founding member benefits - Early access to Rayo app, Fee free money transfers for life, subscription fees waived, special edition debit card

Debit Card and credit card -
Ready debits cards when immigrants arrive and apply for credit cards on arrival



Miscellaneous service -
Expert relocation and concierge service, free data service ready when immigrants arrive

Personal loan -
Without any credit score users can apply for a loan

Money transfer & FX -
International money transfer and currency services

Partnerships:

STILT

To offer personal loan



To support with Remittances

Other partners include:

Relocation agencies, local banks to keep deposits and international remittance partners



“

The power of a cloud-based open banking platform is that it can scale globally with minimal marginal cost, compared to traditional banks which would need to build data centres.

”

Eduard Fabian

Vice-President and CTO of Razer
FinTech

What value does each member of Razer's consortium bring to the table?

Razer brings the power of its leading global brand for Youth & Millennials and its extensive expertise in FinTech. FWD has a strong base in digital insurance, Sheng Siong provides support from a consumer and B2B point-of-view. Insignia provides a strong VC background, while Carro brings strong expertise as an e-commerce player.

How does Razer intend to reach underserved segments, being one of the Monetary Authority of Singapore's eligibility criteria for granting a digital banking license?

Razer defines the 'underserved' as the youths and millennials segment in both the B2C and B2B space. This is where the brand is the strongest: Razer has over 100m users globally in its ecosystem to whom it may provide new services. Its ambition is to serve segments of underserved SMEs, especially start-ups and smaller players who can't get access to credit or for whom it may take too long to secure business loans.

Does Razer anticipate strong competition in the payments space, especially from incumbent players?

The payments space is highly competitive and is getting commoditized. The market share for incumbent banks in the payments space will continue to get eroded by the new FinTech players, especially if they are only operating in Singapore. We also see business models around the region that are not sustainable, where payment service providers are burning cash by paying merchants to adopt their solutions in 'wallet wars', rather than focusing on customer experience or business value.



Provides online and offline payments services for merchants and an e-wallet for youth and millennials

**2018**

Founded

2020

Applied for digital banking licenses

**N/A**

Funding Raised

**NA**

Users (Sep-2020)

**2**

Countries (Singapore & Malaysia)

Products offered:



E-Wallet



Merchant Payments



Razer Fintech provides offline-to-online digital payment network in Southeast Asia

Tools and features for merchants and individual customers

E-wallet -
Provides payments services, transfer funds, and lifestyle products

Secure 1-Click -
Provides a secure 1-Touch Payment method instead of entering 16 card digits

Mobile XDK -
Cross-platform payment kit for brands to boost in-app payment performance

Online merchant services -
Global card processing and online payment gateway

Offline merchant services - Over 2m physical points across SEA providing point of sale services such as distribution of games, top ups, bill payments and cash over counter

Marketplace payments -
Payments between multiple sub merchants with an automated processing system

Payment automation - For recurring payments and easy instalments plan

Virtual Terminal - All-in-one payment processor for merchants via a mobile app



Partnerships:



To drive customer engagement and gamification of the user experience



To offer short-term business financing to merchants under Razer Merchant Services



Enable Google Play Store customers to make O2O payments through the Razer Cash Solution



Our universal tech stack and operating model is key to our competitive advantage and global vision.



James Shanahan
CEO of Revolut Singapore

Why did Revolut enter the Singapore market?

Revolut launched in Singapore in October 2019. Singapore is an attractive market for several reasons. It is a wealthy market in terms of GDP per capita and therefore a strong fit for Revolut's products and services. Additionally, the Monetary Authority of Singapore is a well-respected regulator who also supports a well-developed startup ecosystem. Although Revolut is ineligible for a Digital Full Bank License as a non-Singapore controlled entity, Singapore's Payment Services Act provides clarity and structure for our payments business. Finally, Singapore represents a natural beachhead for our expansion into Southeast Asia, with a surrounding population of over 600m and an addressable market of 100-200M, which is similar in size to Europe and the US. Singapore is also a market that welcomes new approaches to existing problems: Revolut has reached over 70,000 signups in Singapore since our launch, indicating a strong appetite for innovation and improved customer experience.

How does Revolut intend to pursue its ambitious global expansion strategy?

Revolut has built a single global operating model and a universal technology stack. This means that apart from some degree of localization for regulatory and language barriers, our back-end, operations and app is the same across the world. This is true of our approach to credit, risk, compliance and all other operating capabilities. As a result, we can go-to-market and reach profitability quickly, as we do not build any stack in new territories and our products have proven business models.

Can you tell us more about Revolut's aim to build the world's first truly global financial "Super App"?

Money has found its way into every aspect of life, and a financial "Super App" represents the same unbounded potential for integration. Compared to a bank, a "Super App" attracts less preconceived restrictions and assumptions. This framing enables opportunities for us to roll out products that reach far beyond the traditional concept of a bank.



Mobile app-based financial “Super App” which provides a wide range of financial services for consumers and small businesses



2015

Founded



USD 580M

Series D Funding



13M+ & 500k+

(personal)

(businesses)

Users (Jul-2020)



35

Countries Supported

Products offered:



Current account



Debit /Credit Card



Saving account



Intl. transfers



FX



Insurance



Crypto-currency



Revolut is a fully digital banking alternative, offering a debit card, FX, savings and more

Tools and features for businesses and individuals

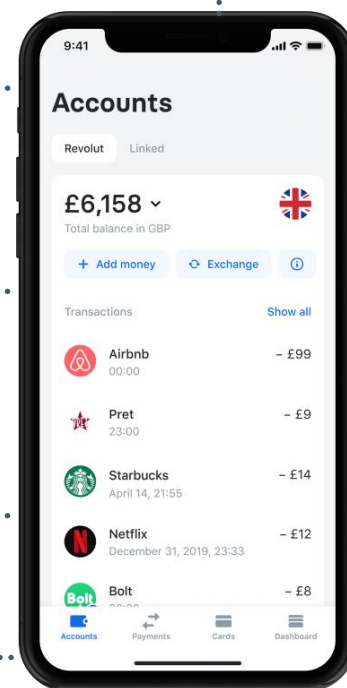
Savings Vaults - Allows individual and groups to save money for financial goals

Budget and spend analytics - Weekly spending insights with categorization

Instant spending notifications - Alerts for transactions in and out of account

Account aggregation - Connect external bank accounts to Revolut, giving users a view of their accounts within a single application

Smart company cards - Issue physical and virtual cards, track spending in real-time for the entire team



International transfers - Transfer in 28+ currencies with no hidden fees and at interbank exchange rates

Card Control - Freeze and unfreeze card easily from the app

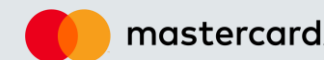
Accounting integration - Connect and automate accounting with tools like Xero, Freeagent and QuickBooks

Comparison - Personalized comparison and switching services

Group Bills - split bills easily in groups

Partnerships:

VISA



For payment & FX, and to support its global expansion



TRUELAYER

To launch Open Banking for all UK customers

FLAGSTONE
THE SMARTER CASH PLATFORM

To provide clients with interest on their Savings Vaults



To offer marketing help to its business customers



“

Ultimately, the challenge is not only to build innovative financial products, but to build a profitable and future-proof bank around them

”

Ravi Patel

Head of Partnerships, Asia-Pacific of
Thought Machine

How Thought Machine's value proposition is unique in the cloud banking space?

As banking continues to evolve to a cloud infrastructure model and with growing pressure to be profitable and compete with emerging technology platforms, there is a growing demand for cloud native core banking applications.

Thought Machine is an engineering company that has purposefully written our cloud-native platform, Vault, entirely in-house so it does not contain any legacy or pre-cloud technology. It is designed for any type of bank, including large complex banks, to take advantage of all the benefits of scalability, security and resilience. Vault is available on every major cloud infrastructure provider including Google Cloud Platform, Amazon Web Services, Microsoft Azure and IBM Cloud, or hybrid cloud using Red Hat OpenShift, as software or as a SaaS product. Banks such as Lloyds Banking Group, Atom bank, SEB, Standard Chartered's Mox and FinTechs such as Monese have been able to design new Digital Banks with a strategic advantage in platform capabilities, performance and their ability to develop new 'hyper-personalized' products.

Where does Thought Machine sit in the customer's end-to-end experience?

Thought Machine focuses on a bank's back-end core banking product engine and ledger technology, designed to be performant on a cloud infrastructure. In an ideal scenario, a Digital Bank would be built around a real-time core ledger that could efficiently integrate to all the various upstream and downstream systems required through our APIs, giving it the foundations to scale up the efficiencies of platform agility. So Thought Machine sits at the heart of any financial product business and allows banks to deliver any proposition and any innovative customer experience, all using modern battle-tested technologies.

Does Thought Machine have plans to expand into new markets?

Headquartered in London, Thought Machine has been growing aggressively across all aspects of our business and geographically to be close to our clients. In 2019 we launched our second office located in Singapore to support the Asia-Pacific region and will be very soon opening offices in Australia in 2020 and the USA in 2021. Thought Machine will continue developing Vault, our core banking technology, as a market-leading solution while exploring new segments and capabilities where it adds new value to our clients.



Helps banks digitize
their core offerings
easily through a
microservices API
architecture platform



2014

Founded



USD 148.5M

Funding Raised



400+

Users (Jul-2020)



1

Countries - United Kingdom, Singapore,
Australia. (US opening in 2021)

Products offered:

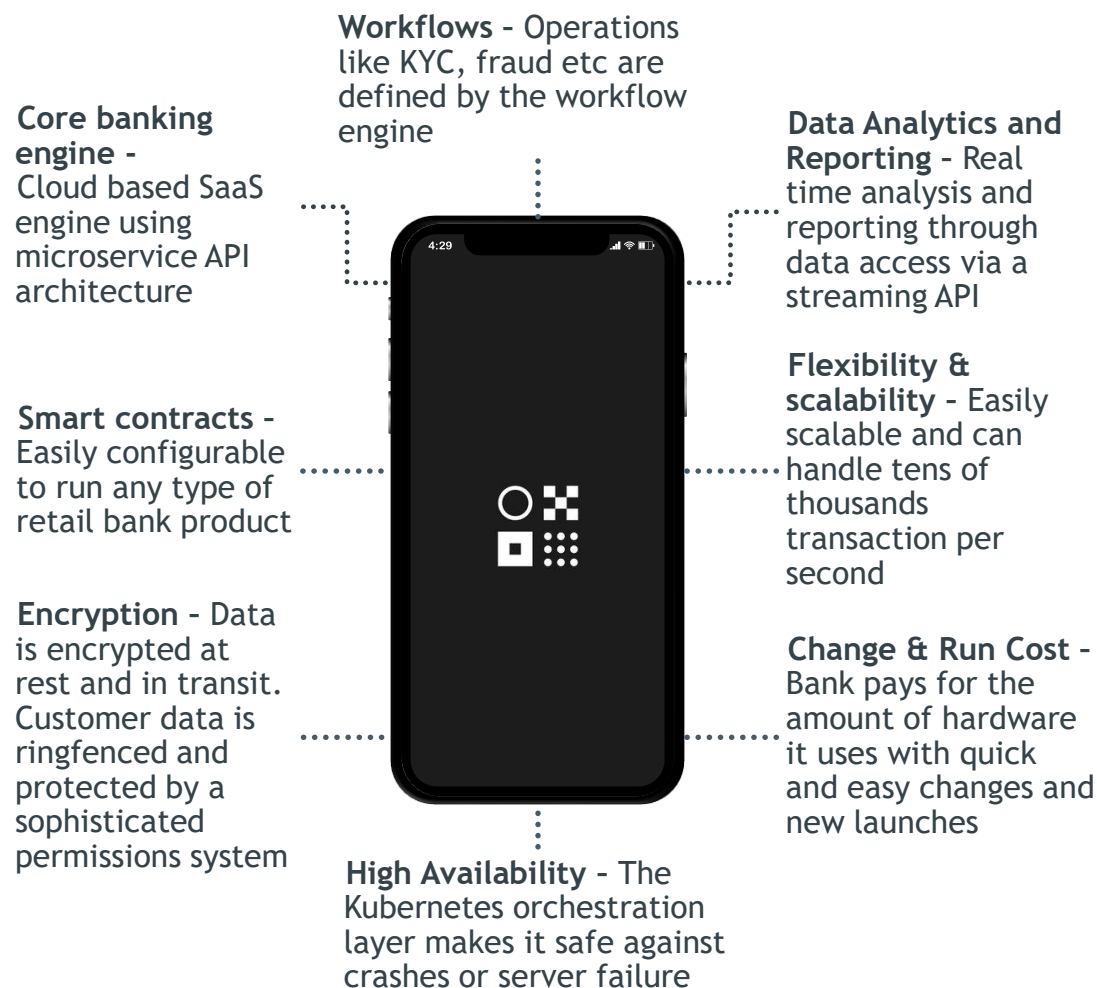


Core
Banking
Platform



Thought Machine enables flexible product design and creation through Vault

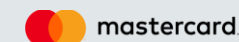
Tools and features helping banks deploy their banking solutions



Partnerships:



(Works with all mainstream public cloud infrastructure service providers)



start path



CLOUD NATIVE
COMPUTING FOUNDATION



Stuart Smith

Regional Head of Engagement & Design
at TMRW by UOB

What are the target market segments for TMRW?

TMRW by UOB is a mobile-only bank designed for the digital generation in ASEAN, offering a simple and engaging customer experience through the use of data.

TMRW is targeting the millennial segment, where the sheer size of young and digital-native population makes it very attractive. Even though we have set a target to grow to 3-5 million customers in 5 years, numbers aren't the sole focus and we want to ensure quality customer acquisitions. If we are able to get it right - demographic, age group, etc., the lifetime value of each customer will be exceptional.

An important value proposition of digital banks is the emphasis on a good onboarding experience and TMRW by UOB is outperforming in that respect; we can do it in Indonesia within 7 minutes.

What differences do you see in markets in Indonesia and Thailand?

When it comes to digital banking, banks in Thailand have great digital offerings and provide a very well-rounded omnichannel experience.

Indonesia is a very diverse and fast-moving market where incumbent banks are providing features on their digital platforms as well as strong offerings from wallets and non-bank players.

TMRW by UOB has similar offerings in both markets and is currently looking to introduce an e-commerce loan product which will further attract customers to our bank. Moreover, most Neobanks tend to launch with a single product, TMRW by UOB started with a bundled product- cash and credit card which has worked very well in both markets.

How do TMRW and UOB Mighty co-exist?

UOB Mighty services our omnichannel customers in our mature market such as Singapore and Malaysia. These customers often have complex product needs and requirements. TMRW on the other hand, is designed to reach new customer in the emerging markets of ASEAN. TMRW and Mighty share technologies and the AI platforms we have built are deployed in both applications.



A full suite of banking solutions through a smart, mobile-only app



2019

Founded



N/A

Funding Raised



N/A

Users (Jul-2020)



2

Countries (Thailand and Indonesia)

Products offered:



Current account



Debit /Credit Card



Saving account



Unsecured Lending

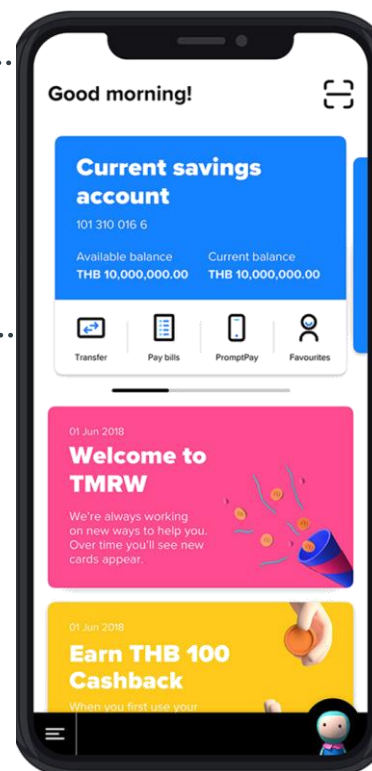


TMRW is a mobile only bank for millennials

Tools and features helping customers on their savings journey

Analyse and predict -
Provides a cash flow analysis & predict cash flow patterns for upcoming payments

Spend tracking -
Enables budgeting, categorization, payment notification & spend notification



Smart saving -
Provides personalised saving advice and has an in-app saving game where user's virtual city grows with savings

TMRW Credit Card
- offers cashback and other attractive deals on spending



Chatbot -
24hr helpline with in-built call feature

Powered by:



Partnerships:



Leverages AI-powered personalized insights that offer stand-alone bite-sized information about a customer's financial activity



Leverages its technology to track, consolidate and categorize customer data



Uses Avatec.ai's credit assessment capabilities



“

There is a huge opportunity in digitalizing deposits for the banked and unbanked in Philippines, providing them with a better digital proposition.

”

Greg Krasnov
CEO and Founder of tonik

Why are you initially going after the Philippines market?

tonik is a transformative Digital Challenger Bank on a mission to revolutionize the way money works across SEA. There is a great opportunity in deposits within Philippines; 50% of the banked Filipinos are ready to switch to a good digital proposition - a Digital only Bank that is simple, not intimidating, helps them save with a non comparable mobile-based efficiency. Additionally, there is another addressable market: financial inclusion - there is a lot of money not deposited in banks today (70% of Filipinos save cash "under the mattress").

How is tonik positioning itself compared to the competition?

tonik is focusing on deposits and loans for the underbanked and unbanked segments, fulfilling their digital banking needs where a lot of incumbent banks in the Philippines have not met. Out of the population that borrow, only 4% borrow from banks - banks are doing a poor job including them.

On the other hand, while digital lenders are very active in the Philippines, we do not consider them to be competition. They mainly focus on loans granted for a period of 30-60 days which is not suitable for the target segment tonik is focusing on.

Why did you choose to incorporate in Singapore?

Singapore provide legal entities advantages: shareholders agreement and arbitration are favourable. tonik is operating across 3 locations: Manila, Singapore and India, where our R&D centre is located (Chennai). Our holding company in Singapore is the owner of these entities.



First Digital-only Bank licensed in Philippines



2018

Founded

2020

Digital Banking License



USD 27M

Funding Raised



N/A

Users (Jul-2020)



1

Country (Philippines)

Products to be offered: (As not yet launched)



Current account



Debit card



Saving account



Unsecured Loans



tonik offers a full range of digital-only banking services

Tools and features enabling customers to use digital only financial services

Onboarding -
Take less than 5 minutes to open an account online with digital biometric authentication

Deposits -
Use deposits solutions and checking account online

Cards -
Provide debit and credit cards with security features

Loans - Offer more competitive rates

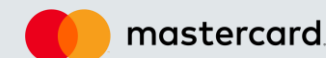
Payment -
Proceed to any payment through mobile



Core Banking System:



Partnerships:



Issue a range of electronic payments products using MasterCard's' global network



DAON to deliver onboarding mobile biometric authentication with IdentityX Platform



V-KEY as Mobile Security Partner with the V-OS App Protection



“

Digital banking for the mass market requires a “high touch - high tech” approach to travel the digital journey with the customer in order to establish strong trust.

”

Coen Jonker

Executive Chairman at TymeGlobal;
Non-Executive Director at TymeBank

Brief introduction about TymeBank

TymeBank is globally the fastest growing greenfield Digital Challenger Bank, launched in South Africa in 2019 with 2m customers onboarded in 17 months. It is also the country’s first majority black-owned retail bank. Tyme’s proposition solves unique emerging markets challenges - access to cash and financial literacy, to enable financing access to the underserved and underbanked in South Africa. Tyme is a full Digital Challenger Bank with no branches and a cloud-based loosely coupled microservice tech stack.

What was the bank’s customer acquisition strategy?

Digital banking for the mass market requires a “high touch - high tech” approach to travel the digital journey with the customer in order to establish strong trust. Partnering with the most trusted grocery chain in South Africa, TymeBank opened with standardized digital onboarding kiosks to provide bank accounts in under five minutes. Working with the grocery chain offers the customer a physical location to easily access banking activities, and at the same time, also reassures the customer that they can access cash through a cash register till when needed. 85% of Tyme’s 2 million customers have onboarded through the kiosks which takes on average under 5 minutes to issue a bank account and personalized debit card. Customers then learn about the account from an Ambassador, hired from the local community, who guides and provides support, further strengthening the trust factor.

How has Tyme differentiated its offering?

Tyme’s bank account, which is a transaction and savings account in one, is free to open and doesn’t charge a monthly fee, unique in South Africa. Tyme’s GoalSave savings account uses gamification and positive incentives to provide better interest rates the longer the customer keeps the money deposited. At the same time, Tyme does not penalize if money is withdrawn prematurely. TymeBank is imminently launching responsible high velocity lending products as well as third party products in insurance and a credit card. Tyme further builds customer loyalty through integrating into its retail partner’s Smart Shopper Loyalty program.



A bank for underserved South Africans



2018

Full Banking License

2019

Banking launch



ZAR 900M

Funding Raised



2M

Users (Jul-2020)



1

Country (South Africa)

Products offered:



Current account



Debit /Credit Card



Saving account



Loans

Source: BCG/Expand FinTech Control Tower, company websites, press releases / research

TymeBank offers digitally smart banking designed to meet people where they go

Tools and features for retail and SME customers

Account -
Online account with no monthly fee for daily transactions

Loan -
High velocity lending products to be launched

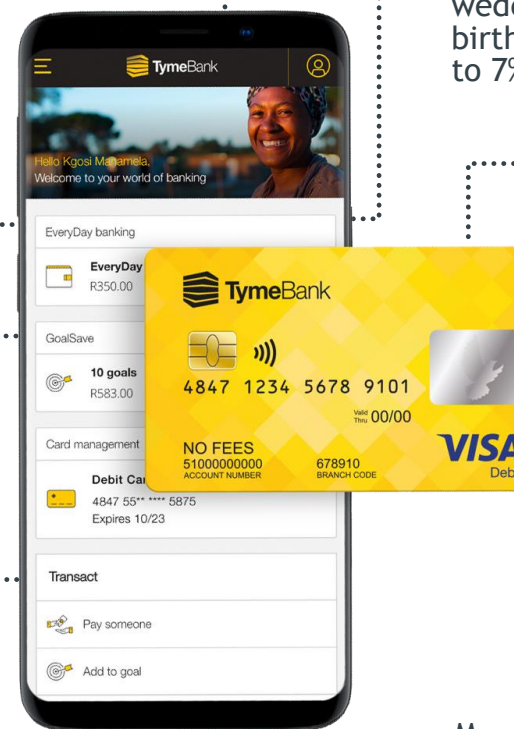
Smart shopper points -
TymeBank card earns smart shopper points when users shop and double points for swiping at Pick n Pay

TymeCoach -
Free access to credit score plus tips and tools to help users make better decisions

Goal save -
Savings tool for a purpose like wedding, holiday, birthday with up to 7% interest

Debit card -
24/7 access to debit card with the power to immediately freeze or cancel when lost or stolen

Money transfer -
Instant money transfer to South African cell number



Cloud-based :



Hosts Tyme's loosely coupled microservice platform.

Partnerships:



Retail environment that hosts the Tyme Kiosk, the Ambassadors in the retail stores; provides retail basket detail for credit scoring.



Up is a Digital Bank designed to help you organise your money and simplify your life.



Dominic Pym
Co-Founder of Up

What's the founding vision for Up?

Up is a Digital Challenger Bank designed to help you organise your money and simplify your life. We believe we can take people from a place where money is a cause of stress and anxiety to a happier place where they feel empowered and in control of their finances.

How does Up differentiate itself from digital banking contenders in terms of features?

Up is delivered through a collaboration between Ferocia (an Australian technology company) and Bendigo and Adelaide Bank (the fifth largest retail bank in Australia). This unique partnership helps us iterate at lighting speed, delivering innovation faster than any other Australian bank. Upsiders build their own experience according to their needs and values, our role is simply to help them spend wisely and save effortlessly. With auto Salary Splitting they can push their salary into multiple interest-bearing Savers. With just two taps, Upsiders can use money in a Saver to “Cover” a purchase or they “Forward” incoming transactions like forwarding an email. “Pull to Save” rounds balances to the nearest dollar to save their spare change. Up’s Insights tools automatically assign categories to track spending with over 150,000 identified merchants and power auto-predictions of upcoming bills and subscriptions. Transaction balance notifications and Saver Pools help Upsiders reconnect with their digital money in completely unique ways. Plus, Up is the only bank in Australia to have partnered with global players Afterpay for integrated BNPL transactions & smart receipts and TransferWise for near-instant and low-cost global money transfers.

How does Bendigo and Adelaide bank benefit from the partnership?

As the highest rated banking app in Australia, Up helps Bendigo connect with a new generation of customers (with 50% of Up’s customers aged 16 to 25). Up also fuels Bendigo’s growth with 140%+ year-on-year increase in customers (over 280,000 by Sep-2020) of which 90% are new-to-bank and have deposited over \$3B since launch.



Australia's fastest-moving bank, constantly innovating and engaging with customers to help them spend wisely and save effortlessly



2017
Founded



Self funded
No outside investment to date (Sep-2020)



280k+
Customers (Sep-2020)

Source: BCG/Expand FinTech Control Tower, company websites, press releases / research



Up offers new digital-first tools to help you reconnect with and take back control of your money

Rapid Development
Requested updates from customers can go live on the same day

Products Offered
Spending account
Debit card
Multiple savings accounts
International transfers
Digital wallets (Apple, Google, Samsung, Garmin, FitBit)
Smart receipts with product data
Upcoming spending predictions
In-app customer support



In partnership with





Tools and features

International purchases -
No fees. Actual Mastercard exchange rate provided

Support -
In-app customer support, 7 days a week

Saving goals -
Multiple customized savers with auto-roundup facility, boosts, and pay splitting

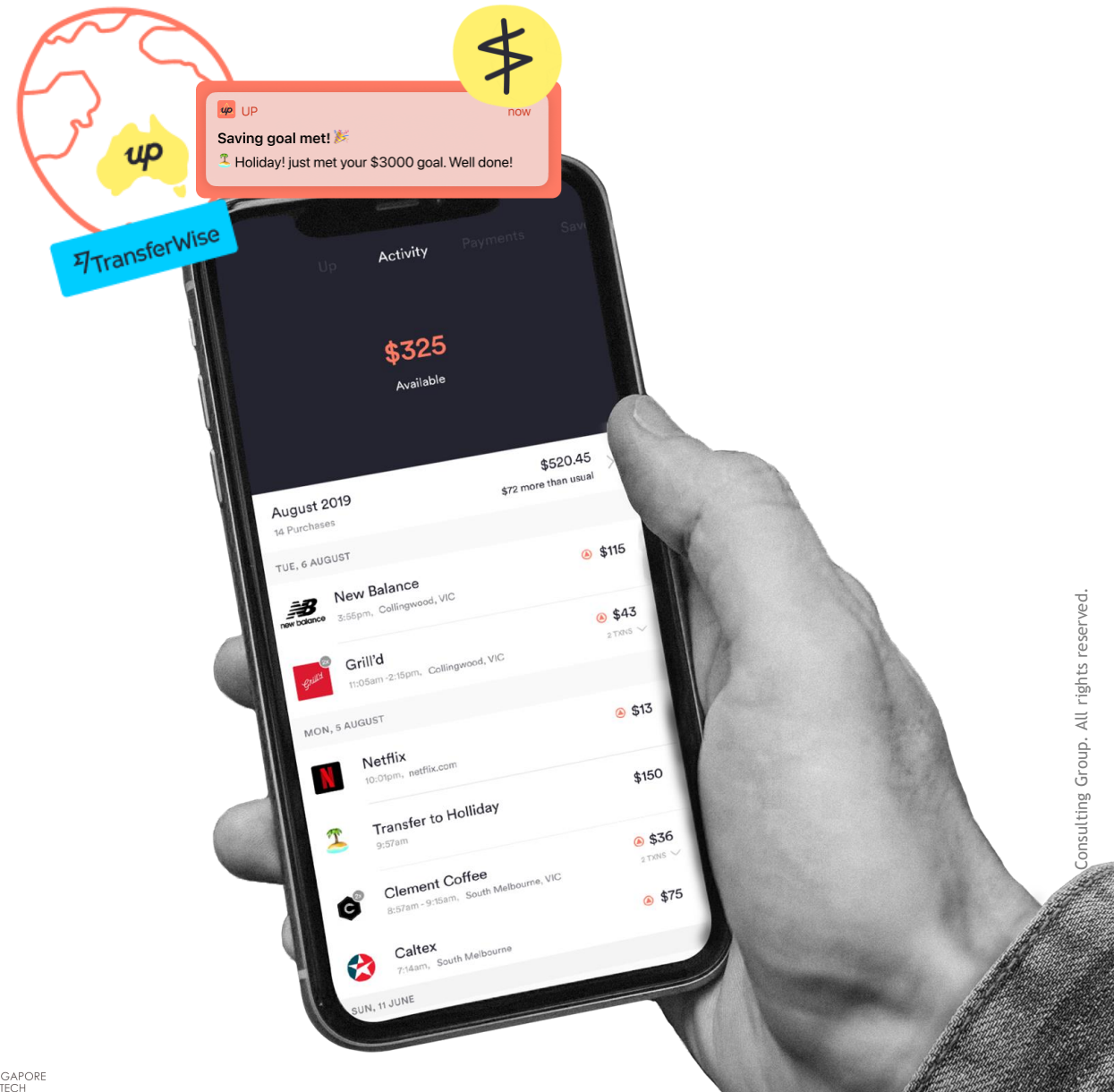
Fast onboarding -
< 3 mins in-app sign up, including digital wallets

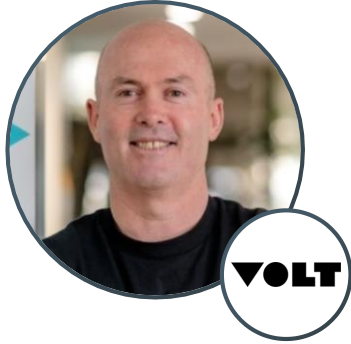
Smart Spending -
Instant merchant identification, spend categorization, and insights

Instant notifications -
Get real-time spending and balance notifications

Payment options - Supports Apple Pay, Google Pay, Samsung Pay, Garmin Pay, and Fitbit Pay
Also built-in Osko support, TransferWise and Up2Up

Easy deposits -
Free deposit of cash and cheques through Bank@Post at the local Australia Post outlet





Major banks business models leverage a lack of pricing transparency and strong customer inertia. Volt Bank is committed to showing Australians that banking can be done in a simpler and better way.



Steve Weston
CEO & Co-Founder Volt Bank

What is the founding vision and value proposition of Volt?

Rather than just providing banking products, Volt will provide a full range of support, including bank accounts, education and other tools, to more effectively support customers in living better financial lives than incumbent banks have been able to do. Volt offers highly competitive deposit interest rates. Unlike most banks, Volt doesn't offer higher deposit interest rates only for an introductory period, nor does it require customers to meet certain conditions to qualify for bonus rates. For deposits, Volt will target millennials, retirees, small businesses and corporates. Volt will commence lending once it is comfortable with the state of the Australian economy, and when unemployment levels have stabilised.

What is Volt's customer acquisition strategy?

Volt has a two-pronged approach to customer acquisition; directly via our app and via a diverse set of partners such as retailers and payment firms. The partner channel will leverage the platform that Volt has built, which will allow customers to open bank accounts through the partner's ecosystem; a service that doesn't currently exist in the Australian banking market. This provides a low cost of acquisition for Volt and allows its partners offer a better experience to their customers.

What are some of Volt's "winning factors"?

Volt will facilitate account and utility bill switching and offer discounts at a large number of retailers when payment is made using a Volt account. Volt will also offer a seamless onboarding process and will support customers with budgeting and learning good savings habits. Volt aims to provide best-in-class solutions whether they are built internally or leveraged from best-in-class partners using open APIs.



Helping customers to be better off



2017

Founded

2019

Full banking license



AUD \$113M

Funding Raised (Jul -2020)



~6,000

App Users (Jul-2020)



1

Country (Australia)

Products offered:



Saving account



Transaction account



Cash Management account

Source: BCG/Expand FinTech Control Tower, company websites, press releases / research



Volt is building a bank with a focus on customer experience

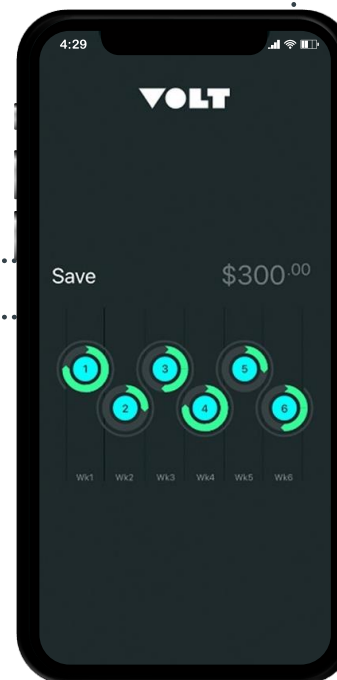
Tools and features that will be launched to help customers on their savings journey.

Savings Challenge - set up a saving habit by setting goals and keeping track regularly

Great Savings Rates

- Competitive interest rate, leveraging lower cost operating model

No Bonus Rates - attractive & fair rates all the time. No catches such as honeymoon periods which rely on the customer not noticing that they have rolled over to an uncompetitive rate



Data Analytics - real time data analytics to provide behavioural insights to customers

Savings tools - savings visualisation, buckets, and automated payments

Seamless onboarding - 60 second digital account opening

Core Banking System:



Partnerships:



PayPal customers can login to Volt using their PayPal credentials



Introduced its customers and team members to Volt



leveraged its cloud-based payments innovation platform & services marketplace



Huiya Yao

Head of Fintech Innovation



Mohan Ma

Head of Regional Partnerships

How has WeBank transformed banking in China?

Backed by Tencent as its largest shareholder, WeBank is China's first Digital Challenger Bank with a focus on improving the accessibility and quality of financial services for underbanked and unbanked individuals and SMEs.

Over the last 5+ years, WeBank has taken a non-conventional approach to developing its business by employing several digital banking business models simultaneously: Mass Banking (offering personal loans through WeChat & QQ platforms); Direct Banking (offering personal finance management and SME lending through independent, self-owned channels), and API banking (embedding financial services into 3rd party platforms, such as e-wallets in retailers and auto loans into online second-hand car platforms).

Serving millions of customers via each of these business models in a fully digital, agile, and cost-viable manner poses many internal and external challenges for the Bank (e.g. customer predictability, fraud risk, high frequency transactions, etc.). To solve for these, WeBank's in-house developed FinTech is applied throughout the Bank, leveraging advanced AI, Blockchain, Cloud Computing and Big Data technologies.

Consequently, WeBank serves as one of the world's strongest examples of a bank applying business model innovation and FinTech at scale.

How is WeBank positioning itself compared to the competition?

WeBank combines its core competencies in product design, technology, and data analytics as a part of a '3O' Paradigm of Open Banking (Open Platform, Open Innovation, Open Collaboration). Through Open Platform, WeBank positions itself as a partner bridging ecosystem-based digital businesses over to incumbent financial institutions. Open Innovation allows third party technology and financial businesses to develop their own capabilities and technologies based on WeBank open-source projects. Open Collaboration encourages multiple businesses to join WeBank to form collaborative business models for equitable participation and benefits.

How is WeBank adapting its offering during Covid19?

WeBank's agile operations and digital business model ensures uninterrupted services to customers, even as employees and customers alike must work from home. WeBank established multiple financial relief measures for individuals and SMEs stressed by COVID-19. Based on WeBank's technological capabilities and modular systems, new tailored products may be launched in rapid response to the crisis; for instance, one SME loan for an ecosystem partner was released in just 10 days.



Deep in-house technical expertise - partnering with Ecosystem



WeBank offers internet-based banking products with strong credit propositions

Tools and features for retail and SME lending customers



2014

Founded



Non-disclosed

Funding Raised



>200M

Users (June-2020)



1

Country (China)

Products offered:



Unsecured microloan



Insurance



Auto Loan



Mutual funds

Credit line offered

¥ 500 - ¥ 300 K
(~\$70 - \$43 K)

Time to determine credit line

<5 Seconds

Easy application

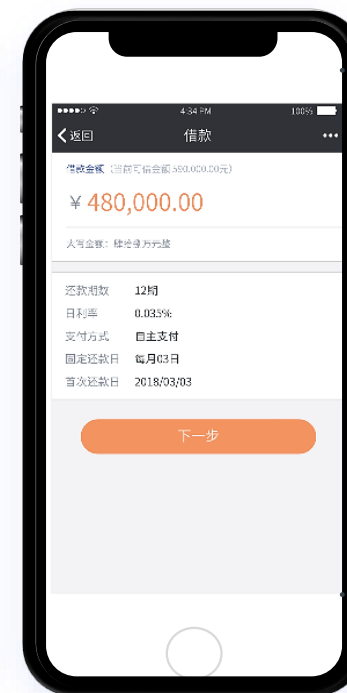
Whitelisting mechanism improves UX and approval rates

Time to receive funds in account

Instant credit assessment, funds can be received in <1 minute



1. Weilidai
Personal Microloan



2. Weiyedai
SME Loan

Dynamic unsecured Credit Line Max.

¥ 3M (~\$435 K) without requiring collateral

Flexible repayment

- daily interest accrual, options to pay off outstanding amount without penalty

Smart risk management:

quantitative risk assessment based on big data, <54 sec approval

Acknowledgements



Source: BCG Fintech Control Tower

Interviews

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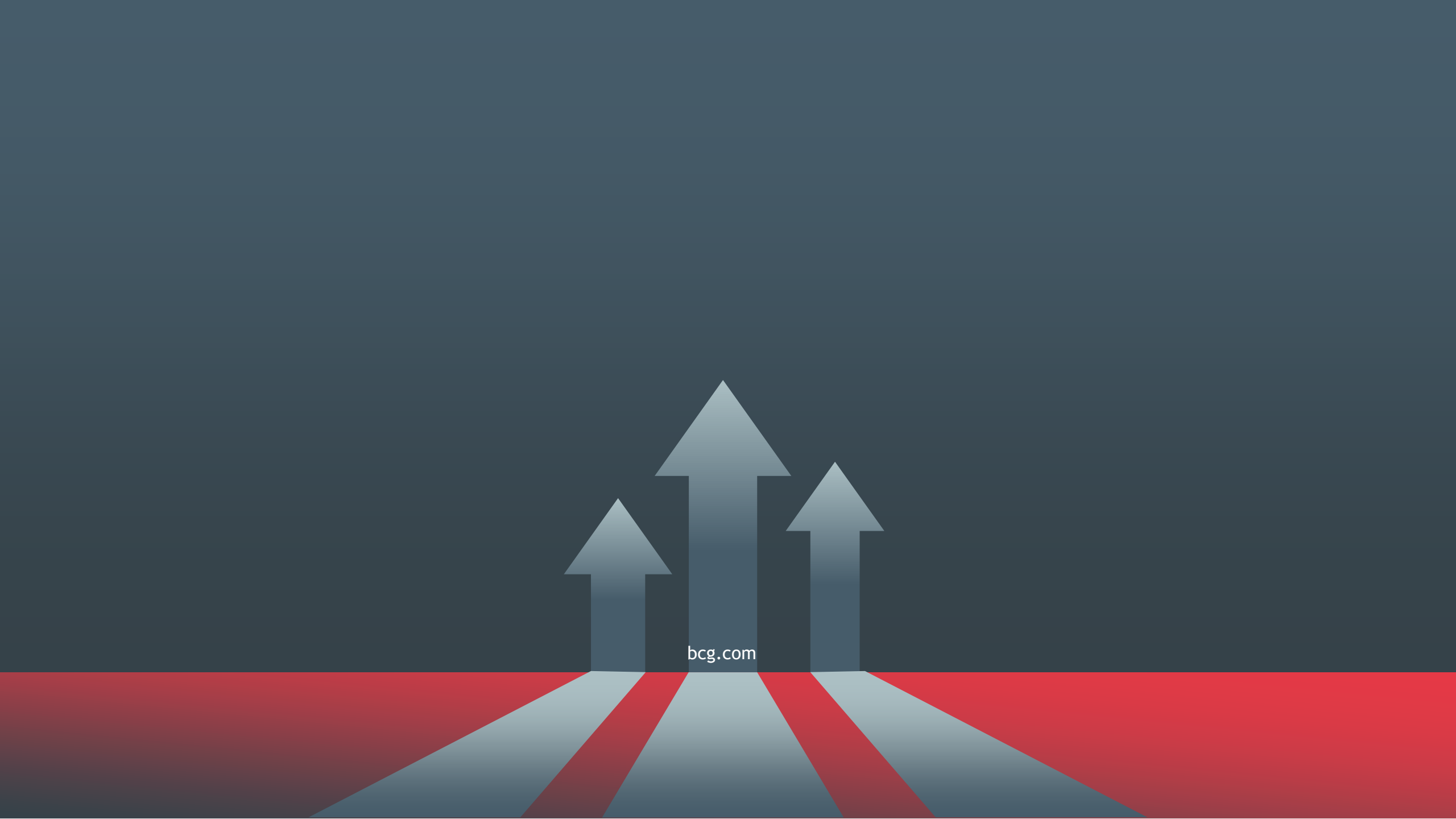
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