

# The Future Of Banking: Virtual Banks Chase The Dream In Asia-Pacific

July 16, 2019

## Key Takeaways

- Virtual banking is intensifying the competitive dynamics affecting Asia-Pacific banking.
- Newly licensed indigenous virtual banks, global virtual-only banks, and digitized traditional banks are driving competition.
- In the long term, virtual banking will likely contribute to the potential for increasing ratings differentiation between banking systems and banks across Asia-Pacific.

Virtual banking is fanning the competitive flames in Asia-Pacific banking. Newly licensed indigenous digital banks, global digital-only banks, and digitized traditional banks are all vying for their share across the region's lucrative markets. To date, this development has not caused any noteworthy changes to our outlooks for banking sector country risks across the region. Our current base case is that virtual banking may not lead to rating or outlook changes for Asia-Pacific banks over the next two years. Over a longer time horizon, however, as virtual banking strategies take hold and further disrupt the traditional bank sector, the potential for ratings differentiation is greater.

New indigenous entrants in many Asia-Pacific countries--including in China, Hong Kong, Taiwan, Australia, Singapore, Japan, Korea, and India--have either already begun operations or are expected to become functional in the next year or so. As more bank regulators across the region develop the infrastructure to manage and supervise virtual banks we expect this trend will continue. In addition, ex-regional players are expanding in Asia-Pacific, such as London-based Revolut Ltd., which is now operating in the region. Further, and perhaps most profoundly, traditional banks are accelerating electronic and digital banking strategies in the race for digital supremacy and a competitive edge.

Two key factors are driving the growth of digital banking in Asia-Pacific:

- Serving the underbanked: Primarily a factor in emerging markets, virtual banking facilitates the introduction of simple banking products through accessible means other than branches.
- Serving the overbanked: Primarily a driver in developed markets, virtual banking mainly seeks to provide customers with greater banking convenience at a lower cost.

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## What Is A Virtual Bank?

The Hong Kong Monetary Authority (HKMA) defines a virtual bank as a bank that primarily delivers retail banking services through the internet or other forms of electronic channels instead of physical branches.

We see the term "virtual" bank as often associated with or used interchangeably with other terms including "digital" bank, "digital-only" bank or "challenger" bank. The key characteristic of a virtual bank is the central use of technology to deliver banking services.

## Emerging Markets: A Playing Field of Opportunities

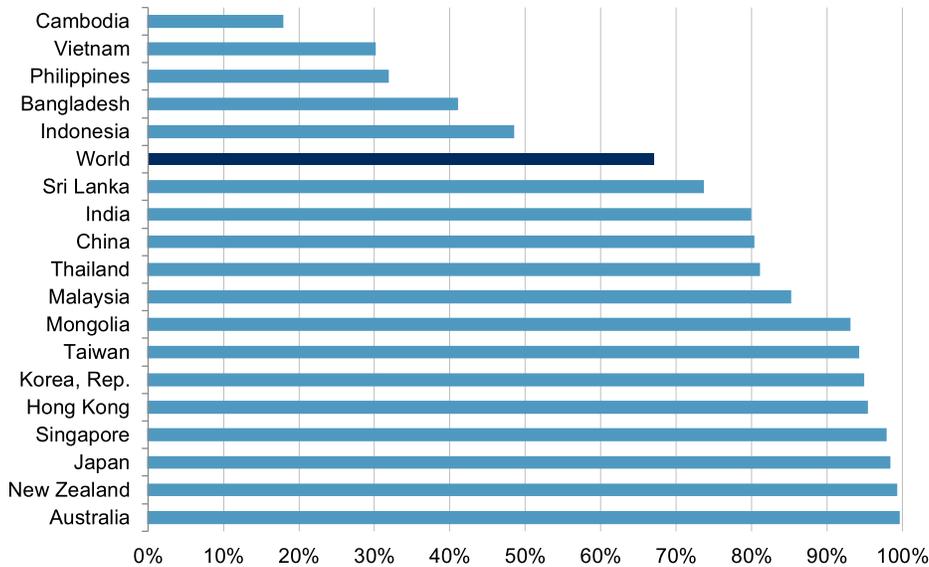
Governments in emerging markets globally are driven by the allure of the financial inclusion agenda that virtual banks can offer. Emerging market nations in Asia-Pacific are home to vast numbers of "underbanked" consumers (see chart 1), which provides opportunities for virtual banks to gain a foothold and scale up their business models.

Further facilitating the foothold of virtual banks is the sheer size of underbanked populations across Asia-Pacific. China and India alone account for over 47% of the world's population, with a combined population of about 2.8 billion people. Furthermore, of the eight most populous countries globally, a further three are in Asia-Pacific--Indonesia, Pakistan, and Bangladesh--and all are significantly underbanked.

Current and future trends impacting demographics, urbanization, and customer behavior across Asia-Pacific are supportive of virtual banking. A young demographic pool, greater openness toward adopting new and innovative technologies in banking services--especially in China--and increasing consumerism provide tailwinds for the success of virtual banks.

Chart 1

### Underbanked Populations In Asia-Pacific Are A Growth Catalyst For Digital Banking



Source: Global Findex Database 2017: Measuring Financial Inclusion and the Fintech Revolution. World Bank: Washington, DC. Data indicates the percentage of respondents aged 15 or above who report having an account (by themselves or together with someone else) at a bank or another type of financial institution. Copyright © 2019 by Standard & Poor's Financial Services LLC. All rights reserved.

### Developed Markets: FOMO Mindset

The appeal of virtual banking in developed markets tends to have a different complexion. From a government standpoint, there is an interest in providing customers with cheaper, more competitive basic banking services in markets that small numbers of large and well-established traditional banks typically dominate. It is against this backdrop that virtual banks have a role. There is an increasing focus by traditional banks themselves--perhaps driven by a "fear of missing out" mindset--to execute skillfully on virtual banking strategies to gain efficiencies and improve profitability, and at the same time stay competitive and relevant in a rapidly transforming digital environment. As for emerging markets, some demographic factors--such as younger consumers being more open to innovative technologies--may contribute to the increasing popularity of digital banks in developed markets.

### Technological Improvements Provide Impetus

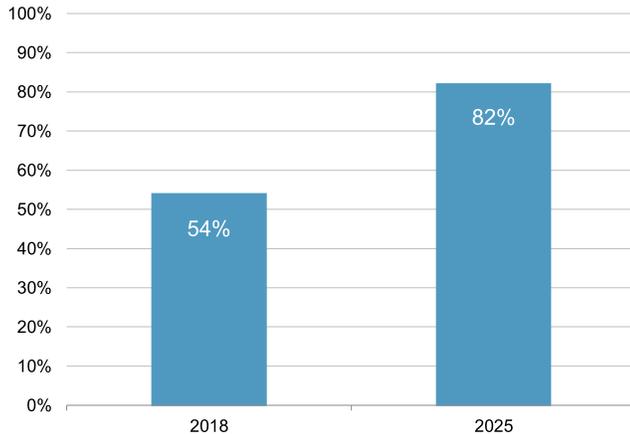
Ongoing technological improvements are a key enabler for the success of digital banks. We expect added stimulus from increasing mobile penetration and migration to faster internet speeds to make the environment more conducive for digital-only banks. According to GSMA Intelligence

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2019, Asia-Pacific's smartphone adoption is set to increase to 82% in 2025, compared with 54% in 2018. In addition, the speed of about 95% of internet connections will be above 2G by 2025 (45% in 2018) (see charts 2 and 3).

Chart 2

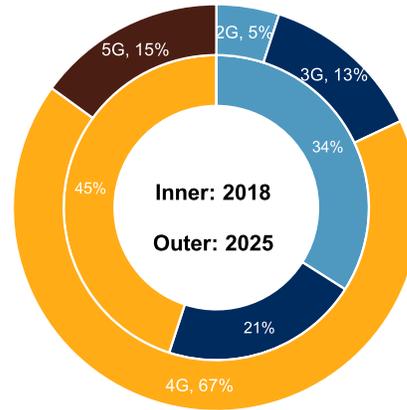
### Smartphone Adoption To Soar



Source: The Mobile Economy 2019, GSMA Intelligence.  
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Chart 3

### Increasing Access To Higher Internet Speeds



Source: The Mobile Economy 2019, GSMA Intelligence.  
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## Asia-Pacific Regulatory Landscape Is In Transition

We are seeing significant variability by country in the evolution of the regulatory landscape for virtual banks in Asia-Pacific. To what extent banking regulators across the region encourage innovative competition but at the same time balance the need to provide protective regulation for traditional banks and bank customers will shape the environment for the development of virtual banks.

**Hong Kong:** The HKMA has granted eight virtual banking licenses in Hong Kong between March and May 2019 as part one of its smart banking initiatives. The diverse background of the licensees, which include traditional banks, insurance companies, fintech, as well as technology companies, is likely to facilitate financial innovation in the banking industry. We expect the virtual banks to carve out a niche market in the Greater Bay Area of Hong Kong, Macau, and Guangdong that could spur growth in the industry. In our opinion, the increased competition in the retail segment will eventually benefit customers and small and micro enterprises, and promote financial inclusion (see "The Future Of Banking: Hong Kong's First Virtual Bank Licenses Will Rejuvenate The Banking Sector," published on March 29, 2019).

**China:** WeBank is the first internet bank to operate in China and was granted its private bank license by China's Banking and Insurance Regulatory Commission (CBIRC) in 2014 as part of CBIRC's effort to promote innovation and introduce private capital to the banking industry. China's internet banks are mainly represented by four banks that are associated with the big techs: WeBank (Tencent), MyBank (Alibaba), XWBank (Xiaomi), and aiBank (Baidu). Big Tech firms have hoarded a substantial amount of data from their social network, e-commerce, e-payment, and search engine businesses, which enables them to perform algo-lending with their own credit

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scoring mechanisms. These online competitors currently account for a minimal portion of the banking system which is partly due to their asset-light strategy. That is, these banks tend to use their fintech capabilities and big data to serve the consumer and small and midsize enterprise (SME) sector to acquire customers, then to co-lend with traditional banks for a fee.

**Taiwan:** In Taiwan, the regulator is set to grant the first virtual bank licenses by end of July 2019 and this should allow the first virtual banks to launch banking services by the end of 2020. The upcoming virtual banks will be subject to the same regulatory compliances and risk management requirements as ordinary commercial banks, though they will be much smaller in scale in comparison. Therefore, we expect the initial setup costs and lack of scale economies could constrain profitability for virtual banks in their early stage of development amid the market's competitive and highly price-sensitive characteristics.

**Singapore:** The Monetary Authority of Singapore (MAS) recently announced plans to issue up to five new digital bank licenses, as part of a push to liberalize the city state's banking sector. There is potential for increased competition. Digital banks would likely compete actively with traditional banks in the mass retail space and SME space, and offer basic products that do not require face-to-face customer interaction. The regulator is managing undue disruption by requiring digital bank applicants to focus on underserved segments and provide clear value propositions on how they can complement the existing ecosystem. The rollout of the digital bank licenses indicate a measured approach on the regulator's part. For example, the full digital bank licenses will be implemented in stages and come with restrictions on product offerings and deposit taking. These will slowly be relaxed only when the digital bank has proven that it can manage the risks involved, and if it is delivering on its value proposition (see "Singapore Follows A Measured Approach To Virtual Banking," published on July 3, 2019).

**S&SEA ex-Singapore:** Elsewhere in South and Southeast Asia (S&SEA), regulatory developments are at an earlier stage. We believe that a virtual banking framework in Malaysia will eventually be announced; and that the recent announcement by MAS may have a catalytic effect in Malaysia and elsewhere across S&SEA.

**India:** With one of the world's largest fintech markets, India has a large ecosystem of traditional banks as well as startups and partnerships that are investing heavily in digital banking. These could help provide workable solutions to the problems facing traditional financial institutions in India such as low penetration, scarce credit history, and a cash-driven transaction economy. Further, the Reserve Bank of India (RBI) has shared draft regulations for a regulatory sandbox, which aims to provide live testing on digital products and services.

India does not allow any virtual banking licenses, though banks like DBS Bank Ltd. offer a digital-only product offering through their Indian subsidiaries. The RBI continues to place emphasis on physical networks and recently ensured that purely digital loan companies operating through mobile apps have at least one physical presence for customers to reach out to. The RBI had also highlighted earlier in its 2014 Guidelines for Licensing of "Payments Banks" that it does not envisage payment banks to be "virtual" or branchless banks.

**Japan:** Japan has seen no major developments on the regulatory front. However, a recent joint venture between LINE, a social media company, and Mizuho FG, one the largest Japanese banking groups, suggests some movement in the virtual space. Since the parents of "LINE Bank" already have a broad customer base, there are many who expect a certain level of success. However, the example of the failure of U.S. Toys "R" Us, which had invested in new digital channels as well as

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traditional stores, suggests it will not be without its challenges.

**Korea:** We expect the financial regulators to remain supportive of developing virtual banking and potentially allow new qualified entrants into the market. The special act on the establishment and operation of online-only banks took effect on Jan. 17, 2019, which allows for nonfinancial companies focusing on information and communication technology businesses to own up to 34% stakes in online-only banks (previously 10%). We believe the traditional banks will continue strengthening their established digital platforms against growing online-only banks though the market share of the two online-only banks is fairly small.

**Australia:** In Australia, the Australian Prudential Regulation Authority (APRA) has not issued industry specific guidance on digital banks. APRA has, however, established a new pathway--a restricted deposit taking institution licensing framework--to assist small firms with limited financial resources. Some digital banks in Australia have already made use of this avenue, such as Xinja Bank Ltd., and our expectation is that other digital banks will explore this option in the future. In addition, APRA is cautiously supportive of cloud-based computing services, which will also assist digital banks. The regulator acknowledges the benefits of such services but has cautioned banks that it will not tolerate compromise in risk management practices in the pursuit of technology enabled cost savings.

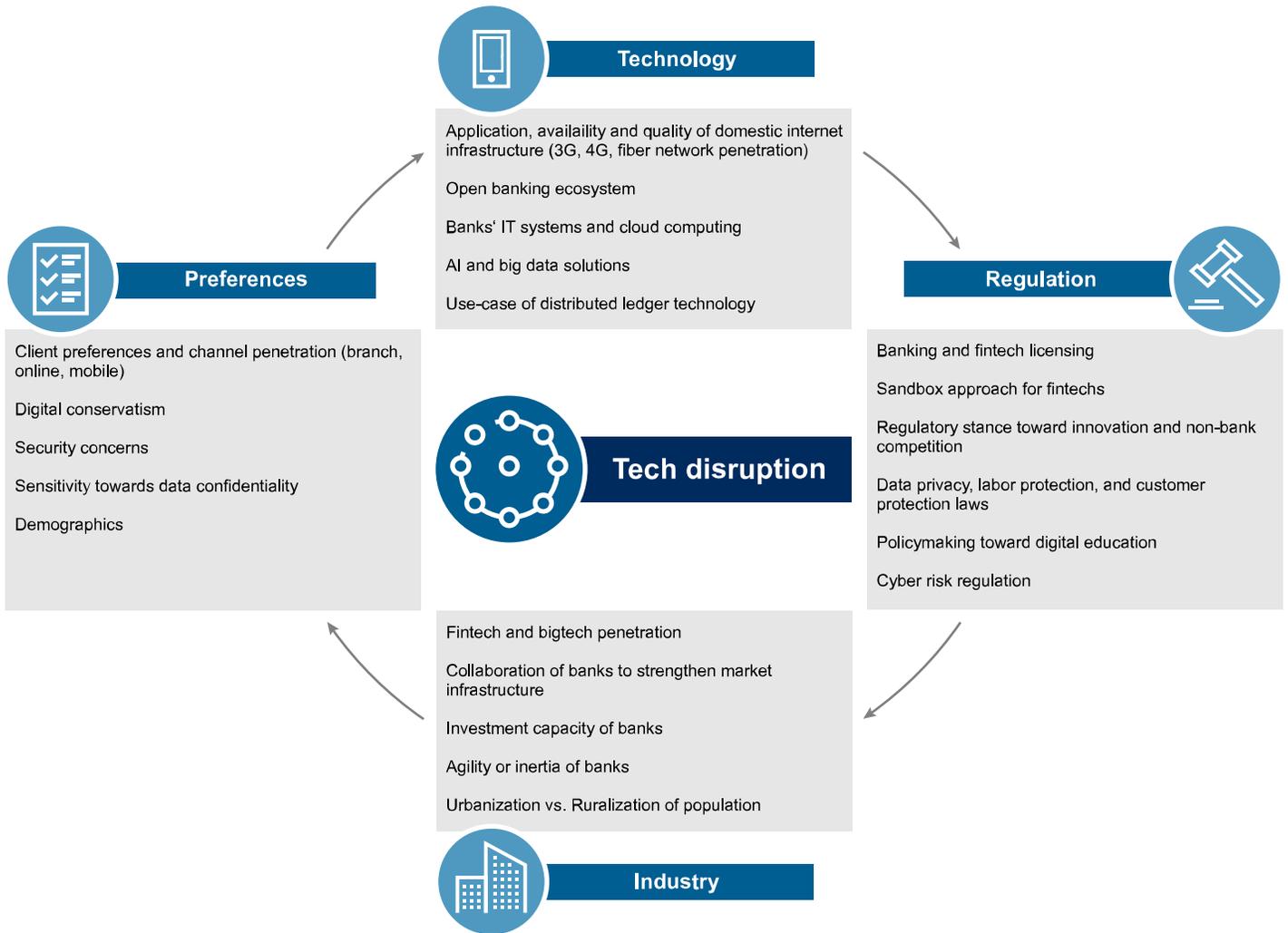
## Four Facets Of Disruption

To evaluate the risk of tech disruption in each individual banking sector, we assess the current state of technology, regulation, industry, and preferences (see chart 4), in what we call our TRIP analysis (see "The Future Of Banking: Will Retail Banks Trip Over Tech Disruption , " published on May 14, 2019). The objective of the TRIP analysis is to explain how we expect the banking industry of each jurisdiction to evolve. For an example of an assessment of how technology disruption forms part of our analysis of the Chinese banking sector, see "Tech Disruption In Retail Banking: China's Banks Are Playing Catch-Up To Big Tech," published on May 14, 2019.

Virtual banking is one of numerous technologies disrupting traditional retail banks. Hence an assessment of virtual banking is one risk factor among many that we take into account in an overall assessment of the risks of tech disruption as it affects a country's banking industry. The four facets of tech disruption for retail banks are as relevant for our analysis of virtual banking as they are for other tech disruption risks.

Chart 4

**Tech Disruption Categories For Retail Banking Sectors**



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**New Competitors Spice Up The Banking Landscape**

Although at a nascent stage of development, individual new virtual banks compete head-to-head with traditional banks. This may have only an incremental competitive impact on the banking landscape in the short term although a more meaningful impact in the long term.

We believe that traditional banks with large well-established client bases and greater resources are better prepared to take on the potential competition from virtual banks as compared with the smaller and midsize banks. We expect smaller banks to rely on collaboration with tech companies to rise up the digital learning curve.

While it is early days for the evolution of virtual banking, trends to date in Asia-Pacific have tended to be more about payments than lending. That said, Big Tech in China has developed algo-lending

capabilities that include inbuilt credit scoring systems. We anticipate the scope of virtual banking products, services, and business models will progressively widen as the industry evolves.

### Partnering In Various Shapes And Sizes

Some traditional banks corral digitization strategies under the same brand as the principal operating bank and alongside traditional banking strategies including those for bricks-and-mortar banking. Other traditional banks in Asia-Pacific are partnering in various ways including by debuting in new geographies with digital-only arms.

Examples include:

- United Overseas Bank Ltd.'s tapping of the Thai market by launching ASEAN's first mobile-only bank in Thailand.
- CIMB Bank Bhd.'s entry in the Philippines, joining hands with about 8,000 convenience stores and launching an all-digital and mobile-first bank app.
- China CITIC Bank's joint venture with search giant Baidu, which has led to the creation of aiBank. aiBank's mission is to apply big data and artificial intelligence to cater to China's massive online finance market.
- Passive investments in digital-only banks, such as India-based Kotak Mahindra Bank's holding of an about 20% stake in the Airtel Payments Bank, and State Bank of India's 30% stake in Jio Payments Bank.
- In Australia, virtual bank Up has collaborated with Bendigo and Adelaide Bank Ltd. (Bendigo), with Bendigo meeting Up's regulatory capital and banking license requirements.

### Profitability Will Be A Tough Nut To Crack

While operating costs for a digital-only bank are in principle lower, the long-term sustainable profitability of the digital-only banking model is only likely to be achievable commensurate with increasing scale and if ongoing risk and other business considerations are well-managed.

The journey to profitability for virtual banks is not without challenges, with digital-only banks facing high standards as they must adhere to strict licensing requirements including for capital, and prudential and risk management requirements. Risk management and compliance functions must keep pace with a range of operational risks--such as anti-money laundering controls--as well as business, credit, market, and technology risks. This is a challenge for new entrants that are growing quickly.

Furthermore, new virtual banks are concentrated in simple and limited products to targeted segments and niches. Digital banks' ability to diversify and expand product offerings over the long term is likely to offer possibilities for enhanced and more stable revenues.

Despite these challenges, there are now reports in the Asia-Pacific region of digital banks turning a profit. An example is South Korea's Kakao Bank, which was jointly launched by the country's most popular chat app operator and one of the major securities companies as major shareholders, has attracted about 9 million customers as of March 2019. Kakao reportedly turned a profit for the first time in the first quarter of 2019 only 18 months after its launch.

## Regulatory Encouragement

Across Asia-Pacific, many regulators are showing various levels of encouragement toward the establishment of virtual banks. In South Korea, the Financial Services Commission has allowed new online-only banks a two- to three-year grace period to implement Basel III regulations (see table 1). These banks have been allowed to operate under Basel I regulations until 2022, unlike traditional banks, which must meet Basel III standards.

Table 1

### Fostering Development: Grace Period For New Online-Only Banks In Korea

	2020	2021	2022	2023-25	After 2025
<b>Capital regulations</b>	Delay (Basel I regulations to be applied)			Gradual implementation of Basel III	Full implementation of Basel III
<b>LCR</b>	80% or above	90% or above	Full implementation of Basel III (100% or above)		
<b>NSFR/leverage ratio</b>	Delay			Full implementation (NSFR of 100% or above, leverage ratio of 3% or above)	

Assumes that new online-only bank is launched in 2020. LCR--Liquidity coverage ratio; NSFR--Net stable funding ratio.  
Source: Financial Services Commission, South Korea.

Meanwhile in Australia some of the newly established digital banks have been opting for restricted licenses (such as Archa and Xinja) while others have been applying for full licenses (86400, Volt, and Judo Bank). The restricted licensing option seems to be appealing for entities that are on the pathway to achieving a full banking license but are not there yet in terms of capabilities and resources.

In Hong Kong, however, the banking ordinance stipulates capital requirements for online-only banks to have a minimum share capital of HK\$300 million. This is the same capital requirement that is required by traditional commercial banks.

## Future State--Will Banks Need Branches?

While most traditional banks in Asia-Pacific are scrambling to digitize and trim their physical footprints, we believe that branches will continue to play their part. The rate of change impacting branch networks varies quite markedly, however, by country and by bank; and in some cases is quite dramatic. For example, in Thailand, Siam Commercial Bank Public Co. Ltd. has set aggressive targets to significantly rationalize its branch and employee count to drive its transformation toward a digital strategy. In South Korea, Citibank Korea Inc. made significant cuts to branch networks in 2017, focusing more on its digital strategy.

Traditional banks tend to carry the weight of legacy infrastructure and systems, including a significant portion of operations conducted through brick-and-mortar branches. They are challenged to diversify away from their physical infrastructure and digitize their operations in a comprehensive, all-embracing manner including front-end as well back-end operations. By contrast, virtual banks are nimble and carry no legacy baggage. They tend to be fully digital from inception from front-end customer interface through to back-office operations.

To further assist traditional banks to improve competitiveness, branch outlets of traditional banks

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are benefiting from a major makeover to incorporate digital-friendly technologies and customer-friendly environments. In our view, the trend toward smaller numbers of more digitally-advanced physical branch outlets will inevitably increase.

### Related Research

- Singapore Follows A Measured Approach To Virtual Banking, July 3, 2019
- The Future Of Banking: Will Retail Banks Trip Over Tech Disruption? May 14, 2019
- Tech Disruption In Retail Banking: China's Banks Are Playing Catch-Up To Big Tech, May 14, 2019
- The Future Of Banking: Fintech Flags Turning Point For Australian Banking, April 30, 2019
- The Future Of Banking: Asia-Pacific Opens Up To Open Banking, April 11, 2019
- Hong Kong's First Virtual Bank Licenses Will Rejuvenate The Banking Sector, March 29, 2019
- Singapore Banks Must Adapt To Fintech Or Lose Out, Feb. 20, 2019
- The Future Of Banking: Could Fintech Transform Banking In Taiwan? June 11, 2018
- The Future Of Banking: Will Fintech Have An Outsize Impact In Japan? Feb. 21, 2018
- The Future Of Banking: How Much Of A Threat Are Tech Titans To Global Banks? Jan. 16, 2018

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