Libyan International Medical University
Faculty of Business Administration

The Future of Finance: The Impact of Information Technology on Financial Institution Performance

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Table of Contents

Introduction

The Impact of Information Technology on Financial Institution Performance

Definitions of Terms

Financial Institution

Financial institutions are vital to the economy because they facilitate the flow of capital between savers and borrowers. These institutions function as go-betweens for individuals and companies with excess funds and those in need of funding to invest in various initiatives. Banking institutions and non-banking institutions are the two basic groups of financial entities.

Commercial banks, central banks, and other financial institutions are examples of banking institutions.

Information Technology to Financial Institutions

In today's digital age, information technology (IT) has become an essential component of financial institution operations. The extensive use of information technology systems and applications has changed the way financial institution’s function, making them more efficient, cost-effective, and client driven. IT has enabled financial institutions to provide a variety of services, including online banking, mobile payments, and automated trading, while also increasing risk management and regulatory compliance.

Definitions of Terms

Central banks

A central bank is a financial organization in charge of setting monetary policy, controlling the banking system, and managing the nation's money supply. It is frequently created and mandated by the government to serve as the country's monetary authority and play a significant role in upholding economic stability and fostering the economy's general health. In addition to producing money, managing monetary operations, overseeing and regulating financial institutions, and acting as a lender of last resort during financial crises, central banks also perform several other crucial tasks. Additionally, they are essential for determining interest rates, limiting inflation, and preserving the stability of the financial system. Although central banks' precise duties and authority.

Blockchain

Blockchain insures secure and transparent transaction

It is made up of a chain of blocks, each of which is made up of several transactions and a special cryptographic signature. An irreversible and impermeable record of transactions is made possible by the fact that once a block is added to the chain, it cannot be removed or changed. Blockchains can be used in a variety of applications, including cryptocurrency, supply chain management, and voting systems. They can also be public or private.

Definitions of Terms

Insurance company

A financial institution known as an insurance company offers insurance coverage to people, businesses, and other entities in return for recurrent premium payments. Life insurance, health insurance, property insurance, liability insurance, and other insurance products are all provided by insurance firms. Their main duty is to take on the policyholders' financial risk and offer compensation or reimbursement in the case of defined losses, damages, or occurrences that are covered, as stated in the insurance policy. Insurance firms combine policyholder premium payments to build a fund that can be used to settle claims. Based on the likelihood of prospective losses, they calculate the necessary premium levels using actuarial calculations and risk assessment. Insurance firms also invest the premiums they receive to produce investment revenue, which aids in sustaining their operations and meeting claim responsibilities.

Why is it Considered a Contemporary Issue?

Because information technology advancement and financial innovation and consumer expectation , cyber security treats and regulatory considerations .

The Aim of The Study

the study aims explored how information technology affect financial performance we will investigate the areas like operation efficiency and customer experience risk management , innovation .

Theoretical Framework

Analysis and Methodology

The qualitative method was used in this investigation. Secondary data was employed in this investigation. The information was obtained and gathered from chosen journal publications. The retrieved data was chosen using a two-stage search procedure (a) initial search and paper selection, and (b) paper selection and acceptance. Google Scholar and ResearchGate; advanced search was established for both search engine databases, with "The Impact of Information Technology on the Performance of Financial Institutions", "central banks", and as keyword searches in paper abstracts, last 5 years (2018 - 2023) as publication dates, and "English" as the selected language of selected articles.

SUMMARY OF PREVIOUS STUDIES

they explored various topic like user adaption , online banking , the finding highlights the important of trust and user proception and ongoing research in financial technology.

Previous Studies (Literature Review)

published study. The paper's focus is on how Information and Communication Technology (ICT) has affected the banking industry, which is regarded as the engine of a healthy economy. The authors contend that because ICT enables service providers to deliver their services more effectively and efficiently, it has become crucial for the banking business. The purpose of this study is to analyze the effects of ICT on bank performance and customer service delivery through a critical assessment of the literature from earlier studies. To determine if banks have successfully delivered good customer service through online channels, while minimizing operational costs and maximizing income, the writers additionally study peer-reviewed, academic, and organizational literature.

(Alhaji Abubakar Aliyu and Rosmaini Bin HJ Tasmin ,2012, Pg.85-86)

Previous Studies (Literature Review)

The relationship between technological innovation and firm success in Kenya was looked at in The research revealed that technological innovation enhances business performance. Entrepreneurs should create novel business plans to improve company performance, while government policies should prioritize enhancing ICT infrastructure and fostering technical externalities in the sector. The findings offer insights into corporate management techniques in both developed and developing nations and add to existing theories.

(study by Shaldon Leparan Suntu, Daoping Wang, and Samwel Macharia Chege,2019,Pg. 316–345)

Previous Studies (Literature Review)

The abstract presented outlines With a focus on the Indian economy, the article seeks to analyze how the growth and stability of the financial sector affect economic expansion. To encourage profitable investment and greater real growth, the study examines the link between financial development and economic growth and places a strong emphasis on the significance of financial intermediation and deepening. The report also discusses issues facing the financial industry, such as underdeveloped corporate bond markets and non-performing assets (NPAs) and makes recommendations for legislative changes.

(study by Ojesh Vyas, Akshay Kapoor, Abhishek Kadu, and Shivam Jha,2020,Pg.10-12)

Previous Studies (Literature Review)

concentrated on central bank digital currencies (CBDC) and its potential effects on the financial system. The paper begins by outlining the benefits of CBDC and giving some historical context for various types of central bank money. The risk of centralizing credit distribution and disintermediating banks, as well as the possibility of encouraging systemic runs on banks during crises, are the next two main objections raised against CBDC. The two-tier compensation structure for CBDC is the approach the paper suggests, and it can assist limit the amount both in regular and emergency situations. It does, however, concede that limiting the supply might not be enough to manage its effects on the financial system The report also examines and contrasts the implications of CBDC with those of other digital assets, including stable currencies, narrow bank digital money, and crypto assets. Despite acknowledging that the adoption of CBDC could alter the financial system, the conclusion shows that well-controlled CBDC is possible.

(Ulrich Bindseil's study from 2020,Pg. 303-335)

Previous Studies (Literature Review)

A study on the use of information technology in finance was undertaken and released in 2021. The purpose of the study is to investigate the idea of information technology and how it is categorized in finance by corporate entities. The primary tools for managing home finances were discussed, along with a summary of software programs that aid in automating financial research procedures. Additionally, they examined how e-government was implemented in Ukraine and assessed its success using the E-Government Development Index. The E-Government Development Index in Ukraine was also thoroughly examined by the authors utilizing a set of metrics. They also looked at the economy and finance of digital technologies independently, evaluating the signs of the growth of the digital economies in Ukraine and other Eastern European nations. The paper also identifies the key directions for applying artificial intelligence in finance and describes the benefits and drawbacks of the contemporary bitcoin market.

(Iryna Prikhno, Valentyna Kuksa, and Ivaylo Mihaylov, 2021, Pg.5-7)

REFLECTION

The papers highlight financial innovation impact banks , digital finance , consumer acceptance of mobile technology

They highlight the transformative nature of information technology, its benefits in improving efficiency and customer service, and the challenges associated with its adoption. While there are some variations in perspectives, overall, the papers emphasize the importance of innovation in transforming the financial industry and enhancing performance.

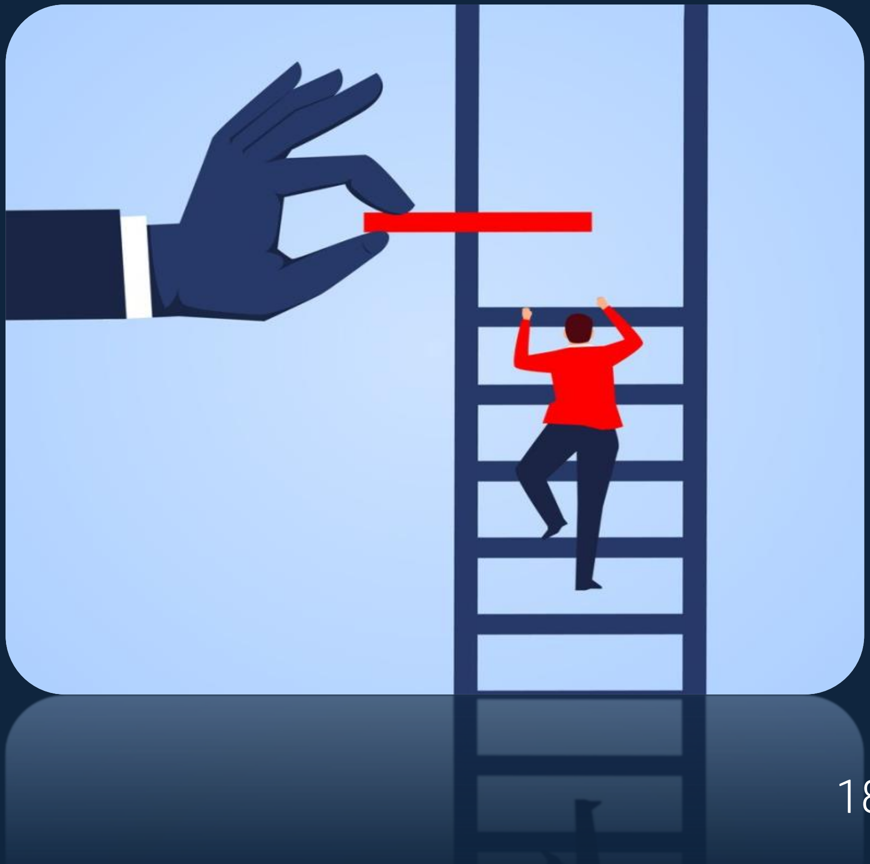
LIMITATIONS

Weak IT infrastructure: Insufficient or outdated technology systems in financial institutions.

Limited digital channels: Lack of diverse and user-friendly digital platforms for customers.

Resistance to technology adoption: Reluctance to embrace and collaborate with tech companies.

Inadequate customer experience: Suboptimal service and interaction with customers.



IMPLICATIONS

1.Improve IT infrastructure: Make investments in advanced technologies and ensure reliable and secure IT systems.

2.Expand digital channels: provide user friendly the number and usability of digital platforms, such as e-wallets and mobile banking, to enhance customer accessibility.

3.Promote tech adoption: Encourage financial institutions to embrace tech partnerships and develop innovative products and services.

4.Enhance customer experience: Utilize analytics and customer data to provide personalized and seamless services, improving overall customer satisfaction.

RECOMMENDATIONS

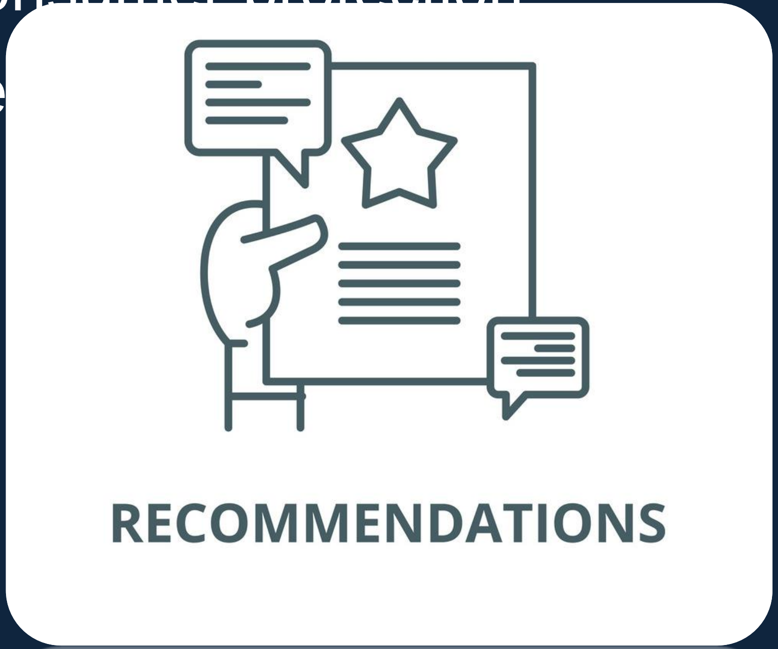
1.Promote innovation and tech adoption for better efficiency and customer experience.

2.Use digital finance and ICT to enhance financial inclusion, especially in underserved areas.

3.Support fintech adoption with user-friendly interfaces and education.

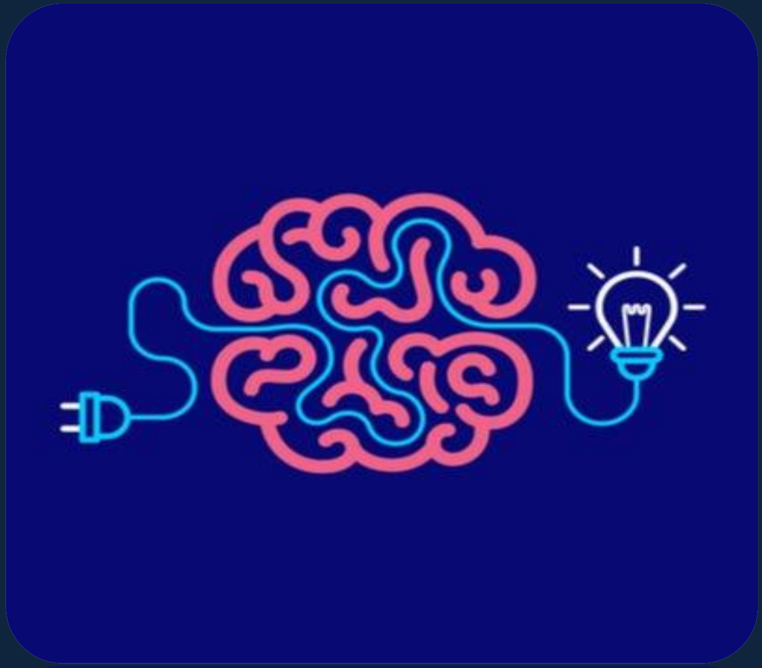
4.Simplify regulatory frameworks balance innovation and consumer protection

5.Encourage collaboration among financial institutions, finte
and regulators.



CONCLUSION

In conclusion, it is important to acknowledge that financial innovation and technology can have both positive and negative impacts in Libya. While these advancements can drive economic growth and enhance access to financial services, there are also risks and challenges that need to be addressed. It is crucial to carefully manage and regulate these technologies to mitigate potential negative consequences such as cybersecurity threats, data privacy concerns, and exclusion of vulnerable populations. Striking a balance between innovation and risk mitigation is essential for harnessing the benefits of financial innovation while minimizing the negative impacts in Libya.



REFRENCES

1. Aliyu, A. A., Rosmain, T., & Takala, J. (2014). Online banking and customer service delivery in Malaysia: data screening and preliminary findings. Procedia-Social and Behavioral Sciences, 129, 562-570.

2. Bindseil, U. (2019) ‘Central Bank Digital Currency: Financial system implications and control’, International Journal of Political Economy, 48(4), pp. 303–335. doi:10.1080/08911916.2019.1693160.

3. Bradford, T. (2020). Neo banks: Banks by any other name. Federal Reserve Bank of Kansas City, Payments System Research Briefing, August 12, 1-6.

4. Chege, S.M., Wang, D. and Suntu, S.L. (2019) ‘Impact of information technology innovation on firm performance in Kenya’, Information Technology for Development, 26(2), pp. 316–345. doi:10.1080/02681102.2019.1573717.

5. Chen, X. Z., & Liu, Y. (2019). The Impact of Information Technology Investment on Firm Performance. DEStech Transactions on Computer Science and Engineering, 7-21.

REFRENCES

6. Chhaidar A. Abdelhedi M. and Abdelkafi I. (2022) “The effect of financial technology investment level on European banks’ profitability” Journal of the Knowledge Economy [Preprint]. Available at: https://doi.org/10.1007/s13132-022-00992-1.

7. Li Z. Chen B. and Lu S. (2022) “The impact of information and communication technology on financial inclusion-based on a global perspective” AIMS Mathematics 7(12) pp. 20930–20961. Available at: https://doi.org/10.3934/math.20221147.

8. Mawutor J.K.M. (2015) Impact of e-banking on the profitability of banks in Ghana SSRN. Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2572982 .

9. Muhammad Talha et al. (2022) “Impact of information technology on accounting and Finance in the Digital Health Sector” Journal of Commercial Biotechnology 27(2). Available at: https://doi.org/10.5912/jcb1299.

10. Ozili P.K. (2018) “Impact of digital finance on Financial Inclusion and stability” Borsa Istanbul Review 18(4) pp. 329–340. Available at: https://doi.org/10.1016/j.bir.2017.12.003.

REFRENCES

11. Popelo O. Dubyna M. and Kholiavko N. (2021) “World experience in the introduction of Modern Innovation and Information Technologies in the functioning of financial institutions” Baltic Journal of Economic Studies 7(2) pp. 188–199. Available at: https://doi.org/10.30525/2256-0742/2021-7-2-188-199.

12. Prikhno I. Kuksa V. and Mihaylov I. (2021) “The use of Information Technology in financial management” SHS Web of Conferences 100 p. 01007. Available at: https://doi.org/10.1051/shsconf/202110001007.

13. Schenk, C.R. (2020) ‘The Global Financial Crisis and banking regulation: Another turn of the wheel?’, Journal of Modern European History, 19(1), pp. 8–13. doi:10.1177/1611894420974252.

14. Thatcher, M.E. and Oliver, J.R. (2015) ‘The impact of Technology Investments on a firm’s production efficiency, product quality, and Productivity’, Journal of Management Information Systems, 18(2), pp. 17–45. doi:10.1080/07421222.2001.11045685.

15. Vyas, O. et al. (2020) ‘Structure of financial systems and their effects on economic development’, International Journal of Social Science and Economic Research, 5(11), pp. 3414–3426. doi:10.46609/ijsser.2020.v05i11.009

Thank you