Digital Banking:

Malaysian banks at a crossroads

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Foreword

The year 2020 promises to be an exciting year for banking in Malaysia. Bank Negara Malaysia (BNM) has recently released guidelines that opens the way for technology players and other non-financial institutions to directly compete with traditional banks.

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Digital or virtual banks are an opportunity for disruption across the financial services sector - impacting both challenger (entrants) and incumbent (traditional) banks. Besides promoting innovation, Bank Negara Malaysia's vision is for digital banks to enhance financial inclusion for the underserved and help grow small and medium-sized enterprises (SMEs) in Malaysia.

Based on observations of the impact of digital banks on the banking and FinTech landscape, executives will need to quickly adopt a position on how they want to play.

Will they participate in the digital banking licensing scheme, potentially waiting up to 18 months before they can go to market? Should they seek partnerships with existing banks to launch new products and innovative services? Should traditional players speed up their plans to digitise their existing banking operations to stay ahead of the curve?

Whichever direction is selected, a clear strategy to move forward is needed. From PwC's proprietary research and industry analysis, we have identified a number of opportunities that industry players can take, as well as the risks that will need to be addressed to be successful.

Background

The Finance Minister announced in the Budget 2020 speech that BNM was finalising the licensing framework for digital banks. Since then, the framework for public consultation has been issued. The final framework is expected to be issued by the first half of 2020 to invite applications for new digital banking licences.

Malaysia's decision to open doors to digital banks come close on the heels of other jurisdictions in Asia Pacific in issuing new digital banking licences. Hong Kong issued 8 digital banking licences in March 2019, followed by Taiwan with 3 digital banking licences in July 2019. Closer to home, the Monetary Authority of Singapore (MAS) announced in June 2019 that it will issue up to five new digital banking licences in Singapore.

BNM's move to issue new digital banking licences is a significant milestone in the Malaysian financial services landscape, and demonstrates the speed and importance of financial technology evolution in recent years.

To illustrate, FinTech was not a buzzword yet when BNM's Financial Sector Blueprint 2011-2020 was published. Furthermore, recent banking licences issued in Malaysia were driven by Government-to-Government (G2G) agreements. Recent consolidation of Islamic banking players could also be an indicator why BNM did not issue new banking licences earlier due to the saturated market.

Malaysian consumers already have a need

PwC commissioned a recent study among banking consumers in Malaysia, Singapore and Hong Kong. Of the more than 4,500 people that were surveyed, just over 1,500 respondents were based in Malaysia. It is clear to us that opportunities abound for potential applicants of digital banking licences.

Malaysian banking consumers:

- Have had bad experiences that could well be the straw that breaks the camel's back, and encourage the switch to digital banks
- Are open to new technologies if they're better than what's on offer currently, but data protection is a key concern
- Want to be empowered with personalised tools that allow them to take control of their financial planning
- Want access to e-commerce and lifestyle services for an integrated experience on a single platform

Experience in mature markets such as the UK, Europe and China shows that successful digital banking entrants (challenger banks) share a common "organisational DNA"; agile, technology-enabled and scalable with a much lower cost of acquisition and customer servicing. But that is not enough to ensure success *(see page 11).*

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Malaysia's unique opportunities

BNM has released the Exposure Draft on Licensing Framework for Digital Banks, opening the way for technology and other non-financial institutions to directly compete with existing banks.

Key highlights from the BNM Exposure Draft		PwC's point of view
When and whom the licensing applies to	BNM may issue up to 5 new digital bank licences. Preference is given to applicants whose controlling equity interest resides with Malaysians. BNM will start accepting licence applications by the first half of 2020 upon issuance of the final policy document[1].	***The preference given to Malaysians who will have controlling interests in the digital bank is consistent with the regulatory framework in Singapore. This provides an opportunity for foreign players to form consortiums with Malaysian players to apply for the digital banking licence.***
What to expect in the first few years of operations	When a digital bank starts operating, it will undergo a "foundational phase" of 3 to 5 years, in which the minimum total capital funds is RM100 million and total asset size is limited to RM2 billion.	***Whilst capital and liquidity rules under Basel II and III are simplified during this foundational phase, however, there are no defined regulatory simplifications accorded in other areas that are expected of a traditional bank such as risk management, compliance, anti-money laundering rules, consumer protection, and other prudential requirements.***
What's next after the first few years	After the foundational phase (up to 5 years), the minimum total capital funds expected of a digital bank is RM300 million and there will be no asset size limitation.	***A digital bank has only 5 years to prove that its business model is viable and that it has achieved its committed value proposition to the underserved/unserved market segments. If it fails to do so, BNM may revoke its licence.***
Other limitations	A digital bank is not allowed to establish any physical branch, but may participate in the Shared ATM Network, and use agents for product distribution.	***The ability for digital banks to participate in the Shared ATM Network is crucial to ensure that the underserved market still has access to ATMs across Malaysia.***
Serving the underserved	Applicants are required to submit a detailed 5 year business plan, with emphasis on how the digital bank plans to serve the unserved and underserved segments. The business plan needs to include the applicant's market study of the unserved and underserved segments and an analysis of the market gap.	***BNM has specifically used the terms "unserved" and "underserved" to describe the digital banks' market segments, instead of the term "unbanked". This indicates that whilst the unbanked population is small in Malaysia, however, banks are not adequately serving the needs of certain segments in terms of products, services and pricing.***

[1] Policy Document on Application Procedures for New Licences under Financial Services Act 2013 and Islamic Financial Services Act 2013 (Licensing Procedures)

Malaysia's unique opportunities

Key highlights from the BNM Exposure Draft		PwC's point of view
Validating the business plan	Pro-forma financial statements will need to accompany the 5 year business plan, and indicate a projected path to profitability. An independent external party will need to validate the applicant's business plans.	***BNM is cognisant that digital banks may not be able to break even within 5 years. This is consistent with our observations of global digital banks' financial performance, in which significant investments are required in technology and customer acquisition in the initial years. However, BNM has requested for applicants to indicate the year they expect to break even in their pro-forma financial statements.***
What happens when the business model is unsustainable	A detailed exit plan will need to be developed in the event that the digital bank's business model is unsustainable and a wind-down of the business is required. BNM has referred to the Recovery Planning exposure draft guidelines or "living wills" to be issued, as a starting point on how a "living will" is to be developed.	***The requirement to develop an exit plan is consistent with regulations in Hong Kong and Singapore. Regulators need to ensure that failures of digital banks do not disrupt the banking ecosystem while continuing to emphasise the importance of depositor protection.***

Our observations

Bank Negara Malaysia's call to action for digital banking is to focus on financial inclusion and the underserved, such as the B40, micro and SME market segments. These segments include rural areas in some of the poorest and most remote areas of Malaysia. They are typically underserved, often incurring high servicing cost and low revenue potential, relative to the more prosperous and concentrated urban areas.

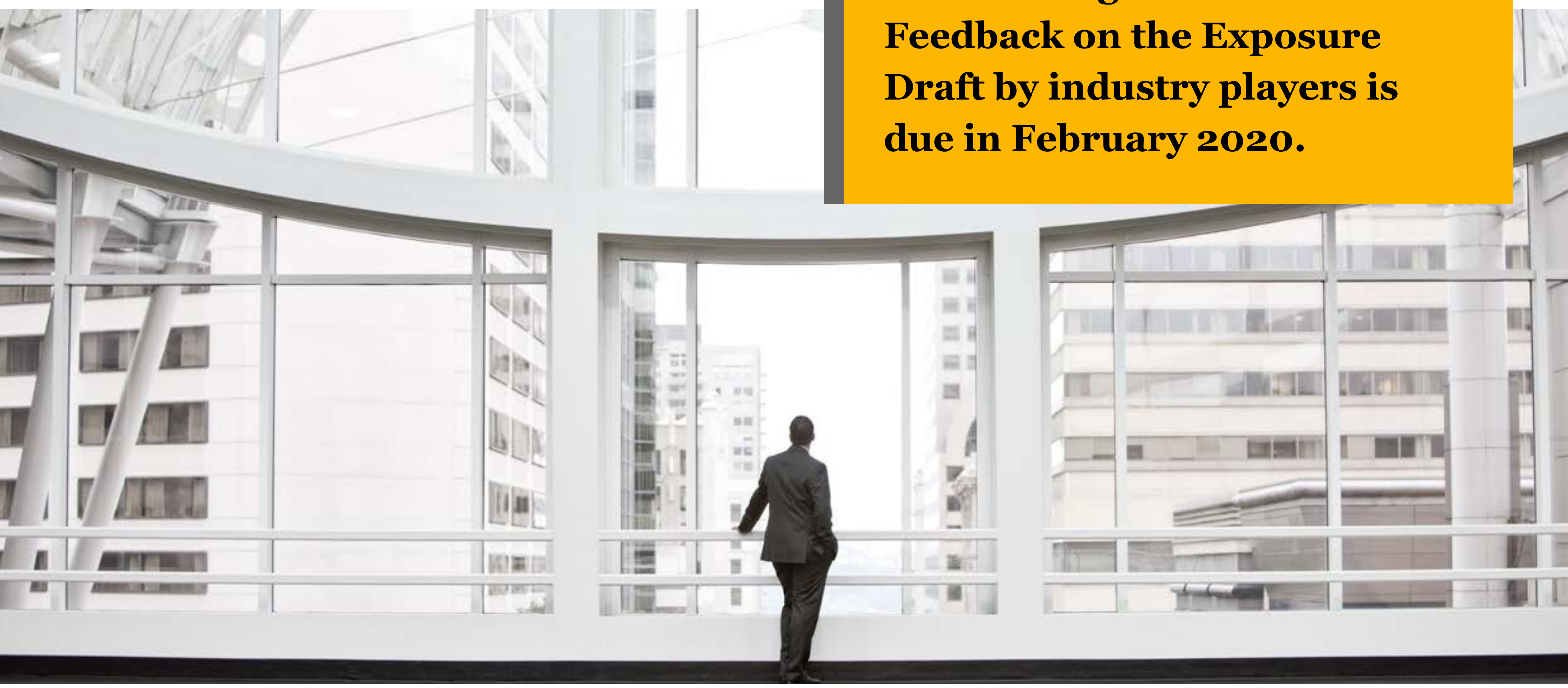
Digital banks can play an important part in achieving the recently announced Shared Prosperity Vision (SPV) 2030, which focuses on promoting sustainable economic growth, and restructuring the economy to be more progressive, knowledge-based and high-value for all communities in Malaysia.

A key strategic thrust is increasing the GDP contribution from SMEs and micro businesses, a major objective for BNM in launching its digital banking licensing framework. Other key economic growth activities as laid out in the SPV 2030 include Fourth Industrial Revolution (4IR) technologies that enable digital banking innovation, including cloud computing, advanced data analytics, artificial intelligence, and mobile technologies.

For example, one area of collaboration in line with public service initiatives is the recently launched National Digital Identity (National Digital ID) initiative. Future digital banks can be early enablers for digital compliance requirements, such as electronic Know-Your-Customer (e-KYC) processes, as well as the journey towards accelerating a cashless society. Additionally, vast efficiencies can be achieved in helping Malaysia's development financial institutions (DFIs) further progress in their digitalisation efforts.

If Malaysia is able to find an approach that works sustainably, it can share this model regionally across emerging markets in ASEAN such as Indonesia, Vietnam, Myanmar, Laos and Cambodia.

On 16 December 2019, BNM released the Exposure Draft on e-KYC, which sets out the standards required for digital banks to implement e-KYC for on-boarding of customers. Feedback on the Exposure Draft by industry players is due in February 2020.



Opportunities abound

In Malaysia, many organisations, both challengers and incumbents are actively assessing if they should apply for a digital banking licence. What success factors should drive their decision?

For those looking to succeed in digital banking, we believe that the question must be reframed from "what can I do in digital banking?" to three key questions that each organisation must be able to answer:

1. How do we **create value for customers** with a digital banking licence?
2. What is the **winning proposition** that will work in the Malaysian context? How would this be differentiated from other markets?
3. What capabilities are needed to build the value proposition? How can we **build/partner** with other parties (like technology companies) to acquire the necessary capabilities?

Digital banks will put customers at the heart of what they offer, offering innovations in the products and access channels associated with traditional banks.

These new banks succeed when they fill gaps in the market; whether it is providing better, more attractively priced products and services, superior customer experience or creating options for previously underserved customer segments such as millennials, the B40, micro and SME segments. This could include offering lower thresholds for wealth management products, lower transaction costs for cross-border transactions, and quicker approvals for loan finances.

In Europe, challenger banks include Atom, Monzo and Revolut in the UK while in Germany, there are over 15 challenger banks including N26. In North Asia, we see WeBank and MYBank in China, and KakaoBank in South Korea. The trend has accelerated with Hong Kong and Taiwan issuing digital banking licences in 2019, and Singapore following in their footsteps in 2020.

By looking at the track record of successful digital banks around the globe, we can see what characteristics successful banks share.

Overview of other markets

Digital banking traction and market penetration

Canada
More than 10 neobanks and challenger banks are operating in Canada

Germany
More than 15 neobanks and challenger banks are operating in Germany

China
Since 2014, China saw entries of unicorn neobanks including Tencent and Ant Financial

United States
At least nine digital banks are in operations in the US

Hong Kong
Eight digital banking licences were issued in May 2019, four of which are partnerships

United Kingdom
At least three notable neobanks are operating in UK – Atom, Monzo and Revolut

Taiwan
Three digital banking licences were granted in July 2019, two of which are partnerships

Brazil
Nubank challenged Brazil's oligopolistic financial market, and is now the 6th largest financial institution in Brazil

Traction gained by digital banks:
- Advanced
- Maturing
- Nascent
- Licences just awarded/to be awarded

South Korea
To date, two banks – K Bank and KakaoBank have been issued digital banking licences

South Africa
Mobile-first challenger banks i.e. TymeBank and Zero Bank have built strong positioning

Singapore
MAS announced that they would issue up to five digital banking licences (applications closing end 2019)

Australia
Three neobanks were granted full banking licences in 2019, while a few other FinTechs emerged

Source: PwC Strategy& analysis

How can banks create value for customers through digital banking?

Globally, in answering the question "How do you create value for customers with a digital banking licence?" successful digital banks usually identify a gap in the market that has sufficient size and growth and build a business model that appeals to the need for that target segment.

With digital banks usually entering a crowded and competitive banking space, the long term viability of digital banks is only possible if they move beyond the deposits/payments space, through the delivery of lending or lifestyle solutions, or through the creation of their own ecosystem, for instance.

In Hong Kong, some of the features used by successful applicants include addressing customer pain points, customer defined features and delivering integrated lifestyle solutions. But behind the scenes, there was also significant work in building the partnership and operating model of digital banks by building B2B2C connections, leveraging IOT and integration SME/vendor supply chain ecosystems.

However, to gain market share, digital banks have offered attractive pricing on basic financial products such as deposits (current accounts/savings accounts and term deposits), payments and credit cards. Digital banks are typically loss-making in their early customer acquisition phase.

For example, Zuno Bank started operations with strong customer acquisition, but has accumulated losses and failed due to its inability to access customers' credit. Another challenger bank, N26, initially offered free cash withdrawals in the beginning, but had to introduce a cap to manage costs.

Product characteristics offered by digital banks

Digital banks	Early stage	Late stage
Nubank (Brazil)	• No fee, low interest rate credit card • High interest rate savings account • Account registration in 20 minutes • Credit card approval in 1 day	• Debit card with ATM withdrawal features and enhancements • Direct deposit to paychecks • Personal loans with interest of 2.1-5% • Small business accounts
Revolut (UK)	• Prepaid debit card for withdrawals in 120 countries • Currency exchange • Cryptocurrency trading	• Subscription based accounts • Personal and business loans • Stock trading • Mobile phone and medical insurance
Atom Bank (UK)	• Fixed-term savings account at attractive rates • SME loans • Fixed rate residential mortgages	• Instant access savings account • Credit card • Personal loans
KakaoBank (Korea)	• Fee-free accounts • Free interbank transfers • Unsecured, low value consumer finance • Low exchange rates for FX remittance	• Separate payments proposition i.e. KakaoPay • Underserved deposit and loans segment as an entry point • Secured loans

Source: PwC Strategy& analysis

Building a winning proposition

In building a winning proposition, all global digital banks share a common organisational DNA including:

- lean and low cost operations both in customer acquisition and servicing,
- leveraging technology to innovate, and
- having the agility to innovate and respond.

In many cases, digital banks have moved beyond digitising legacy banking approaches to building fundamentally different approaches using deep customer understanding built on sophisticated data and analytics and AI capabilities that enable real-time customer interaction.

It is this agility and ability to innovate which sets digital banks apart from their conventional competitors who may be constrained by slow governance, concerns about cannibalisation, channel conflict and margin compression on their existing legacy business.

What we can learn from the WeBank model

Traditionally, incumbent banks use credit data to evaluate credit scoring, e.g. payment history, amounts owed, credit utilisation, credit mix, and credit history. Digital banks, however, build their own credit model by leveraging vast customer data from the digital ecosystem, including:

- Social media activities
- Online behaviour and preferences
- Network quality
- Payment history

As a result, this enables digital banks to make instantaneous decisions on credit approvals and provide other value-added services.

1 Credit model based on user data

Internal data

Evaluate **user data from Tencent's ecosystem** – WeChat and WeChat Pay

- Social media activities
- Spending behaviour based on WeChat Pay transactions
- Quality of personal connections

Third party/Partner data

Leverage **shared data models and algorithms** such as:

- National electronic invoice centre for a federated learning credit model
- Clustar to speed up the computing process

2 WeChat pay score

User score between 350 and 800

3 Value-added services

- **Rapid decisions**; micro loan evaluation within 5 seconds and fund issuance within 1 minute
- **Guided financial planning** based on user expenditure
- **Flexible and personalised loan** options based on user characteristics
- **Tier-based benefits** such as deposit waiver for ride hailing, hotel bookings and power bank sharing

Source: PwC Strategy& analysis

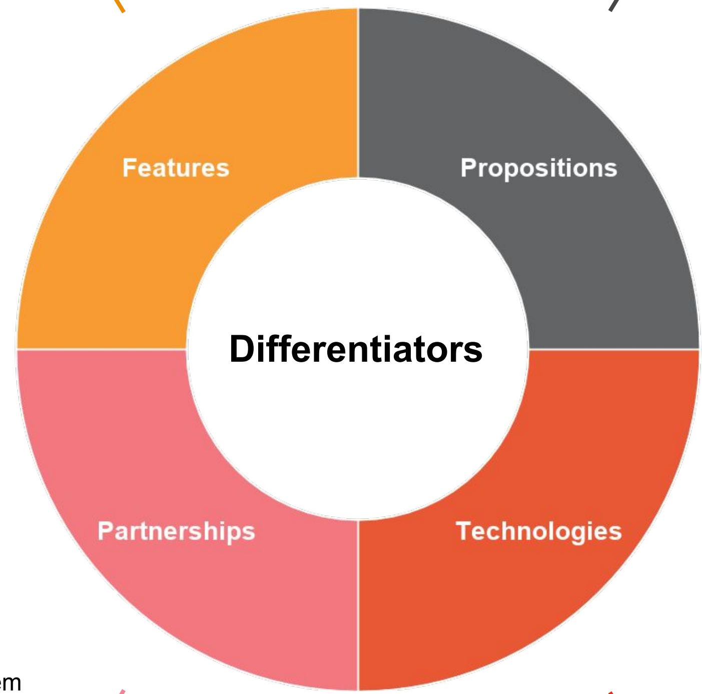
What capabilities are needed to build the value proposition?

Features

- Precise customer segmentation - no irrelevant offers
- Seamless experience across a more focused product range
- Consistently competitive pricing; potentially tailored pricing for individuals

Propositions

- Personalised promotions based on data-driven customer insights
- Solutions that are integrated with how people live their daily lives
- Personalised information that enables customers to change their spending and savings habits



Partnerships

- A wider variety of partners than are typically found in incumbent banks
- Loyalty offerings relevant to your demographic provided through partner ecosystem
- Connectivity to adjacent products or businesses through the partner ecosystem

Technologies

- Open APIs to deliver seamless customer journeys
- Instant account opening on a smartphone
- Data analytics to accelerate lending decisions
- AI to more accurately flag up irregular activity

How can incumbents react and get ahead of digital banks?

Recognising this legacy organisational DNA challenge, some conventional banks have set up standalone digital banks to challenge the existing business. DBS, a leading regional bank based in Singapore, established DBS digibank in India, a market where it has the potential to take on the role of challenger bank. Using over 180 partners for data, technology and business built on an open market approach, it created a business model that has been adapted for the Indonesian market.

CIMB has also established CIMB Philippines, a digital bank, which is free from the constraints of the legacy Malaysian business model such as systems, processes, products and customer segmentation.

But for incumbents, the question is, what can they do to get a headstart in digitising their existing business.

	Transform digitally	Create digital bank window	Establish standalone digital bank
Description	• Digitising middle and back office to improve efficiency and cost ratio • Enhancing digital touchpoints to the point of table stakes – focusing on core products	• Introducing a digital platform to target new/ niche market segments – may function as a sandbox • Separation of sales and business development teams, but sharing product development capabilities and balance sheets	• Obtaining a separate digital banking licence to operate on a standalone basis • Separation of operations, with alignment on customer segments to reduce revenue cannibalisation
Typical bank archetype	• Segment leader among higher net worth individuals and/or large institutions • Revenue profile relies less on transaction fee-based products, e.g. retail payments, foreign currency spread	• Universal banks with a strong local presence, a strong focus on retail and corporate/wholesale banking • Growth saturation in existing segment, looking to extend market position	• Challenger banks looking for a 'blank-slate' to improve competitiveness in select segments • Revenue profile is skewed towards interest-based products to reduce the impact from customer overlap

Source: PwC Strategy& analysis

Crafting the winning strategy

We have leveraged the experience of experts from our global network, who have assisted applicants to successfully obtain digital banking licences, to put together some key lessons learned. A winning strategy is one that has an impact mix of business strategy, innovative technology, appropriate risk and control frameworks, and is led by experienced management teams. Here are some lessons learned from our engagement experience with digital banks in Hong Kong, South Korea, Taiwan, Thailand, and Singapore on digital banking licensing initiatives and digitisation of products and services for existing banks.

Long term success will depend on how well digital banks address five essential components of a digital banking strategy, which include:

1. **Business strategy with innovative value propositions**
   Create a culture around the customer journey philosophy. Constantly seek ways to enhance customer value and experience through the creation of new products and services.

2. **Robust banking architecture integrated into a digital platform**
   Opportunities to design and deploy new technologies to support digital services to customers must be identified and leveraged.

3. **Alliances and partnership opportunities for a fully digital ecosystem**
   Having a broad based consortium would open up opportunities for a wider customer base, better technologies and innovations to serve bankable customers.

4. **Regulatory obligations that are adequately understood and practiced**
   Develop a sustainable and robust business plan in line with prevailing regulations.

5. **Risk management framework with strong governance**
   Digital banking brings about a new spectrum of risks. A robust risk management framework must be put in place to identify and mitigate potential threats. Define the controls for eliminating or minimising the impact of these risks, as well as the mechanisms to effectively monitor and periodically evaluate measures taken.

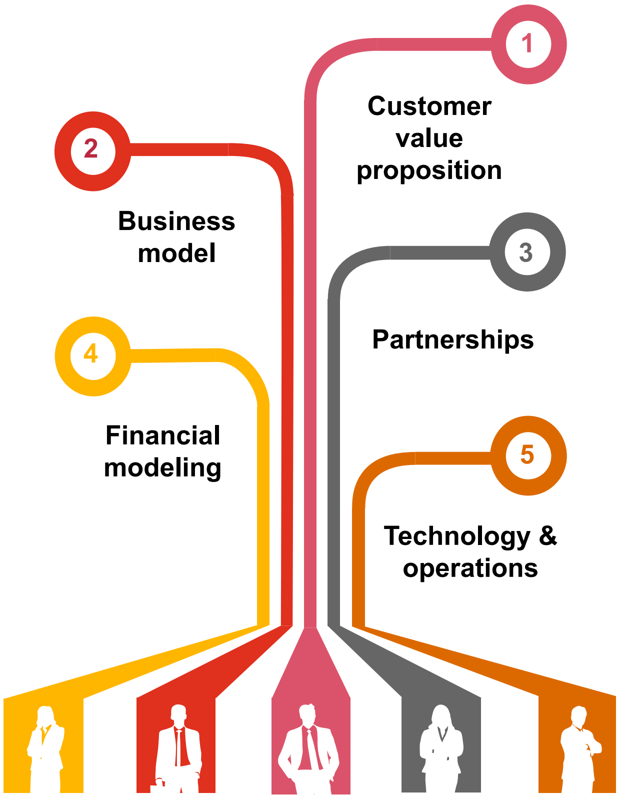
How PwC can help

The winning formula is one that is an impactful mix of business strategy, innovation, new technologies, data management and appropriate risk and control frameworks, led by experienced management teams with strong financial strength and commitment. With a proven track record in successfully helping digital banks excel across the world - most recently in Hong Kong and Taiwan - we can leverage our global experience and diverse perspectives to be your trusted advisor in this exciting yet complex journey.

Here are examples of how we have helped digital banks launch their services in Asia:

- Developed a sustainable strategy fit for growth
- Developed financial modelling scenarios
- Guided applications through legal and regulatory requirements and approvals
- Accelerated customer acquisition and brand loyalty
- Enabled client onboarding quickly
- Enhanced customer journeys in a digital-first world
- Adapted the workforce for the future
- Simplified tax, finance and treasury functions
- Helped banks navigate through complex risk and compliance challenges
- Protected them from cyber threats

Let us help you get it right



Key questions we can help you address:

Customer value proposition	What are the addressable market and customer segments in Malaysia? Is your customer value proposition compelling? Does the proposition address BNM's requirements and intent?
Business model	Is the business model in line with Malaysia's market needs? Is a digital banking licence required, or can value be created without one?
Partnerships	What is the anticipated partnership business arrangement? Are the capabilities within partnerships articulated well?
Financial modeling	Is the cost and revenue forecast reflective of the expected outcomes? Are the models in line with BNM requirements?
Technology & operations	Is the technology innovative and scalable to meet future requirements? Are they in line with BNM RMIT (Risk Management in Technology) guidelines?

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Our Malaysian digital bank specialists are part of a global team of experts that serve traditional and digital banks throughout the world.

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