APAC DIGITAL BANK LANDSCAPE WHERE TO FROM HERE?





TABLE OF CONTENTS

SECTION	TITLE	PAGE
Section 1	UNADDRESSED DEMAND	6
Section 2	ENTER THE DIGITAL BANKS	13
Section 3	KEY CHALLENGES	31
Section 4	SUCCESS CASES	37
Section 5	THE WAY FORWARD & HOW WE CAN HELP	45

EXECUTIVE SUMMARY (1/3)

UNADDRESSED DEMAND

- Within the traditional banking system in APAC, there remains large unbanked and underbanked populations who are unable to access any / full banking services, particularly in developing markets; while in developed markets, traditional banks also tend to fail to provide customers with a personalised and streamlined digital experience, resulting in customer dissatisfaction.
- SME customers also face several pain points in their banking journey, including a slow and paper-based account onboarding process, lengthy loan application processes with tedious documentation requirements, as well as onerous annual account reviews. Most importantly, many MSMEs in the region struggle to secure credit within the traditional banking system.

ENTER THE DIGITAL BANKS

- To address customer pain points and to meet the emerging demands and growing digital preferences of customers, there has been a surge in digital-native banks that have launched in APAC markets, with over 40 having been launched to date.
- Digital banks are utilising a wide variety of cutting-edge technologies to improve the customer experience along the end-to-end value chain, including, for example:
 - Customer awareness: social media, targeted ads, and SEO / ASO
 - Customer onboarding: OCR, facial recognition, and data verification tools
 - Customer engagement: gamification, budgeting tools, and social connectivity features
 - Product / service offerings: credit scoring, robo-advisory, and payment rewards
 - Customer Maintenance: chatbots, live chat, and 24x7 hotlines
 - Data Management: cloud, cybersecurity, and fraud detection software
- In addition, many digital banks in the region are also focusing on building partnership ecosystems in an effort to enhance product development, drive their distribution efforts, and enhance customer loyalty.

EXECUTIVE SUMMARY (2/3)

KEY CHALLENGES

- While early entrants in markets like Japan, Mainland China, and South Korea have established a substantial customer base and are generating profits, newer digital banks in the region are facing significant hurdles in breaking even. Taking Hong Kong as an example, since the market entry of all 8 players back in 2020, none have managed to turn a profit, recording sizeable losses.
- The cost of customer acquisition ("CAC") has been a significant challenge for many firms, especially those operating in developed markets like Hong Kong, with CACs for retail customers ranging from USD 65-90 (vs. USD 15-50 in emerging Asia and USD 1-5 in frontier Asian markets).
- Substantially lower average deposit levels per customer compared to traditional banks, being 10 times lower on average in markets like Hong Kong, also limits the ability for digital banks to effectively monetise their customer base via lending and investment products.
- Digital banks also face a number of over-arching challenges such as trust issues, data security, talent retention, and stiff competition from both other digital banks, as well as a growing number of traditional banks who are investing heavily in their digital transformation efforts.

SUCCESS CASES

- Taking a look at some of the profitable digital banks operating globally, we observe some key features of their business models:
 - WeBank: capitalised on Tencent's vast customer base, developed an online collaborative lending model, and created proprietary advanced risk models that enables the bank to approve loans in just 2.4 seconds.
 - KakaoBank: monetised its customer base by offering a range of products, especially a wide variety of loans, while providing a uniquely gamified customer experience.
 - OakNorth Bank: developed an advanced credit scoring model that has enabled it to grow its loan book significantly and expand its business through licensing.
 - Airtel Payments Bank: attracted a large number of users and deposits by offering high interest rates, monetising customers through cross-selling third-party offerings.
 - Starling Bank: catered to older, more affluent customers, expanded its mortgage lending business, and built a marketplace for third-party offerings.

EXECUTIVE SUMMARY (3/3)

THE WAY FORWARD

- There are a number of key considerations that APAC digital banks must address in charting their path to profitability, including:
 - Acquisition:
 - **Customer acquisition:** rapidly acquire new customers while keeping CAC in check.
 - Customer experience: optimise UI / UX to offer a truly superior and engaging customer experience across the end-to-end value chain.
 - Monetisation:
 - Interest income: secure a sizeable, sticky deposit base to scale targeted lending activities with key unbanked / underserved customer segments.
 - Non-interest income: launch suitable fee-based product / service offerings in key white spaces to drive non-interest revenue streams.
 - **Cross-selling:** develop a clear strategy and automated process to drive cross-selling.
 - Strategic Superchargers:
 - Third-party partnerships: actively identify and engage with relevant partnerships to refine product / service proposition and scale distribution efforts.
 - Ecosystem / Platform proposition: develop a self-sustaining ecosystem that acts as a bridge between customers and partners.
 - Geographic expansion: leverage existing capabilities and track record to expand into new markets, either organically or inorganically.



SECTION 1

UNADDRESSED DEMAND



APAC MARKET GAPS: RETAIL & MSME BANKING

Key Takeaways

The APAC market has a sizeable unbanked population, particularly in the Philippines, Vietnam, Indonesia, and Pakistan, where retail customers lack access to basic banking services. The credit demand gap for MSMEs also remains unaddressed in many markets due to limited financing options, limited data availability, and hefty collateral requirements.

In other developing countries within the APAC region, such as India, Mainland China, Thailand, and Malaysia, both retail and MSME customers may be underbanked, meaning they may have access to basic banking services but not to the full range of financial products and services available in the market.

Even in developed APAC countries, where the unbanked / underbanked population may be small, there are still evolving customer demands that may be underserved by traditional banks, including highly personalised and digital experiences. While market structure dynamics in APAC are far from homogenous, many emerging Asian economies have sizeable unbanked populations and MSME financing gaps

Market Gaps 2022E

202	Market	Retail Unbanked Population		MSME ¹ Credit Gap as Proportion of GDP	
Ţ	>> The Philippines	66%	34%	76%	24%
- payu	🚼 Vietnam	69%	31%	12%	88%
Unbanked	E Indonesia	51%	49%	19%	81%
	C Pakistan	43%	57%	15%	85%
Ţ	💿 India	20%	80%	11%	89%
anked	🣒 Mainland China	20%	80%	17%	83%
Underbanked	E Thailand	18%	82%	10%	90%
	堡 Malaysia	15%	85%	7%	93%
Ţ	South Korea	<mark>5%</mark>	95%	n.a.	
 8	🙀 Hong Kong	<mark>5%</mark>	95%	3%	97%
Underserved	Singapore		98%	<mark>4%</mark>	96%
- Und	 Japan 		98%	n.a.	
	🔭 Australia		100%	6%	94%

Note: ¹Micro, Small and Medium Enterprises

Source: World Bank, International Finance Corporation, InvestHK, The Adviser, Global Finance, Merchant Machine, Quinlan & Associates estimates

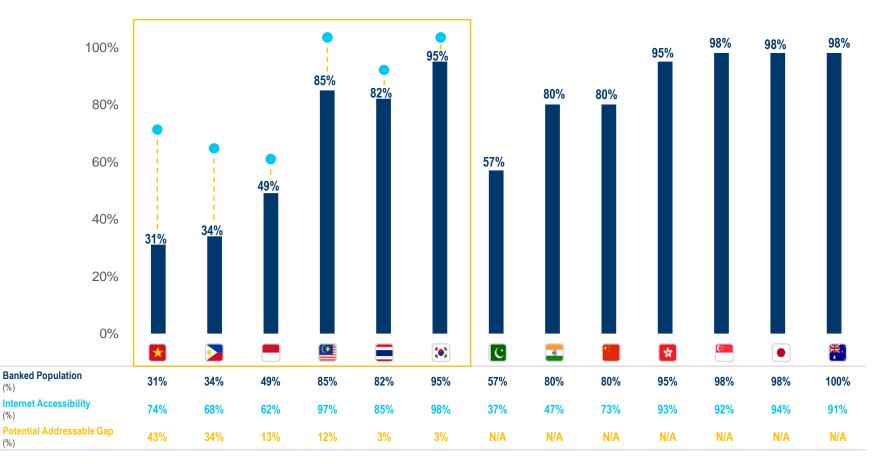
RETAIL PERSPECTIVES: UNBANKED SEGMENTS

Key Takeaways

While a significant proportion of the population in emerging APAC markets is still unbanked, the rapid growth of internet accessibility in many of these countries presents a unique opportunity for digital-first banks to acquire new customers who have access to the internet but have yet to engage with banking services.

By tapping into a more digitally savvy customer base, digital banks can offer tailored solutions that meet the needs of long-tail unbanked / underbanked customers, including those in rural or remote areas where traditional banking services may not be readily available. Rising internet accessibility offers digital-first players in emerging Asia the ability to access previously untapped customer segments

Untapped Potential Upside 2022E



Source: World Bank, Global Finance, Merchant Machine, Datareportal, The Express Tribune, Quinlan & Associates estimates

RETAIL PERSPECTIVE: UNDERSERVED SEGMENT

Key Takeaways

The traditional banking model is plagued by numerous pain points for retail customers throughout their end-to-end journey.

This includes having to physically travel to branches for account opening, lengthy waiting periods between requests and approvals, and a lack of personalised products and services.

Additionally, the remote service experience offered by incumbent banks' chatbots and call centres are often viewed as unsatisfactory. Existing customers of many traditional banking institutions experience a variety of lingering pain points across their end-to-end journey

Underserved Retail Customer Pain Points

Overview

PHYSICAL TRAVEL	Physical travel to branches for account opening procedures, including submitting paperwork
QUEUING UP	Queueing up at branches in cases of heavy customer traffic, staff shortages, or the lack of an appointment
ONBOARDING PROCESS	Slow onboarding process, with paper-based application forms and tedious requirements
LENGTHY WAITING TIMES	Long waiting periods between requests / applications for usage of products and services, and their approval
INSUFFICIENT DIGITAL OFFERINGS	Inability to access numerous banking services through online channels or digital means
POOR PERSONALISATION	Lack of personalisation of products and services, rendering the customer experience generic / unsuitable
LACK OF INTEGRATION	Offerings may not be well integrated with each other, making it difficult for a customer to keep track of everything
UNSATISFACTORY REMOTE SERVICES	Remote service experience offered by chatbots and call centres may not always be satisfactory

Services

Onboarding

Product Access

MSME PERSPECTIVES: PAIN POINTS

Key Takeaways

SME customers also face several pain points in their journey, including a slow, manual, and paper-based account onboarding process, lengthy loan application processes with tedious documentation requirements, as well as a onerous annual account reviews.

Especially for loan applications, SMEs may face challenges posting collateral, and many banks may be unwilling to approve their credit applications due to their small size and higher perceived risk.

These pain points can drastically hinder SME credit access and customer experience, leading to considerable funding gaps and customer dissatisfaction, with many SMEs forced to seek out alternative financing solutions.

Overview (Hong Kong) LOAN APPLICATION ACCOUNT ONBOARDING ACCOUNT REVIEW 2-4 WEEKS 3-5 WEEKS Initial Account Onboarding Document Checklist Loan Application RMs require SMEs to provide a comprehensive The reported time for the entire onboarding Application submission and initial review by list of the most updated documents iourney, from sign-up to approval the traditional bank Document Submission **Ongoing Document Requests Ongoing Document Requests** R SMEs submit documents for preliminary checks Ongoing document requests result in Ongoing document requests result in and respond to ongoing document requests frequent back-and-forth frequent back-and-forth Phone / In-person Interview In-person Appointments **Fax Submission** RMs interview SME owners / employees to verify To comply with additional formalities, in-Document sharing via fax is often required, 5-7 WEEKS business conditions, including employee status person visits may be required which people no longer know how to operate 8-12 WEEKS Site Visit & Collateral / Guarantee Check Digital Enablement Lengthy General Checks Ēž Risk specialists may physically visit to review SMEs' Enablement of digital banking access, Banks need to check the current condition of ability to fulfil collateral / guarantee agreements features, and functionalities may take time collateral / quarantee, documents, etc.

MSMEs also face slow onboarding times, as well as stringent loan application and annual

review processes, leading to significant credit demand gaps and customer dissatisfaction

Cheque Book Delivery A cheque book may need to be collected from a branch or by mail

Card Delivery

MSME Value Chain Pain Points

A debit / credit / ATM card may need to be collected from a branch or by mail

Relevant Parties' Loan Confirmation Delays often occur in asking and reminding shareholder(s) and director(s) to sign-off



Banks adjust SMEs' credit risk scores and modify loan amount / terms based on review results

```
Visible Procedure
```

ANNUALLY

MSME PERSPECTIVES: CREDIT GAPS, MALAYSIA

Key Takeaways

Due to rigorous loan application requirements and annual reviews, many MSMEs in emerging APAC markets face difficulties in securing credit.

For instance, in Malaysia, the rejection rates for individual business owners and MSMEs ranged from 45% to 60% between 2018 and 2022,.

This trend highlights the challenges faced by MSMEs in accessing credit within the traditional banking system, which can potentially be addressed by digital banks. As a result, many MSMEs in emerging Asia struggle to get access to credit; the majority of MSME lending applications in Malaysia, for example, were rejected from 2018-22

Lending Applications by MSME Size

2018-22, %



MSME PERSPECTIVES: CREDIT GAPS, HK

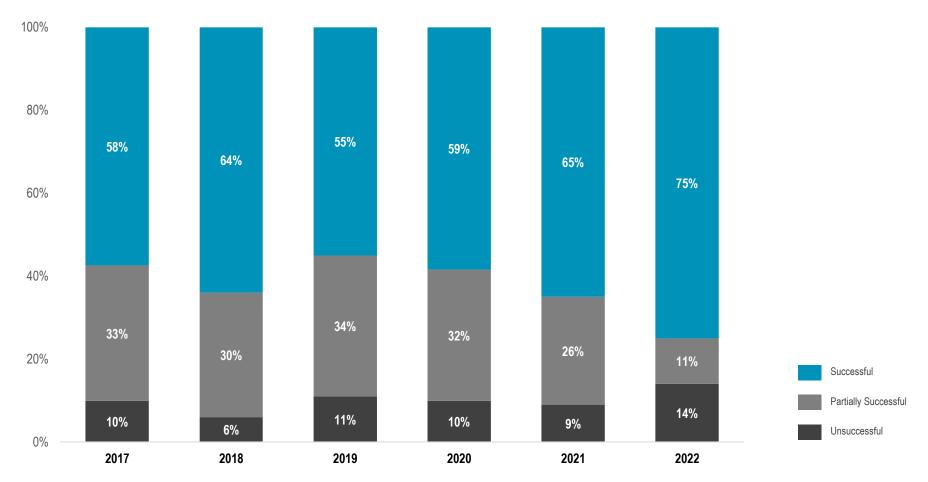
Key Takeaway

The rejection rates of loan applications for MSMEs in developed markets are comparatively lower than those observed in emerging markets.

However, taking Hong Kong as an example, ~10% of SMEs' credit applications from 2017-22 were outright rejected by banks, with another ~30% of applications being only partially approved. More importantly, there is no clear trend indicating that the funding situation for SMEs in the city has been improving over time. The situation isn't meaningfully different in developed Asia; in Hong Kong, ~40% of MSME credit applications were rejected or only partially approved from 2017-22

Bank SME Credit Application Success Rate

%, 2017-22, Average



Note: quarterly data has been annualised

Source: HKMA, Hong Kong Productivity Council, Quinlan & Associates estimates



SECTION 2

ENTER THE DIGITAL BANKS



APAC DIGITAL BANK LICENSING OVERVIEW

Key Takeaways

To meet the emerging demands and digital preferences of customers, various APAC markets have either launch or are in the process of launching digital-native banks.

This typically involves a stage-by-stage approach: from industry consultation, to licence application, preparation, launch, and expansion.

Vietnam and Thailand are currently in the earliest stages of this process, with virtual banks in Hong Kong, South Korea, Japan, and Mainland China all having already been in operation for a number of years. To address the shortfalls of traditional banks and capitalise on consumer demands and digital trends, many markets have either launched or are planning to launch digital banks

Market Development

APAC Digital Banks

	Phase	Market	Progress			
Fin	Consultation The regulator explores the opportunity for launching virtual / digital banks and consults industry experts on their ability to achieve the regulator's strategic objectives	Vietnam (No Current Dev.)				
	Application Interested companies and consortiums submit applications for a virtual / digital banking licence, undergoing a review and evaluation process, before licences are approved	Thailand (App. Opens Soon)				
¢	Preparation Successful applicants establish an appropriate entity and develop required capabilities to prepare for the launch of the virtual bank and to satisfy all regulatory requirements	Malaysia (5 VBs)				
レ	Launch Virtual / digital banks launch their operations, focusing on acquiring customers and building a meaningful deposit base, while typically providing relatively basic services	Indonesia (7 VBs)"	Philippines (6 VBs)"	Taiwan (3 VBs)	Australia (1 VB)	Singapore (4 VBs)*
*	Expansion After amassing a customer following and deposit base, virtual banks can seek to expand into more sophisticated offerings, such as wealth management	Hong Kong (8 VBs)	South Korea (3 VBs)	Japan (~9 VBs)"	Mainland China (~6 VBs)	1

² full banks and 2 wholesale banks, "Jurisdictions that have virtual banks licensed under the existing Banking Act (no separate virtual bank licensing frameworks) with regulations stating that they must be backed by an incumbent bank Source: The Edge Markets, financial regulator websites, Quinlan & Associates analysis

APAC DIGITAL BANK SNAPSHOT

Key Takeaways

More than 40 digital banks have been launched and are currently operating in APAC, which include:

- **Mainland China**: WeBank, XWBank, MYBank, aiBank (Baixin), Yillion Bank, Suning Bank
- **Singapore**: trust Bank, GXS Bank, Green Link Digital Bank, ANEXT Bank, MariBank
- Japan: Jibun Bank, Kyash, Minna Bank, PayPay Bank, Rakuten Bank, Seven Bank, Sony Bank
- Australia: Judo Bank
- South Korea: Kbank, KakaoBank, toss
- Indonesia: Jenuis, Aladin, digibank, MotionBanking, TMRW, Bank Jago
- Hong Kong: ZA Bank, Airstar Bank, WeLab Bank, Iivi Bank, Mox Bank, Ant Bank, Fusion Bank, PAObank
- **The Philippines**: Tonik Bank, Maya Bank, UnionDigital Bank, GoTyme Bank, Overseas Filipino Bank, UNO Digital Bank

At present, over 40 digital-native banks have been launched in APAC (excluding offshore players, e.g. Revolut), though some have already shuttered their operations (e.g. Volt)

Digital Banking Progress

APAC



Note: *Xinja and Volt shut down their operations in 2020 and 2022 respectively Source: various digital banks, Quinlan & Associates analysis



IMPROVING USER EXPERIENCE

Key Takeaways

Digital banks in the region are continuously striving to improve the customer experience and address the pain points of traditional banks by adopting a range of cutting-edge technologies across the end-to-end customer value chain.

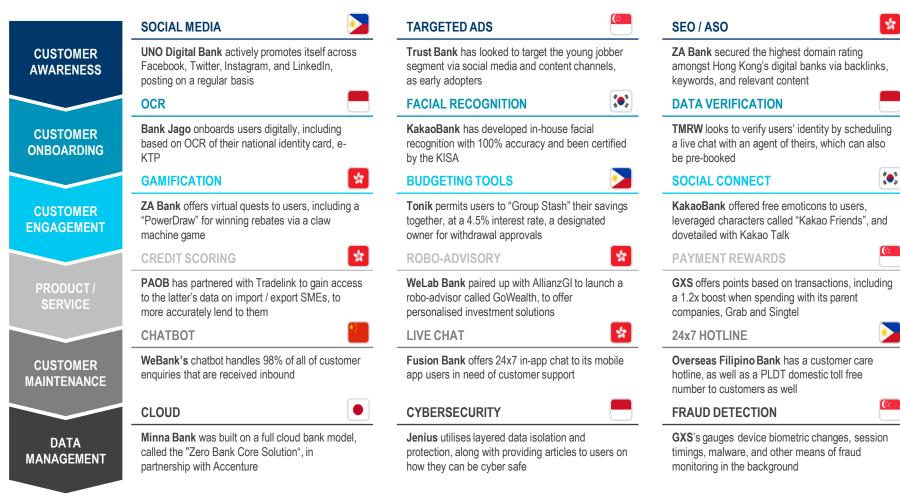
When it comes to customer awareness, digital banks are leveraging social media platforms, targeted ads, and SEO/ASO to increase their reach and attract potential customers. OCR, facial recognition, and data verification have also been adopted to streamline the onboarding process.

Digital banks also use gamification, budgeting tools, and social connectivity features to create a more interactive and personalised experience for customers, while product and service offerings are improved through credit scoring solutions, robo-advisory, and payment rewards.

Chatbots, live chat tools, and 24x7 hotlines are in place to ensure that customers receive prompt and efficient service, Finally, technologies such as cloud, cybersecurity, and fraud detection are being leveraged to better manage and protect customer data. The digital banks have brought to the table cutting-edge technologies across the customer value chain, from remote onboarding to cloud-based data management

Technology Usage Across the Value Chain

APAC Digital Banks, Select Examples



CUSTOMER AWARENESS & ACQUISITION

Key Takeaways

Taking Hong Kong as an example, digital banks are proactively raising customer awareness by employing various digital-first marketing strategies.

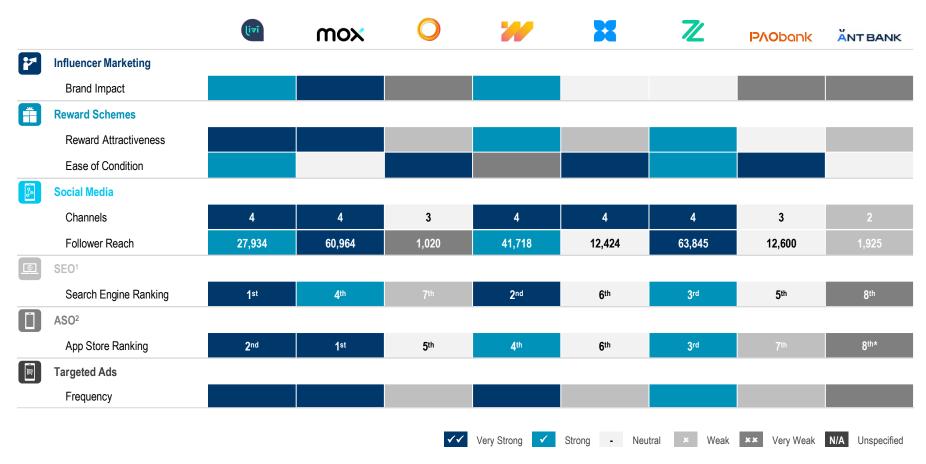
These include collaborating with local influencers, offering attractive joining rewards, maintaining an active presence on all major social media platforms, conducting search engine and app store optimisation, and frequently posting targeted ads.

These efforts have proven extremely valuable in allowing Hong Kong's virtual banks to acquire a sizeable customer base since their launch in 2020.

Taking Hong Kong's virtual banks as an example, many are actively adopting a variety of digital-first customer acquisition initiatives, including influencers, targeted ads, and ASO

Customer Acquisition Initiatives (Hong Kong Virtual Banks)

As at May 2023



¹Search Engine Optimisation ("Hong Kong virtual bank" as the keyword on Google), ²App Store Optimisation ("bank" as the keyword on Apple App Store Hong Kong) *Ant Bank has not appeared among the top 100 search results Source: various virtual bank websites, Quinlan & Associates analysis

CUSTOMER **ONBOARDING**

Key Takeaways

In terms of customer onboarding, digital banks in Hong Kong are taking steps to simplify and completely digitise the process, implementing advanced technologies such as mobile phone OCR and biometric identification.

Through mobile phone OCR, customers can simply take a picture of their identity documents, following which the information is automatically extracted and verified

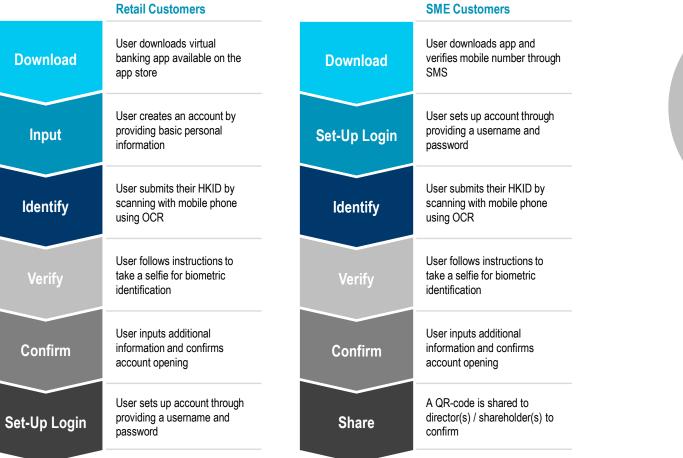
Biometric identification allows customers to confirm their identity through fingerprint or facial recognition technology.

Such technologies have eliminated the need for physical branch visits, saving customers considerable time and effort. More importantly, Hong Kong's virtual banks are able to provide 24/7 onboarding services that can take as little as two minutes to complete.

Hong Kong's virtual banks have streamlined the customer onboarding experience by completely digitalising it, enabling 24/7 onboarding in as little as 2 minutes

Customer Onboarding

Digital Account Opening





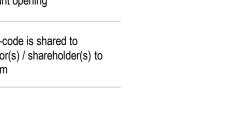
55%

...accounts opened during

after hours

2 Minutes 3 Seconds

Fastest Onboarding Time



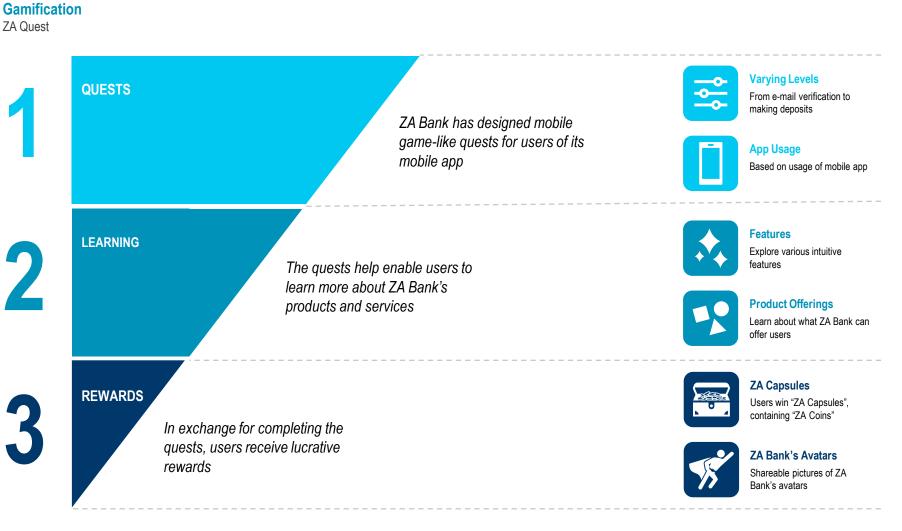
CUSTOMER ENGAGEMENT (1/2)

Key Takeaways

ZA Bank, one of the top digital banks in Hong Kong by customer count, has created a gamification campaign called "ZA Quest" to better engage its customers.

Through the campaign, customers can learn more about the bank's product and service offerings and discover different features within the bank's app.

By completing various quests, users can earn rewards, such as "ZA coins," which can be used for cashbacks and creating avatars, aimed at enhancing the customer experience and encouraging customers to explore more of what ZA Bank has to offer. ZA Bank has launched a gamification campaign, titled "ZA Quest", to encourage users to explore their various products and services, in exchange for lucrative rewards



CUSTOMER ENGAGEMENT (2/2)

Key Takeaways

Another leading digital bank in Hong Kong, Mox Bank, has implemented granular budgeting tools to boost customer engagement.

Mox's budgeting tool, called "Generation Mox," enables users to create a sub-account called "goal" and specify a saving amount, frequency, and time period for automated transfers. The app then sends reminders on set dates to prompt users to save money.

This way, Mox is not only enhancing customer engagement, but also helping customers to more effectively achieve their savings goals. Mox Bank offers granular budgeting tools to its customers, christened "Generation Mox", who have set a collective savings target of HKD 660 billion

Budgeting Tools

Mox Bank

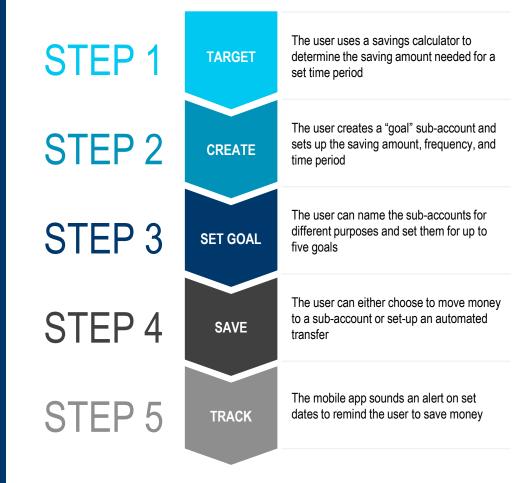


 Image: Series series of the series of the



RETAIL OFFERINGS (1/2) – EVOLUTIONARY PATH

Key Takeaways

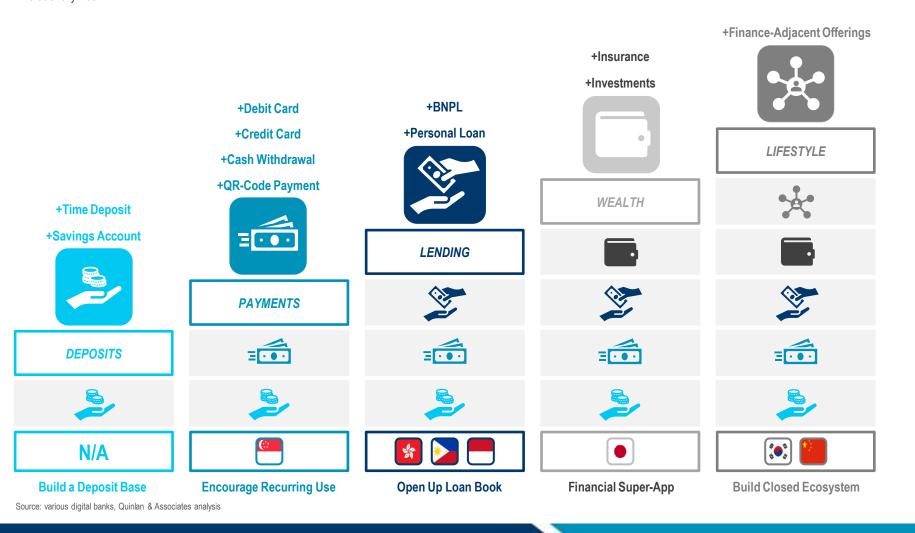
As digital banks continue to evolve, they are expanding their range of retail products and services to become a comprehensive one-stop platform and increase customer stickiness.

This typically follows a buildout process that follows various sequenced stages, including:

- 1. Deposit services, including time deposit and savings accounts;
- 2. Payment services, such as debit/credit cards, cash withdrawals, and QR code payments;
- 3. Lending services, including personal loans and buy now, pay later ("BNPL") options;
- 4. Wealth management services, such as insurance and investments;
- 5. Lifestyle offerings related to finance.

Digital banks are gradually building-up their suite of retail product / service offerings to become a one-stop platform, with progress being largely dependent on time in the market

Products / Services Roll-out Evolutionary Path



RETAIL OFFERINGS (2/2) – HK CASE STUDY

Key Takeaways

Taking a deep dive into the digital banking landscape of Hong Kong, a majority of the players have already introduced deposit and lending products.

Other firms, such as livi, ZA, Mox, and WeLab, are now offering additional financial services such as insurance and wealth products, including BNPL, life insurance, and wealth / investment management solutions. Taking Hong Kong as an example, most players have launched lending products, with some now venturing into the wealth management space to better monetise their customers

11011	ig Kong			RETAIL I	FOCUSED		RETAIL S	SKEWED	SME SH	(EWED
			MOX	0	*		[i⊽î	72	P/\O bank	ANTBANK
		Savings Account	✓	√	✓	✓	✓	✓	✓	✓
	0	Time Deposit	✓	✓	✓	✓	✓	✓	✓	×
		Online	✓	✓	✓	✓	✓	✓	✓	✓
	(Offline	✓	x	✓	✓	✓	✓	✓	×
~		Debit Card	✓		✓	×	✓	✓	×	×
		Credit Card	✓		×	×	×	×	×	×
	2	Personal Loan	✓	✓	✓	✓	✓	✓	×	<
	la l	PLGS ¹	×		×	×	×	✓	×	×
	5	Debt Consolidation	✓		✓	✓	✓	✓	×	×
		BNPL ²	✓	✓	✓	×	\checkmark	×	×	✓
		Life Insurance	-		-	×	✓	✓	×	×
	V	Health Insurance	-	×	-	×	×	✓	×	×
		Other Insurance	-		-	×	✓	✓	×	×
	8	Discretionary Inv.	×		✓	×	×	√ **	×	×
		Non-Discretionary Inv.	×	✓	×	×	×	✓	×	×
		Foreign Exchange	✓	✓	✓	✓	✓	✓	×	×
	E L	Lifestyle Offerings	✓	✓	✓	✓	✓	✓	×	✓

*Under ZA Bill Master, users can settle all credit card statements in one go with flexible repayment period of 72 months (vs. 30 days), and pay a small handling fee (vs. interest), **ZA Bank's IPOGo is a discretionary investment service, executing trades on behalf of users 1Personal Loan Guarantee Scheme, 2Buy Now Pay Later

© 2023 Quinlan & Associates Limited, a company incorporated in Hong Kong. All rights reserved.

Source: various virtual bank websites, Quinlan & Associates analysis

Offered - In Progress ×

Not Offered N/A

Unspecified

MSME OFFERINGS (1/2) – EVOLUTIONARY PATH

Key Takeaways

Several APAC digital banks are also broadening their offerings for MSMEs in order to become a well-rounded platform.

However, since the majority of players in the region primarily cater to retail customers, the development of MSME-focused products and services has been comparatively slower.

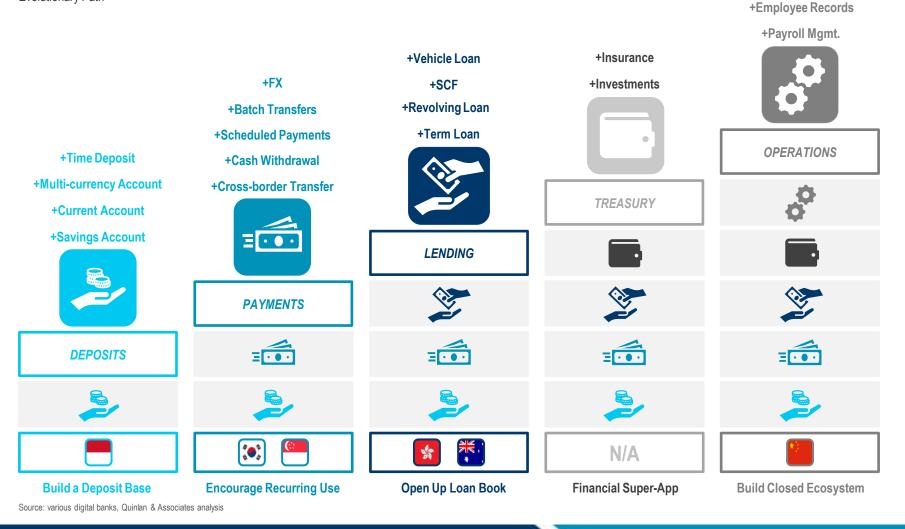
A typical rollout journey includes:

- 1. Deposit services, including time deposit, multi-currency accounts, current accounts, and savings accounts;
- 2. Payment services, such as FX, batch transfers, scheduled payments, cash withdrawals, and cross-border transfers;
- 3. Lending services, including vehicle loans, SCF, revolving loans, and term loans;
- 4. Treasury services, such as insurance and investments; and
- 5. Operations offerings, including employee records and payroll management.

Given that most of the digital banks in APAC are retail-focused, progress on the MSME front has been comparatively slower

Products / Services Roll-out

Evolutionary Path



MSME OFFERINGS (2/2) – HK CASE STUDY (1/2)

Key Takeaways

Despite the vast number of SMEs in Hong Kong (i.e. 340,000), many of these businesses still struggle to access low-cost funding options.

Beyond offering basic deposit and payment services, most virtual banks in Hong Kong are prioritising the expansion of their lending capacity and product offerings.

For example, both ZA Bank and PAObank not only offer instalment loans, but also provide their SME customers access to the government's SME Financing Guarantee Scheme.

By allowing SMEs to apply through their bank accounts, the application process is made much more convenient for business owners. To address persistent SME funding gaps, most digital banks in the region remain focused on enhancing their core lending proposition, including those in Hong Kong

	ME Products / Services g Kong					✓ Offered	- In Progress	× Not Offered N	A Unspecified
			RETAIL	FOCUSED		RETAIL S	KEWED	SMES	KEWED
		mox	0	2	*	[ivî	Z	P/\O bank	ANTBANK
F	Business Account	×			×	_**	✓	✓	✓
DEPOSIT	Savings Account	×		×	×	×	✓	✓	✓
	Ö Time Deposit	×		×	×	×	✓	×	×
ENT	Domestic Transfer	×		×	×	×	✓	✓	✓
PAYMENT	Cross-Border Transfer	×		×	×	×	✓	✓	N/A
	Instalment Loan	×	×	×	×	×	✓	✓	×
ŊĊ	100% SFGS ¹	×		×	×	×	×	×	×
	90% SFGS	×		×	×	×	✓	✓	×
IERAL	80% SFGS	×	×	×	×	×	✓	✓	×
GEN	C Revolving Loan	×		×	×	×	✓	×	✓
	Overdraft Facility	×	×	×	×	×	×	×	×
DING	Franchise Financing	×		×	×	✓	×	×	×
NICHE LENDING	Inventory Financing	×		×	×	×	×	×	×
NICH	SCF ²	×	×	×	×	×	×	×	×

*launched a pilot trial in 2021 for SME banking services (e.g. account opening, loan product, money transfer, time deposit set-up), but those services have not been officially provided, ** issued a press release stating its plan to introduce account opening for SMEs this year, though it is inconclusive whether this service has been launched yet as there is no portal for SMEs to login, ***Ant Bank is conducting its first trial of business banking services for SMEs with an exclusive invitation code ¹SME Financing Guarantee Scheme, ²Supply Chain Financing

Source: various virtual bank websites, Quinlan & Associates analysis

MSME OFFERINGS (2/2) – HK CASE STUDY (2/2)

Key Takeaways

In addition to offering a diverse range of retail and SME-focused products and services, digital banks have transformed the traditional lending process through their use of credit algorithms, machine learning, AI technologies, and alternative data, including Hong Kong's WeLab Bank, Fusion Bank, and PAObank.

By leveraging advanced technologies, these banks have significantly reduced documentation and in-person interview requirements, making the lending process more streamlined, convenient, and accessible for both small businesses and consumers.

Hong Kong's virtual bank customers can now apply for loans completely online, with minimal paperwork, resulting in faster turnaround times and a more efficient lending experience. Hong Kong's virtual banks have revolutionised the lending processes by vastly reducing documentation requirements via their credit scoring algorithms and use of alternative data

Credit Scoring (Hong Kong Virtual Banks) Retail and Commercial Loans

		\bigcirc	Z		P/\O bank
	WeLab Bank	Fusion Bank	ZA Bank	Airtstar Bank	PAOB
Data Analytics	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
M.L. ¹ / A.I.	\checkmark	-	-	-	-
Traditional Data	\checkmark	✓	\checkmark	✓	\checkmark
Alternative Data	✓	✓	-		✓
Description	WeLab Bank utilises conventional linear regression as well as machine learning models	Fusion Bank uses big data analytics and behavioural assessments to expedite the process	ZA bank assess retail loan applications based on user's monthly salary data and credit reports	Airstar Bank relies on SAS analytics solutions to extract, map, and load integrated datasets	PAOB has adopted "alternative credit scoring", utilising data like import and export volume, etc.
Impact	Average loan tenor of 18 to 24 months, with an average ticket size between HKD 150,000 to 200,000	Fusion Bank is launching a personal loan of HKD 1,000 to HKD 250,000 with a 5 to 20 month tenor	ZA Bank has adopted a 30- minute pledge, paying a HKD 10 penalty for every minute of overtime up to HKD 500	Airstar Bank has launched a debt consolidation loan that carries a larger average ticket size	PAOB has a gross and net interest margin of 9.3% and 8.3% respectively, with a 14.5% LDR ²

🗸 A

Applicable - Unspecified × Inapplicable

FEE MODELS

Key Takeaways

APAC digital banks adopt a transaction-based fee structure, whereby customers are charged based on the frequency and/or volume of the transactions.

This differs from the subscription fee models used by some of the major players digital banks in the West, in which customers pay a fixed fee based on their selected subscription plan.

With a transaction-based model, digital banks are able to offer modularised service offerings that align with customers' specific demands. On the other hand, subscription-based models provide recurring revenue for digital banks and eliminate the need to compete over the pricing of individual offerings.

It remains to be seen whether any of the digital banks in APAC will explore the subscriptionbased pricing models in the coming years.

Unlike a number of virtual banks in the West, who monetise their customers via subscription plans, APAC digital banks employ a transaction-based fee structure

Fee Models

Transactions-based and subscription plans

	TRANSACTION-BASED	SUBSCRIPTION-BASED
DESCRIPTION	Users are charged a fee based on their frequency of usage / transactions	Users pay a regular fixed fee, based on the subscription plan selected by them
VALUE PROPOSITION	Modularised offerings can be provided to users based on their needs, with low maintenance costs	Recurring revenue can be generated, without competing over pricing of individual offerings
EXAMPLE DIGITAL BANKS	Rakuten 楽天銀行	
		<u>N</u> 26
RECURRING NATURE	×	✓
FREEMIUM OPTION	×	\checkmark
PRICING COMPETITION	×	✓
CUSTOMER STICKINESS	*	✓
MODULARISED OFFERINGS	✓	×
MAINTENANCE COSTS	✓	*
	APAC digitals hanks are adopting	Many of the major European digital banks are

APAC digitals banks are adopting transaction-based fee models

Many of the major European digital banks are actively adopting subscription-based fee models

Favourable



CUSTOMER MAINTENANCE

Key Takeaways

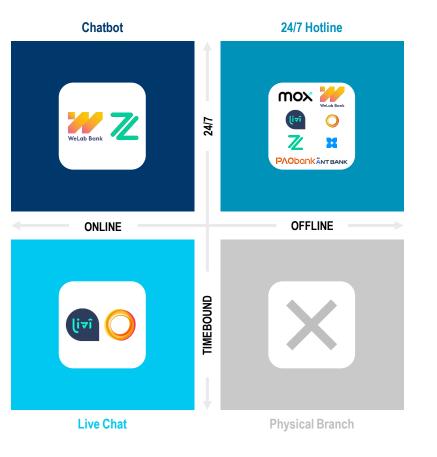
Digital banks utilise a range of tools for the maintenance and servicing of their customers, replacing the need for physical branches that are common in traditional banks.

These tools include a 24/7 hotline, which is provided by all virtual banks in Hong Kong, ensuring round-the-clock support for customers through the use of both onshore and offshore call centres.

Leveraging AI and natural language processing, chatbots are also being used to provide automated and personalised responses to customer queries, with some banks utilising live chat functionality through in-app messaging tools, connecting customers with service representatives in real time. Services like chatbots and live chat tools give digital banks distinct advantages over the competition, given their ability to engage customers over changes in time and scale

Maintenance and Servicing (Hong Kong Virtual Banks)

Chatbot, Live Chat, 24/7 Hotline, and Physical Branch





Chatbot WeLab Bank and ZA Bank's chatbots leverage A.I., NLP¹ for automation and personalisation



24 / 7 Hotline Onshore and offshore call centres for ensuring 24/7 support for customers



Live Chat Leverage in-app messaging tools to connect customer service representatives and customers



Physical Branch Virtual Banks are mandated to remain branchless, excluding office space

¹Natural Language Processing Source: various virtual banks websites and disclose

© 2023 Quinlan & Associates Limited, a company incorporated in Hong Kong. All rights reserved.

Source: various virtual banks websites and disclosures, Quinlan & Associates analysis

DATA MANAGEMENT

Key Takeaways

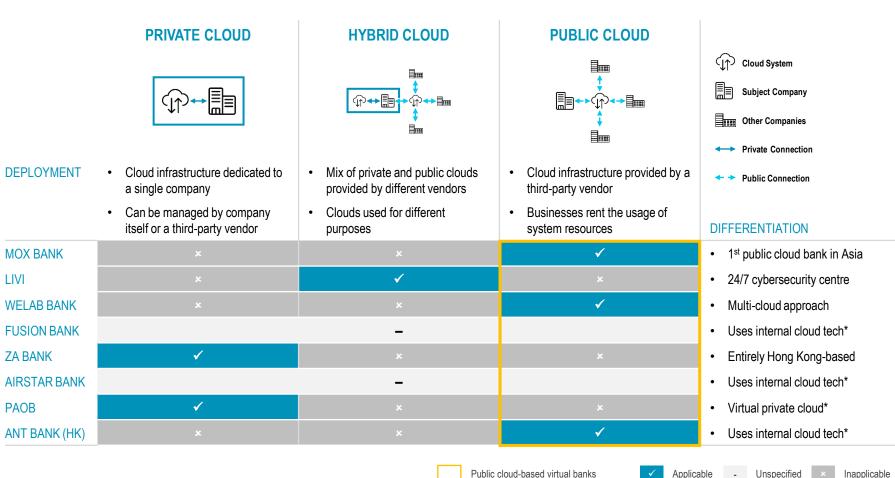
Many of Hong Kong's virtual banks are relying on various types of cloud technology, with Mox Bank, WeLab Bank, and Ant Bank all having adopted public clouds,

By utilising cloud services, digital banks can improve their data collection and storage capabilities, streamline data processing, and provide advanced security measures to protect sensitive information. Cloud has also proven very effectively in scaling – and expediting – these banks' product development efforts.

Public cloud technology provides a more costeffective solution for data management than traditional data centres, which require a significant investment in physical infrastructure and maintenance. Hong Kong's virtual banks are utilising cloud technology, including public clouds, in order to better collect, store, process, and protect their customer data

Cloud Technology (Hong Kong Virtual Banks)

Private, Hybrid, and Public



*Fusion Bank, Airstar Bank, PAOB. and Ant Bank (Hong Kong) utilise a form of cloud technology from their parent company Source: Quinlan & Associates analysis

PARTNERSHIP ECOSYSTEM

Key Takeaways

Many digital banks have established an extensive partnership ecosystem across the customer value chain.

By collaborating on content marketing, joint incentives, and referral agreements, digital banks can leverage their partners to enhance customer awareness and acquisition.

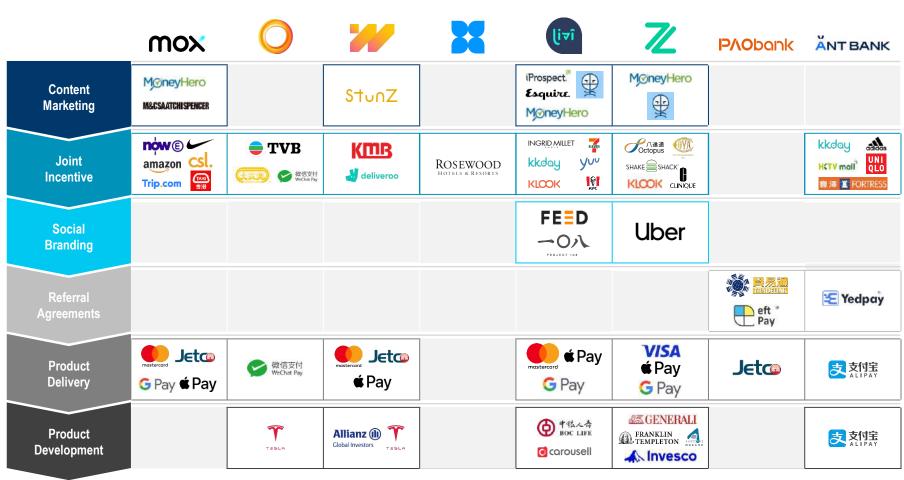
Moreover, partners can also facilitate product delivery and development processes by cocreating innovative solutions that meet the needs of specific target customers.

Building a robust partnership ecosystem is a vital component of digital banking success, helping to establish strong relationships with customers, partners, and stakeholders.

Digital banks have established an array of partnerships across the customer value chain to drive visibility, customer uptake, and product development / delivery

Partnership Ecosystem (Hong Kong Virtual Banks)

Nature of Partnership



Note: technology partners and shareholders are not included Source: virtual bank websites, Quinlan & Associates analysis

INTEGRATED ECOSYSTEM

Key Takeaways

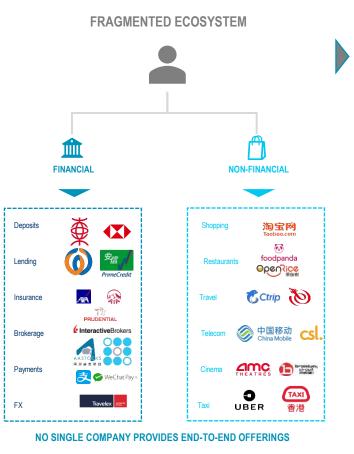
For digital banks to create a comprehensive financial solution that meets customers' needs, they must develop a closed and integrated ecosystem that functions as a one-stop-shop financial super app-like platform.

Achieving this requires not only offering traditional financial services like deposits, lending, insurance, brokerage, payments, and FX, but also integrating non-financial offerings such as taxi, cinema, telecom, travel, restaurants, and shopping. By doing so, digital banks can create a holistic offering that caters to customers' needs beyond financial services, ultimately driving customer loyalty.

To create such an ecosystem, digital banks may partner with a variety of non-financial service providers to meet the evolving needs of customers. More importantly, many players are attempting to build an integrated ecosystem of financial and non-financial offerings to become a one-stop-shop for their customers

Ecosystem

Financial and Non-financial Offerings

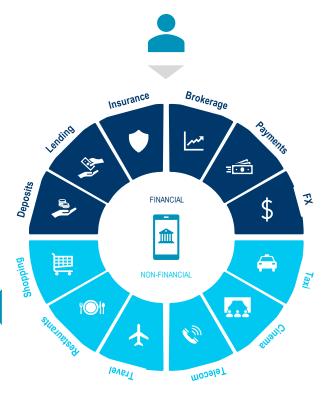


Poor customer understanding Multiple loging/upprpage

- Multiple logins/usernames
- Numerous passwords
 Lack of personalisation
- Lacklustre data integration
- × Revenue leakage
- × Poor cross-selling
- Low stickiness and loyalty
- Less diversification

INTEGRATED ECOSYSTEM

- ✓ Robust customer understanding
- ✓ Single access point
- ✓ Single delivery channel
- Strong personalisation
- ✓ Favourable data integration
- ✓ Additional revenue streams
- ✓ High cross-selling potential
- Higher stickiness and loyalty
- Greater diversification



INTEGRATED ECOSYSTEM

A ONE-STOP SUPER APP FOR ALL CUSTOMER NEEDS



SECTION 3

KEY CHALLENGES



PROFITABILITY (1/2) – OVERVIEW

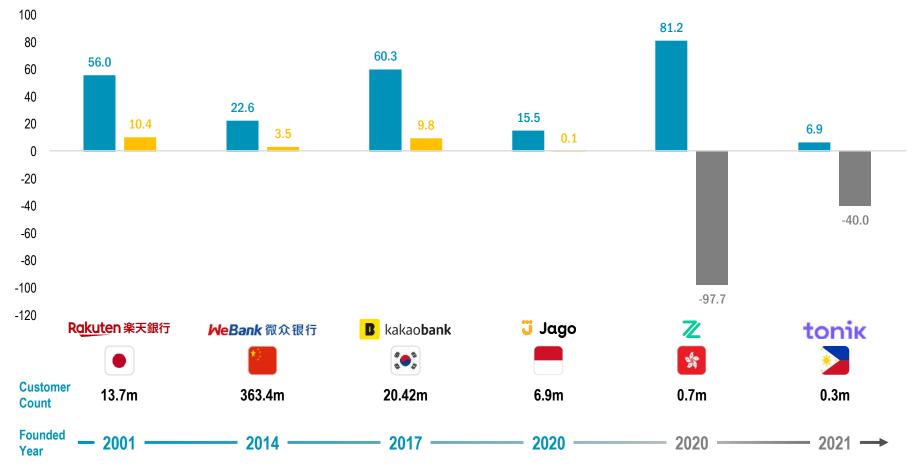
Key Takeaways

Digital banks in Japan, Mainland China, and South Korea, which were first to enter the market, have established a substantial customer base and are generating healthy profit margins.

However, most other digital banks in the region (including those in both developed and developing markets), especially those focused on the retail banking segment, are struggling to break even. Digital banks in Japan, Mainland China, and South Korea, which were first to market, are turning healthy profits, with banks in most other APAC markets struggling to break even

Level of Monetisation

2022, Revenue & Profit per customer (in USD)



Note: select leading digital banks showcased; revenue for tonik is estimated based on the data from the most recent disclosure (March 2022) Source: various digital bank annual reports / company disclosures, Quinlan & Associates estimates

PROFITABILITY (2/2) – HK CASE STUDY

Key Takeaways:

Hong Kong's virtual banks are facing significant challenges in terms of monetisation.

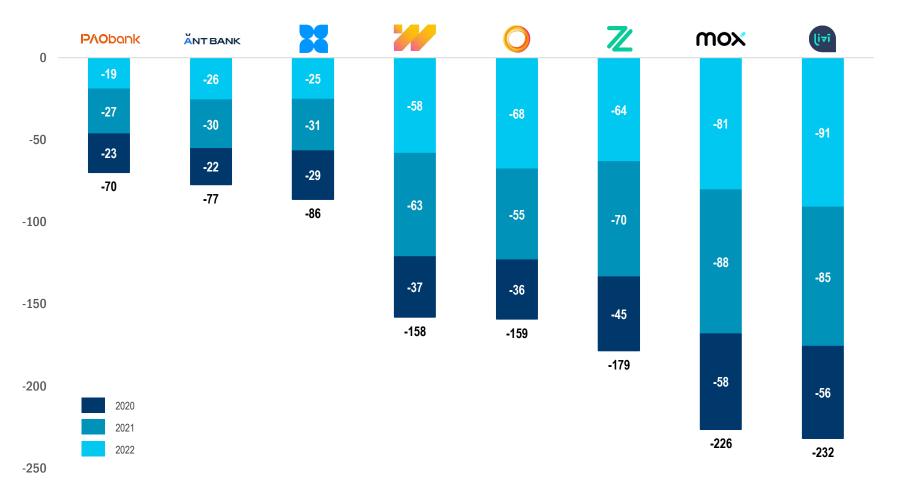
Despite having been in operations since 2020, none of the city's 8 virtual banks have managed to turn a profit, with many incurring substantial losses over the past 3 years.

Cumulative losses between 2020-22 range from USD 70 million for PAObank on the low end, to USD 232 million for livi between on the high end.

While some digital banks, including Mox Bank, ZA Bank, WeLab Bank, Airstar, Ant Bank, and PAObank, have managed to reduce their losses slightly in 2022, we believe they are still a few years off establishing a profitable business model. In the case of Hong Kong, since entering the market in 2020, all virtual banks have been unprofitable, losing an average of USD 148 million per bank between 2020 and 2022

Losses

2020-2022, USD Million



Source: virtual bank filings, Quinlan & Associates analysis

EXPENSIVE CUSTOMER ACQUISTION

Key Takeaways

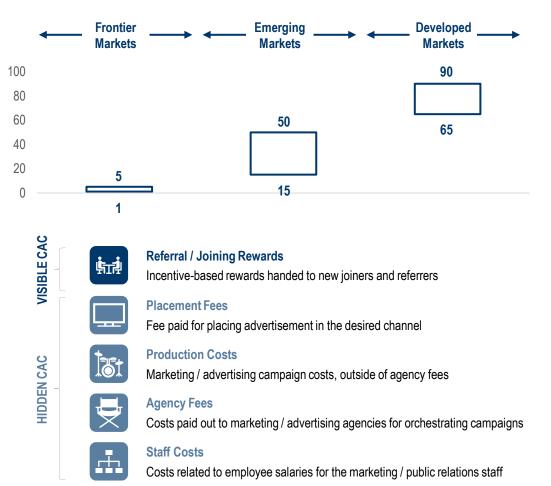
Digital banks, especially those operating in the retail segment, need to acquire a large customer base to monetise and sustain their growth.

However, customer acquisition costs ("CAC") have proven to be a significant challenge for many players.

At present, we estimate the average CAC in Hong Kong to range from USD 65 to USD 90, considerably higher than USD 15-50 in emerging markets and USD 1-5 in frontier Asian markets.

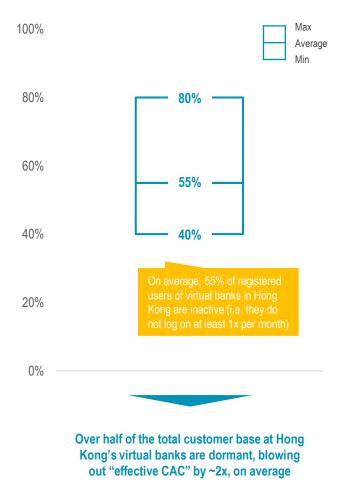
Apart from the visible cost of acquisition, there are various hidden costs that must be considered, such as indirect fees and expenses incurred to acquire customers. More importantly, however, are high dormancy rates being faced by many digital banks. For instance, in Hong Kong, where more than half of the total customer base of virtual banks is dormant, the effective cost of acquisition is almost twice the visible cost, on average. Customer Acquisition Cost ("CAC") remains a key pain point for many players, especially when taking into consideration high dormancy rates, which has blown out "effective CAC"

Average Customer Acquisition Cost of Digital Banks 2022E, APAC Retail, USD



Dormancy Rate

2022, Hong Kong Digital Banks



SMALL DEPOSIT BASE LIMITING MONETISATION

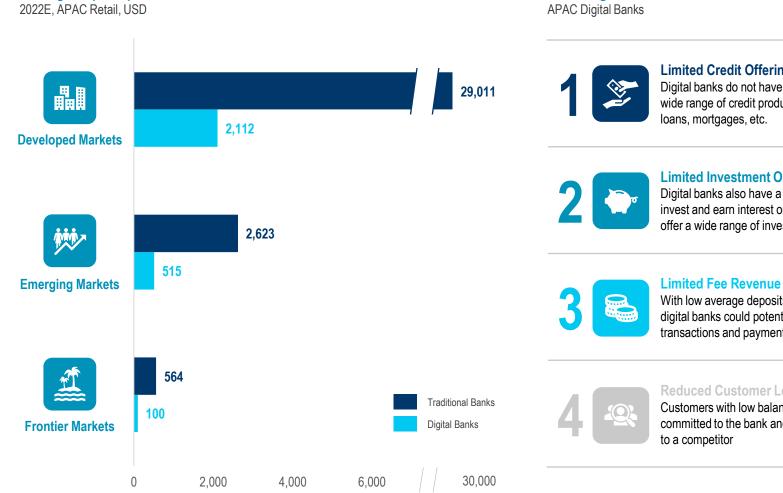
Key Takeaways

Another major challenge for APAC digital banks is the substantially lower average deposit level per customer compared to traditional banks.

In developed markets like Hong Kong, Japan, and Korea, traditional banks have an average deposit level per customer of over USD 29,000, vs. USD 2,100 for digital banks, limiting their lending capacity and ability to monetise idle deposits into fee-based income (e.g. via the sale of investment / insurance products).

Furthermore, customers may exhibit less loyalty and can easily switch to competing banks. In fact, many digital banks in the region have seen large outflows of customer deposits (namely, back to their primary bank accounts) once their promotional deposit rates expire.

With a much lower average level of deposits per customer compared to traditional banks, monetisation (e.g. loans, sale of insurance / investment products) remains challenging



Limited Credit Offerings

Resulting Drawbacks

Digital banks do not have as much capital to fund a wide range of credit products, such as commercial loans, mortgages, etc.

Limited Investment Options

Digital banks also have a smaller capital pool to invest and earn interest on, and may not be able to offer a wide range of investment products

With low average deposits, the fee revenue that digital banks could potentially generate from

transactions and payments may also be limited

Reduced Customer Loyalty

Customers with low balances may be less committed to the bank and be more likely to switch to a competitor

Source: Bank disclosures, Quinlan & Associates analysis

Average Deposit per Customer

ADDITIONAL HEADWINDS

Key Takeaways

In addition expensive customer acquisition costs and low average deposits per customer (limiting activation and monetisation), there are several key obstacles confronting digital banks:

- 1. Trust issues: Digital banks must win the trust of retail customers and demonstrate how they offer better value than traditional banks.
- 2. Data security: Digital banks need to protect user data, maintain their credibility, and comply with regulatory requirements.
- 3. Talent retention: Digital banks are in a war for talent and need to address hiring bottlenecks and high staff turnover rates.
- 4. Competition: Digital banks face stiff competition – not only from from both other digital banks, but traditional banks who are investing heavily in their digital capabilities.

There are also a number of over-arching challenges facing digital banks in their quest to dislodge incumbents and emerge victorious over each other

Challenges

Headwinds Facing Digital Banks

CHALLE	NGE	DESCRIPTION	SEVERITY	COUNTERMEASURE(S)
?	Trust Deficit	Gaining retail customers' trust and showcasing their value-addition over traditional banks is a key hurdle facing digital banks		Digital banks may highlight any deposit insurance available and various data privacy and security measures undertaken
	Data Protection	Cybersecurity is essential for safeguarding user data, maintaining credibility, and meeting regulatory requirements		Deploy advanced cybersecurity measures, with regular updating of systems, and a strict internal and vendor management policy
Ľ	Talent Management	Competition over talent has erupted among the digital banks, resulting in hiring bottlenecks and high staff turnover rates		Establish a talent strategy that encompasses: (1) proactive learning and development; (2) robust remuneration practices; and (3) a future talent pipeline
	Competition from Other Digital Banks	Digital banks battling it out for wallet share have raised questions over whether the market size can support all eight players		Identify a niche / core focus that is in-line with the bank's internal capabilities and external brand positioning, including identified white spaces
	Competition from Traditional Banks	Traditional banks have responded with accelerated digital partnerships and aggressive price competition in the form of lower fees		Double-down on digital innovation (esp. customer experiences) as a key differentiator that can springboard digital banks ahead of competing traditional rivals





SECTION 4

SUCCESS CASES



PROFITABLE VIRTUAL BANKS

Key Takeaways

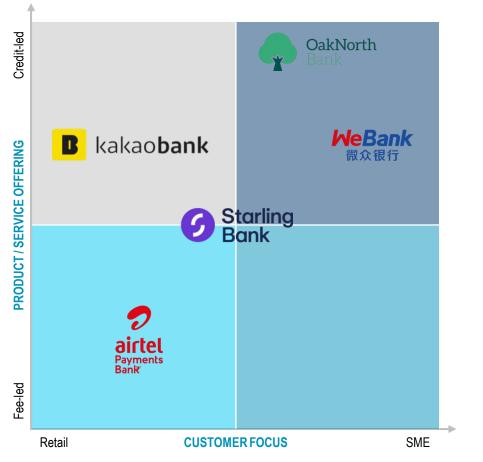
We have identified several profitable digital banks, including WeBank, KakaoBank, OakNorth Bank, Starling Bank, and Airtel Payment Bank, to examine their business models in greater detail, considering factors such as whether they are fee-led or credit-led and whether they primarily serve retail or SME customers.

This analysis can help us understand the key success factors behind each bank's unique business model in the following case study slides.

Examining some of the profitable digital banks globally, most are primarily balance sheetled, focusing on both retail and SME customers

Business Models

Product / Service Offering vs. Customer Focus



Competitive Landscape Select Global Digital Banks



CASE STUDY (1/5) – WEBANK

Key Takeaways

WeBank has achieved remarkable success by leveraging the vast customer base of Tencent's ecosystem, amassing over 360 million retail and SME customers.

To capitalise on this customer base, WeBank pioneered an innovative "online collaborative lending model" for personal loans. This model involves co-funding with partner banks at a 2:8 ratio, sharing interest income at a 3:7 ratio, and earning a 10% channel fee.

WeBank has also developed proprietary advanced risk models that integrate over 100,000 risk parameters. This enables the bank to approve loans in just 2.4 seconds and disburse funds in as little as 40 seconds. This speedy and efficient approach to lending has helped it to attract and retain customers, contributing to the bank's impressive net profit of over USD 1.5 billion in 2022.

Overall, WeBank's unique business and risk management models have been crucial in enabling the bank to monetise its vast customer base and generate sustainable profits. Adopting an innovative co-lending model and advanced risk modelling technologies, WeBank has successfully monetised its vast customer base and expanded rapidly

Case Study WeBank

HeBank 微众银行

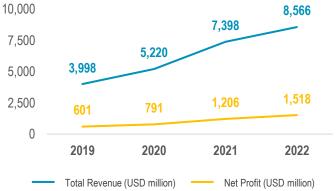
Founded in 2014, WeBank, China's first digital bank, is backed by Tencent. It serves over 360 million retail customers and 3.4 million SME customers, leveraging Tencent's large customer base in social media.

Credit-focused retail & SME bank

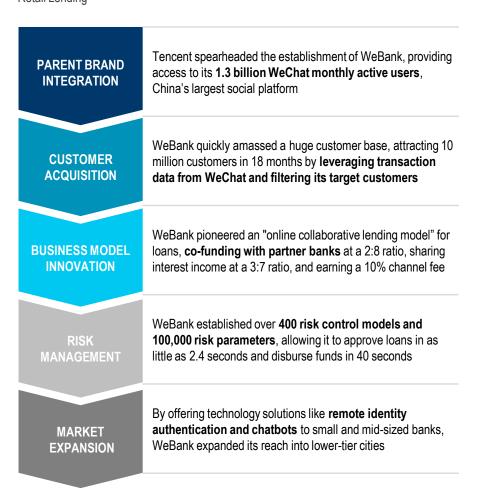
- Co-lending fueled scalability
- Agile risk management

Financial Highlights

2019-22



Path to Profitability Retail Lending



CASE STUDY (2/5) – KAKAOBANK

Key Takeaways

KakaoBank, a South Korean digital bank linked to KakaoTalk, the largest instant messaging app in the country, has attracted a massive customer base of around 20 million users.

To monetise its retail customers, the bank offers a wide range of products, including deposits, debit cards, remittances, and a variety of loans, such as mortgages, microloans, overdrafts, and other forms of credit.

In addition, kakaobank has taken steps to improve customer loyalty and experience by providing a gamified experience with a userfriendly and enjoyable UI / UX. Thanks to fellow group companies, KakaoBank stormed out of the gate, quickly attracting customers and then monetising them through loans, attaining profitability in just three years

Case Study KakaoBank

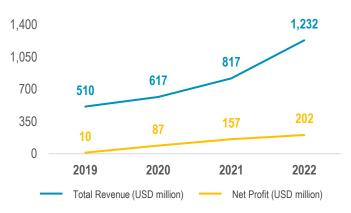


Established in 2016, KakaoBank is a South Korean digital bank with 20 million customers, especially popular amongst the youth, and posted its very first net profit in 2019

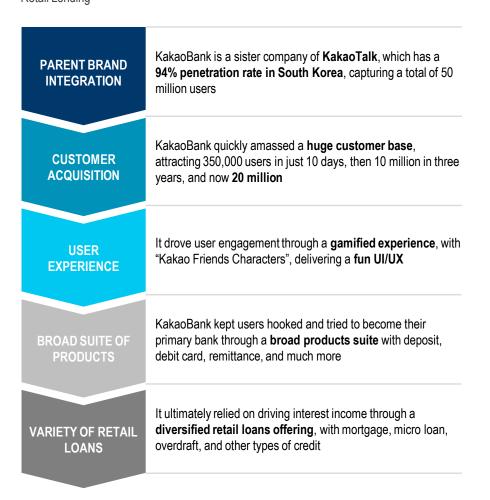
Credit-focused retail bank

- Emphasis on gamified UI/UX
- Wide products delivered at scale

Financial Highlights 2019-22



Path to Profitability Retail Lending



CASE STUDY (3/5) – OAKNORTH BANK

Key Takeaways

OakNorth Bank is a digital bank based in the UK that focuses on providing business and property loans to SMEs.

The bank has developed a cutting-edge credit scoring model called OakNorth Analytical Intelligence (ONAI) that utilises machine learning and big data.

With the help of this model, OakNorth Bank has been able to grow its loan book significantly, with its total loan facilities reaching USD 5.8 billion as of 2022.

After achieving profitability in SME lending, the bank expanded its business offshore by licensing its credit scoring model through a Banking-as-a-Service model, allowing other banks and lending-focused financial institutions to benefit from its deep credit expertise. By leveraging its robust credit scoring technology, OakNorth Bank was able to confidently grow its loan book by lending to SMEs, becoming profitable in just two years of operations

Case Study OakNorth Bank



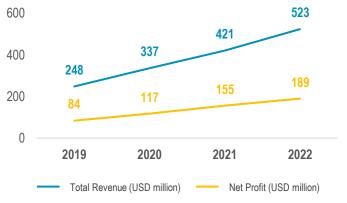
Launched in 2015, OakNorth is a British digital-only bank that specialises in providing business and property loans to the SME segment. In 2017, it became the first U.K. digital bank to turn a profit.

Credit-focused SME bank

- Robust credit scoring capabilities
- BaaS-led offshore expansion

Financial Highlights

2019-22



Path to Profitability SME Lending

COST CONTROL	OakNorth Bank maintained a stringent grip on costs from the get-go, such as by minimising outsourcing and scrutinising the need for each hire
CREDIT SCORING MODEL	It built a state-of-the-art credit scoring model , called alled OakNorth Analytical Intelligence ("ONAI"), leveraging big data and machine learning
SME LENDING	With a robust credit scoring model in place, OakNorth Bank rapidly grew its Ioan book , with total loan facilities reaching USD 5.8 billion as of 2022
RISK MANAGEMENT	To manage risk most optimally, OakNorth Bank primarily extended collateralised loans and positioned itself as a senior secured creditor
BANKING-AS-A- SERVICE	After turning a profit on its home turf, it chose to expand offshore by licensing its credit scoring model through a Banking-as-a-Service model

CASE STUDY (4/5) – AIRTEL PAYMENTS BANK

Key Takeaways

Airtel Payments Bank, a subsidiary of Airtel, is an Indian payments bank that has successfully served 122 million users on its digital platform and reached breakeven in 2022.

To attract deposits, Airtel Payments Bank offered a 6% interest rate, which resulted in attracting a remarkable ~USD 141 million worth of deposits.

Moreover, through its network of 200,000 merchants, Airtel Payments Bank has garnered a base of 43 million monthly transacting users. It processes USD 16.8 billion in gross merchandise value annually with a take rate of 0.74%, deriving 80% of its revenues from transactions.

Furthermore, Airtel Payments Bank also crosssells third-party offerings, including insurance and loans, which make up 15% of its revenue. Through facilitating transactions, Airtel Payments Bank managed to attract a sizeable active customer base of 43 million people, turning a profit in five years of operations

Case Study Airtel Payment Bank

? airtel Payments Bank

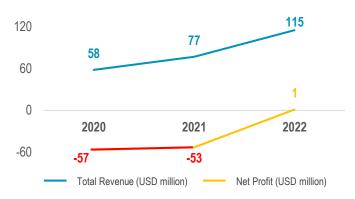
Founded in 2016, Airtel Payments Bank is an Indian payments bank and a subsidiary of Airtel, which serves 122 million users on its digital platform and manages to break-even in 2022

Payment-focused retail bank

Leverages Airtel's customer base

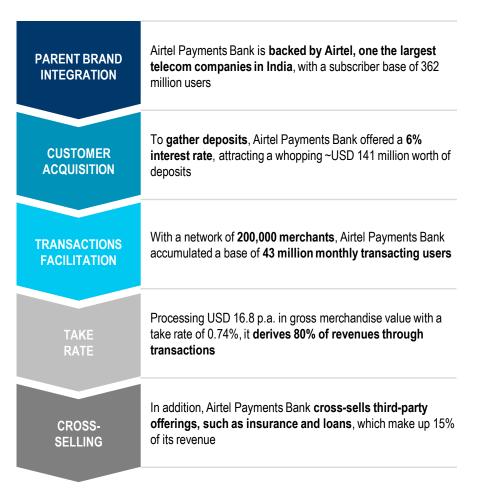
Cross-sells 3rd-party solutions

Financial Highlights 2020-22



Path to Profitability

Retail Transactions



CASE STUDY (5/5) – STARLING BANK

Key Takeaways

Starling Bank is a digital bank in the U.K. that focuses on serving both retail and SME customers.

It has a different customer target compared to most digital banks, catering to older and more affluent customers who have an average deposit of USD 2,600.

To meet the needs of its customers, Starling Bank acquired Fleet Mortgages in 2021 and expanded its mortgage lending business to USD 1.41 billion.

In addition, Starling Bank created a marketplace of third-party offerings for SMEs by integrating with various platforms, including Slack, Xero, and QuickBooks. It utilised the "Incentivised Switching Scheme" of the Banking Competition Remedies to attract SMEs from its competitors and onto its platform.

By using government-backed pandemic loan schemes, Starling Bank built a USD 2.5 billion loan book for SMEs, helping it to accumulate a sizeable balance of low-risk assets. Starling Bank won over customers' heart- and mind-share through non-credit offerings and then successfully monetised them via credit offerings, turning a profit after eight years

Case Study Starling Bank

> Starling Bank

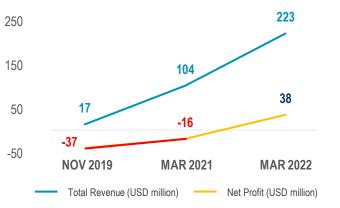
Established in 2014, Starling Bank is a U.K.-based digital bank that serves retail and SME customers, which has made a loss since it first started all the way to 2022, while its rivals continue to record losses

Universal bank focused on depth

- SME focus on lending + integrations
- Scaled retail lending via mortgages

Financial Highlights

Nov 2019 - Mar 2022



Retail & Business Proposition Starling Bank



CASE STUDIES KEY TAKEAWAYS

Key Takeaways

We have identified several important lessons that can be drawn from the success of profitable digital banking models globally:

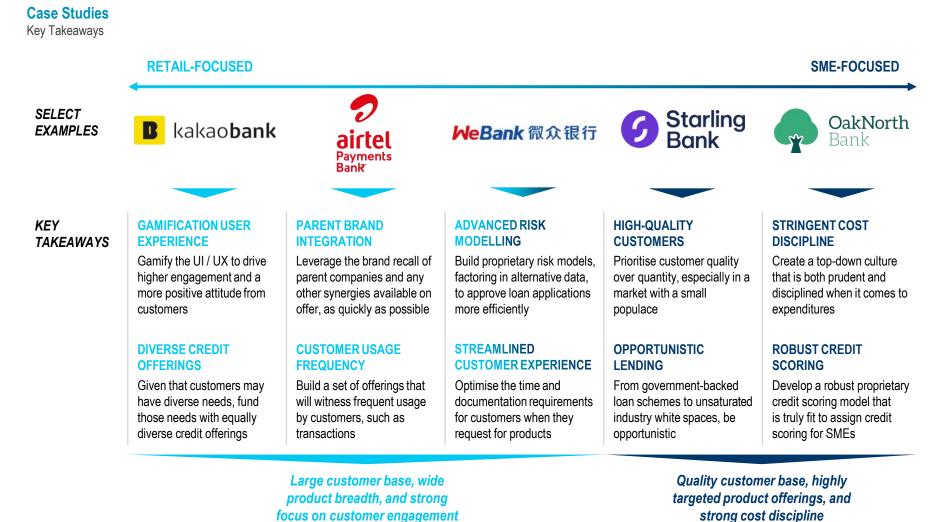
Retail-Focused Banks

- 1. Incorporating gamification into the UI / UX
- 2. Offering a diverse range of credit products
- 3. Leveraging the well-known parent and/or shareholder brand(s)
- 4. Encouraging frequent usage
- 5. Advanced risk modelling capabilities
- 6. Streamlining the customer experience

SME-Focused Banks

- 1. Attracting high-quality customers
- 2. Opportunistic lending focus
- 3. Strong credit scoring capabilities
- 4. Stringent cost discipline

Based on our analysis of each of these case studies, we have identified some key takeaways that digital banks should bear in mind when crafting their own strategies



© 2023 Quinlan & Associates Limited, a company incorporated in Hong Kong. All rights reserved.

Source: various virtual bank websites, Quinlan & Associates analysis

44



SECTION 5

THE WAY FORWARD & HOW WE CAN HELP



CHARTING THE PATH **TO PROFITABILITY**

Key Takeaways

In charting the path to profitability, digital banks must focus on 3 key areas:

- 1. Acquisition:
- Customer acquisition
- Customer experience
- 2. Monetisation:
- Interest income
- Non-interest income
- Cross-selling
- 3. Strategic Superchargers:
- Third-party partnerships
- Ecosystem / Platform proposition
- Geographic expansion

We see eight key areas that need to be addressed by virtual banks in charting their path to profitability, including acquisition, monetisation, and addressing strategic "superchargers"

		SITION	MONETISATION			
	CUSTOMER ACQUISITION	CUSTOMER EXPERIENCE	INTEREST INCOME	NON-INTEREST INCOME	CROSS-SELLING	
DESCRIPTION	With sizeable competition from both local and international digital / incumbent banks, digital banks must find creative ways to acquire customers at low cost	As a crucial part of their value proposition, digital banks should aim to provide a superior customer experience compared to their traditional counterparts	Once customers are onboarded, digital bank should look to leverage their balance sheets by offering attractive lending products to drive interest income	In addition to income from core lending activities, digital banks should look to diversify their fee- based revenue streams to ensure business sustainability	Once a comprehensive range of products is readily available, digital banks should look to drive customer revenue through targeted cross-selling efforts	
KEY QUESTION	How can digital banks build a sizeable target customer base while keeping CAC in check?	How can digital banks enhance UI / UX to best serve their customers vs. the competition?	How can digital banks secure a sizeable, sticky deposit base to scale their lending business?	What fee-based product / service offerings should digital banks offer their customers?	How should digital banks drive cross-selling opportunities to their existing customers?	

	THIRD-PARTY PARTNERSHIPS	ECOSYSTEM / PLATFORM PROPOSITION	GEOGRAPHIC EXPANSION
DESCRIPTION	In order to rapid scale their customer base and product / service / technology capabilities, digital banks should actively seek out – and nurture – relevant partnerships	Since digital banks can serve as a bridge between customers and business partners, building a self- sustaining ecosystem is critical for long-term success	Once a digital bank successfully turns a profit, they can expand their footprint organically and / or inorganically by leveraging their existing capabilities and track record
KEY QUESTION	How should digital banks identify and engage with relevant partners to drive long-term value?	How should digital banks establish an integrated platform /ecosystem that cultivates a positive reinforcement cycle?	What different organic and inorganic expansion options are available for digital banks to enter new markets?

HOW WE CAN HELP

The Quinlan & Associates team can support you on your journey to profitability

	ACQUISITION			MONETISATION			
	CUSTOMER ACQUISITION		ENCE			TEREST INCOME	CROSS-SELLING
OBJECTIVE	Optimise customer acquisition strategies to solve for CAC and/or better enable "super-scaling" efforts:	Review customer UX / UI, including de benchmarking, to understand areas fo		Develop a carefully crafted ALM strategy that solves for both sides of the balance sheet (i.e. deposits + loans)		to-end business case and operating ing into new product / service offerings	Develop a robust cross-selling strategy based on understanding customer needs and peer best-practices
POTENTIAL ENGAGEMENT	 Direct Acquisition (1/2): Product-led approach Recalibrating referral rewards, CASA offerings, and / or payment based incentives, etc. to encourage new account set-up Direct Acquisition (2/2): Content-led approach Reviewing branding and / or channel optimisation status (e.g. content strategy, channel strategy, and cadence) to identify areas for improvement Indirect Acquisition: External Partnerships Identifying relevant channel partners and engagement strategy, ensuring clear value / service alignment, appropriate incentive structures, robust governance structures, training and communication protocols, and technology enablement (e.g. partner portals) 	 Experience Perspective Auditing and analysing digital touchp customer journey (e.g. number of clic complete an end-to-end digital proce payments, loan applications, wealth Reviewing use of in-context support instructions) and latency / speed of c Evaluating gamification strategies an Conducting detailed data-driven cust analysis (e.g. surveys, focus groups, customer" analysis) Fulfilment Perspective Identifying relevant customised value (e.g. reports, analytics, etc.) 	cks / time taken to uss, such as management) (e.g. prompts, ustomer service ad benefits tomer sentiment i.e. "voice of	 Deposit Perspective Formulating a clear strategy to scale a low-cost, sticky funding base (e.g. winning the war for employee payroll, positioning the bank away from a secondary account to customers' primary bank accounts) Lending Perspective Conducting industry / market / peer analysis to understand the size of unmet / underserved needs and potential competitive whitespaces within specific credit products / segments Benchmarking competitor credit offerings (e.g. invoice financing, BNPL) to understand key gaps (e.g. tenor, fee, quantum, application / approval timelines) Examining opportunities to further leverage alternative data to offer pre-approved loans (i.e. removing need for timely case-by-case loan application reviews) 	services that co lending service, - Brokerage - Wealth Manage - Foreign excha - White-labelled - Insurance (dis - BaaS (e.g. eK service) - Operating solu - Assessing both options, includin	ctiveness of potential products / uld be offered in addition to core such as: gement ange	 Revenue Optimisation Reviewing and prioritising high potential cross-sell customers based on their current and future needs, preferences, and behaviours Identifying key cross-sell triggers / events to engage customers, including strategies / tools to automate the cross-sell process (e.g. via CRM systems) Creating alignment between different departments / business units (e.g. retail and SME banking) with respect to information / data sharing Creating clear governance and incentive structures to drive cross-selling activity, supported by robust training and communication programmes
	THIRD-PARTY PARTNERSHIPS		ECOSYSTEM / PLATFORM PROPOSITION		GEOGRAPHIC EXPANSION		
OBJECTIVE	Formulate a clear partnership strategy across entire customer value chain to accelerate acquisition, monetisation, etc.		Build a sustainable closed-loop platform / ecosystem with a positive reinforcement cycle that drives strong network effects		Supporting strategy development for new market entry – from end-to-end business case analysis to new license application support		
POTENTIAL ENGAGEMENT	 Partner Identification and Prioritisation Identifying and prioritising key partners based on their value alignment, strategic priorities, operational capabilities, size and/or needs of their end customer base, etc. to determine priority targets, addressable wallet potential, and potential roadblocks Activation & Engagement Developing a clear partnership proposition to take to targets – from developing institutional-grade sales collateral to commercialisation models Operationalisation Instituting relevant operating model adaptations to activate / commercialise tie-ups (from developing fit-for-purpose incentive structures to partner training / communications 		Supply-side Perspective • Crafting mutually beneficial proposition for business partners by thoroughly understanding their challenges and requirements across their respective value chains Demand-side Perspective • Proposing appropriate on-app prompts and features for the current user base, based on insights gained through thorough detailed data analysis Platform-side Perspective • Identifying various tools and incentives that will promote a positive reinforcement cycle within the wider customer community STRATEGIC SUPERCHARGERS		 Organic Growth Reviewing complete cost-benefit business case to set up operations in select offshore markets (e.g. addressable market size, competitive landscape, demand dynamics) End-to-end license application support Inorganic Growth Identifying potential targets and / or partners to leapfrog into new markets In-depth commercial due diligence support 		

OUINLAN &ASSOCIATES

STRATEGY WITH A DIFFERENCE

Copyright © 2023 Quinlan & Associates.

All rights reserved. This report may not be distributed, in whole or in part, without the express written consent of Quinlan & Associates. Quinlan & Associates accepts no liability whatsoever for the actions of third parties in this respect.

The information and opinions in this report were prepared by Quinlan & Associates. This report is not financial or investment advice and should not be relied upon for such advice or as a substitute for professional accounting, tax, legal or financial advice. Quinlan & Associates has made every effort to use reliable, up-to-date and comprehensive information and analysis in this report, but all information is provided without warranty of any kind, express or implied.

Quinlan & Associates disclaims any responsibility to update the information or conclusions in this report. Quinlan & Associates accepts no liability for any loss arising from any action taken or refrained from as a result of information contained in this report or any reports or sources of information referred to herein, or for any consequential, special or similar damages even if advised of the possibility of such damages. This report is not an offer to buy or sell securities or a solicitation of an offer to buy or sell securities.

Website	www.quinlanandassociates.com			
Email	enquiries@quinlanandassociates.com			
Telephone	(+852) 2618 5000			
Address	Level 19, Two International Finance Centre 8 Finance Street, Central Hong Kong			

AUTHORS

Benjamin Quinlan CEO & Managing Partner T: +852 2618 5000 E: bquinlan@quinlanandassociates.com

Alison Hu

Senior Consultant T: +852 2618 5000 E: ahu@quinlanandassociates.com Justin Chung

Engagement Manager T: +852 2618 5000 E: jchung@quinlanandassociates.com

Jeanny Ang

Senior Consultant T: +852 2618 5000 E: jang@quinlanandassociates.com