#### МИНИСТЕРСТВО ОБРАЗОВАНИЯ РЕСПУБЛИКИ БЕЛАРУСЬ

## УЧРЕЖДЕНИЕ ОБРАЗОВАНИЯ **«БРЕСТСКИЙ ГОСУДАРСТВЕННЫЙ ТЕХНИЧЕСКИЙ УНИВЕРСИТЕТ»**

# АКТУАЛЬНЫЕ ПРОБЛЕМЫ СОВРЕМЕННЫХ ЭКОНОМИЧЕСКИХ СИСТЕМ – 2025

Сборник научных трудов

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**А 43** Актуальные проблемы современных экономических систем – 2025: сборник научных трудов; редкол.: А. Г. Проровский [и др.]. – Брест: Издательство БрГТУ, 2025. – 224 с.

#### ISBN 978-985-493-660-4

Сборник научных трудов посвящен 30-летию экономического факультета Брестского государственного технического университета.

В нем анализируются проблемы современных экономических систем различных сфер деятельности и вырабатываются рекомендации по их развитию. Сборник научных трудов интересен специалистам, преподавателям высшей школы, аспирантам, магистрантам и студентам экономических специальностей.

УДК 330(476) ББК 674.480.46

# A COMPARATIVE ANALYSIS OF INTERNET BANKING DEVELOPMENT MODELS IN THE UNITED STATES AND CHINA

### Liu Qinyuan, A. V. Kievich Polessky State University, Pinsk, Republic of Belarus

Abstract. The paper analyzes the implementation of Internet banking development models in the United States and China; it emphasizes that the positioning of Internet banking is to rely on the advantages of big data to serve 80 % of ordinary customers, fully utilizing the value of lower-class customers.

Keywords: internet-banking, Big Data, electronic information channels, internetization of traditional banking, new discoveries, online mode, business challenges and goals.

### СРАВНИТЕЛЬНЫЙ АНАЛИЗ МОДЕЛЕЙ РАЗВИТИЯ ИНТЕРНЕТ-БАНКИНГА В США И КИТАЕ

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Аннотация. В статье проведен анализ внедрения в практику моделей развития интернет-банкинга в США и Китае; подчеркивается, что позиционирование интернет-банкинга заключается в том, чтобы, опираясь на преимущества больших данных, обслуживать 80 % обычных клиентов, полностью используя ценность клиентов низшего класса.

Ключевые слова: интернет-банкинг, большие данные, электронные информационные каналы, интернетизация традиционного банкинга, новые открытия, режим онлайн, бизнес-задачи и цели.

And so, as we all know by now, starting in the 1990-s, Internet technology became widespread and banks started accepting orders for transactions and providing services to consumers through electronic information channels, which we now often refer to as Internet banking.

Internationally, the concept of internet banking is mainly expressed in the following ways: Electronic banking, PC banking, Internet banking, Online banking, Cell-phone banking and Virtual banking [1].

Types of Internet banking mainly include three levels: the first is a website providing information, which mainly releases information on banking products and services to consumers and the public; the second is a simple transactional website, which can realise the submission of requests for banking services, enquire about their accounts, and give transactional instructions to the bank, but does not allow the transfer of funds; and the third is a higher-functioning transactional website, which allows consumers to transfer funds between accounts, pay bills as well as transfer funds. funds transfers, can pay bills and conduct other banking transactions online.

Traditional Internet banking was based on offline entities, i. e. the Internetisation of traditional banking. However, in the era of big data, new types of Internet banks have emerged that do not have offline branches and have relied exclusively on online business since their inception, which are the type of Internet banks discussed in this paper without special caveats [2].

Internet banking is based on big data analysis. In the era of big data, the American Chris Anderson put forward the "long tail theory". He believes that under the premise that the storage and circulation channels of the products are large enough, the products with low demand or poor sales can occupy a comparable market share with those few hot products, or even larger, that is, the convergence of many small markets can generate market energy that matches that of the mainstream. In the financial sector, the traditional commercial banks and other large financial enterprises, 80 % of the profits from 20 % of the important customers, the remaining 20 % of the profits from 80 % of the ordinary customers. The positioning of the Internet bank is to rely on the advantages of big data to serve 80 % of ordinary customers, fully exploiting the value of low-end customers. Internet banks, especially those set up by senior e-commerce 208

companies, have more reliable private databases in terms of credit, which, combined with the centralised credit system, allow them to carry out credit loans and other businesses more efficiently, significantly increase the breadth and depth of financial services, and help them to serve low-income people and small and micro-enterprises in a low-cost and high-efficiency manner.

Thus, Internet banks should take full advantage of existing advantages and opportunities, strictly comply with national financial laws and regulations and regulatory policies, and innovate on the basis of legal compliance, prudent business operation and sustainable development goal.

Internet banking development model in the US and its advantages. After more than a decade of development, Internet banks in the United States have formed a more mature Internet operation mode. At present, internet banks in the US mainly have internet platform mode, direct sales bank mode, banking service provider mode and so on. These three development modes just have their own characteristics and advantages.

First, the Internet platform model. This model represented by Bank of Internet USA, which is a US-based Internet bank that opened in July 2000 and provides Internet consumer banking services throughout the US via the Internet without setting up any physical branches, similar to the operation models of Netcommerce Bank and Microcrowd Bank. It adopts a combination of online and offline approaches. Online, it uses big data analysis technology to carry out precise marketing for the characteristics of customer groups, provide targeted products and attract target groups with higher interest rates and fewer fee items; offline, it has formed Internet partners with supermarket chains and other supermarkets, attracting such customers by providing fast payment methods. At the same time, data is collected through online and offline clients and data analysis technology is used to carry out cross-selling, firmly targeting customers and improving service levels and efficiency, thereby enhancing the core competitiveness of the enterprise.

The second is the direct banking model. Represented by ING US Direct Banking, this is a typical operation model of ING Bank in the Netherlands, which actively combines the Internet. ING US Direct Banking is oriented to retail customers, with simple and standardised product and service processes, and also facilitates online operation and data collection. Its risk control relies on "hard information" and the "law of big numbers", and the full integration of big data technology can improve the bank's risk management level and efficiency, so that it can provide services to customers more quickly.

Third is the bank service provider model. Represented by Simple, which is not a bank per se, but a banking service provider offering comprehensive personal financial services through web and mobile phone mobile clients. Cooperative banks provide a NOW deposit account insured by the FDIC (Federal Deposit Insurance Corporation), while Simple provides personal financial services, including comprehensive financial management, to individual customers based on the account, combined with big data technology and clear targeting of customers.

The main insights from the development of Internet banking in the United States are as follows.

1. Economy of scale is the main feature of the profit model of Internet banks. The advantage of the Internet is mainly cost savings, so it can tolerate lower interest rate

spreads, and "thin profits and high sales" is its main feature. The "asset-light, weak network" development model of Internet banks can reduce operating costs, and the network-based distribution means that banks can expand their business without the need to set up branches, which provides more potential room for growth. Its management mode also tends to be flatter, avoiding inefficiency due to too many layers, which is conducive to the improvement of management efficiency, and the online mode of operation makes it easier to collect and analyse data, and by virtue of the big data technology, it can improve the level of management decision-making, improve operational efficiency, further reduce operating costs and achieve economies of scale.

- 2. Internet banks must pay attention to customer experience and real needs. Internet banks mainly serve individual consumers and small and micro-enterprise customers, whose demand for financial services is broader and more personalised, and who need to consider more about risk control [3]. The use of big data technology can be used to develop products from customer needs and achieve accurate marketing. From the point of view of the development of Internet banking in the United States, Internet banks tend to provide standardised products and limited product choices, mostly focusing on savings products and mortgage products. Standardised self-service banking products are easy for customers to try and can be independently managed by consumers. Such a model is also more amenable to big data collection and analysis, and can be used as soon as possible for product feedback and customer demand analysis, thus improving the customer experience.
- 3. Mismatched competition and cooperation with traditional banks. Internet banks mainly face the long-tail market, the number of customers is large, the amount of individual customer financial transactions is very small, so the financing costs that can be borne are also very small.

Internet banking is a useful supplement to the existing banking system, and there is a relationship of competition and cooperation between the two. Internet banks and traditional banks cooperate effectively on the basis of small and micro-credit, and the modes of cooperation include:

- 1) Jointly set up a project fund pool, construct a revolving credit facility of a syndicated nature, jointly bear the risks of customers and share the premium equally;
- 2) Construct structured products and graded products, and choose yield products suit your risk appetite, making Internet banking an asset management intermediary for banks;
- 3) Internet banks adopt a pure intermediary mode of exporting credit models, screening based on the characteristics of the target credit-granting groups of external banks and parameters of big data models, or directly providing credit scoring reports of customers. Of course, traditional banks can also learn from the advantages of Internet banks to improve the efficiency of their own retail lending services, and enter the Internet finance field by establishing their own direct sales banks or cooperating with banking service providers.

<u>Status of Internet Banking Development in China.</u> With the arrival of the big data wave on the Internet, enterprises based on e-commerce or social platforms have unique advantages in establishing online banks [4].

At present, the main representatives of internet banking in China are: Shenzhen Qianhai Weizhong Bank, co-financed by Tencent, Baiyeyuan and Liye; Zhejiang

Netcommerce Bank, co-financed by Alibaba and Wanxiang; and Baxin Bank, co-financed by Baidu and CITIC Bank [5].

As one of the first pilot private Internet banks, Zhejiang Netcommerce Bank will operate in a purely Internet-based business model, with no physical outlets, no cash business, and no involvement in the offline business of traditional banks, such as cheques and bills of exchange. The bank will focus on serving "long-tail" customers, especially small and micro enterprises, entrepreneurs and ordinary consumers, especially the rural consumer groups. It will adopt a "small deposit and small loan" model, which means that it will mainly provide deposit products of less than RMB 200,000 and loan products of less than RMB 5 million.

The reason why Zhejiang Netcommerce Bank is able to adopt the "small deposit and small loan" model is due to the big data processing capability of Ali's ecommerce platform and the construction of the credit system. With financial inclusion as its mission, ZCB hopes to use the technology, data and channel innovation of the Internet to help solve the problems of difficult and expensive financing for small and micro-enterprises and the lack of financial services in rural areas, so as to promote the development of the real economy. Netcombank is also the first bank in China to structure its core system on the financial cloud. Based on the financial cloud computing platform, Zhejiang Netcommerce Bank has the ability to handle highly concurrent financial transactions, massive big data and elastic expansion, and can take advantage of the Internet and big data to provide financial services to more small and micro enterprises. Among them, Ant Small Loan will use big data technology to provide small loans to small and micro enterprises and individual entrepreneurs on Taobao and Tmall.In early 2015, Ant Gold Service launched Sesame Credit, which is mainly based on Alibaba's e-commerce transaction data and Ant Gold Service's Internet financial data, to assess users' credit, which can help Internet financial enterprises to assess users' creditworthiness. These credit assessments can help Internet financial enterprises to provide a basis for users' repayment willingness and repayment ability, and then provide users with fast credit and cash instalment services.

In May 2015, MicroBank launched its first Internet banking product, the Microparticle Loan. "Micro-particle loan" is a small credit loan products, with "unsecured, unsecured, pay as you go, daily interest" features, the amount of 20,000-200,000 yuan, daily interest rate of 0,005%,  $7\times24$  hours service, the fastest 15 minutes loan completion [6].

The essence of Internet financial products is the Internetisation of traditional bank personal credit loans or revolving loans. The traditional business model is based on the borrower's comprehensive credit and income, water flow and some asset proof as the basis for loan issuance, while the Internet bank's credit compliance method is quite different from that of the traditional bank, mainly by using multi-dimensional big data such as online consumption, payment, wealth management, social networking, etc., and issuing a credit report through modelling and analysis.

Companies such as Ali's Sesame Credit and Tencent Credit have gradually begun to develop the Internet third-party credit market, which Internet banks can use to obtain users' credit data as the main basis for assessing the amount of loan issuance.

Thus, Internet banking is a useful complement to the existing banking system and there is a competitive and cooperative relationship between them. Internet banks and traditional banks cooperate effectively on the basis of small and microcredit, etc.

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#### Научное издание

## АКТУАЛЬНЫЕ ПРОБЛЕМЫ СОВРЕМЕННЫХ ЭКОНОМИЧЕСКИХ СИСТЕМ – 2025

Сборник научных трудов

Ответственный за выпуск: Проровский А. Г. Редактор: Винник Н. С. Компьютерная вёрстка: Соколюк А. П. Корректор: Северянина А. Г.

ISBN 978-985-493-660-4

Издательство БрГТУ.

Свидетельство о государственной регистрации издателя, изготовителя, распространителя печатных изданий № 3/1569 от 16.10.2017 г. Подписано в печать 28.08.2025 г. Формат 60х84 <sup>1</sup>/<sub>16</sub>. Бумага «Performer». Гарнитура «Times New Roman». Усл. печ. л. 13,02. Уч. изд. л. 14. Заказ № 804. Тираж 50 экз. Печать цифровая. Изготовлено и отпечатано в учреждении образования «Брестский государственный технический университет». 224017, г. Брест, ул. Московская, 267.