



Impact of Digital Transformation on Commercial Banking in Vietnam

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ABSTRACTS:

The article discusses the application of digital technology in operations by commercial banks in Vietnam. Technologies such as online banking, mobile applications, and business process automation systems have changed the way customers access banking services and how banks process transactions.

Digital transformation helps improve bank operational efficiency, reduce paperwork, and increase transaction processing speed. Customers benefit from convenience and flexibility when using electronic and mobile banking services.

The article also highlights risks related to privacy and information security. As digital technology becomes more widely used, banks need to invest more in security measures to protect customer data.

Digital transformation can lead to changes in the workforce structure of banks, with an increase in demand for digitally skilled personnel and a decrease in demand for traditional jobs. The article also examines the impact of digital transformation on employment opportunities and human resource training in the banking industry. Finally, the article discusses the development trends of the commercial banking industry in the context of digital transformation. It raises the question of how commercial banks in Vietnam can continue to innovate and remain competitive in the ever-changing digital age.

In summary, the article provides an overview of the impact of digital transformation on commercial banks in Vietnam, emphasizing the importance of balancing the benefits of technology and the associated risks. mandarin.

Keywords: Digital transformation, Vietnamese commercial banks

1. Introduction

Digital transformation is becoming an inevitable trend in all sectors of the economy, including the commercial banking industry in Vietnam. The explosion of information technology and the popularity of the Internet have created a new environment where banking services and products can be provided in a more convenient, faster and suitable way. modern customer needs. The emergence of technologies such as artificial intelligence, blockchain, cloud computing, and big data has been creating significant changes in the way commercial banks operate and serve customers.

In this article, we will consider the impact of digital transformation on commercial banks in Vietnam. We will analyze the benefits that digital transformation brings, including operational efficiency, customer experience, and innovation in products and services. At the same time, we will also discuss the challenges that commercial banks face, such as information security risks, competition from fintech companies, and pressure from today's regulatory environment. the more complicated.

By evaluating both the positive and negative aspects of digital transformation, the article will provide a comprehensive view of how commercial banks in Vietnam can adapt to the continuous change in technology. technology, while maintaining stability and safety in operations. This will help bank managers, financial experts, and general readers gain more insight into the future of the commercial banking industry in Vietnam as digital transformation continues to develop.

2. Research Methods

The article uses qualitative research methods thanks to searches, interviews and group discussions focusing on issues to evaluate the impact of digital transformation on the performance of commercial banks. . In addition, the team relies on previous research to make arguments as well as assessments to create a multi-dimensional perspective on the problem.

3. Theoretical basis for digital transformation in commercial banks

Technology Adoption Theory: Digital transformation in commercial banking can be understood through the lens of technology adoption theory. This theory suggests that the adoption and diffusion of innovations, such as digital technologies, follow a predictable pattern, influenced by factors such as perceived usefulness, ease of use, and external influences.

Information Systems Theory: Information systems theory provides insights into how digital technologies are integrated into the operations of commercial banks. This theory emphasizes the importance of aligning information technology with organizational goals and processes to enhance efficiency, decision-making, and competitive advantage.

Innovation Theory: Digital transformation in commercial banking can also be analyzed through innovation theory, which explores how new technologies disrupt existing business models and create opportunities for value creation. Innovations such as mobile banking, artificial intelligence, and blockchain have the potential to revolutionize the way banks interact with customers and deliver services.

Organizational Change Theory: Implementing digital transformation in commercial banking requires significant organizational change. Organizational change theory offers frameworks for understanding the challenges and strategies involved in transitioning to a digital-first mindset, including leadership support, employee training, and cultural adaptation.

Customer Experience Theory: Central to digital transformation in commercial banking is the focus on enhancing the customer experience. Customer experience theory examines how digital technologies can be leveraged to personalize interactions, streamline processes, and deliver seamless omni-channel experiences that meet the evolving needs and preferences of customers.

By applying these theoretical perspectives, researchers and practitioners can gain a deeper understanding of the dynamics and implications of digital transformation in commercial banking, guiding strategic decision-making and facilitating successful implementation efforts.

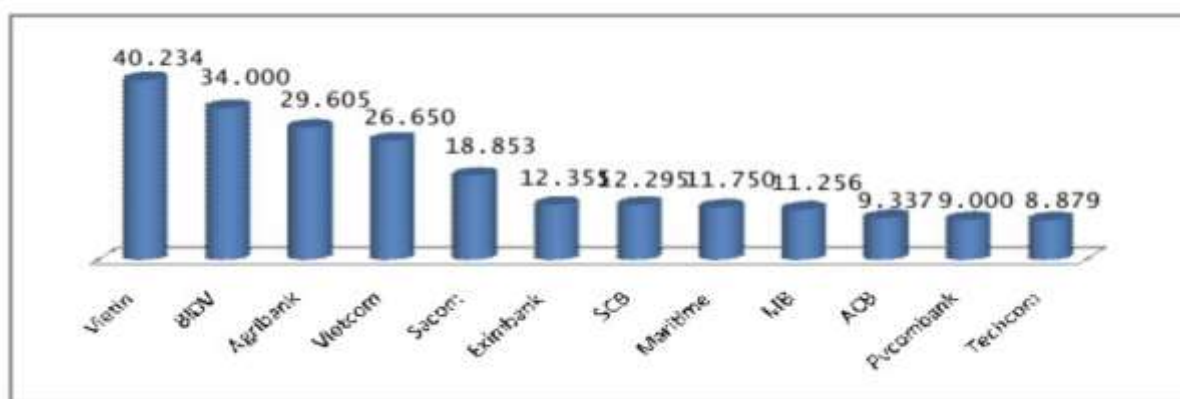
4. Current status of digital transformation at Vietnamese commercial banks

4.1. Current situation of Vietnamese commercial banks

With the regulation that the charter capital must reach the minimum level according to the roadmap, some banks have had a breakthrough through mobilizing capital from shareholders, including domestic and foreign strategic shareholders. Some banks have had a capital contribution ratio of strategic investors of up to 30%³. To date, the charter capital of a number of banks has increased significantly, reflecting the strength of each bank and serving as a basis for expanding capital mobilization and lending activities as well as developing banking services to meet the needs of each bank. ever-increasing customer demand.

Figure 1. Charter capital of some commercial banks after merger

Unit: Billion VND

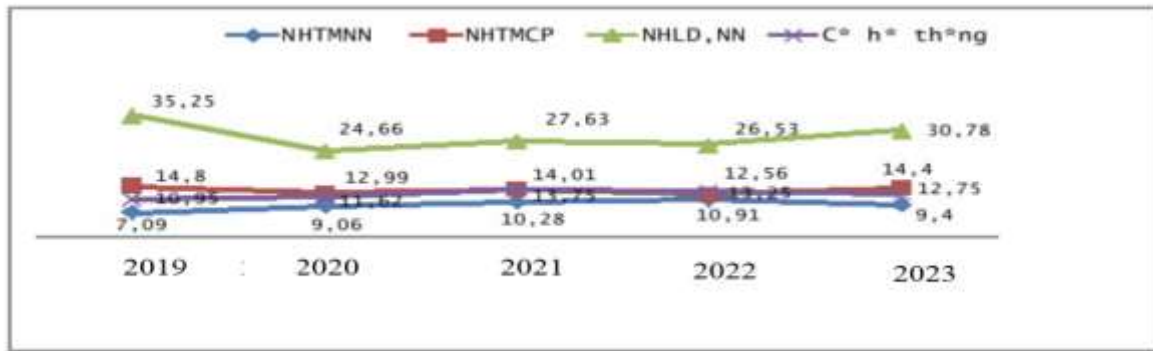


Source: Investment forum newspaper 2023

When charter capital increases, the capital adequacy ratio (CAR) of each bank as well as the whole system improves. In 2021, the average capital adequacy ratio of Vietnamese commercial banks will be 10.98%, in 2022 it will be 13.75%, then decrease to 13.25% in 2023 and 12.75% in 2014, respectively. The basic reason is that charter capital did not increase, while total assets increased very quickly, some loans and investments were previously not included in the total outstanding debt, but now the State Bank of Vietnam requires banks to include them. Credits in the form of investment trusts, guarantees, corporate bonds...

Figure 2. Capital adequacy ratio of the commercial banking system

Unit: %



Source: SBV, UBGSTC, cafef website

However, if calculated correctly, fully account for all types of operational risks, market risks... and accurately determine the real equity capital (eliminate virtual capital due to cross-ownership) of some commercial banks according to Basel II requirements, the CAR coefficient of commercial banks is lower than the data published above. This shows the unsustainable development of the Vietnamese banking system.

4.2. Current status of digital transformation at Vietnamese commercial banks

In the era of digital transformation, not moving forward is falling behind. Therefore, digital transformation is now becoming an inevitable trend in many areas of socio-economic life, especially in the banking sector. In recent years, the banking industry has made many significant changes with digital transformation applications, in addition, financial technology companies (Fintech) have changed the market with the emergence of technology. Blockchain and cryptocurrency. Banks have responded to market changes and have cooperated with Fintech to launch new digital services to proactively adapt to the context of the Fourth Industrial Revolution (CMCN 4.0), create competitive advantage and sustainable development. Digital transformation in the banking industry is not simply the application of new technologies such as artificial intelligence (AI), Blockchain technology... but also a transformation in the entire model, strategy and culture. business, how banks operate on the basis of technological innovation. It can be said that banking is a pioneer in digital transformation, on that basis, continuously bringing improvements and breakthroughs in providing service activities to meet the increasingly rich and diverse needs of customers. people and the whole society.

Digital transformation in banking is the integration of digitization and digital technology into all areas of banking. This integration enables new or modified existing business processes, cultures and customer experiences to meet changing market requirements and customer expectations. Digital transformation helps banks save costs and streamline operational processes. This integration also delivers an easier and more engaging customer experience. Digital banks can perform most banking transactions online via the Internet. When using digital banking transactions, customers do not have to go to bank branches; Minimize related paperwork. At the same time, digital banking features can be performed anytime, anywhere without depending on time or space, so customers are completely proactive. All banking transactions are performed online via the Internet, the bank digitizes the process, all customer relationships with the bank are processed online, transfer payments, 24/7 money transfers, loans banking, savings, deposit money, account management, card management, investment, insurance, personal and business financial management - security is absolute and strictly monitored tight.

For digital banking, all activities are digitized and carried out through Internet Banking and Mobile Banking. Customers can perform all transactions on the bank's website and mobile application. Using digital banking brings maximum convenience and diverse usage devices: Computers, laptops, smartphones... with Internet connection. All activities performed at traditional transaction counters are digitized and integrated into a digital banking application, so customers do not have to go to traditional transaction counters. In addition, activities such as risk management, capital resources, product development... are also digitized.

4.3. The impact of digital transformation on commercial banks in Vietnam

For basic banking operations, bank employees need to be trained and gain many years of experience to achieve the desired level of efficiency. But when facing the step towards digital banking operations, it can be clearly seen that the lack of high-quality human resources, information technology experts and data analysts hinders this process. Databases that are not standardized and digitized can make it difficult for bank employees as well as customers to share information and build a digital banking ecosystem.

Impact on capital mobilization operations

The impact of digital technology transformation on capital mobilization has brought many positive things. First, expanding capital mobilization channels through social networks, online advertising and data analysis helps attract new customers, especially the younger generation who love to use technology. Along with that, the development of online transaction channels such as websites, mobile applications and services such as internet banking, mobile banking, chatbot... creates convenience and ease for customers to make transactions. everytime everywhere. Using artificial intelligence and Big Data

helps improve operational efficiency, from assessing customer needs to optimizing profits. Customer experience is improved through a simple interface, personalized service and detailed instructions, bringing customer satisfaction and engagement.

However, there are also some challenges to face during this transition. Using modern technologies can push up labor and technology costs. Many customers still do not fully trust technology to invest in digital transformation applications, especially those who are older or do not have much experience with technology. The capital mobilization business still requires human-to-human communication to ensure confidentiality, safety and absolute trust of customers. Therefore, although modern technology brings many benefits, there is still a need for the right combination and consideration between technology and people in capital mobilization operations.

Impact on credit operations

In the digital transformation of the banking industry in Vietnam, credit operations are one of the areas most affected. In the digital age, customer experience is enhanced through conducting transactions via mobile applications and banks' websites, bringing convenience and saving time to customers.

In addition, digital technology allows banks to collect information from many different sources and use complex data analysis models to evaluate credit risk. Digital technology allows banks to store data such as financial transactions, payment history, personal information or social data. Thanks to automating the data collection process, banks can capture more information and thereby have a more comprehensive view of customers' credit records. With data analysis models, banks can assess customers' credit risk more comprehensively. These models not only predict credit risk more accurately, but also help identify underlying patterns and trends in the data. Finally, digital technology also allows banks to automate and optimize the credit assessment process. Instead of having to spend a lot of time and effort manually reviewing credit applications, banks can use automation tools to evaluate and process applications quickly and effectively. This helps increase working efficiency and minimize errors in the credit assessment process.

However, digital transformation also brings certain challenges to banks' credit operations, including issues such as network security, investment costs or human resource capacity. With the increased use of digital technology, banks face increasingly sophisticated and complex cybersecurity threats. High-tech criminals may seek to infiltrate systems to access customers' personal information, commit transaction fraud or conduct cyber attacks to cause incidents or loss of reputation. Therefore, investing in cyber security measures and complying with data security standards has become a pressing issue. However, to achieve that goal, banks will have to invest heavily in technology infrastructure, develop and deploy applications, as well as train employees. Finding and retraining employees to adapt to the current situation also requires a lot of the bank's financial resources and time.

Impact on investment operations

Digital transformation is having a positive impact on investment operations. Digital technology brings rich and easily accessible information from many different sources, helping investors evaluate and choose potential investment opportunities more intelligently and accurately. Interoperability and convenience are improved through online trading platforms and mobile applications, helping investors make investment decisions quickly and effectively. Automation in investment processes saves time and costs, while increasing efficiency and reducing risk. Opening up new investment opportunities in the fields of technology and blockchain is also a positive thing about digital transformation. Digital transformation not only creates new opportunities but also enhances efficiency and transparency in investment operations, helping investors achieve better results in the process of managing and developing their investment portfolios.

Digital transformation not only brings new opportunities but also brings challenges to the investment profession. Although digital technology provides rich and convenient information sources for investors, it can also create potential risks. One of the biggest challenges is information security. Dependence on online systems can create security vulnerabilities, leading to the risk of losing important information and investor trust. Additionally, automation in the investment process can cause job losses for employees and create an unstable investment environment. This can lead to investors relying too much on algorithms and without adequate human intervention, reducing flexibility and creativity in the investment process. Therefore, understanding and managing the challenges of digital transformation is very important so that investors can take advantage of the opportunities that digital technology brings in investment operations in an effective and sustainable way.

5. Some solutions for implementing digital transformation in the Vietnamese banking system

5.1. Digital transformation roadmap of Vietnam's commercial banking system

The digital transformation roadmap of the banking system is divided into three levels: digitalization of information - interface, digitalization of processes and comprehensive digitalization.

Digitizing interfaces and information is an important step in the digital transformation process of commercial banks. It brings many benefits to both banks and customers. Digitizing interfaces and information is an inevitable trend in the banking industry. Banks need to invest in technology to improve operational efficiency, improve customer experience and increase competitiveness. Bank information and interface play an important role so that customers can recognize the brand and trust the bank more. The bank's E-banking interfaces are intuitive and easy to use, giving customers a better experience to retain old customers and also attract new customer files. For banks, digitizing interfaces and information will help improve the customer experience with a more intuitive interface and easier to grasp information, thereby improving the bank's competitiveness thanks to on the customer attraction that digitalization of information and interfaces brings. In addition, banks can also reach more customers through many different channels.

Besides, the convenience that digitization of services and information brings to customers, transactions are quick and easy to use, and information about transactions or payment amounts is also clear and clear. more transparent.

Process digitization is the application of technology to automate manual processes in commercial banking. It brings many benefits to both banks and customers. Process digitization is an inevitable trend in the banking industry. Banks need to invest in technology to automate manual processes, increase operational efficiency, improve customer experience and increase competitiveness. Process digitization can be expressed in many activities such as opening a direct account when customers do not have the conditions or do not want to go to bank branches, paying bills online, transferring money online when customers do not want to go to bank branches. Customers do not need to use cash or borrow credit online.

Finally, comprehensive digitalization is the application of digital technology to every aspect of a bank's operations, from the front-end (customer interface) to the back-end (core system) and internal processes. Comprehensive digitalization is an inevitable trend of the banking industry. Banks need to have a clear strategy and roadmap to effectively deploy comprehensive digitalization to improve operational efficiency, improve customer experience, and increase competitiveness in an increasingly competitive market. compete. With the right investment and effective strategy, comprehensive digitalization will help banks enhance their operations, increase value and affirm their position in the modern financial market.

6. Solution

Digital transformation in Vietnam's banking industry is becoming a top priority, especially in the context of the information technology revolution and the 4.0 industrial revolution taking place strongly globally. Vietnam, with its rapid industrial development and information technology boom, is facing pressure to improve and modernize its banking system to meet growing demand. customer satisfaction and compete with international competitors.

Developing electronic payment systems is one of the most important areas in digital transformation. Vietnamese banks need to increase investment in electronic payment platforms, including e-wallet applications, online payments and other related services. Vietnam also needs to encourage the use of non-cash payment methods such as credit cards, debit cards and mobile payments. Along with developing and expanding the electronic payment system is ensuring information security and safety. Vietnamese banks need to ensure that their banking system is tightly protected from cyber attacks and data breach risks. This requires investing in advanced security measures and promoting compliance with data protection regulations.

The Vietnamese banking system is looking for opportunities to cooperate with domestic and foreign technology companies to take advantage of the latest potential and techniques in the field of information technology. This cooperation could include developing joint applications and services, investing in emerging technology companies, and creating cutting-edge solutions based on artificial intelligence and data analytics. Digital transformation requires a workforce with high technical qualifications and the ability to work in a digital environment. Banks also need to invest in the training and development of their staff so they can understand and apply the latest technologies in the industry.

The digital transformation process also poses new management and monitoring challenges. The State Bank and the Government need to have clear and effective policies and regulations to ensure transparency, fairness and safety in the operations of digital banking organizations. In addition, there is also a need to have support and incentive policies for new businesses and application developers so that they can create new and breakthrough solutions in the field of digital transformation of the banking industry to create new solutions. Create an environment that promotes creativity and entrepreneurship in the digital banking industry.

Conclude

In the 4.0 era - the technological revolution, the application of digital transformation in the banking sector cannot be missed thanks to the benefits it brings such as convenience, ease of use, and security. , is safe and can attract more customers. However, the current state of digital transformation at Vietnamese banks still faces many challenges such as technology risks, high investment costs, and limited human resources and resources. In addition, the law has not been innovated promptly to create opportunities for digital technology to develop, leading to many obstacles in digital transformation.

Therefore, the state needs to closely monitor and pay attention to the digital transformation situation in the current period, must have measures to support and encourage banks in Vietnam to use digital transformation, and must take measures to support and encourage banks in Vietnam to use digital transformation. train quality human resources and build enough solid funding sources. Digital transformation in Vietnam is gradually becoming an important part in every field, banks should know how to seize the opportunity to exploit all applications of digital transformation to gain an advantage when competing with competitors. other banks.

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