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A STUDY ON THE EFFECTIVENESS OF E-BANKING SERVICES

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ABSTRACT

E-banking services have transformed the financial sector by enhancing accessibility, efficiency, and convenience for customers. This study examines the effectiveness of e-banking services in terms of customer satisfaction, security, service quality, and financial inclusion. By analyzing user experiences and industry trends, the research highlights key benefits such as 24/7 accessibility, reduced transaction time, and cost-effectiveness, while also addressing concerns like cybersecurity threats and technical challenges.

Keywords: E-banking, Digital banking services, Customer satisfaction, Cybersecurity.

INTRODUCTION

The rapid advancement of digital technology has revolutionized banking, making e- banking services an essential component of modern financial transactions. E-banking encompasses various digital services, including online banking, mobile banking, and automated payment systems, enabling customers to conduct financial transactions remotely. The increasing reliance on e-banking raises questions about its efficiency, security, and overall impact on customer experience. This study explores the effectiveness of e-banking services by evaluating their benefits, challenges, and future implications for the banking sector.

STATEMENT OF THE PROBLEM

Despite the growing adoption of e-banking, concerns persist regarding its reliability, security, and accessibility. Many customers face technical issues, cybersecurity risks, and difficulties in adapting to digital platforms, which can hinder the overall efficiency of e- banking services. Additionally, some users, particularly those in rural or underdeveloped areas, may struggle with limited internet access and digital literacy, preventing them from fully benefiting from these services. This study aims to assess the effectiveness of e-banking services, identifying key challenges and potential improvements to enhance user experience and security.

OBJECTIVES OF THE STUDY

1. To evaluate the impact of e-banking services on customer satisfaction and banking efficiency.
2. To identify key challenges such as cybersecurity risks and accessibility issues in e- banking.
3. To recommend strategies for improving the effectiveness and security of e-banking services.

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DATA SOURCES AND METHODOLOGY

Nature of the Data: This study will be based on both primary data and secondary data.

Data Sources: Primary data from customer surveys and secondary data from bank reports and research studies.

Tools of Analysis: Some of the statistical tools of analysis like simple percentage and chi-Square were used.

Sample Size: 100 respondents, including bank customers and industry experts.

REVIEW OF THE LITERATURE

Nibras Khadim and Muhummad Khairul Islam, (2022)[1], International Journal of Professional Business Review, this study reviews literature to understand customer satisfaction in mobile banking, focusing on service quality, security, and ease of use. It highlights a scarcity of research in the Iraqi context and emphasizes the need for more investigations to raise awareness about mobile banking advantages.

Sintayehu Ermias Lolemo and Dr. Hemal B. Pandya, (2024)[2], International Journal of Management, Economics and Commerce, this systematic literature review examines how digital banking influences customer satisfaction and loyalty in commercial banks. Analyzing 146 papers published between 2006 and 2022, the study finds an increasing focus on customer satisfaction and loyalty, with descriptive research designs being predominant. Insights are provided for banks to enhance digital services to improve customer satisfaction and loyalty.

M. Shah, A. Braganza, and V. Morabito, (2017)[3], European Journal of Information Systems, this paper presents a survey identifying critical success factors for e-banking from an organizational perspective. It emphasizes the importance of strategic alignment, customer focus, and technological infrastructure in successfully implementing e-banking services.

Mugdha Y. Keskar and Neeraj Pandey, (2018)[4], Journal of Internet Commerce, this comprehensive review examines developments in internet banking over 15 years, focusing on adoption, customer satisfaction, e-service quality, and trust. It identifies customer satisfaction as the most common research theme and provides insights into the evolution of internet banking.

S. Chauhan, A. Akhtar, and A. Gupta, (2022)[5], International Journal of Quality and Service Sciences, this study demonstrates digital banking's influence on customer service experience, developing a framework identifying significant variables affecting banks' financial performance. It highlights the role of functional, mechanic, and humanic clues in customer experience and proposes integrating gamification to enhance digital banking services.

THEORETICAL OVERVIEW

Technology Acceptance Model (TAM): Developed by Davis (1989), the Technology Acceptance Model (TAM) explains how users accept and use new technology. It suggests that two main factors influence adoption: Perceived Usefulness (PU) and Perceived Ease of Use (PEOU).

Unified Theory of Acceptance and Use of Technology (UTAUT): Proposed by Venkatesh et al. (2003), UTAUT expands on TAM by incorporating social influence, effort expectancy, and facilitating conditions. This theory is particularly relevant in studying e- banking effectiveness, as it highlights how external factors like peer influence and bank support

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systems affect customer adoption of digital banking.

Diffusion of Innovation (DOI) Theory: Introduced by Rogers (1962), the DOI Theory explains how new technologies spread among users. In the context of e-banking, customers fall into different adoption categories: Innovators, Early Adopters, Early Majority, Late Majority, and Laggards.

Financial Inclusion Theory: This theory emphasizes the role of digital banking in enhancing access to financial services for underserved populations. It suggests that the effectiveness of e-banking should be measured not only by technological efficiency but also by its ability to provide financial access to rural and low-income customers.

ANALYSIS AND INTERPRETATION OF PERCENTAGE ANALYSIS TABLE 1.1 THE PRIMARY ADVANTAGE OF E- BANKING SERVICE

THE PRIMARY ADVANTAGE OF E- BANKING SERVICE		
Particulars	**No. of Respondents**	**Percent**
24/7 accessibility	51	51
High transaction costs	29	29
Limited customer support	20	20
Total	100	100

Source data: primary

The majority (51%) of respondents identified 24/7 accessibility as the primary advantage of e-banking services, highlighting convenience as a key benefit. A smaller portion (29%) viewed high transaction costs as an advantage, possibly due to perceived value in security or premium services. Meanwhile, 20% cited limited customer support, suggesting a segment values even basic assistance availability.

CHART 1.1

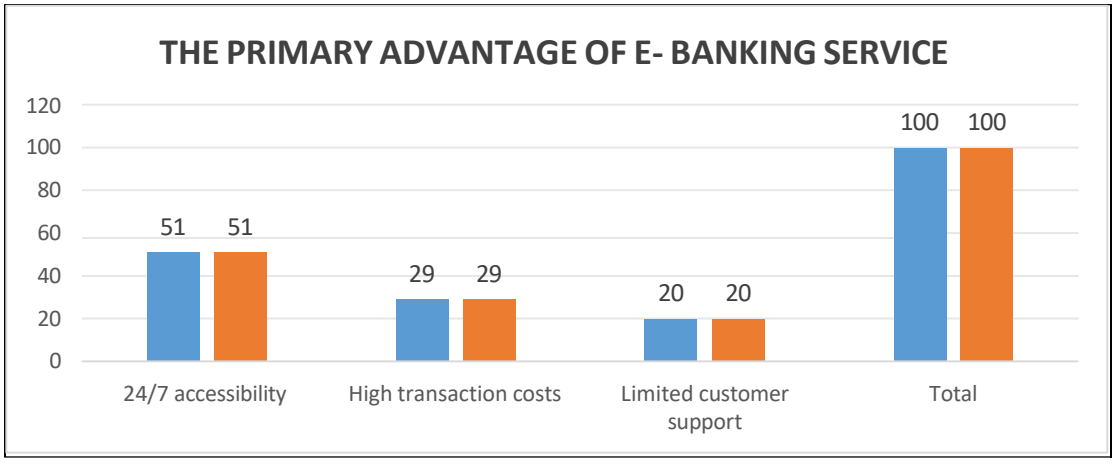

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TABLE 1.2 A MAJOR CHALLENGES IN E- BANKING ADOPATION

A MAJOR CHALLENGES IN E- BANKING ADOPATION		
Particulars	**No. of Respondents**	**Percent**
Easy account management	45	45
Cybersecurity risks	32	32
Faster transaction processing	23	23
Total	100	100

Source data: primary

The biggest challenge in e-banking adoption, according to 45% of respondents, is easy account management, indicating difficulties in user experience or navigation. Cybersecurity risks were a concern for 32%, reflecting fears about fraud and data breaches. Meanwhile, 23% identified faster transaction processing as a challenge, suggesting potential issues with speed or reliability.

CHART 1.2

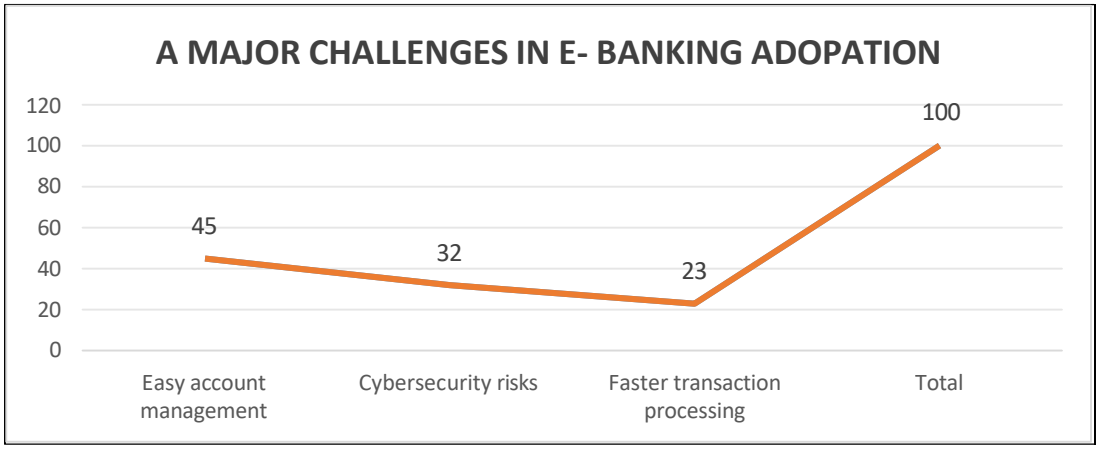

TABLE 1.3 THE ADOPTION OF TECHNOLOGY BASED ON PERCEIVED USEFULNESS AND EASE OF USE

THE ADOPTION OF TECHNOLOGY BASED ON PERCEIVED USEFULNESS AND EASE OF USE		
Particulars	**No. of Respondents**	**Percent**
Diffusion of innovation theory	36	36
SERVQUAL Model	33	33
Financial inclusion theory	31	31
Total	100	100

Source data: primary

The adoption of technology based on perceived usefulness and ease of use is most associated with the Diffusion of Innovation Theory (36%), indicating its relevance in understanding technological acceptance. The SERVQUAL Model follows closely at 33%, emphasizing the role of service quality in adoption. Financial Inclusion Theory (31%) also plays a key role, highlighting accessibility and inclusivity in technology acceptance.

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CHART 1.3

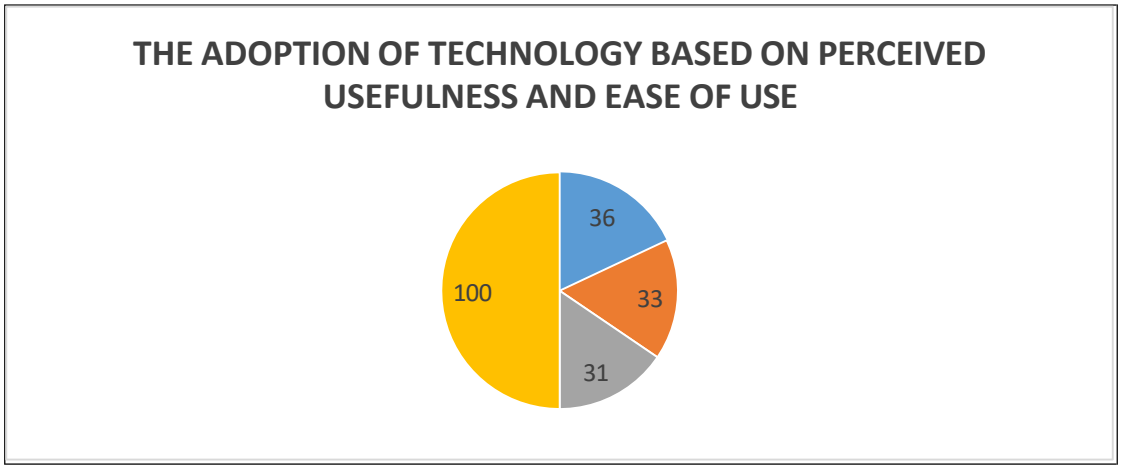

TABLE 1.4 AN EFFECTIVE WAY TO ENHANCE CUSTOMER TRUST IN E-BANKING

AN EFFECTIVE WAY TO ENHANCE CUSTOMER TRUST IN E-BANKING		
Particulars	**No. of Respondents**	**Percent**
Reducing internet banking services	35	35.0
Making digital transactions slower	39	39.0
Implementing advanced security measures	26	26.0
Total	100	100.0

Source data: primary

Surprisingly, 39% of respondents believe making digital transactions slower enhances customer trust in e-banking, possibly associating speed with security risks. Another 35% think reducing internet banking services builds trust, suggesting concerns over complexity or fraud exposure. Only 26% favour implementing advanced security measures, indicating a potential gap in awareness of their importance.

CHART 1.4

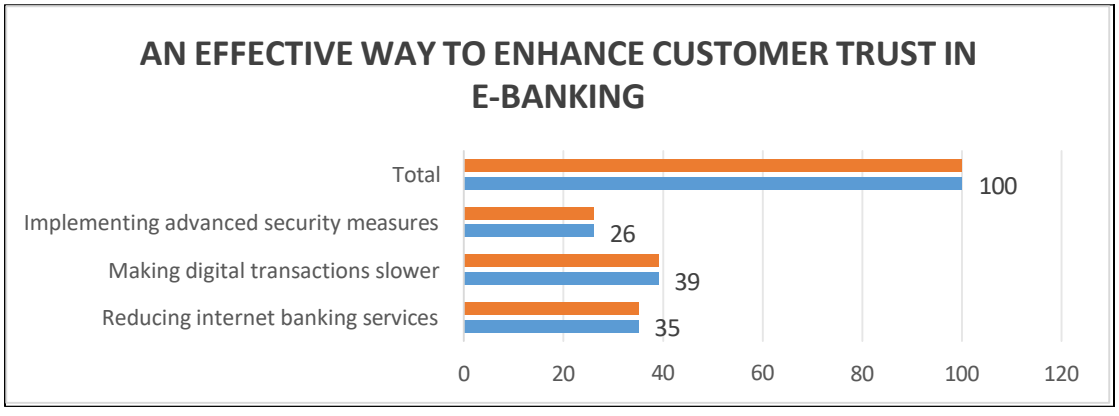

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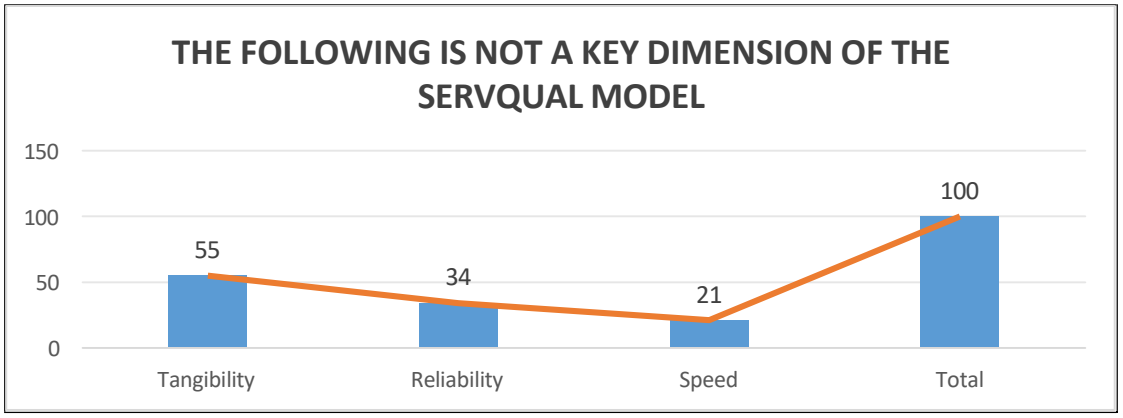
TABLE 1.5 THE FOLLOWING IS NOT A KEY DIMENSION OF THE SERVQUAL MODEL

THE FOLLOWING IS NOT A KEY DIMENSION OF THE SERVQUAL MODEL		
Particulars	**No. of Respondents**	**Percent**
Tangibility	55	55.0
Reliability	34	34.0
Speed	21	21.0
Total	100	100.0

Source data: primary

A majority (55%) of respondents identified "Tangibility" as not being a key dimension of the SERVQUAL model, which is incorrect as tangibility is one of its five dimensions. "Reliability" was chosen by 34%, though it is also a core SERVQUAL dimension, suggesting some misunderstanding. Only 21% correctly identified "Speed" as not a key dimension, as SERVQUAL primarily focuses on tangibility, reliability, responsiveness, assurance, and empathy.

CHART 1.5



FINDING

- Most respondents (51%) see 24/7 accessibility as the main advantage of e-banking, emphasizing its convenience.
- Easy account management (45%) is the top challenge in e-banking adoption, followed by cybersecurity risks (32%) and transaction speed (23%).
- Diffusion of Innovation Theory (36%) is the most cited framework for technology adoption, followed by SERVQUAL Model (33%) and Financial Inclusion Theory (31%).
- Most respondents (39%) see slowing digital transactions as a way to enhance trust, while 35% prefer reducing services, and only 26% prioritize security measures.

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- Most respondents (55%) mistakenly considered "Tangibility" as not part of SERVQUAL, while only 21% correctly identified "Speed" as the incorrect dimension.

SUGGESTIONS

- Enhance Cybersecurity Measures – Banks should implement advanced security protocols, such as multi-factor authentication, biometric verification, and AI-driven fraud detection, to protect customers from cyber threats.
- Improve User Experience and Accessibility – E-banking platforms should have a user-friendly interface, support multiple languages, and be accessible to people with disabilities to ensure a seamless banking experience for all users.
- Increase Digital Literacy and Awareness – Banks should conduct training programs, workshops, and awareness campaigns to educate customers, especially those in rural areas, on using e-banking services safely and efficiently.
- Expand Internet and Mobile Banking Infrastructure – To promote financial inclusion, banks and governments should invest in expanding internet connectivity and mobile banking networks, especially in remote and underserved regions.

CONCLUSION

E-banking services have significantly improved banking efficiency, convenience, and accessibility, benefiting both customers and financial institutions. However, challenges such as cybersecurity threats, technical disruptions, and digital literacy gaps must be addressed to maximize their effectiveness. Continuous advancements in technology, coupled with customer education and enhanced security measures, will be crucial in ensuring the long-term success of e-banking services. By addressing these challenges, banks can enhance customer trust and optimize the full potential of digital banking solutions.

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