# Digital Transformation of Commercial Banks under the Impact of the Epidemic

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Abstract: Commercial banks are about to undergo a digital transformation, which will give Chinese commercial banks a competitive edge. This transformation will take place in light of the unfavorable global economic situation following the epidemic and the rapid development of new generation information technology. based on the three fundamental ideas of competitive thinking, client focus, and transformation direction Our systematic analysis and summary of the real-world experience of the digital transformation of foreign commercial banks is based on the three fundamental ideas of customer orientation, competitive thinking, and transformation direction. We then suggest the fundamental concepts and approaches for the digital transformation of commercial banks in China. The fundamental concepts and defenses against the digital revolution of Chinese commercial banks are put out.

**Keywords:** commercial banks, digital transformation, international experience, strategy

#### 1. Introduction

The sudden appearance of a new coronavirus (COVID-19) in Spring 2020, which swept away millions of lives, inevitably had a huge impact on the economy, hitting the ability of commercial banks to serve remotely and, to some extent, accelerating the process of digital transformation. Under the multiple pressures of the central bank's accelerating interest rate market reform and continuous strengthening of regulation, commercial banks' scale growth-oriented and capital-heavy business model will be unsustainable. Digital transformation has become an inherent requirement for China's commercial banks to maintain their industry status and healthy development. With the continuous development of Internet technology, some enterprises in the financial industry have also started to establish and improve their online platforms, Internet financial platforms, but the digital transformation of commercial banks in China still has hidden worries such as insufficient accurate portraits based on super perception ability, insufficient accurate positioning based on wise decisionmaking ability, and insufficient accurate policy-making based on fast execution ability. In this regard, commercial banks should accelerate the conversion of culture and concept and integrate digital thinking; accelerate the innovation in data utilization and promote data governance; accelerate the penetration in technology and consolidate digital infrastructure, and accelerate the iteration in operation management and create value collaboratively. Therefore, the objectives of this study are as follows:1 Basic ideas and countermeasures for the digital transformation of commercial banks. Therefore, the following research questions are possible: 1 Main model and experiences of digital transformation of international commercial banks 2 Direction and trends of digital transformation of commercial banks.

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## 2. Fundamental Models of Multinational Commercial Banks' Digital Transformation

There are three basic approaches for the digital transformation process of foreign commercial banks: disruptive change model, systemic transformation model, and concentrated breakthrough model.

### 2.1. The Citibank and JP Morgan Chase Bank Disruptive Transformation Model

Citibank established the "Build a Digital Bank" strategy in 2017, concentrating on the primary demands of clients, improving its digital capabilities as the emphasis, and actively welcoming external partners. Citi introduced its "Build a Digital Bank" strategy in 2017, focusing on fundamental client demands while strengthening digital capabilities and actively engaging with external partners. Citibank's digital channel transactions increased by 15% in 2019, mobile client volume increased by 40%, and total profit increased by 49% [1].

Since 2012, JPMorgan Chase has been executing its "Mobile First, Digital Everything" strategy, which has resulted in the creation of a fully digital bank and digital ecosystem. JPMorgan Chase Bank increased its primary business revenue and tripled its profit in 2017 compared to ten years before, and there were around 47 million active digital users in 2018. The capital market has acknowledged JPMorgan Chase Bank, and the digital transformation has yielded positive outcomes.

Capital One Group established a "technology first" policy during the 2008 worldwide financial crisis, and the number of active customers increased in 2018. With over 50 million active users in 2018, up 20% from 2015, including over 30 million mobile users, up 35% from 2015, its share price increased by 292 percent in 2018.

#### 2.2. DBS Bank and Commerzbank Australia Offer a Systemic Transformation Model

DBS Bank in Singapore developed its "Gandalf Plan" digital transformation plan in 2014, to progressively become a technology firm like Google and Amazon via transformation. 2018, DBS Bank formulated In 2018, DBS launched the "Life on Demand, DBS on the Move" plan to grow its ecosystem and acquire new markets around its core business, completing 92 percent of payment transactions through digital channels and generating twice as much revenue as conventional channels.

Commonwealth Bank of Australia began its digital transformation in 2015, establishing three primary digital strategies: developing a complete digital channel, inventing digital goods, and enhancing the efficiency of existing business services. Notably, the overall number of Commonwealth Bank of Australia digital clients increased by 29% between 2015 and 2018, and the digital penetration rate reached 28% [2].

#### 2.3. HSBC Represents a Concentrated Breakthrough Model

By improving the customer experience, altering IT infrastructure, and developing an online service platform, HSBC has established a targeted breakthrough model of digital transformation. Consumers may use the "Open Banking App" to merge their accounts, loan information, and credit cards from over 20 banks without having to switch banks. HSBC has substantially increased the efficiency of banking processes and saved staff time by using big data for all elements of the front, middle, and back offices. Big data technology is being utilized to better understand client demands and create distinct banking goods and services [3].

# 3. Three Fundamental Concepts Underlying China's Commercial Banks' Digital Transformation

#### 3.1. Commercial Banks' Gradual Internal Restructuring

To begin, begin within commercial banks by adopting the project as the transformation unit and swiftly mobilizing and organizing resources for immediate execution. The project should be picked because it is the most known and simple activity inside the commercial bank that can be accomplished fast. Implementing big data analytics in risk management, customer experience, mobile payments, and other areas, for example. [4]. The strategy implementation duration is shorter than two years, and project success is expected shortly.

#### 3.2. Strategic Boundary Expansion

The medium-term strategy plan of 2-3 years includes innovation at the edge of commercial banks' activity. Commercial banks can develop startup teams in non-bank subsidiaries or set up transformation incubators in units outside of IT business operations by departing from known regions inside commercial banks and into new or even unexposed sectors. Transformation exploration may be carried out at the fastest possible rate given the resources available by forming innovation teams that are not constrained by the parent organization. In the instance of Capital One Group's specialized digital lab in the United States, a similar method is applied. Commercial banks' organizational limits can also be considered for digital innovation. Loyalty products and vouchers, for example, may be used to create customer ties and lay the groundwork for the next stage of creating consumer stickiness.

#### 3.3. Groundbreaking Invention

Over the next three years or so, the strategic aim is to move away from the present core business and into data-driven services unrelated to commercial banking, while facing new markets, clients, and laws. Virtual marketplaces, MOOCs, and other educational programs, as well as online reservations, are examples of areas where commercial banks may increase digital traffic and utilization to grow into new markets and serve new consumers through cross-selling. Commercial banks may reach out to additional organizations and corporate clients, as well as generate new profit models and service bases, by establishing a "digital ecosystem." On this premise, the digital transformation of digital currency issuance and circulation will be accomplished by actively engaging with the central bank's digital currency (DCEP) two-tier structure design [5].

#### 4. Fundamental Steps for China's Commercial Banks' Digital Transformation

#### 4.1. To Achieve the Best Possible Client Experience, Build a Digital "Customer Journey"

The "customer-centric" service model of commercial banks calls for a change from "product-driven" to "customer-driven," and the start of interaction with customers is the creation of a strong customer connection. We need to conduct a thorough analysis of the key "customer journey" from the point of first contact with the customer onward and fully utilize digital technology to continuously promote agile, rapid, end-to-end digital process reengineering, which significantly enhances and improves the customer experience while achieving cost reduction and efficiency.

First, we are developing novel digital and scenario-based goods inside the "customer journey" paradigm. We investigate the "short and quick" development of digital goods with a focus on the "customer journey" by the traits of Internet product development, such as scenario-based innovation, rapid online, and small step iteration. The several "customer journeys" from the point of contact feature scenarios that satisfy the demands of consumers in a simple, seamless, and natural experience,

and the "customer-centric" approach gives greater awareness of their needs. For instance, the Commonwealth Bank of Australia developed the Little Elephant Virtual Savings Jar, an innovative app that allows kids to save their spare change, based on the "customer journey" product development concept. This app can assist parents. The invention enables parents to add cash to their kids' cell phone accounts via a mobile application, and the screen on the baby elephant's tummy displays the account balance in real-time. By improving the customer experience, products like "Little Elephant Virtual Savings Jar" may successfully retain consumers.

Furthermore, it creates omnichannel connections and improves the "customer journey" experience. It is challenging to provide a rich "customer journey" experience without information engagement with clients. Branches, ATMs, phone centers, and other conventional methods of consumer interaction are used by banks. However, as mobile Internet and other technologies have advanced, banks are now able to communicate with consumers in seamless ways across online and offline "omnichannel" channels. Through omnichannel contact, banks can enhance the customer service experience from the service side, obtain comprehensive customer big data, and utilize big data mining technology to assist banks in thoroughly analyzing the potential service needs of customers, maintaining customer stickiness and maximizing cross-selling opportunities.

# 4.2. Use Cutting-edge Digital Technologies to Develop a Fresh Business Strategy

First, we develop a direct sales network using digital technologies to reach new markets and consumer groups. Direct banking is consistent with the idea of "omnichannel" marketing, which uses commercial banks as both the starting point and the destination, connects with target customers online and offline, enters the ecosystem platform, and continuously increases the number of new customers in scenario-based marketing. It also introduces profitable asset-based products based on customer characteristics and uses data analysis capabilities. To retain a certain degree of sustainability, the organization has been able to establish precise risk control, iterate and adapt in practice, preserve operational independence in direct banking, and continually enhance agility. For instance, Goldman Sachs developed "Marcus," a direct marketing bank that offers richer, more timely, and more tailored goods through an ecosystem that is continually extending the way it communicates with consumers, using artificial intelligence and other cutting-edge digital technology.

With the use of artificial intelligence and other cutting-edge digital technology, Goldman Sachs developed a direct bank called "The Marcus."

We then construct a "digital ecosystem" to produce a thorough financial scenario. The financial services offered by commercial banks currently tend towards "invisibility". Commercial banks could expand their typical core business operations during the construction phase and engage in creative collaboration at the boundary or even outside the border to build "direct sales channels" in a larger context, allowing clients to experience the scenario. Commercial banks should also keep enhancing their interactions with consumers through teamwork and creative services both within and outside of their walls to increase client stickiness and enhance customer experience through ongoing services [7]. The Commonwealth Bank of Australia is dedicated to developing more scenario-based finance in the process of extra-boundary service innovation in real estate, including integrating different financial services with real estate transactions, further integrating and iterating customer information while facilitating the conclusion of transactions, and reshaping the customer value chain by developing a full range of scenario-based financial innovation, bridging the boundary gap.

#### 4.3. Improve Digital Capabilities and Thoroughly Explain Fintech

For digital transformation to be progressive, strategic, and revolutionary, a thorough understanding of fintech is required. The simplest approach to getting involved in fintech businesses is to first create

or join equity investment funds and consider fund investments. For instance, Citibank formed a technology fund with investments in parking service Streetline, intelligent investment manager Betterment, travel booking site Jet, and payment platform Square, among others. Commercial banks can also work together with fintech venture capital as their limited partners to increase their skills and knowledge while reducing risks and gaining expertise at a reduced cost. Create a startup team to actively engage in and mentor fintech incubation initiatives in the second step. Commercial banks can help internal staff members create entrepreneurial teams internally on a project basis, develop related incubation projects based on the company's client positioning and core business, and offer resources like venues and funding for internal entrepreneurship. Through internal integration to create a cross-departmental entrepreneurial team, begin with the bank's internal requirements to collaborate with outside technology businesses, concentrate on the topic of service innovation, and identify suitable landing pilot chances. Create another strategic partnership for financial technology. Actively build alliances with fintech firms that share fundamental technology, a similar clientele, and a similar mindset to increase the number of collaborators in the digital ecosystem and meet the objectives of enhancing one another's advantages, strengths, and shared development.

#### 5. Conclusion

Commercial banks in China are undergoing a systematic reform from idea to structure to strategy, not only product innovation or capacity enhancement. Digital transformation for big state-owned banks is not just a shift in the development strategy for the new era but also a crucial choice for their continued existence and growth. Based on the prosperous experience of the foreign banking sector, we can learn the nutritional components that benefit large state-owned banks' digital transformation. We can also quicken the pace of digital transformation in terms of business style, organizational structure, and corporate culture based on our company's business characteristics and market scale, strengthen the introduction of resources, and consolidate the necessary data analysis and IT capabilities. Only by doing this can banks better serve consumers, businesses, and society through their digital transformation.

#### References

- [1] Zhang Jun, Hong Yongmiao, Guo Qingwang, Ouyang Guan, Lv Wei, Tang Weibing. Constructing Chinese economics in pencil[J]. Economic Dynamics, 2020(7):3-20.
- [2] McKinsey. Other's stone: Ten leading banks' digital innovation practices[J]. Modern Commercial Banking, 2020(1):37-40.
- [3] Wei Yanqiu, Huang Xu, Zhang Wei. Digital transformation of commercial banks in the era of big data [J]. Banker, 2017(2): 128-131.
- [4] Wang Han. Research on the development of commercial banks in the context of big data and Internet finance [J]. Journal of Shandong Administrative College, 2019(1): 102-107.
- [5] Ye Wangchun. Financial technology and the intelligent transformation of banks [J]. China Finance, 2017(21): 67-68.
- [6] Suzanne Chisti. The definitive guide to global fintech [M]. Beijing: People's University of China Press, 2017:249-317.
- [7] Zhao R, Wang Tuan-Kai. The practice of digital strategy of large international banks [J]. Banker, 2017(4):90-92.
- [8] Brett King. Banking 4.0 [M]. Beijing: China Finance Press, 2018:156-248.