Exploring the Transformation of Commercial Banks in the Era of Internet Finance

-- Take Pudong Development Bank as an Example

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Abstract

Accompanied by the rapid development of the economy, China's overall financial environment has changed drastically compared to a decade ago. Early traditional commercial banks dominate the market, undertake and play the role of market capital financing intermediary, in 2012 the concept of Internet finance came out of nowhere, investors invest in ways and channels gradually diversified, after 10 years of cultivation and growth, to today's Internet financial system as a whole more and more mature and stable, on the traditional banking industry's mode of operation has produced a very big impact. In this context, how should commercial bank managers face the impact and competition of Internet finance, and how to meet the diversified financial needs of enterprises and individuals. This issue is worth exploring. This paper takes Pudong Development Bank, which has a good overall performance among commercial banks, as an example, and analyses to find the transformation path of Pudong Development Bank to give some inspiration to the future operation and development trend of the bank nowadays.

Keywords

Pudong Bank; Digital Transformation; Low Carbon Banking; Lightweight Transformation.

1. Introduction

Over the years, with the continuous improvement of the level of information technology, China has gradually stepped into the era of Internet for all, and in this aspect of finance is no exception, the Internet financial era of China's commercial banks have also put forward higher requirements. Based on this, in order to enable commercial banks to obtain more long-term and lasting development and progress, it is necessary to carry out innovative development of commercial banks under the Internet financial era, banks are also in a long-term transformation process. Pudong Development Bank in the face of the impact of Internet finance "dance with the wolves", deep into the wave of Internet finance, take the initiative to transform, continue to promote the "digital transformation", facing the "whole user", building the "whole user". We have continued to push forward digital transformation and build a "panoramic bank" with "alluser" orientation and "all-intelligent connection"; we have focused on "lightweight transformation" and built a new retail system by focusing on wealth management and consumer finance; we have consolidated our competitive advantages in the field of green finance and built a new retail system; we have also strengthened our competitive advantages in the field of green finance. Focusing on "lightweight transformation", we will focus on wealth management and consumer finance, and build a new retail system; consolidating our competitive advantages in green finance, and building a low-carbon bank by taking the first step in the "carbon" path.

2. Case Background

2.1. Introduction to Pudong Development Bank

The full name of Pudong Development Bank is Shanghai Pudong Development Bank. It was established on 28 August 1992 as a national joint-stock commercial bank located in Shanghai with the approval of the People's Bank of China. As of 2021, the company's total assets reached 8.14 trillion yuan, and it has set up 41 first-tier branches and nearly 1,700 business organisations at home and abroad, of which the domestic branches cover all provincial administrative regions in the mainland, and the overseas branches include Hong Kong branch, Singapore branch and London branch, with 59,000 employees. According to the "Top 1000 Global Banks 2022" released by the authoritative media banker, Pudong Development Bank ranked 18th among the top 20 on the list. The list is mainly based on the Tier 1 capital data of each bank at the end of the previous year, which shows that Pudong Development Bank's Tier 1 capital is US\$103.443 billion, an increase of 7.75 per cent compared with that of 2021. In recent years, Pudong Development Bank has steadily improved its ranking among the top 1000 global banks, entering the top 50 in 2014 (44th), the top 30 in 2016 (29th), 27th in 2017, 25th in 2018, 24th in 2019, and among the top 20 for the first time in 2020 (20th), rising to 18th in 2021, and ranking in 2022 remains the same as the previous year.

2.2. Impact of Internet Finance on Traditional Banks

"Internet finance" is a financial business activity carried out on the Internet as a carrier, including but not limited to third-party payment, the sale of online financial products, credit evaluation and audit, financial intermediary, financial e-commerce and other modes. The main modes of Internet finance in China include Internet integrated sales products such as balance treasure, P2P loan mode, third-party payment and Internet money.

- 1) Internet finance share away the traditional banking model "profit cake": the traditional banking profit model is mainly through the deposit and loan spread profits, the generation of Internet finance to a certain extent makes the financial disintermediation, weakening the intermediary role of commercial banks in the economic operation. China has now become the world's largest Internet financial market, to consumer finance, for example, Internet consumer finance since 2013, has been rapid development, the first quarter of 2022, the domestic Internet financial market of more than 10 trillion yuan. There are more than 19,000 Internet financial service platforms in China in total. From the business circle, there are currently a total of 21 categories of Internet financial business circle, including online loans, Internet technology investment management, Internet crowdfunding and so on. Among them, there are more than 6,000 online loan platforms in total, close to 3,500 Internet technology investment management, and 800 Internet crowdfunding. In terms of popularity value, there are more than 530 million daily active users in the recent 3 months and more than 360 million daily active users in the recent week. The cumulative turnover of online loans, Internet crowdfunding, and online payments did \$70 trillion. Although the overall scale and profitability cannot yet be compared with commercial banks, it undoubtedly poses a great threat to the profitability model of traditional commercial banks.
- 2) Internet finance is eyeing the liability business of commercial banks: the rise of third-party payment institutions has diverted part of the bank's deposits, and users use Alipay, WeChat and so on to make payments, and the good and familiar payment environment has prompted customers to choose financial channels such as Balance Treasure and WeChat Balance+ to make financial investments in short-term funds to obtain income, although the current yield of Balance Treasure and other Internet financial products is not high, but because the payment environment retains users and creates stickiness, users will still choose such products as short-term investment. Overall the emergence of products such as Alipay has broken the tradition of

commercial banks' monopoly on deposits, which has impacted the debt business of traditional business and affected profitability.

- 3) Internet finance is marginalising the payment capacity of commercial banks: payment and settlement as the intermediary business of traditional commercial banks, the emergence of third-party payment and settlement has seized the larger market share of the original commercial banks in this regard. For example, with the emergence of Alipay, Alipay appeared a certain amount of free withdrawals, mutual transfer without charging fees, which has a great impact on the bank's commercial transfer fees intermediate business.
- 4) The "catfish effect" of Internet finance on the banking industry: Internet finance has a rapid potential for development, and its impact on the banking industry will be greatly enhanced in the future. Although it is not comparable to the banking industry in terms of turnover, total property production, market share and other aspects in a short time, Internet finance, by virtue of its own open network resources, practical approach, social selection and other great advantages, has produced the "catfish effect", which strengthens the internal pressure on the transformation of the banking industry for independent innovation. In response to the "attack" of Internet finance, the banking industry has begun to cope with it calmly, continuously thinking about its own mode of operation, mode of operation and mode of service, and has long begun to make its own adjustments to self-change.

3. Three Major Transformations of Pudong Development Bank under the Wave of Internet Finance

3.1. Leveraging Fintech to Drive Digital Transformation

Digital transformation in banking refers to the high-level transformation of a banking organisation that uses technology to analyse data to improve operational efficiency within the bank, builds on digital transformation and digital upgrades, and further reaches out to the company's core business with the goal of creating a new business model.

Digital transformation is Pudong Development Bank has been promoting the "protracted war", for Pudong Development Bank, there are three main reasons why digitalisation is indispensable. First, the development of retail business is in a bottleneck, by the Internet giants such as Ali, Tencent, Jingdong's online financial platform, the traditional offline retail performance decline. Secondly, the source and management of customers into a bottleneck, in the era of the Internet, the bank outlets of the cold and overcrowded back then, passive waiting for customers to the door of the cost of large, inefficient, data era with big data in order to "catch" the customer. Third, the product innovation bottleneck. For a long time, the bank's products and the industry, homogenisation is too serious, and along with the enhancement of people's financial management concepts, customers have different needs for financial, so the use of digital launch of financial products for different customers is imperative.

3.1.1. Grasp the Digital Transformation of Corporate Finance and Build a Good Industrial Ecology

Pudong Development Bank focuses on promoting the development of digital transformation of corporate finance. From the customer's perspective, it has created an innovative model of specialised operation for customer groups in the end-to-end field, and comprehensively improved the level of Internet-based and intelligent corporate financial services. Create an industry-wide financial ecosystem. Proactively integrate into the symbiosis and co-prosperity of finance and China's real economy "big ecology", with the help of "Puhui e-financing" digital investment and financing platform, to create a digital inclusive financial "1 N" of the whole industry chain financial ecosystem. With the digital investment and financing platform of "Puhui eRong", we will build a whole industry chain financial ecosystem of digital inclusive

finance "1 N". Promote cross-border marketing. Integrate the advantages of resources, according to the scenario-based customer demand pain points, and constantly improve the level of financial services for the development of the real economy, promote transformation and upgrading and industrial restructuring. Proactively create a new financial ecosystem. According to the scene-based company customer satisfaction, integration of SaaS producers of non-banking scene service capabilities, together with SaaS producers to provide users with comprehensive, all-round, non-gold and financial information services in-depth integration of the scene-based solutions.

3.1.2. Promote Digital Transformation of Retail Finance and Customer-centric Good Wealth Management

Pudong Development's retail finance has always adhered to the core value of "creating wealth for customers", and has been working hard on digital transformation and upgrading, comprehensively completing the retail data centre, business centre, service centre, and management cloud and management, basically completing the customer-first, end-to-end, fullstack development and digitalisation, and promoting the completion of the transformation and development of the retail sector. Vigorously carried out the basic construction of intelligent asset management financial institutions. Sound intelligent insight, intelligent line research, intelligent interaction, intelligent overall planning, intelligent risk control five intelligent basic construction, sound 360-degree panoramic map user image, providing users with instant products and services and precise interaction; independent innovation and release of intelligent base selection system software, completing the customer's financial planning and property optimal allocation; create data investment and financial management operation specialist, giving investors all day, 260 items of intelligent Capital service skills. For personal credit loans, we have built a "credit factory". Newly created and iteratively updated 29 scorecard models, reasonably promote personal credit steps from physical to online, human to intelligent, scattered to the whole process of closed-loop management transformation; bank credit card to create a panoramic picture of the activities of the review and analysis of the service platform, to create the whole chain of marketing online integration, data visualisation, end-to-end activity management mechanism; bank credit card "Pudaxi Ben" App industry's first The "Pudaxi Run" App was the first in the industry to receive national-level security verification. Updated the organisation's cloud management management method. We have completed the operation management to the least operating unit, applied digital management methods to produce a closed-loop control management system that is traceable, measurable, data visualisation and evaluable; run the basic construction of the retail risk-based defence system, and improved the ability of retail risk compliance management methods.

3.1.3. Financial Markets Business Builds a Digital Ecosystem and Improves Digitalisation Standards Across the Board

It has been running a new generation of financial system system software engineering project, promoting the integration of front, middle and back office, and the Internetisation of the whole process of basic construction. Promoting customer maintenance, digital drive and ecological building, the construction of the e industry service platform to complete a total of nearly 2,500 customers applying for registration, the line size of more than 700 billion; released e industry small program, loaded with interest rate bonds, debt rolls borrowing, interbank certificates of deposit, agent settlement, cross-border e-commerce trade finance, rely on Pu agents and other commodities, to complete the convenience of the user experience and easy to reach out to the customers to expand the customer. Accelerating the digital transformation and development of electronic commercial bills of exchange, releasing "Puyin e-posting", completing the combination of all commodities of banknote discounting and expanding the scope of online exchange scenarios. Newly upgraded online hosting service platform, creating new experience

from the three major levels of visualisation of business data, improvement of feelings, and interactive communication of specific content, and releasing a new generation of project investment performance assessment and risk evaluation system software to provide more efficient and comprehensive services for customer decision-making and management.

3.1.4. Promote Digitalisation of Risk Management and Create a Digital Risk Control System

Pudong Development Bank independently developed the SkyEye system and continued to optimise and upgrade it, with the main objective of creating a company-level and company-wide digital risk control system, and orderly promoting the full coverage of risk monitoring, the full set-up of risk control, and the completion of the risk control system. Re-constructed the company's credit system group. It carries out the construction of closed-loop control, credit line checking, through detection, intelligent risk control, forward movement of the gate, light architecture design, flexible development, etc., and completes the construction idea of "whole process, comprehensive coverage, intelligence, and componentisation". Create a risk management system for internal control. Basically build a model risk management methodology system based on certification, remediation architecture design, policy system, management system, quality management standard, and information management system, and promote the basic construction of the Basel III project group according to the plan; complete a globalised risk measurement system and a more complete internal rating management methodology system; set up an innovative model of improving collateral management, and enhance the ability of intelligent management of collaterals. Intelligent management capability.

3.1.5. Matching the Needs of the New-style Operation System and Upgrading IT Hightech Capabilities

Build a professional technology system for data-driven business. Basic construction of the business centre, data centre, intelligent cloud management together with the Bank's intelligent data and information nerve centre, to create a company-level quantitative strategy architecture design (EDA) system, connecting the scenario end, the intelligent nerve centre, high-speed data exchange between the software system, support point intelligent cognition and digital drive. Compact the base of security, high efficiency and tension. Accelerate financial cloud, big data technology, human intelligence, blockchain technology, Internet of Things technology and other IT basic data platforms to give calculation rate basic for green ecological business development, digital customer service and operation and management e-energy level improvement. Improve independent innovation and product development capability. Promote the rational layout of the independent innovation system, accelerate the key technology research and enhancement, and improve the independent development capability and the conversion efficiency of cuttingedge research; accelerate the process of technological massification, market and promote the low-code research and development platforms, computer science platforms, and the flexible application of perfect open-source service platforms, and reduce the key technological barriers; give full play to the advantages of the high-tech social system, and take the "dual-service, dualcreation change" as the basis, service, double creation and change" as the guideline, support the digital new operation mode internally, and open up the export of financial technology products, solutions and financial technology services externally.

3.2. Focus on "Lightweight Transformation", and Cultivate New Tracks of Retail and Wealth Management

Making the business model "lighter" is what the banking industry has been actively exploring in recent years. The aim is to find a "lower capital consumption, more intensive" development model in its own business development. "Transformation to lightweight" is another major strategy of Pudong Development Bank. The general manager of Pudong Development Bank said that the core of the transformation of lightweight banking will be to change the business model

around customers and services, so that the development of banking business to become "light", which is mainly reflected in two aspects, one is to build and improve the new retail system, and the other is to seize the new track of wealth management.

3.2.1. Promote the Construction of New Retail System and Build Pudong's Scenariobased Ecology

In July 2018, Pudong Development Bank held a retail business partner exchange meeting in Beijing and officially announced the release of a new system for retail operation. The system completes business modular design and componentisation based on step-by-step reconfiguration; improves digital-driven operation capabilities based on the technicality of the application of big data such as APIs, intelligent perception systems, and discovery models; and produces ubiquitous situational integration of credit business based on the mastery of key aspects of customer satisfaction and the linkage of upstream, midstream, and downstream partners.

In the traditional business model, financial institutions are a "business island". For customers to export savings, borrowing business, you customers want business must go to the bank branch to apply for processing; when the mobile phone Internet banking instead of business outlets, geographical boundaries will be removed. Pan Weidong, the president of Pudong Development Bank, described his bank's "API system" as "borderless, senseless, endless". He said that the new system pays more attention to the integration of Internet finance and scenarios, completes the combination of different areas of retail culture and art, improves the rate of utility, and expands the boundaries of the ecological chain; the new business system promotes the relationship between financial institutions and customers, gets rid of the "I am the main" stereotypical thinking, and further optimises the current workflow; and strengthens the close relationship between financial institutions and partners, and the financial institutions and partners. The new management system advances the relationship between financial institutions and their customers, breaking away from the "me-first" mentality and further optimising the current workflow; it also strengthens the close relationship between financial institutions and their partners, and connects financial institutions with various industries, reducing the time of the development cycle and the cost of collaboration. In addition, the new retail management system restructures the relationship between banking systems, gets rid of business process barriers, responds to scenario-based project requirements, and completes a coherent and consistent user experience.

At the same time, due to the popularity of the 5G era, retail online and offline boundaries tend to be blurred, O20 has become OMO (M that is, Merge, combined), behind which is through a series of fintech ways to complete the reconstruction of the current process, complete the modular design of the business and componentisation. For example, we can apply for the Pudong Development Bank Jingdong Mall co-branded shoes "small gold card" through the Jingdong platform APP rather than business outlets, this small gold card fully automatic binding Pudong Development's advantages of cash management business commodities "call treasure", so that the account more than 1,000 yuan of assets can enjoy more than the call treasure, so that the account can enjoy more than the call treasure. This is a great way to get the most out of your account, and you'll be able to enjoy a higher return on your financial products than you would if you were to pay interest on your current account. If you want to have an outbound trip, you don't need to go to a bank branch to print out property certificates and exchange foreign currencies, you just need to log on to the travel apps with which Pudong Development Bank has contracted to cooperate, buy travel goods, and immediately submit property certificates, visa applications, hotels and restaurants, and foreign currency cash requirements, which only takes about 3 minutes.

At this stage, Pudong Development Bank has carried out deepening cooperation with Ant Financial and Jingdong Digital Technology to establish a double creation. In the industry first released - personal credit loan micro-mini program, applicable to small amount of loan application for processing, a key property valuation, direct bank account opening, the way to interact with the flow of methods, etc., so that the financial information service is close at hand. At the same time, Pudong Development Bank also released the Mobile Intelligence APP version 10.0, which applies dynamic data analysis to deeply understand user preferences and accurately recommend the most suitable products, activities and information for customers; technically builds a diversified and interactive life channel and culture channel based on API; and applies artificial intelligence technology, data labelling, micro-service architecture and other methods and approaches to comprehensively improve the platform's customer experience.

In the third "May 5 Shopping Festival" from July to September this year, Pudong Development Bank stimulated the charm of online and offline transactions in all aspects, providing users with high-quality, further efficacy and services. For example, Pudong Development Bank launched the "May 5 Shopping Festival Bank Credit Card", rationally laid out the business circle transactions and increase the payment of marketing and promotional capital investment, in the form of points for purchase, transaction concessions to promote the sales market "blood"; in cooperation with Jingdong Mall, Pinduoduo platform, jittering video and other leading ecommerce and WeChat merchant platforms, to build up the binding of the bank card transactions and other diversified activities; to carry out the purchase and sale of instalment specials and Diversified mall system member area activities, real price to customers.

From the Pudong Development Bank's mid-year report released in June, the retail business turned out to be a major flashpoint. From a set of data information can be seen: as of the end of the first half of the year, Pudong Development Bank in person customers (including bank credit cards) to enhance the 130 million households, Pudong Development Bank App daily living customers more than 22.3 million, compared with the beginning of this year, an increase of 27%; personal financial assets account balances (including the total market value) of nearly 4 trillion, the retail bank deposits to enhance the 1,100 billion. At the same time, Pudong Development Bank proactively closely around the source of the transaction, to promote the iterative upgrading of goods, "Youkai point loan", "Chanting" and other further expansion of the scenario runway, consumer loans continue to last year's rapid growth momentum. According to the report, by the end of June, Pudong Development Bank's retail loan (including bank credit cards) account balance exceeded RMB 188 billion, with a turnover of RMB 1,180 billion, an increase of 12 per cent over the same period, and a loan volume of more than RMB 430 billion.

3.2.2. "Five Intelligences" to Strengthen Wealth Management and Expand Business Advantages with Steady Progress

The construction of the world's asset management centre in Shanghai has been accelerated, and Pudong Development Bank, a local bank, is also actively involved in it, giving full play to the advantages of group synergy, promoting the two wings of "customer operation" and "product management", and creating specialised service capabilities.

By the end of the first half of the year, Pudong Development Bank's account balance of investment wealth management products held by its own customers raised RMB 1,080 billion; the insurance agency business has achieved good results by joining hands with head institutions, and a multi-segmented and rational layout of treasury products, with equity funds enjoying an operating scale of more than RMB 160 billion; and the operating scale of private banking customers (with a monthly daily average of assets of more than RMB 8 million inclusive) is almost 30,000 in number.

It is worth mentioning that Pudong Development Bank is the industry earlier in the retail industry to run big data technology, natural language understanding and other human intelligence technology research banks, driven by technical factors, this bank is also focusing on creating the "most intelligent wealth management financial institutions", including insight, line research, interaction, overall planning, risk control, the five major intelligent basic construction.

Specifically, "Intelligent Insight" refers to the 360-degree panoramic picture of customer portraits to build a physical model of customer behavioural trajectory, under the premise of strengthening the security of personal information, insight into the hidden needs of customers. and better able to provide customers with optimized services; "Intelligent Integral Planning" is to closely focus on the customer's wealth goals, resulting in the "commodity line research financial diagnosis - scenarios of the overall planning - sales performance tracking countermeasures to optimize the" closed-loop control of pan-wealth management; "Intelligent Risk Control" using AI automation technology, basically covering the entire process of capital products management methods, compliance management market and its monitoring and early warning. Intelligent overall planning" is a closed-loop control of pan-wealth management to improve customers' financial planning ability; "intelligent risk control" applies AI automation technology, and basically builds an intelligent control platform that covers the entire process of capital product management methodology, compliance management, marketing and sales, as well as its monitoring and early warning; at the level of "intelligent research", the company releases independent innovation and intelligent system software, which supports the completion of the optimal allocation of customers' property for financial planning.

In addition, at the level of "intelligent interaction", Pudong Development Bank launched the "data investment and wealth management operation commissioner", constituting a "precise push-interaction-waiting" three-layer intelligent wealth management protection system, to provide investors with round-the-clock services. By the end of June, the data investment and wealth management operation commissioner already has 260 intelligent capital service skills including online Q&A, market quotation news and information, investment education, product introduction and position gain analysis, etc., with a total of more than 270 service projects.

In order to further improve the efficiency of business processing, Pudong Development Bank will be mobile phone net banking and business outlets intelligent machine equipment, data links, to create an over the air business outlets service projects member area, sound water printing, lost and replaced the card and other basic services, in order to meet the customers in the global epidemic sealing and control areas, bad weather and other inconvenient transport travel premise to do business, to provide a solution. In the first half of the year, the airside business network provided service programmes for nearly 3.7 million customers.

Pan Weidong said that in 2022 will be in the scenario-based business industry all hard work to achieve a breakthrough. Adhering to the unremitting customer source, service entity, Puhui preferred choice, promote the digital ecological scenario collaboration, at the same time, Pudong Bank will also create the key service level of independent property rights, accelerate the transformation and renewal of the traditional style of business, and turn into a digital ecological facilitator, co-creator and guide.

3.3. Embrace Green Finance and Build a low-carbon Bank

Droughts, heavy rains, floods, and persistent high temperatures In recent years, the occurrence of extreme weather around the world has made people in all countries vigilant when the test of climate change arrives, the low-carbon transition can not be delayed. In September 2020, China explicitly stated that In September 2020, China clearly stated its overall goal of "carbon emission reduction" by 2030 and "carbon trading" by 2060; and in 2021, the two sessions of the National People's Congress succeeded in writing the "dual-carbon" goal into

the government report. With the development trend of carbon reduction rising to a strategic level in China, China's industrial transformation and upgrading has entered a new development stage of green and low-carbon transformation. In this process, the financial industry will play an irreplaceable and important role. "In recent years, the green low-carbon development trend has become a unique background colour for the high-quality development of socio-economic development, and the banking industry is the key support for promoting the sustainable development of green low-carbon.

3.3.1. POSCO's Path to Green Finance

Pudong Development Bank has always been a leader in the practice of green finance in the industry. Since the launch of the first comprehensive green credit service programme for the low-carbon economy in the industry in 2008, Pudong Development Bank has been exploring and innovating in the field of green finance for more than ten years, and has landed a number of "firsts in the industry".

In 2009, Pudong Development Bank began international cooperation in green finance, landing the International Finance Corporation (IFC) performance loan, AFD green intermediary credit project; in 2014, issued the first domestic carbon bond in the interbank market; in 2020, launched the green financial financial financial consulting services, forming a multidimensional, three-dimensional green financial products and services system. Data show that by the end of 2020, Pudong Development Bank's green financial scale exceeds 500 billion yuan, and the balance of green credit exceeds 260 billion yuan. In 2021, Pudong Development Bank will iterate its Green Finance Comprehensive Service Programme to version 3.0, covering six major areas, such as green smart manufacturing, green urbanization, environmental protection, green energy, new energy automobile, and carbon finance, to serve the upstream and downstream of the carbon-neutral industry chain, enterprises. In addition to vigorously developing green credit, Pudong Development Bank has also upgraded its green investment system to an ESG comprehensive bond business system, underwriting CDB's "Yellow River Basin Ecological Protection and High-Quality Development" thematic green financial bonds in 2021, and launching the first structured product in the market linked to the "China Bond-Carbon-Neutral Green Bond Index". It also underwrote CDB's green financial bonds on the topic of "Ecological Protection and High-Quality Development of the Yellow River Basin", launched the first structured product linked to the "China Bond - Carbon Neutral Green Bond Index" in the market, and launched the first carbon neutral CMBS asset securitisation business. By the end of September 2021, Pudong Development Bank's green credit balance exceeded RMB 300 billion, an increase of more than 60% year-on-year, ranking at the forefront of state-owned commercial banks.

On 3 November 2021, Pudong Development Bank held a new green finance conference in Shanghai, "Greening the World and Creating the Future Together". Guided by the core concept of green financial institutions, Pudong Development Bank released a series of measures from forward-looking research, scientific and technological innovation products, and practical activities of service projects. The Blue Book on Financial Enterprises' Global Environmental Governance and Promotion of Carbon Neutrality clearly puts forward practical action proposals; firstly releases the carbon account management system applicable to enterprise owners; publishes China's first multi-property quantitative analysis index value covering domestic and international ESG (natural environment, corporate social responsibility, corporate governance structure) assets certified by Standard & Poor's; puts on sale the Pudong Development Bank's China UnionPay green and low-carbon themed credit card savings card; and the National Green Innovation Fund, the Shanghai Natural Environment Energy Exchange, and the National Green Innovation Fund. Ltd. and Shanghai Natural Environment Energy Exchange Co., Ltd. signed a cooperation framework agreement to jointly promote the concept of green sustainable development.

In 2022, Pudong Development Bank continued to accelerate the pace of independent innovation in green finance, landing the first carbon asset bond, the first carbon capture and application project investment, and the first green capital preservation wealth management linked to the carbon neutral bond index of Shanghai Qingdao. By the end of the third quarter, Pudong Development Bank's green credit balance of RMB 394.6 billion ranked at the forefront of the joint-stock cooperative industry, and RMB 25.108 billion of carbon emission reduction loans had been distributed to 162 key projects.

3.3.2. Keeping up with Policy Guidance and Keenly Grasping Green Development Opportunities

Pudong Development Bank pays high attention to policy releases, with extremely sharp judgement and execution. For example, in the recent China Foreign Exchange Trading Centre published "on the optimization of foreign currency repo business with overseas foreign currency bonds as collateral notice" (hereinafter referred to as "notice") mentioned that "in order to meet the market demand, colourful foreign exchange repurchase business role, the China Foreign Exchange Trading Centre foreign exchange trading system applies the role of the collateral basket, the buyer and seller can commit to a basket of overseas foreign currency bonds as collateral, the basket bonds as the repo underlying to carry out foreign exchange repo business". Collateral, the basket of bonds for the repurchase base to carry out foreign exchange repurchase business".

After the issuance of this Notice, Pudong Development Bank strongly supported and immediately negotiated with the China Foreign Exchange Trading Centre and overseas bond custodians to scientifically study the standard for equipping the bamboo basket of pledged loan bonds. In order to promote the green industry development planning, Pudong Development Bank in advance of the overall goal of repurchase bonds locked into a highly rated basket of green bonds. After discussing with the willing counterparties, on 5 September, the bank carried out the foreign exchange tripartite repurchase with a basket of green bonds as collateral to two regional and overseas counterparties, and became the first batch of regional inter-bank institutions to participate in the green bond tripartite repurchase.

In fact, in the first half of the year, Pudong Development Bank has successively released "China Bond - Pudong Development Bank ESG preferred bond index value", the landing type of regional reduction linked to the European region of the carbon emission rights of the structural products, showing the green purchase and sale of new milestones in the transaction. Pudong Development's participation in the China Foreign Exchange Trading Centre's on-line tripartite repurchase business process for ESG bonds is considered to be another pioneering and practical implementation of the strategic plan for the development of "green finance", and is also extremely relevant to the current policy of shaping an international green ecological vision and vigorously promoting green finance, demonstrating that Pudong Development Bank is actively implementing the policy policy and policies and rapidly implementing the development trend of new business. It shows that Pudong Development Bank actively and proactively implements the policy, rapidly implements the emerging business development trend, and supports the real economy execution ability according to the financial market business transmission.

Also in June this year, China's inter-bank dealers association independent innovation released transformation bonds, will raise funds specifically for high pollution, high carbon emissions of traditional industries, capacity replacement, technical upgrading and transformation, as well as new projects with the effect of carbon reduction, for this application of the traditional industry of the green low-carbon environmental protection transformation. Pudong Development Bank integrates the company's transformation planning and capital demand, according to the personalised transformation bond business plan scheme, successfully participated in the

underwriting and sale of the first batch of transformation bonds in the market, and continued to implement the second phase of medium-term notes (transformation) of Chalco International Limited Company for the year of 2022 and the fifth phase of medium-term notes (transformation) of Datang International Power Generation Company Limited Company for the year of 2022, which reasonably promoted the upgrading of industrial structure and energy saving and consumption reduction.

Zheng Yang, general manager of Pudong Development Bank, said that in order to build a "green financial institution", the first is to continue to strengthen the top-level design, set the bank's efforts to vigorously carry out and optimise the green financial business processes; the second is to continue to increase the inclination of resources, the green financial market development to implement personalised assessment, incentives, incentives to encourage operating institutions to fully support the provision of green finance; the third is to continue to promote the structure of the asset-liability structure, the way of goods and services, corporate culture and so on to the green transformation, while gradually improving the workflow management programme, information disclosure system. Thirdly, it has continuously promoted the green transformation of its asset-liability structure, commodity service approach and corporate culture, while gradually improving its workflow, management programme and information disclosure system.

Overall, Pudong Development Bank is constantly improving the green security system, continue to consolidate the core competitiveness in the field of green finance, and steadily develop and improve the "Pudong Development Bank Green Creation" famous brand. Pan Weidong also said at this year's mid-year conference that green finance is one of the three "golden cards" that the enterprise is trying its best to create, and it must do a good job of this piece of signboard with its heart, hard work, and newness.

4. Summary

After experiencing the impact of Internet finance, traditional commercial banks should embrace changes, respond to the opportunities of the times, and endeavour to find new directions so that they can be revitalised. According to the interim report released on Pudong Development Bank's official website in August 2022 and announcements made by the company in recent years, Pudong Development Bank's performance and operation as a whole show a steady upward trend, which is inextricably linked to its all-round and multi-level transformation. Digital banking moves from geographic outlets to everyone's side, is customeroriented, and attaches importance to experience; lightweight banking allows business to move from complexity to simplicity, and from functionality to specialisation, with high efficiency and speed; building a low-carbon bank responds to policy, seizes the opportunity for development, and consolidates its characteristics. Pudong Development Bank's persistent transformation has also kept it from falling behind, providing good inspiration and reference for the development of China's banking industry.

In the environment of universal Internet, commercial banks and Internet finance are not antagonistic but a win-win relationship. The transformation of Pudong Development Bank has left us thinking about how commercial banks should develop in the next 10 years and what role they should play in the financial market. What other changes need to be made on the road to transformation? This needs to be given more thought and attention by the future financial practitioners.

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