

Global Banking & Securities

Joining the next generation of digital banks in Asia

As the region's regulators increase license allocations and set standards for the next wave of digital banks, there are opportunities for both incumbents and new entrants to enter the arena.

By Raphael Bick, Denis Bugrov, Hernán Gerson, Alexander McFaull, Alexander Pariyskiy



© Getty Images

Digital banking in Asia is primed for growth. Amid soaring demand for online and mobile alternatives, new digital players are shaking up the market and transforming banking for individuals and companies. As regulators increase license allocations and set standards for a new generation of banking, there is a unique opportunity for both incumbents and new entrants to get involved.

Not every Asian digital bank is a success story, of course, but those that have developed a productive business model and scaled effectively have thrived. Once established, digital banks can generate higher revenues at a lower cost to serve than incumbents, putting them in a position to expand market share. In addition, their digital architecture enables them to access ecosystems of businesses and customers, bringing exponential benefits in terms of knowledge and data.

While digital banks in other geographies are often startups, Asian digital banking is being driven largely by established companies and consortia. Despite structural challenges with regard to governance, consortia bring significant advantages in terms of achieving scale. Just five years after launch, Tencent-backed WeBank serves some 200 million people, and Alibaba-supported MYbank has more than 20 million SME customers. Over a short period, China's digital banks now have a roughly 5 percent share of the country's RMB 5 trillion (~\$700 billion) unsecured consumer loan market and more than 7 percent of online SME loans. South Korea's KakaoBank, launched in 2017, attracted more than 10 million customers in its first year and now has a roughly 5 percent share of the country's unsecured consumer loan market.¹

Asia's digital licensing process began with Chinese regulators in 2015, and has since expanded around the region, with central banks in South Korea, Taiwan China, and Hong Kong SAR China granting limited numbers of licenses. In 2019, Singapore set

up a digital banking license application process and Malaysia issued a draft licensing framework; meanwhile regulators in countries including Thailand and Pakistan have announced or indicated plans to follow suit.

A word on the impact of COVID-19 on the digital banking landscape. As we've noted in other articles, COVID-19 and related lockdowns have led to an increase in the use of digital banking, even among segments previously less likely to adopt it. On the investment side, investors, particularly venture capital firms, have become more cautious, lending more momentum to consolidation and consortia as funding approaches for digital bank launches.

On the regulatory front, caution related to economic uncertainty has led some regulators to delay licensing timelines; for example, Singapore licensing was delayed roughly five months, while Malaysia's was delayed about six months. On the whole, however, the pandemic has not shifted the path for digital banking in Asia. In 2020, all virtual banks in Hong Kong SAR China managed to launch, along with Rakuten Bank in Taiwan China in early 2021; Singapore's regulator shortlisted four candidates for new digital banking licenses;² and Malaysia³ and the Philippines⁴ finalized their digital banking frameworks/guidelines. At the same time, as digital banking matures, regulation tightens. In China, for instance, regulators have introduced additional rules related to risk management (including for systems, data, risk model management, and IT risk management)⁵ as well as limitations on online micro-lending business.⁶

In order to reach consumers and small businesses that have struggled to gain access to financial services, many new digital banks are seeking entry into new markets.

¹All consumer unsecured loans issued by banks, excluding credit card balances.

²MAS Announces Successful Applicants of Licenses to Operate New Digital Banks in Singapore," mas.gov.sg, December 4, 2020.

³Licensing Framework for Digital Banks," www.bnm.gov.my, December 31, 2020.

⁴BSP Introduces Digital Banking Framework," www.bsp.gov.ph, November 25, 2020.

⁵CBIRC Releases the Provisional Rules on Internet Loans of Commercial Banks," www.cbirc.gov.cn, July 17, 2020.

⁶CBIRC and PBC Solicit Public Opinions on the Interim Rules on Online Micro Loan Business (for Consultation)," www.cbirc.gov.cn, November 2, 2020.

To succeed, they need to prepare for robust licensing processes, and demonstrate that they are equipped to compete in a high-performance banking environment. Considering business plan, customer proposition, and management of the application, we see 10 essential elements that new digital banks should focus on, including a unique proposition, a strong leadership team, good governance, and a clear path to profitability. The task is significant, but those companies that make the grade, and scale effectively, have an opportunity to play a part in one the world's most dynamic financial markets.

Digital banking licenses present an opportunity

As in many regions, digital banking in Asia is competitive, and many startups have failed to scale sufficiently, or have scaled but not made a profit. In aggregate, however, Asian digital banking has been a success. Japan's Jibun bank, the first Asian digital pure play (launched in 2008), reached profitability less than five years after launch. China's WeBank and XW Bank and South Korea's KakaoBank produced positive returns

two years after launch. All five Chinese digital banks were profitable in 2019, with WeBank and XW bank posting ROEs of about 28 percent and 30 percent respectively, compared with a national average for all banks of roughly 11 percent.

Successful digital banks in Asia often operate under a consortia business model that contrasts to the vertical approach seen in Europe and the United States. In China, for example, both WeBank and MYBank are consortia, led by Tencent and Alibaba's Ant Financial, respectively.

Consortia do present challenges and complexity of their own, particularly in ensuring alignment between participants; but they also offer a path to scaling relatively quickly. Notably, consortia were awarded the highest number of licenses in recent licensing processes in Taiwan China and South Korea, and five of the eight digital licenses awarded in Hong Kong SAR China in 2019 went to groups of companies. (In Hong Kong SAR China, for example, Fusion Bank is led by Tencent and ICBC; Standard Chartered-led Mox is backed by HKT, PCCW, and online finance company CTrip Financial.) The majority of publicly known

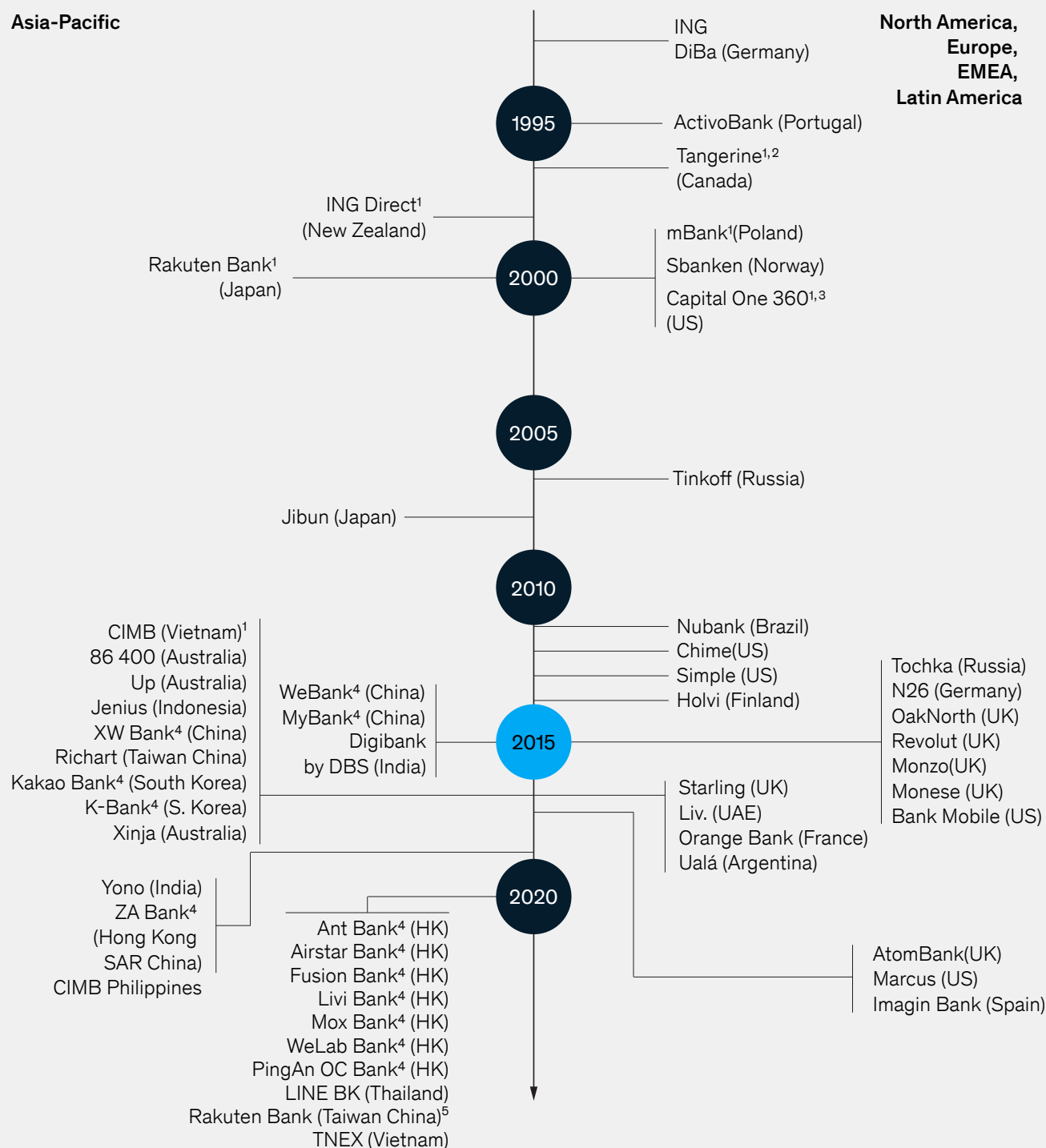
Note on methodology

Globally, digital banks have proliferated over the past 20 years (Exhibit 2). However, the variety of business and operating models has led to some confusion over the distinction between digital channels, digitized traditional banks, and pure-play digital banks. In this article, we define a digital bank as a deposit-taking financial institution that provides its products and services through a digital-first or digital-only business model. Characteristics of digital banks include:

- A digital front end and operations. Digital banks acquire and onboard customers, and meet most customer needs, with little or no reliance on paper documents, a physical footprint (e.g., branches, ATMs, agent point of sale), or manual processing. They also offer a high-quality user interface and experience.
- A digital-native back-end core. Digital banks have configurable, modular, micro-services-based cores, with APIs that enable rapid IT delivery and innovation.
- Set up and run like a technology company. A digital operating model is characterized by a horizontal structure, minimal bureaucracy, and a non-hierarchical environment, with high levels of staff empowerment and ownership, and a test-and-learn culture enabling continuous development of systems, products, and channels.

Digital banks have proliferated globally since the advent of digital licensing in 2015.

Asia-Pacific



¹Not fully digital model; has branches.

²Formerly ING Direct Canada.

³Formerly ING Direct US.

⁴Launched under "special" digital banking license.

⁵Expected to launch 2021.

applicants in Singapore's licensing round, which closed in December 2019, were consortia. And in the full banking license category, which requires paid up capital of the equivalent of roughly US\$1 billion, two of the four nominees eventually

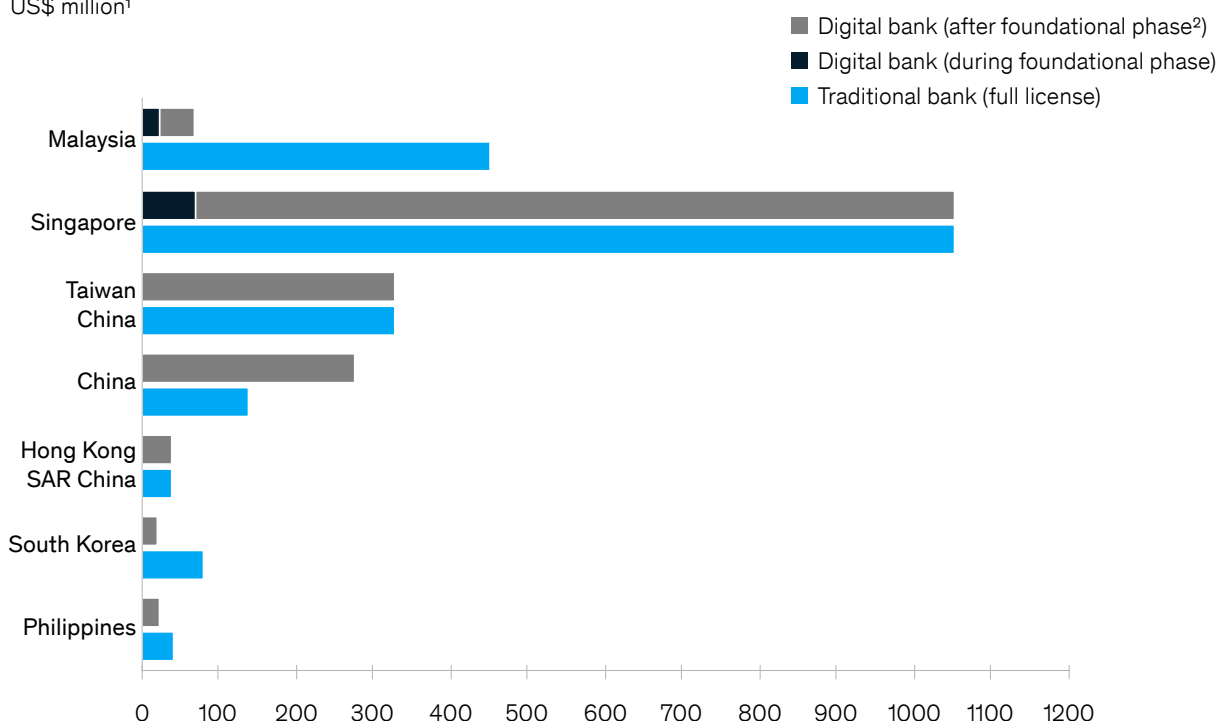
awarded licenses were consortia. (It is worth mentioning that capital requirements for digital banks are usually, but not always, in line with those for traditional physical banks [Exhibit 1]).

Exhibit 1

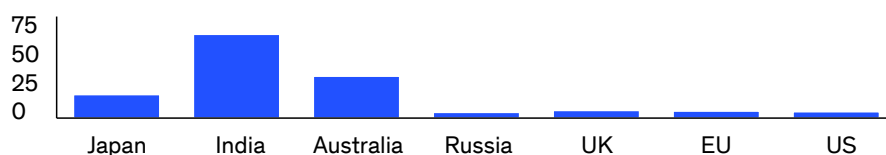
Digital bank capital requirements are not always lower than those for traditional ones.

Minimum capital requirement for digital and traditional banking licenses in selected markets

Minimum capital requirements (jurisdictions with dedicated digital banking licenses),
US\$ million¹



Minimum capital requirements (jurisdictions without dedicated digital banking licenses⁵),
US\$ million¹



¹FX rate as of end May 2020.

²"Restricted" phase in Singapore; phase with reduced capital and other requirements, but with limitations such as SGD50 million aggregate deposit book cap in Singapore and MYR3 billion total assets cap in Malaysia.

³For "digital full banks." (For digital wholesale banks, minimum capital requirement is SGD100 million).

⁴Universal bank with head office only.

⁵Indian Payments banking licenses are not considered digital banking licenses due to significant restrictions to the payments banks (deposit amount cap, cannot issue loans and credit cards); Australian restricted ADI licenses are not considered for the same reason.

Source: Central bank websites

In some markets, the prevalence of the consortia model has been at least partly driven by regulation. In South Korea and China, the stakes of non-financial services shareholders are capped at 34 percent and 30 percent, respectively, for digital banks. In some cases, regulators have stated that applicants for digital banks need to work with other entities that have track records in operating a digital business, which has encouraged market participants to seek out partnerships.

A consortia approach enables new banks to more easily assemble the ingredients required for a successful proposition, including: customer loyalty and trust; data and touchpoints; advanced technology capabilities, which support rapid proposition development and evolution; and analytics, to leverage the data. Core banking capabilities such as risk management (credit, financial risk, compliance), and a deep understanding of banking products and regulation, are table stakes in all markets.

Of course, globally, not all successful digital banks are consortia. Russia's Tinkoff bank is a greenfield stand-alone operation that delivers high profitability (2019 return on equity of 56 percent) and growth (loan book grew by 66 percent in 2019). Asian examples of stand-alone digital banks include Rakuten Bank in Japan, Hong Kong SAR China license awardees Ant SME, OneConnect Bank, and WeLab Bank, and Singaporean short-listed candidates Ant Group and Sea Group.

Recent experience shows that, whether operating as consortia or stand-alone entities, successful and profitable digital banks share the following strengths:

- A truly differentiated customer value proposition. The successful value proposition extends beyond a sleek customer interface to offer seamless digital onboarding (typically just a few clicks); fast loan approval and disbursement (e.g., MyBank's three-minute SME loan approval); 24/7 customer support (one Korean bank and

some leading Chinese players manage roughly 80 percent of customer inquiries via chat bot); attractive pricing, enabled by richer data and a lower marginal cost of loan disbursement.

- Early revenue generation. Successful digital banks tend to focus early on revenue-generating products, including loans, remittances, and third-party offerings such as wealth management and insurance. This approach both boosts profitability and fosters the development of sticky customer relationships. KakaoBank, for example, offered loans soon after launch and achieved breakeven in less than two years. Banks that can access high-quality external data to enable effective credit scoring and partnerships with powerful platforms that engender trust and loyalty are also more likely to thrive.
- Quick scalability. Digital banks need to attract a critical mass of customers to be viable. China's aiBank, for example, attracted 30 million customers in two years.
- Cost efficiency. An existing customer base is not just a route to scaling—it also significantly reduces the need to spend significantly on customer acquisition. Indeed, access to large volumes of data enables better targeting and therefore marketing optimization and more accurate risk management. Digital-only models and the use of new technologies such as artificial intelligence and robotic process automation significantly reduce cost-to-serve and fixed costs. WeBank and XW Bank posted cost-to-income ratios of 25 percent and 23 percent respectively in 2019, among the lowest globally.

Licensing is expanding in Asia

Before 2015, there were very few pure-play digital banks in Asia, for reasons that included limitations in infrastructure, regulatory hurdles (including the lack of e-know-your-customer frameworks), insufficient customer interest, and incumbent bank oligopolies.^{7,8}

⁷For Asia, we refer to the entire Asia-Pacific region, including Australia and New Zealand.

⁸Exceptions include Japanese pure-play digital bank Jibun Bank, launched in 2008; mixed-model internet banks such as ING in Australia (launched in 1999); and Japan's Rakuten Bank (launched in 2000).

The situation started to change in 2015, when the People's Bank of China granted five internet-only banking licenses (Exhibit 2). In the following years, several geographies followed suit, including

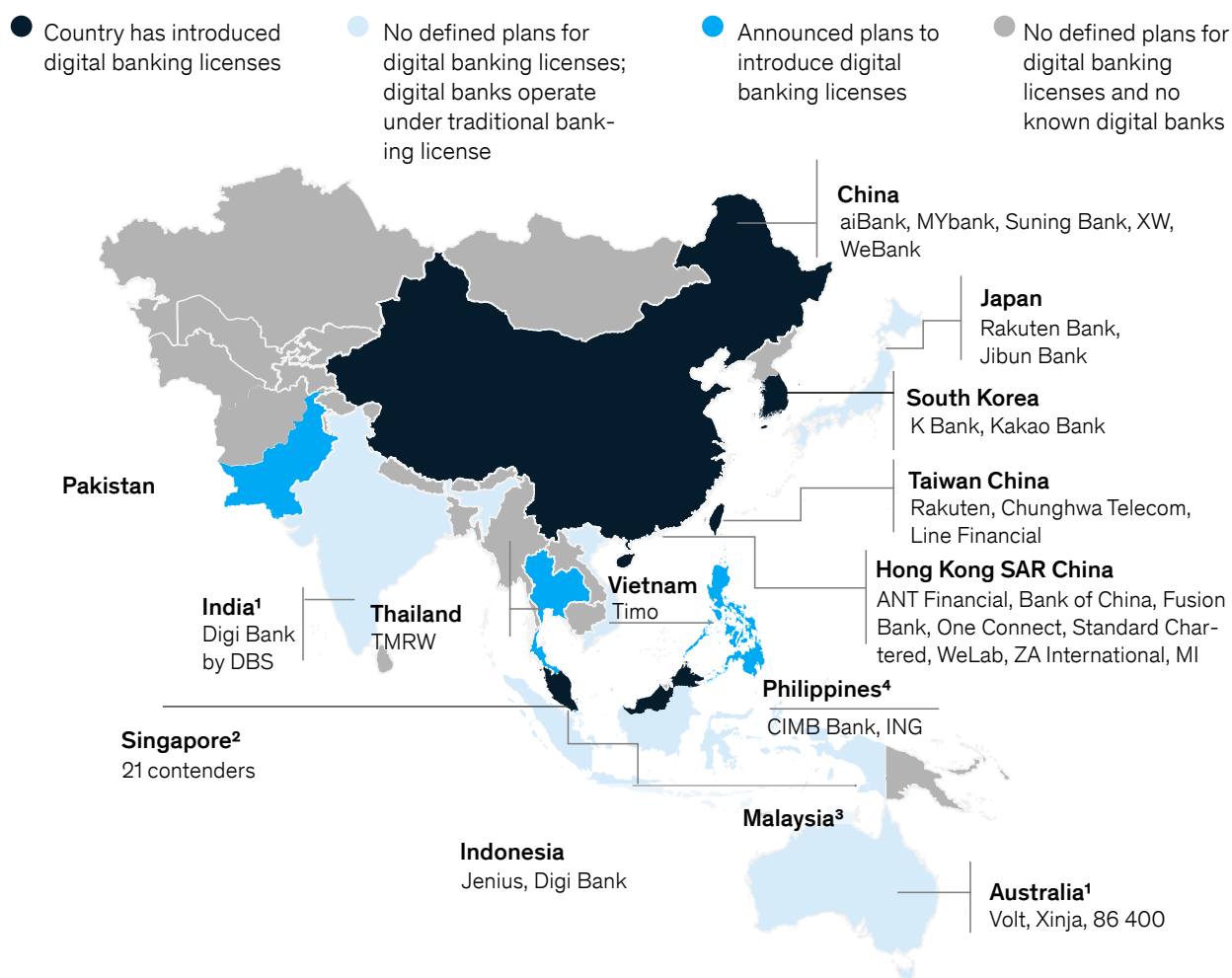
South Korea (two licenses in 2017, one in 2019), Taiwan China (three licenses in 2019), and Hong Kong SAR China (eight licenses in 2019).⁹ The Monetary Authority of Singapore received

⁹ Other Asia-Pacific jurisdictions have introduced similar frameworks (e.g., India's payments banking licenses in 2015, Australia's Restricted ADI Framework in 2018); these were not considered in depth in this article mainly due to significant restrictions on the licenses.

Exhibit 2

Digital banking licenses in Asia have unlocked access to banking markets, particularly for non-banking firms.

Mapping the growth of digital banking in Asia¹



¹ Indian payments banking licenses are not considered digital banking licenses due to significant restrictions (deposit amount cap, cannot issue loans and credit cards); Australian Restricted ADI licenses are not considered for the same reason.

² Digital banking licensing framework was introduced in 2019, successful applicants were announced on December 4, 2020; licenses yet to be granted.

³ Finalized digital banking license framework issued on December 31, 2020; licenses expected to be awarded in 2021-22.

⁴ Digital Banking Framework introduced on November 25, 2020; further developments expected.

Source: Central bank websites

21 applications for up to five licenses in 2019, eventually short-listing four candidates in December 2020. The same year Bank Negara Malaysia finalized its licensing framework and BSP in the Philippines introduced its Digital Banking Framework. Bank of Thailand is set to launch a licensing program in the near future. Across Greater China, South Korea, and Singapore, some 22 licenses have now been or are about to be granted. China, meanwhile, is working to finalize rules for digital banking, which could open the way for foreign banks to set up separate digital banking platforms.

Digital banking prospects are often tied to the extent of accommodation provided by licensing regimes. Banks operating under more stringent regulations have seen relatively limited growth. The Reserve Bank of India granted provisional “payments bank” licenses to 11 entities in 2015, permitting them to accept restricted deposits and issue debit cards—but not to issue loans or credit cards. Seven of these entities remain active and none are meaningfully challenging incumbent market share. In 2019, Australia granted “restricted licenses” to digital banks, capping total deposits at AU\$2 million and individual deposits at AU\$250,000. These banks initially grew slowly and only started to achieve momentum when they gained full licenses. Xinja Bank became a fully licensed deposit-taking institution in 2019, and saw AU\$200 million in deposit inflows in its first month of operations.

Who can compete? Asia’s sector-agnostic blueprint

There are no preconditions in Asia on the applicant business activity or sector best suited to set up a digital bank or apply for license. Chinese tech giant Alibaba, Tencent and OneConnect are all involved, as is Japan’s Rakuten (e-commerce, social media), Taiwan’s LINE (social media), and Singapore’s Grab (a “super-app” encompassing a range of services) and Sea Group (e-commerce, gaming). These companies bring tech know-how and access to customers and data to the table, along with advanced analytics capabilities.

Incumbent banks are often significant participants, seeking to capture new customer segments, compete against potential competitors and disruptors, and create a technology hedge against legacy infrastructure. For example, China’s CITIC controls AiBank, with a 70 percent stake; Standard Chartered owns 65 percent of Mox; and BOC has a 44 percent stake in Hong Kong SAR China’s Livibank. Non-banking financial services firms are also often involved. A subsidiary of Chinese insurer ZhongAN co-owns newly-launched ZA Bank in Hong Kong SAR China and investment firm Korea Investment & Securities has a stake in South Korea’s KakaoBank.

Telecoms, with their extensive data resources and large customer bases, are often part of the equation, typically as minority shareholders. Examples include Taiwan’s Chunghwa Mobile, which is the major shareholder in Next Bank, and Singtel, which partnered with Grab to apply for a license in Singapore. Electronics manufacturer Xiaomi has a stake in mainland China’s digital-only XW Bank and Airstar in Hong Kong SAR China. Automotive components manufacturer Wanxiang Group is one of the largest shareholders in MYBank, and conglomerates New Hope Group and Jardine Matheson Group are shareholders in XW Bank and Mox, respectively. Supermarket chain Chengdu Hongqi is a minority shareholder in XW Bank and PX Mart has a stake in Taiwan’s Next Bank.

Next steps: Best-practice license applications

In markets where they have been awarded, license applications are highly competitive. In addition to meeting all regulatory criteria, applicants must demonstrate their right to compete against large, established incumbents, and that they offer a unique and compelling customer value proposition. They must have a business model that will lead to positive financial performance, and a plan to scale so they can reach enough customers to build a sustainable business. In addition, the process itself is challenging, usually requiring thoroughly crafted set of documents, multiple contributors, and several months of preparation.

We have identified 10 success factors to consider during a licensing application, which we group under three broad categories: an experienced team that can implement a plan; the vision and roadmap for a stable and ultimately profitable and differentiated offering; and following the licensing process and engaging with the regulator.

An experienced team

Applicants, whether acting alone or in consortia, must demonstrate to a regulator that they have the know-how, experience, resources, and appetite to deliver. To do so, they should demonstrate that they are:

- Diligent risk managers: Non-banks must show that they are as effective at managing risk as any incumbent, and that they possess (or will develop) cutting-edge risk management capabilities. Risk management capabilities might, for example, be based on extensive data resources for better credit underwriting, or on a track record of scaling and operating tech-centric businesses while mitigating IT and cyber risk. Most successful applicants have experience of managing a financial business (typically payments or lending), or have partnered with an organization that has such experience.
- Proven innovators, household names, and respected brands: Regulators tend to value a track record of innovation and the ability to create novel offerings. Similarly, brands with reputations for attracting, nurturing, and retaining talent improve their chances of being granted licenses.
- Well-funded with strong support from parents or investors: Applicants must be able to demonstrate they can sustain themselves as they scale up. This typically requires a four- to five-year funding commitment.
- A strong, cohesive team with a singular vision (for JVs and consortium applicants): While consortia may possess complementary skills, a higher number of stakeholders can also be an impediment to decision making, and can add

complexity to execution. Consortia must present a cohesive, singular, and convincing vision, with clear value added by each partner (Exhibit 3). Companies seeking to launch with partners should start discussions early; the necessary strategic alignment and mutual trust take time to develop. Exploratory conversations should take place before regulators finalize license criteria. Malaysian telecom Axiata has said it is in conversation with 11 potential partners in advance of Bank Negara Malaysia's finalization of its digital banking licensing framework at the end of 2020.

Vision and roadmap

Regulators typically require applicants to demonstrate the ability to balance the potentially competing objectives of encouraging innovation and promoting stability in the banking system, and benefiting customers and the broader community. Applicants must show they have a vision for a differentiated offering that will have staying power.

Successful applicants we have studied have articulated their capabilities in the following areas:

- Leverage unique capabilities to provide a differentiated service: Applicants must possess unique capabilities that will enable them to offer a differentiated proposition. This may be associated with the user experience (a tech-native company may be better positioned to offer a distinctive experience than traditional banks); the range of services offered (an ecosystem owner might leverage its deep customer relationships to provide additional use cases for its products); or the ability to manage risk (an e-commerce platform or telco may have access to large volumes of data that can inform superior credit underwriting of “thin-file” customers).
- Identify a clear path to profitability: Regulators can be accommodating on timeframe (with some accepting plans for five or more years of unprofitable scaling up), but applicants must be able to demonstrate a clear path to profitability based on reasonable business assumptions and a realistic business model.

Exhibit 3

Various financial and non-financial sector companies are forming consortia; typically only big techs and fintechs apply solo.

License winners across Greater China, South Korea, and Singapore

- Main/largest shareholder
- Secondary shareholder, stake >30%
- Secondary shareholder, stake 10-30%
- Secondary shareholder, stake unknown

		Sector breakdown of shareholders with stake of 10% or more (top-3 largest)					Main/ultimate shareholder
		Incumbent bank ¹	Other financial services ² , investments	Big tech and fintech ³	Telecom	Other ⁴	
China	WeBank						Tencent
	MYBank						Ant Group
	XW						New Hope Group
	AiBank						CITIC
	Suning Bank						Suning.com
Taiwan China	Rakuten Bank						Rakuten (through Rakuten Bank Japan)
	LINE Bank						LINE (through LINE Financial)
	Next Bank						Chungwa Telecom
S. Korea	Kakaobank						Kakao
	K-Bank						Woori Financial
	Toss Bank						Viva Republica
Hong Kong SAR China	ZA Bank						ZhongAn
	Mox Bank						Standard Chartered Bank
	Livibank						Bank of China
	Ant SME Bank						Ant Financial
	WeLab Bank						WeLab
	Airstar Bank						Xiaomi
	Fusion Bank						Tencent
Singapore	Grab/Singtel consortia ⁵						Grab
	Sea						Sea Group
	Ant						Ant Group
	Consortia led by Greenland Financial						Greenland Financial Holdings Group

¹Locally licensed banks.

²Eg, insurance, securities, investment holding companies; includes online-only.

³Large internet-based companies and conglomerates with core businesses in e-commerce, online gaming, social media, internet search, etc., and their financial services subsidiaries.

⁴Eg, manufacturing, retail.

⁵Not official names as licenses are freshly assigned.

Source: Central bank websites; company websites; interviews.

- Develop a safe and robust enterprise: Applicants must be able to assure regulators that they have designed their business models and target operating models to be resilient. To do so, applicants must identify any potential events or developments that would cause them to exit the market (for example, if the business fails), define governance processes for activation and escalation of an exit plan, establish a clear contingency plan, identify relevant indicators to be monitored, and outline a communication strategy for before, during, and after activation of the plan.
- Positively impact society: Many regulators require applicants to demonstrate they can make a positive contribution to the local financial services and technology sectors, and to society more broadly. Applicants should articulate their intentions to hire locally, support the development of capabilities (e.g., through investment in skills development and hackathons, or by offering internships to local university students), and help position the host country as an innovator and digital financial services hub or leader.

Putting together an exemplary application process

Regulators set out their broad expectations of applicants in exposure drafts, public statements, and published license criteria. However, applicants should also expect to have to provide specific details about their proposed offering, and further clarifications. Strong applicants will consider the following steps:

- Establish a dialogue with regulators: Applicants that are willing to hold frequent discussions (as often as every two weeks) on specific topics, with the aim of clarifying understanding and testing ideas, increase the likelihood that their applications meet regulator requirements. An agile and iterative approach may allow for a

product that is more fully developed and better aligned with regulatory expectations. A dialogue that allows for an element of co-creation and regular interaction, and which deepens understanding of the regulator's expectations, will likely be more constructive.

There should be no surprises by the time of the final application submission. Applicants should demonstrate their understanding of core banking concepts and digital banking needs (value proposition, risk, financial viability). Applicants may also consider showcasing their proposed offering through live demonstrations, so that regulators can see first-hand what customers will experience, and provide feedback.

- Explicitly address regulatory objectives: Regulators have stated that the introduction of new licenses is intended, among other things, to boost competition, widen financial inclusion, and accelerate innovation.¹⁰ Applicants should articulate how they plan to meet these objectives, both in their ongoing dialogues and final submissions. Just as the product offering and execution plan will be refined and tailored, so should the applicant's mode of communication reflect the regulator's expectations.

Digital banking in Asia has followed a unique path to success, with large companies across industries playing a leading role. The digital business model offers significant benefits, from boosting revenues to obtaining access to new customers, technologies, and partners. To earn the right to compete, applicants must show that they offer an outstanding proposition and have the strategic, operational, and financial resources to operate in one of the world's most dynamic banking environments. A review of

¹⁰See www.mas.gov.sg/regulation/Banking/digital-bank-licence; "Licensing Framework for Digital Banks," www.bnm.gov.my; "Licensing Framework for Digital Banks," www.bnm.gov.my.

successful endeavors shows that consortia have a strong chance of success, but this model is not the only one that can succeed. The key factors in receiving a license are demonstrating the

ability to execute, a compelling vision, and the capacity to meet regulatory standards—and a license application that runs like clockwork.

Raphael Bick is a partner in McKinsey's Shanghai office, **Denis Bugrov** is a senior partner and **Hernán Gerson** is an associate partner, both in the Singapore office, **Alexander McFaull** is a consultant in the Kuala Lumpur office, and **Alexander Pariyskiy** is a consultant in the Bangkok office.

The authors would like to acknowledge the contributions of Callie Cao, Hyunjoo Lee, and Wenyang Su to this report.

Copyright © 2021 McKinsey & Company. All rights reserved.