

Dissertation

**Exploring the Role of Digital Financial Innovation in
Enhancing the Competitive Advantage of Banks: A case
study of CITIC Bank**

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Table of Contents

1. Introduction.....	2
Background.....	2
Aim and objectives.....	2
Research questions	3
2. Literature review.....	3
3. Research methodology.....	4
Sample method.....	4
Sample type	5
Sample size	5
4. Provisional work schedule: Gantt chart.....	5
5. Research Content and Expected Outcomes.....	6
Main Areas of Digital Financial Innovation.....	6
Enhancement of CITIC Bank's Competitive Advantage through Digital Financial Innovation.....	6
Expected Outcomes.....	7
6. Limitations and solutions.....	7
Limitations.....	7
Solutions.....	8
7. Ethical Considerations.....	8
8. Conclusion.....	8
9. References and Bibliography.....	10

Research Proposal

1. Introduction

Background

With the rapid development of information technology, digital financial innovation has become an indispensable and important component of the modern financial system. As the core of the financial system, the banking industry is undergoing profound changes in its competitive landscape due to digital transformation. Digital financial innovation has become a crucial factor that cannot be ignored by the banking industry. It can be said that financial institutions, especially banks, have improved their performance and profitability through financial innovation (Mbama and Ezepue, 2018).

With continuous advancements in technologies such as the Internet, artificial intelligence, big data, and block chain, financial technology is rapidly changing the traditional financial industry landscape. Digital financial innovation is not merely a supplement to traditional financial services but an important driving force for the upgrading of banking services and the transformation of business models. Banks are enhancing their competitiveness through digital transformation. Korir et al. (2015) pointed out that digital financial innovation involves the introduction of new tools and instruments used by financial institutions. These institutions improve the effectiveness and efficiency of the services they provide to their customers.

In this context, studying how digital financial innovation enhances the competitive advantage of banks holds significant theoretical and practical relevance. This paper will use China CITIC Bank as a case study to explore the role of digital financial innovation in enhancing the competitive advantage of banks.

Aim and objectives

This study aims to explore the role of digital financial innovation in enhancing the competitive advantage of banks through an analysis of CITIC Bank's digital financial innovation initiatives, and provide references and insights for other banks undergoing digital innovation.

- Understanding the specifics of digital financial innovation and its business

- models in the banking industry
- Exploring the impact of digital financial innovation on the competitive advantage of the banking industry
- Analyzing China CITIC Bank's strategies in digital financial innovation, including technology investment and digital platforms
- Analyzing the role of China CITIC Bank's digital financial innovations in strengthening its competitive advantage

Research questions

Research on digital finance has received widespread attention. Many scholars have conducted in-depth and comprehensive research on the prevention and accessibility of digital financial innovation to the banking industry. However, there is insufficient research on the connection between digital financial innovation and bank advantage competition. The paper raises the following research questions for this situation:

- What are the specific applications of digital financial innovation in the banking industry?
- What impact does digital financial innovation have on the competitive advantage of the banking industry?
- What strategies does CITIC Bank have in digital financial innovation?
- What positive impact does CITIC Bank's innovation in digital finance have on its competitive advantage?
- What lessons does CITIC Bank's application of digital finance have for other banks?

2. Literature review

Digital financial innovation refers to the use of emerging technologies such as internet technology, mobile communication technology, big data analysis, cloud computing, and block chain to innovate and optimize traditional financial services, thereby improving the efficiency of financial services and the user experience. It encompasses various aspects including mobile payments, internet banking, robo-advisors, and block chain finance (Hussain and Papastathopoulos, 2022). According to Gomber et al. (2017), the term "digital financial innovation" includes various novel financial software programs, businesses, products, and services that enable customers to interact and communicate with financial institutions more quickly and efficiently.

Existing literature has extensively studied digital financial innovation and its impact on the banking industry. Digital financial innovation mainly includes aspects such as mobile payments, big data analysis, block chain technology, and

artificial intelligence (Hussain and Papastathopoulos, 2022). These innovations not only improve the operational efficiency of banks and reduce costs but also enhance customer experience and satisfaction. Additionally, research indicates that digital financial innovation can help banks gain greater advantages in market competition. However, despite the growing recognition that digital financial innovation can help enterprises achieve transformative innovation, empirical research in this field, especially case studies on the practices and effects of digital financial innovation in specific banks, remains relatively scarce (Khin and Ho, 2018). In particular, systematic research on China CITIC Bank is still insufficient. Studies have shown that digital financial innovation can significantly enhance the competitiveness of banks by improving operational efficiency, reducing costs, and optimizing customer experience. In recent years, the banking industry has greatly increased its investment in new technologies, and we now use various new tools for payments, transfers, and investments that did not exist a few years ago. Technologies such as artificial intelligence, social networks, machine learning, mobile applications, distributed ledger technology, cloud computing, and big data analytics have given rise to new services and business models for both established financial institutions and new market entrants (European Union, 2022). Digital financial innovation has a significant positive impact on the financial performance of banks.

As one of China's major commercial banks, China CITIC Bank has undertaken numerous practices in digital financial innovation. These include launching robo-advisory services, developing digital payment platforms, and applying block chain technology. These innovative practices have not only improved the service efficiency and customer satisfaction at China CITIC Bank but also helped the bank gain more advantages in the fiercely competitive market.

3. Research methodology

Sample method

This study will employ a quantitative research method with an exploratory and descriptive design. Data will be collected using surveys, and existing academic literature and industry reports will be integrated to analyze the broad practices and effects of digital financial innovation in the global banking industry. This will provide background and theoretical support for the case study of China CITIC Bank.

In terms of data analysis, descriptive analysis will be employed to calculate the mean, standard deviation, significance level, skewness, and kurtosis of all measurements. This will illustrate the significance of variables for the sampled respondents and allow for an in-depth exploration of the key outcomes and challenges of digital financial innovation at China CITIC Bank. Additionally,

quantitative analysis methods will use statistical techniques to analyze the survey data, exploring the relationship between digital financial innovation and China CITIC Bank's financial performance and market competitiveness.

The data collection methods used in this study primarily includes literature review, case analysis, and surveys. The researcher will review relevant academic papers, research reports, and industry analyses to understand the theoretical foundation and current state of research on digital financial innovation. Concurrently, an analysis will be conducted on China CITIC Bank's official reports, news articles, and publicly available data to grasp the specific practices and effects of its digital financial innovations. Using qualitative analysis methods, the collected data will be summarized and integrated to reveal the specific initiatives and outcomes of China CITIC Bank's digital financial innovation. Based on the data analysis results, conclusions will be drawn regarding the role of digital financial innovation in enhancing China CITIC Bank's competitive advantage, and corresponding strategic recommendations will be proposed.

Sample type

In the course of the research, surveys will be used to collect data to validate the conceptual research model and investigate the research hypotheses. In-depth interview surveys will be distributed to China CITIC Bank employees, customers, and other potential customers to gather quantitative data and opinions on the impact of digital financial innovation on competitive advantage. Wherever possible, interviews with relevant personnel at China CITIC Bank will be conducted to collect firsthand information about their digital financial innovation initiatives. The surveys will also be used to collect detailed information and results related to China CITIC Bank's digital financial innovation efforts.

Sample size

The target population (i.e., sample) of this study includes executives, members of the digital transformation team, and key stakeholders of China CITIC Bank to understand their strategies, challenges, and outcomes in digital financial innovation. The researcher expects a total sample size of 60 responses, combining online and paper surveys. After eliminating any incomplete or improperly filled questionnaires, 50 valid and usable samples will be available for further analysis.

4. Provisional work schedule: Gantt chart

1. Week1: Introduction
2. Week2 to week5 (10th,Jun-14th,Jul) : Literature review and summary, determining research framework and methodology.
2. Week6 to week10 (15th, Jul-18th, Aug): Data collection, including literature

materials, official reports, news articles, etc.; conducting interviews and surveys to obtain first-hand information.

3. Week11 to week14 (19th, Aug-15th, Sep): Data organization and analysis.

4. Week15 to week18 (16th, Sep- 13rd, Oct): Writing the research paper.

Tasks	Timetable				
Introduction	Week1				
Literature Review		Week2 to week5			
Data collection			Week6 to week10		
Data analysis				Week11 to week14	
Completing paper					Week15 to week18

5. Research Content and Expected Outcomes

Main Areas of Digital Financial Innovation

This paper will focus on analyzing digital financial innovation in the following areas:

- Mobile Payments: Analyzing CITIC Bank's innovative measures in mobile payments, such as mobile banking and QR code payments.
- Robo-Advisory Services: Exploring the development status of CITIC Bank's robo-advisory services and their impact on customer service improvement.
- Block chain Applications: Studying CITIC Bank's applications of block chain technology, such as in supply chain finance and cross-border payments.
- Big Data Analytics: Analyzing how CITIC Bank leverages big data to enhance risk management capabilities and customer service levels.

Enhancement of CITIC Bank's Competitive Advantage through Digital Financial Innovation

Through an analysis of CITIC Bank's practices in digital financial innovation, this paper will explore specific enhancements to the bank's competitive advantage, including:

- Improved Operational Efficiency: How digital financial technologies help CITIC Bank optimize business processes and reduce operating costs.
- Enhanced Customer Experience: How digital financial innovation improves

- customer service experience and satisfaction.
- Strengthened Market Competitiveness: How CITIC Bank gains a competitive edge in the market through digital financial innovation.
- Risk Management and Control: The role of digital technologies in enhancing CITIC Bank's risk management capabilities.

Expected Outcomes

Through this study, we expect to achieve the following outcomes:

- Comprehensive understanding of CITIC Bank's specific practices and effectiveness in digital financial innovation.
- In-depth analysis of how digital financial innovation enhances the bank's competitive advantage.
- Summarization of successful experiences and practices of CITIC Bank in digital financial innovation.
- Proposals for digital transformation strategies tailored to CITIC Bank and recommendations for other banks to enhance their competitive advantage through digital financial innovation.

6. Limitations and solutions

Limitations

When drafting a paper on the financial industry, the most significant challenges can revolve around obtaining reliable and accurate data and information. Firstly, acquiring detailed data regarding the specific implementation and effects of digital financial innovation at CITIC Bank may involve sensitive commercial information, potentially encountering barriers to accessing foundational information.

Secondly, ensuring that the data and information gathered from CITIC Bank or other sources are complete and accurate is crucial for supporting the credibility and reliability of the research.

Thirdly, during the process of conducting interviews and surveys, gaining the support and trust of relevant personnel at CITIC Bank, such as members of the digital transformation team or other stakeholders, is essential. This ensures that interviews and survey questionnaires attract a sufficient number of participants and are representative, providing a sample of data that is sufficiently representative.

Lastly, the scope of digital financial innovation in the financial industry covers various fields and domains, with some initiatives already implemented and others in the research and experimental stages. During the research process, managing information overload may also present challenges.

Solutions

In the research process, the author should utilize multiple channels to obtain data, such as industry reports, analyses from independent research institutions, and insights from industry experts, to complement or corroborate the data and information obtained internally from CITIC Bank. During interviews and questionnaire surveys, thorough and detailed preliminary research should be conducted to ensure the questions are designed reasonably and efficiently, maximizing the acquisition of accurate and comprehensive information within limited time constraints. Additionally, a scientific approach should be employed to effectively integrate and analyze the data collected from interviews and questionnaire surveys, ensuring the data is applied efficiently and accurately.

Finally, this paper will focus on CITIC Bank's strategies in digital financial transformation, concentrating on a few practical applications such as mobile payments, big data analytics, and intelligent investment. This targeted approach aims to enhance relevance and accuracy while avoiding the introduction of concepts that lack meaningful application.

7. Ethical Considerations

In exploring how digital financial innovation enhances bank competitive advantage, particularly using CITIC Bank as a case study, several ethical considerations must be carefully addressed to ensure the integrity, fairness, and respect for all involved parties.

Firstly, this study will employ data sampling through interviews and questionnaire surveys. Prior to conducting interviews and surveys, all participants, including CITIC Bank executives, members of the digital transformation team, and other stakeholders, will fully understand the purpose, nature, and potential outcomes of the research. Informed consent will be obtained from each participant to ensure they understand their voluntary participation, the use of data, and their right to withdraw participation at any time without consequence.

Secondly, all data collected in this study, whether through interviews, surveys, or secondary sources, will be strictly confidential. Participants' identities and any sensitive information will be anonymized and protected to prevent unauthorized access or disclosure. All data will be securely stored and accessible only to authorized research personnel. Measures will be implemented to ensure data protection and compliance with relevant data protection regulations.

All participants in this study will be treated fairly and respectfully, regardless of their role or position within CITIC Bank. Their perspectives and contributions will be valued and accurately reflected in the research results. The research

methodology, data collection procedures, and analysis techniques will be clearly described and disclosed. This transparency ensures the reproducibility and credibility of the research results. Any potential conflicts of interest, such as financial interests or personal relationships, will be transparently disclosed to maintain research integrity.

8. Conclusion

This study will explore the impact and effectiveness of digital financial innovation on enhancing CITIC Bank's competitive advantage through an in-depth analysis of CITIC Bank's digital financial innovation practices. The aim is to provide valuable insights and references for the digital transformation of the banking industry.

9. References and Bibliography

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