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WeLab Bank: Taking Root in a New Digital Landscape

Banking is necessary, banks are not.
~ Bill Gates[1]

The most obvious advantage of digital banking is the enhancement and extension of services.
~ Janice Chung, Manager for Growth Operations & Strategy, WeLab Bank[2]

Business model innovation is about fundamentally rethinking your business around a clear — though not always obvious — customer need, then realigning your key resources, processes and profit formula with this new value proposition.
~ Innosight[3]

As she and her colleagues resumed work in late February 2021, following the Chinese New Year holidays in Hong Kong, Ms. Janice Chung pondered the events of the past year. There was a sense of both amazement and serendipity. The year 2020 would, of course, be remembered in Hong Kong and around the world for a global pandemic. It was indeed amazing that WeLab Bank, a licensed retail bank that served only individuals, not businesses, had been able to launch in the midst of such tumult. The lockdowns and various other restrictions imposed worldwide also contributed to unprecedented acceleration of remote interactions—working remotely, attending classes remotely, and undertaking various other daily tasks remotely. As a virtual bank, WeLab Bank also provided its banking services remotely rather than at a brick-and-mortar outlet. After a successful launch on 30 July 2020, signing up 10,000 new customers in its first 10 days of operation and launching two new products, things had begun well for WeLab Bank [see **Exhibit 1**].[4] As Manager for Growth Operations & Strategy at WeLab Bank, Janice knew that they had just taken their first baby steps, however, and there was a lot of growth and development still to come. Furthermore, WeLab Bank was one of eight entities that had been granted virtual bank licenses by the Hong Kong Monetary Authority (HKMA),[5] so Janice knew the growth and development would take place in a highly competitive marketplace. In recent years, HKMA had implemented several measures to lay the foundation for the digitalization of financial services in Hong Kong [see **Exhibit 2**].[6] One of those measures was the introduction of open application programming interfaces, or open APIs, to support the development of open banking in Hong Kong. While open banking provided seemingly unlimited opportunities for WeLab Bank, Janice wondered what strategy her young company should pursue in leveraging open banking and developing into a profitable financial institution in Hong Kong.

1. Bill Gates, founder of Microsoft, 1994.
2. Janice Chung, WeLab Bank, communication to Case Writer, 26 March 2021.
3. Innosight Holdings LLC, "Business Model Innovation: Changing the Game in Your Industry through Business Model Innovation", https://www.innosight.com/leadership-agenda/innovating-business-models/, accessed 4 May 2021.
4. WeLab Bank, LinkedIn Posts, https://www.linkedin.com/company/welab-bank/posts/?feedView=all, accessed 9 May 2021.
5. Emily Lam et al., "Virtual banking in Hong Kong: A catalyst for change," PwC HK, July 2019, https://www.pwchk.com/en/industries/financial-services/banking-and-capital-markets/publications/virtual-banking-in-hk-a-catalyst-for-change.html, accessedMarch 2000.
6. Benjamin Quinlan and Eashan Trehan, "Branching Off: The Outlook for Hong Kong's Virtual Banks," Quinlan & Associates, March 2021, https://www.quinlanandassociates.com/insights-branching-off/, accessed April 2021.

Joseph S. Fernandez prepared this case under the supervision of Professor Veronique J A Lafon-Vinais solely as a basis for class discussion. The authors have disguised certain data to protect confidentiality. Cases are written in the past tense; this is not meant to imply that all practices, organizations, people, places or facts mentioned in the case no longer occur, exist, or apply. Cases are not intended to serve as endorsements, sources of primary data, or illustration of effective or ineffective handling of a business situation.

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The Transition to Digital Banking

The traditional bank, with its lobby, counters, and bank officers behind their desks at cubicles or in offices, had existed for generations. In general, it provided two fundamental services: granting loans and receiving deposits. Those services were commonly extended to three types of customers: (1) retail bank customers (individuals); (2) commercial bank customers (small and medium-sized businesses); (3) corporate and institutional customers. In retail banking, different loan or deposit products were offered to customers that provided them with access to cash to meet a certain financial obligation or to safeguard their hard-earned money and, hopefully, have that money grow. The bank earned money by paying out interest on deposits that was lower than the interest earned on lending products. Typically the banks had closed ecosystems with limited interactions with outside entities and utilized private APIs to share information internally as needed. [See **Exhibit 3** for a more extensive overview of the business model for traditional banks.]

Traditional banks were indispensable institutions in societies around the world, with governments stepping in to save their large domestic banks during times of financial upheaval, such as in the aftermath of the 2008 financial crisis, since they were "too big to fail." On the other hand, digital-only banks and fintech companies had proliferated more recently and had been referred to as "neobanks," indicating their novelty, and "challenger banks," signalling their potentially disruptive effect on traditional banks. The global pandemic in the past year helped to accelerate their growth [see **Exhibit 4**][7], and helped nonbanking entities secure a greater share of the financial services market globally [see **Exhibit 5**][8]. Even before the pandemic, governments and regulatory bodies worldwide were assessing the best ways to facilitate the transition to digital financial services, and gradually adjusted their roles from being absolute protectors of traditional banks to being enablers and facilitators of a new digital banking environment in which traditional banks were one of several key players.

With the encroachment of fintech solutions into the previously exclusive domain of traditional banks [see **Exhibit 6**], the business model for financial service delivery also changed [see **Exhibit 7**]. In 2017, the Basel Committee on Banking Supervision (BCBS) defined five possible ways in which the banking industry might develop in the coming years.[9] The options varied from a "Better Bank Scenario" in which traditional banks digitized and continued to be significant players, to traditional banks being relatively insignificant players ("Disintermediated Bank Scenario"), or being replaced by neobanks or fintech companies ("New Bank Scenario") [see **Exhibit 8**].[10] In a subsequent survey of the Hong Kong banking industry, 73% of traditional banks thought a Better Bank Scenario was highly possible and only 3% considered the Disintermediated Bank Scenario likely. However, while 63% of virtual banks also concurred with the likelihood of a Better Bank Scenario, more than half of the virtual banks also considered the Distributed or New Bank scenarios to be highly likely.[11]

7. Jörg Erlebach et al., "The Sun Is Setting on Traditional Banks," Boston Consulting Group, November 2020, https://www.bcg.com/publications/2020/bionic-banking-may-be-the-future-of-banking, accessed March 2021
8. "The digital surge—How the digital surge will reshape finance," Finance & economics, The Economist, October 10, 2020.
9. Jim Wong and Kelvin Ho, "The Impact of Fintech Innovations on the Hong Kong Banking Industry," HKIMR Working Paper No. 08/2020 (May 2020) HongKong Institute for Monetary and Financial Research, https://www.aof.org.hk/docs/default-source/hkimr/applied-research-report/fintechrep.pdf, accessed April 2021.
10. Ibid.
11. Ibid.

Open Banking and Open Application Programming Interfaces

In the early years of software development, developers' primary focus was on keeping their software codes secret; it was their proprietary development and a source of competitive advantage. Then, open source software was introduced that deliberately encouraged sharing of source code and collaborating to jointly develop software that was more robust and, hopefully, had fewer bugs. Similarly, the objective of open banking was to open a previously closed banking ecosystem by permitting businesses to fetch transaction data directly from a customer's bank account or initiate a payment transaction with the customer's consent.[12] Open APIs and their corresponding software instructions provided the means for the businesses to securely exchange messages with the customer's bank.[13] While traditional banks with their extensive, vertical pipeline operations used private APIs to share information within their own ecosystem, open APIs provided a flattened platform and the opportunity to deliver customized products or targeted services to end customers.

Beyond banking, open APIs had helped transform entire industries. In telecommunications, APIs allowed the users of Android-based phones or iPhones to gain access to a selection of thousands of mobile apps. eBay leveraged an open API solution to expand online e-commerce transactions to over USD1bn over three years.[14] In Singapore, the popular ride-hailing app Grab leveraged its platform to become the most popular mobile wallet in Singapore.

Implementing Open Banking: Key Developments Globally

In the US, a mix of both national and various state-level regulations resulted in a disjointed digital banking landscape. As such, digital banking services in the US were extended through voluntary collaborations between fintech companies, traditional banks, and third-party service providers (TSP).[15] For example, the four largest banks in the US by asset size all developed their own API platforms to enable collaborations with fintechs and other TSPs.[16]

Unlike the US, which did not have any virtual bank licensing scheme or compulsory open banking requirements, both the UK, through the Open Banking Mandate issued by its Competition and Markets Authority (CMA), and the EU with its Payment Services Directive 2.0 (PSD2), mandated that banks share their customers' financial data, upon the request of the customer, with authorized TSPs.[17] The objective of these mandates was to facilitate innovation and expand the range of digital financial services available to customers.

In the Asia region, from the small city-state of Singapore to the second largest economy in the world by GDP, mainland China, digital financial services had evolved rapidly. In 2016, the Monetary Authority of Singapore (MAS) introduced the finance-as-a-service API playbook that helped accelerate collaboration between banks, fintechs, and TSPs and guided DBS Bank in Singapore to develop the largest API platform in the world.[18]

12. PYMNTS.com and Truelayer, "Open Banking Report: The Ins and Outs of Open Banking's Evolution," PYMNTS.com, March 2021, https://www.pymnts.com/study/open-banking-report-digital-payments-apis-a2a-psps-merchants/, accessed April 2021.
13. Ibid.
14. Amit Mallick et al., "Power Plays for Monetizing Open Banking APIs: Turning Open Banking into an Opportunity to Drive Growth and Reduce Costs," Accenture, 2020, https://www.accenture.com/us-en/insights/banking/monetizing-open-banking-apis, accessed April 2021
15. Sam Van Horbeek and Annie Chan, "Virtual Banking and Digital Banking: Comparing Digital Disruptions Across the World" Wavestone, 3 December 2018, https://www.wavestone.com/en/insight/virtual-banking-open-banking-comparing-digital-disruptions-world/, accessed April 2021
16. Ibid.
17. Ibid.
18. Ibid.

Mainland China experienced the rapid adoption of digital financial services, in large part due to its two technology giants, Ant Financial, a subsidiary of Alibaba Group, and Tencent. Ant Financial developed the most comprehensive range of digital financial services integrated with its customers' lifestyles, while Tencent launched the first virtual bank in China, WeBank, in 2018.[19] The two tech giants were responsible for over USD10tn in mobile payments annually.[20] Both tech companies were separately part of consortiums that were granted virtual bank licenses in Hong Kong. MAS also granted Ant Group a virtual bank license to serve small and medium-sized enterprises (SMEs) and nonretail bank customers in Singapore; it planned to commence operations by early 2022.

WeLab Bank: Charting Its Virtual Banking Future in Hong Kong

WeLab Bank was a fully licensed virtual bank. It had no branches or wholly owned automatic teller machines (ATMs). It offered all of its services through a virtual platform only accessible via its app. While WeLab Bank had no legacy technology infrastructure in place, as part of WeLab Group, it was affiliated with established fintech lending companies, namely, WeLend, the largest online-only lending platform in Hong Kong, and its related companies in mainland China (WeLab Digital) and Indonesia (Maucash).[21] In addition, WeLab Bank had a number of investors, the most recent being Allianz X, a unit of Allianz, a global financial services company.[22]

WeLab Bank's primary banking products were a Mastercard debit card that was numberless to prevent fraudulent use and that was integrated with the customer's WeLab Bank savings account.[23] WeLab Bank also offered a unique time deposit product called GoSave.[24] One of the bank's main sources of revenue was the transaction fees generated from the use of its debit card, though plans were underway to launch a potentially higher-earning loan and wealth management products.[25] As with the other virtual banks in Hong Kong, WeLab Bank did not have any minimum balance requirements and did not charge any below-balance fees.

As a Hong Kong entity, WeLab Bank's base market was the approximately 7.5 million residents of Hong Kong. Longer term, there was the prospect of expanding operations in the Greater Bay Area (GBA), which included Macau, Shenzhen, and other areas in Southern China and represented a market of over 70 million residents. Expansion into other regions inevitably required complying with additional regulatory requirements however. Fortunately, discussions had commenced between authorities in Hong Kong, Macau, and mainland China to put the regulatory structures in place.

From a technology standpoint, virtual banks were essentially cloud-based platforms, and in the case of WeLab Bank, it had built its own proprietary platform. There were different options for WeLab Bank to consider, therefore, as it further developed its platform [see **Exhibit 9**]. WeLab Bank could have developed its own products and services, leveraged open APIs to partner with TSPs to deliver more unique and customized solutions for its customers [see **Exhibit 10**], or even acquired fintech companies with domain expertise that WeLab Bank did not have. Given that virtual banks were in their early stages in Hong Kong, Janice also considered what strategies digital banks in other markets had pursued. A more mature digital banking market was the UK; Starling Bank was a profitable and award-winning bank in the UK market. It offered a core current account and then invited TSPs to offer financial

19. Ibid.
20. Ibid.
21. Compiled from WeLab Bank, https://www.welab.bank/en and WeLab, https://www.welab.co/zh-hk/, accessed May 2021.
22. Pitchbook Data, "WeLab Holdings," https://pitchbook.com/profiles/company/63952-57#funding, accessed May 2021
23. WeLab Bank, communication to Case Writer, May 2021.
24. Ibid.
25. Ibid.

products to its customers for a fee. In addition to fees from TSPs, Starling also generated revenue from interest on overdrafts and loans, transaction fees from the use of its Mastercard debit card, and treasury income from deposits at the Bank of England.[26] Another UK digital financial services company was Revolut. In addition to generating revenue from its products and services, as did other traditional and virtual banks, Revolut also generated income from subscription fees [see **Exhibit 11**].[27]

Closer to Hong Kong, Janice knew of regional fintech companies that had evolved from single-service apps to super apps offering an ever-growing number of lifestyle-related services. Both Grab from Singapore and Go-Jek from Indonesia began as local ride-hailing apps before eventually expanding into many other markets in Southeast Asia while continuously expanding the lifestyle services they offered.[28] Financial institutions had taken note of the success of such fintech lifestyle companies. The Russian virtual bank Tinkoff counted its previous launch of Europe's first financial super app as one of its significant business achievements and a contributor to its successes to date.[29]

Conclusion

As the Lunar New Year of the Ox began earlier in the year, Janice and her colleagues at WeLab Bank were grateful for many things. They were glad to have been given an opportunity by the HKMA to help chart a new course for financial services in Hong Kong as a licensed virtual bank. They were at the early stages of an exciting journey ahead, and while WeLab Bank had begun its journey as a virtual bank only in the past year, in a few other markets, including the UK, digital banking services had already gained some traction. Janice was keen to glean appropriate lessons from the experiences of WeLab Bank's predecessors in other markets, but knew she also had to intently focus on ensuring WeLab Bank's success in its market of Hong Kong. Moving ahead, Janice had to consider the open banking platform and the open API framework that HKMA had introduced in the past few years, as well as its ongoing implementation in the territory. HKMA's ongoing work with authorities in mainland China and Macau could potentially open significant additional opportunities for WeLab Bank. However, in the immediate term, she needed to consider how to best leverage her company's existing technology platform, its core competencies and resources, and perhaps the partnerships through which joint value could be created. There was indeed much to do before the next Lunar New Year of the Tiger.

26. Marc Shoffman, "Starling Bank Review: The Best Place To Put Your Money?" Money to the Masses, 13 April 2021, https://moneytothemasses.com/banking/starling-bank-review-the-best-place-to-put-your-money, accessed May 2021.
27. Viktor, "The Revolut Business Model – How Does Revolut Work and Make Money?" Productminit, 9 May 2021, https://productmint.com/the-revolut-business-model-how-does-revolut-make-money/, accessed May 2021.
28. "From app to super-app to personal assistant," Bankloch, 17 August 2020, https://bankloch.blogspot.com/2020/08/from-app-to-super-app-to-personal.html, accessed May 2021.
29. Tinkoff, Strategy Day 2023, https://tinkoffgroup.com/events/strategy-days/, accessed May 2021.

EXHIBIT 1

WELAB BANK'S LAUNCH AND FIRST 10 DAYS





Source: WeLab Bank, LinkedIn Posts

EXHIBIT 2

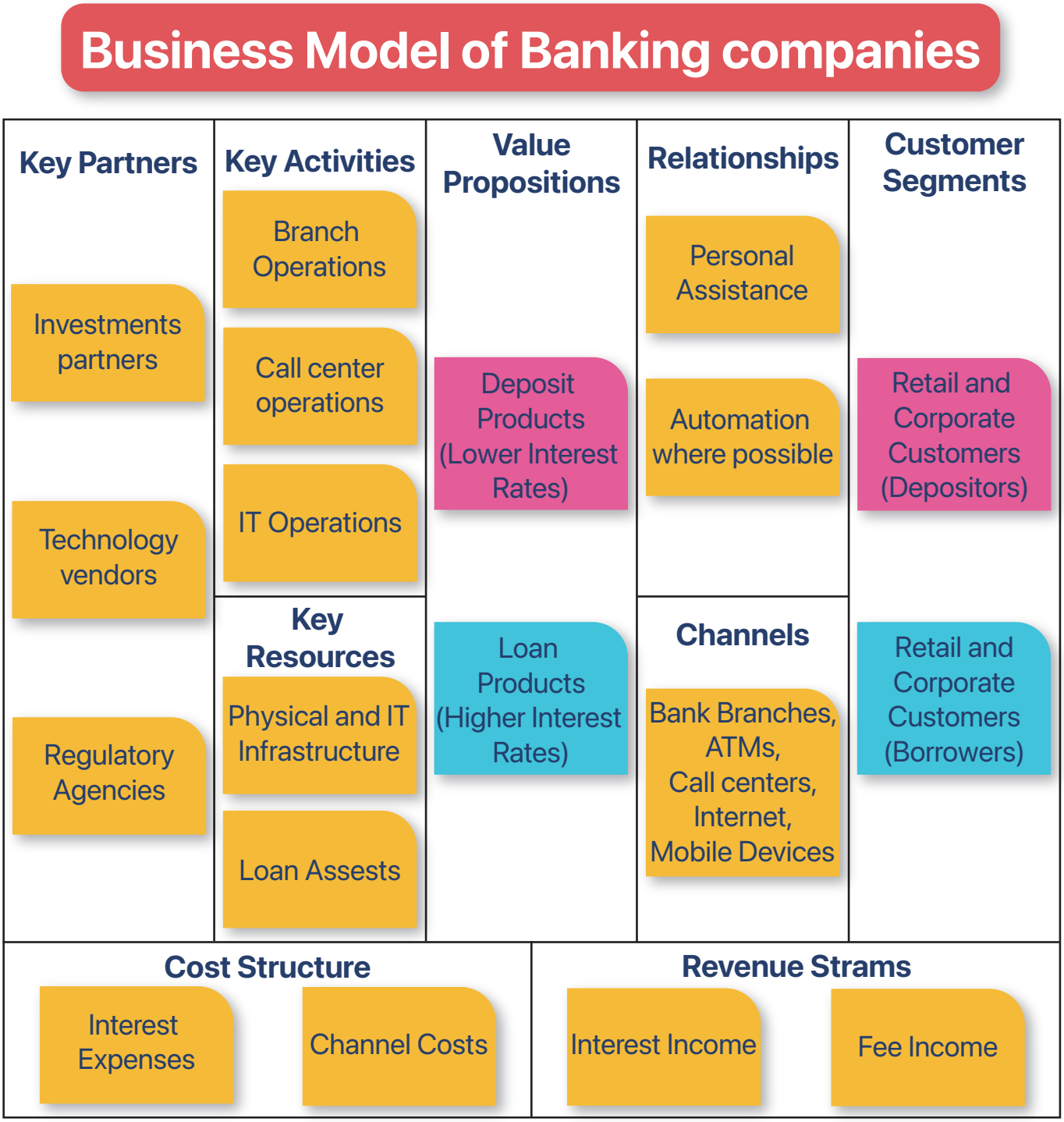
EXHIBIT 2 – KEY HKMA FINTECH INITIATIVES (2016–2019)



Source: Hong Kong Monetary Association, Quinlan & Associates analysis.

EXHIBIT 3

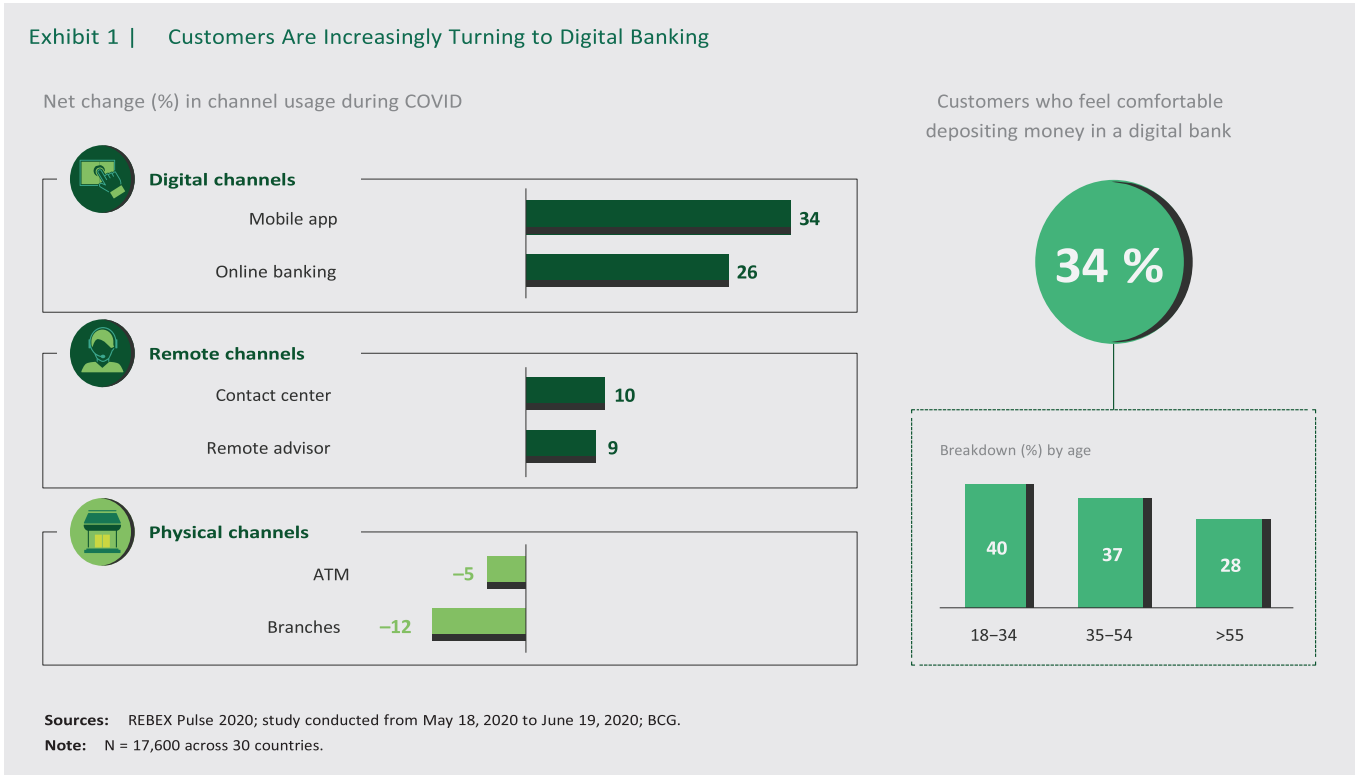
A TRADITIONAL BANK'S BUSINESS MODEL



Source: www.businessmodelgeneration.com.

EXHIBIT 4

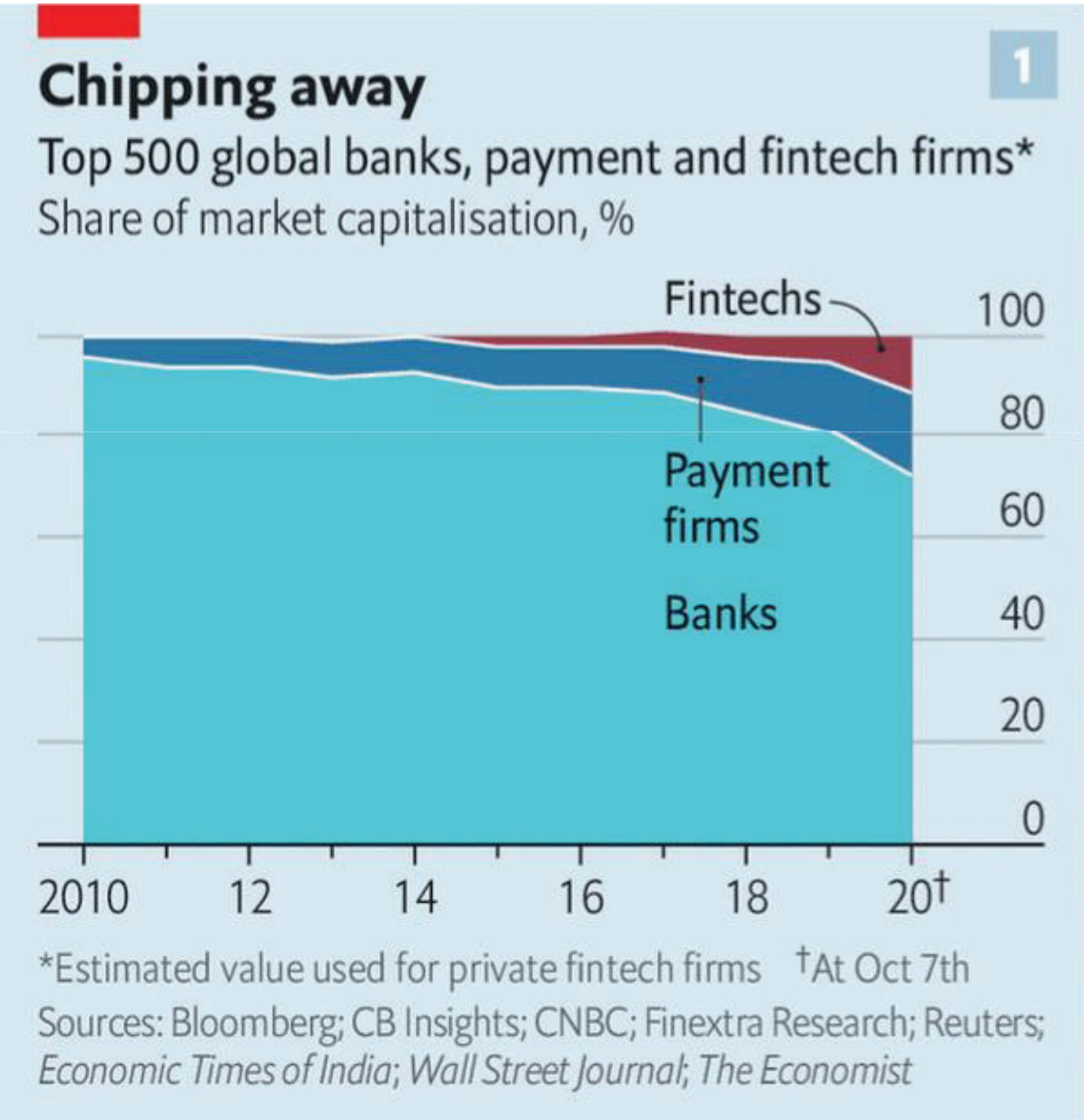
THE RAPID GROWTH OF DIGITAL BANKING



Source: Boston Consulting Group, "The Sun is Setting on Traditional Banking." November 2020.

EXHIBIT 5

THE GROWTH OF PAYMENT AND FINTECH FIRMS



The Economist

Source: "The Digital Surge: How the Digital Surge Will Reshape Finance," Finance & Economics, The Economist, 10 October 2020.

EXHIBIT 6

DIFFERENCE BETWEEN A TRADITIONAL BANK'S MODELS AND A NEOBANK'S (FINTECH COMPANY'S) MODELS

TRADITIONAL BANK'S MODEL PRODUCT-CENTRIC	NEOBANKS' MODEL PLATFORM-CENTRIC*
Branches	**Marketplace community**
High verticalization of products	High community engagement with the product
No strong communities around the brand/product	Horizontalization of products with best-in-class apps
Large branch/network	Open banking through APIS
High customer acquisition costs	Mobile only (low customer acquisition cost)
Tech infrastructure	**Tech infrastructure**
Outsourced technology	Open architecture technology stack
Rigid legacy platforms of 1970s–1980s	Ability to 'plug and play' best-in-class tools/services
Non-modular architecture with limited scalability	Low dependency on 3rd party providers
Hard to integrate data from 3rd party providers	Open ecosystem allowing access to external developers
PRODUCT-CENTRIC BUSINESS	**DATA-DRIVEN BUSINESS**
Banking data divided into silos	Real-time data integration and management
Mix of paper-based and online data	Current accounts generate key data for 3rd parties
Difficulties in reconciling, monitoring data	Data powers business model through 3rd party affiliation fees
ORGANIZATIONAL DESIGN	**ORGANIZATIONAL DESIGN**
Product-centric organizational design	Customer-centric organizational design
Products and verticals drive organization structure	Customer needs drive data architecture

Source: Adapted from Finnovate, "Neo-Banks: Performance and New Ideas," Finnovate Research – Ideas for financial innovation, October 2018.

* The author defines a "Neobank" as a company that is not a licensed bank but utilizes fintech solutions to provide financial services to end users in collaboration with a banking partner.

EXHIBIT 7

KEY DIFFERENCES BETWEEN TRADITIONAL AND DIGITAL MODELS OF BANKING

Distinguishing features	Traditional model	Digital model
Customer service time frame	Limited. Service is carried out only at a clearly defined time	Unlimited. Possibility of round-the-clock access
The speed of customer service	Depends on the qualification and experience of the Bank employee	Immediate
Approach to service	Flexible, however, is limited to a small variety of service channels	Flexible and carried out through any convenient channel for the client
Maintenance cost	High, taking into account the bank's costs for the personnel and maintenance of departments	Low, often services are provided free of charge
Scope of service	Limited branching of the branch network and staffing	Unlimited, can go beyond the geographical location of the banking institution
Status of the operator in the service process	Functions of the operator is performed by an employee of the bank	Functions of the operator are performed by the bank's client
The procedure for learning new services and promotions	Requires time and cost	Carried out quickly, via SMS and e-mail newsletter
Consumable component of the operation of the service system	The key models are articles on the staff and maintenance of departments	The key articles are articles for the purchase and maintenance of servers and software package

Source: S. S. Galazova and L. R. Magomaeva, "The Transformation of Traditional Banking Activity in Digital," International Journal of Economics and Business Administration VII, no. 2 (2019): 41–51.

EXHIBIT 8

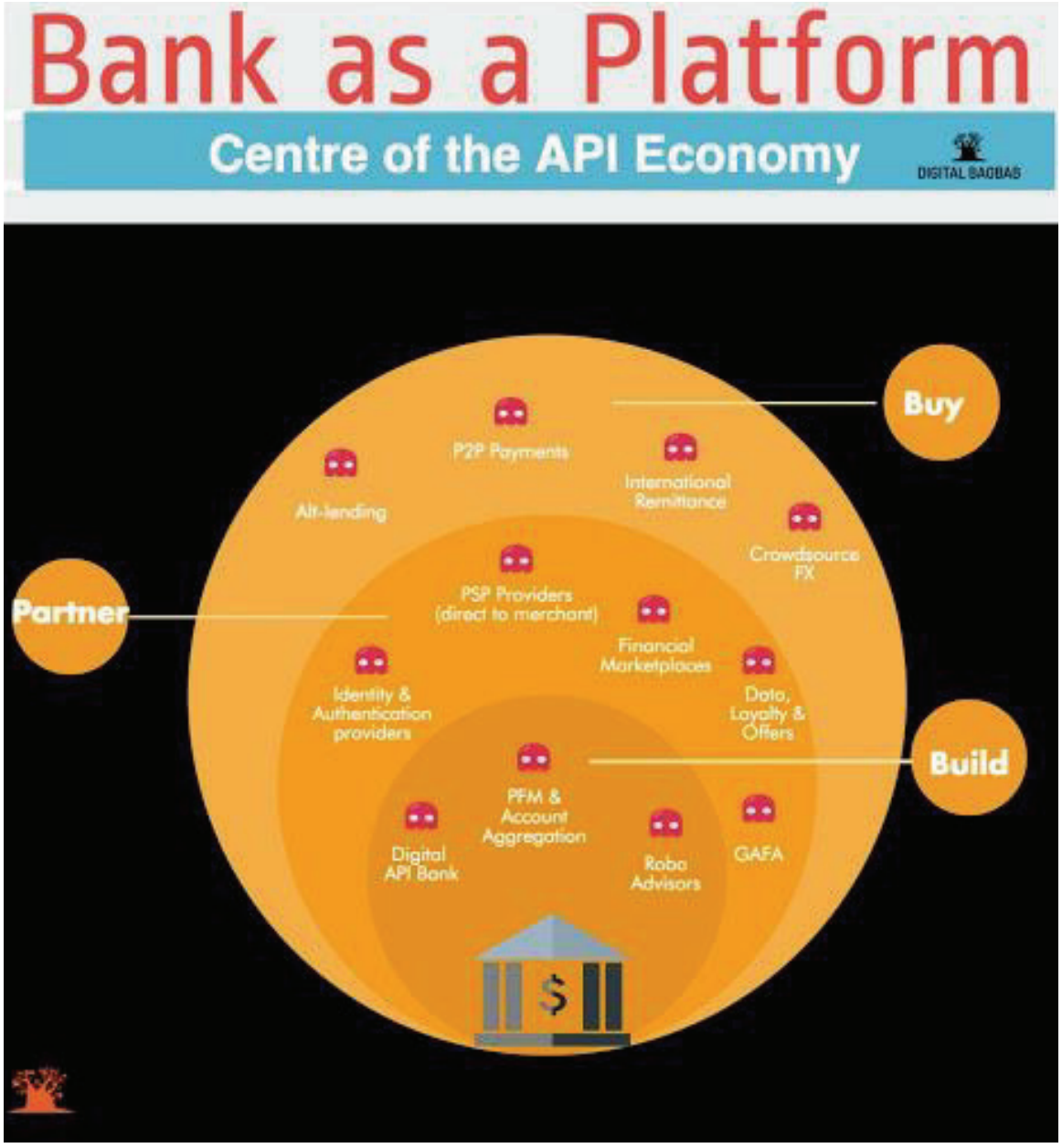
THE RESHAPING OF THE BANKING INDUSTRY



Source: PWC, "Waiting until the Eleventh Hour. European banks' reaction to PSD2," Report, 2017, p. 4.

EXHIBIT 9

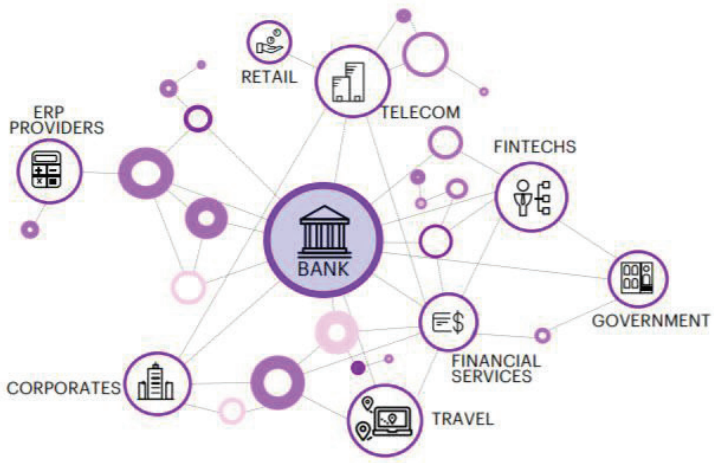
BANKING AS A PLATFORM



Source: "PSD2 – Future Business Models and Strategies,
" Digital Baobab, http://digitalbaobab.com/psd2-future-business-models-and-strategies, accessed May 2021.

EXHIBIT 10

THIRD-PARTY SERVICE PROVIDERS



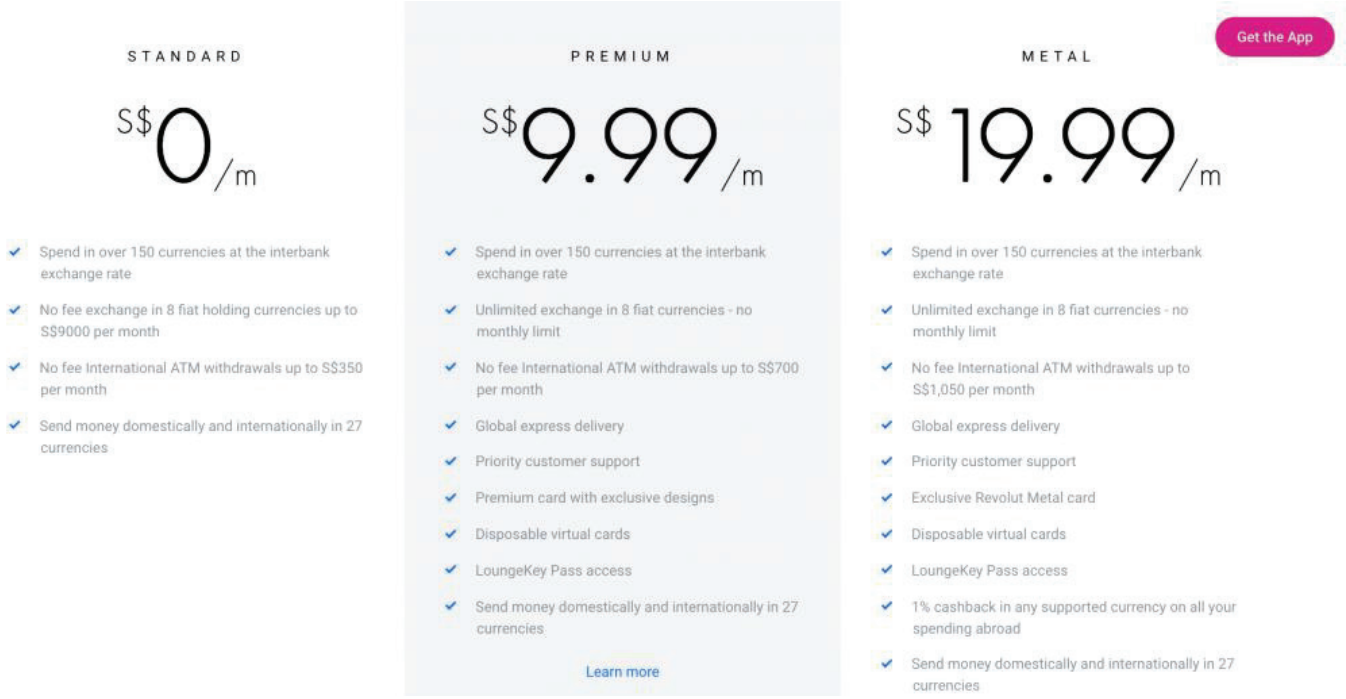
Partnerships are the key to growing Open Banking and open API ecosystems

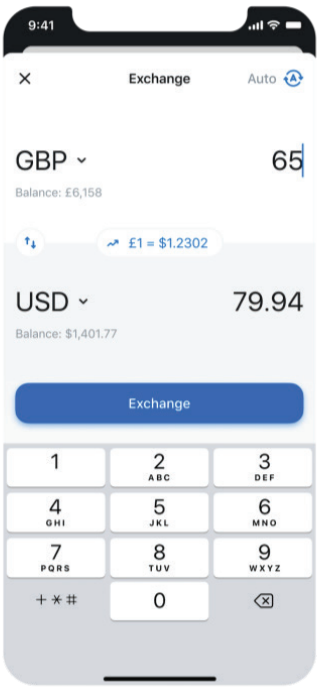
USE CASES	PARTNERSHIPS	EXAMPLES
Personal Finance Mgt	Bank + Fintech	Starling + Emma; ABN Amro + Tink
Shopping, Offers, Loyalty	Bank + Fintech	Monzo + flux
Shopping	Bank + Retail	Paydirekt (40+ banks, 1100+ retailers)
Accounting, Bookkeeping	Bank + Fintech	Starling + Xero; RBS + FreeAgent
Digital Banking	Bank + Telecom	FidorBank + Telefonica
Insurance	Bank + Insurer	N26 + Allianz Assistance
Real Estate	Bank + Property Portal	DBS + EdgeProp
Travel Bookings	Bank + Travel Portal + Airlines	DBS + Expedia + Singapore Airlines
Travel Payments	Bank + Industry Body	Deutsche Bank + IATA

Source: Amit Mallick et al., "Power Plays for Monetizing Open Banking APIs: Turning Open Banking into an Opportunity to Drive Growth and Profitability," Accenture, July 21 2020.

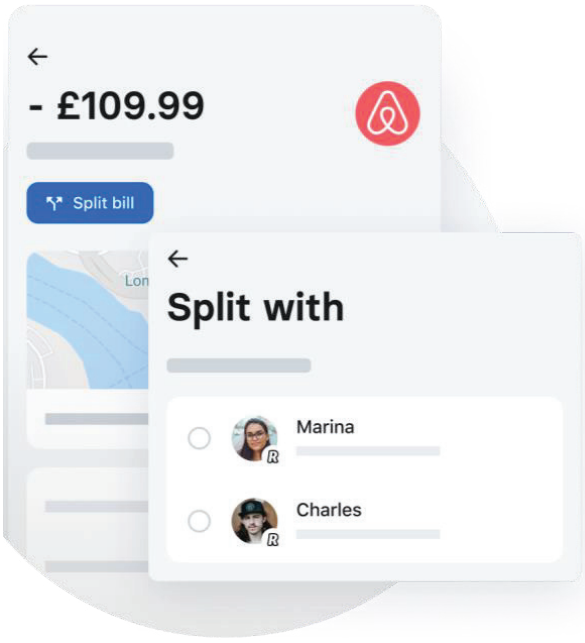
EXHIBIT 11

REVOLUT'S SUBSCRIPTION FEES





REVOLUT OVERSEAS TRANSFERS



REVOLUT SPLIT BILL

Source: Zafirah Salim, "Fintech App Revolut Might Launch In S'pore In Oct - Manage, Send, Exchange Money From $0/Mth," Vulcan Post, 30 September 2019, https://vulcanpost.com/676742/fintech-app-revolut-launch-singapore/; Revolut, https://www.revolut.com, accessed May 2021.

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