
INVESTIGATING THE FACTORS AFFECTING THE ADOPTION OF E-BANKING

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Article Received: 12 February 2026, Article Revised: 03 March 2026, Published on: 23 March 2026

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DOI: <https://doi-doi.org/101555/ijarp.4824>

1.1 INTRODUCTION

The integration of digital technologies into the banking sector has significantly reshaped the delivery and accessibility of financial services worldwide. As customer expectations continue to evolve, there is increasing demand for faster, more convenient, and efficient service delivery. In response, banks globally are adopting electronic banking (e-banking) platforms, which refer to the provision of banking products and services through electronic channels such as the internet, mobile devices, and ATMs (Auta, 2010; Laukkanen, 2007).

E-banking has the potential to transform traditional banking by enhancing customer satisfaction, reducing transaction costs, expanding financial inclusion, and increasing operational efficiency. It is especially relevant in developing countries, where physical bank branches are often concentrated in urban areas, leaving rural and marginalized populations underserved (Demirgüç-Kunt et al., 2018).

This study, therefore, seeks to investigate the factors influencing the adoption of e-banking services at the selected bank. It aims to provide actionable insights that can help financial institutions enhance their digital service offerings, strengthen customer engagement, and contribute to broader financial inclusion goals within the country.

1.2 Background

The evolution of information and communication technologies (ICTs) has significantly transformed the global banking sector. One of the most notable innovations is electronic banking (e-banking), which allows customers to perform financial transactions through digital platforms without the need to visit physical branches. E-banking encompasses a variety of services such as mobile banking, internet banking, automated teller machines (ATMs), and SMS banking, all designed to enhance customer convenience and operational efficiency (Auta,

2010).

In developed countries, e-banking has been widely adopted due to high levels of technological infrastructure, financial literacy, and trust in digital systems.

However, in many developing countries, including Malawi, the adoption rate has been relatively slow and inconsistent (Kwagala, 2018). The selected bank, one of the leading financial institutions in the country, has invested significantly in e-banking platforms to meet the growing demand for digital financial services.

These platforms include mobile apps, internet banking, and USSD based services tailored to cater to customers with limited access to smartphones or stable internet connections.

Despite these efforts, many customers continue to rely on traditional banking channels. Factors such as limited awareness, fear of fraud, low digital literacy, inadequate infrastructure, and cultural attitudes towards technology may contribute to the low adoption of e-banking services (Chitungo & Munongo, 2013). Moreover, security concerns, especially in the context of cyber threats and online fraud, remain a significant barrier for many customers in embracing digital financial services (Yaseen & El Qirem, 2018).

Given the crucial role e-banking can play in enhancing financial inclusion and improving service delivery, it is important to explore the underlying factors influencing its adoption in the Malawian context. A case study of the selected bank will provide valuable insights into customer behavior, challenges, and opportunities that can inform strategic decisions for improving digital banking uptake.

1.3 Problem statement

Several barriers are contributing to slow adoption of E Banking. These include a lack of awareness about available services, low levels of digital and financial literacy, poor internet infrastructure, concerns about the security and privacy of online transactions, and resistance to technological change (Kwagala, 2018; Yaseen & El Qirem, 2018). In addition, socio-cultural attitudes and the perceived complexity of digital platforms can further discourage customers, particularly in rural or less-educated segments, from engaging with e-banking tools (Azongu et al., 2018).

Despite the growing availability and potential benefits of e-banking services such as increased convenience, reduced operational costs, and greater financial inclusion the actual adoption and utilization of these services by customers in Malawi remains suboptimal. In particular, at the selected bank, there appears to be a noticeable gap between the supply of digital banking

solutions and the extent to which customers make use of them.

Currently, enhancing e banking adoption is crucial for improving the bank's operational efficiency and advancing financial inclusion in Malawi. This research is, therefore, necessary to analyze and understand the critical factors that influence the adoption of e-banking services at selected banks. The findings can inform the development of targeted strategies to improve customer engagement, address technological and perceptual barriers, and ultimately promote the wider use of digital financial services in Malawi.

1.4 Research Objectives

The objectives of this study are:

Main objective:

To investigate the key factors influencing the adoption of e-banking services at the commercial bank. Other objectives:

To assess the level of awareness of e-banking services among the selected bank customers.

To evaluate the impact of perceived security and privacy on the adoption of e-banking.

To recommend strategies that could improve the adoption rate of e-banking services at the selected bank.

1.5 Research Questions

The research seeks to answer the following questions:

What are the main factors affecting the adoption of e-banking services at the selected bank?

How aware are the selected bank customers of the available e-banking services? To what extent do security and privacy concerns influence customers' willingness to use e-banking?

What strategies can be implemented by the selected bank to increase customer adoption of e-banking services?

1.6 Significance of the Study

The significance of this study lies in its potential to provide valuable insights into the factors influencing the adoption of e-banking services in Malawi, with a specific focus on the selected bank. For the banking industry, the findings will be instrumental in identifying the key drivers and barriers affecting customer uptake of e-banking. This understanding can help banks develop more effective strategies to enhance service delivery, improve customer satisfaction, and maintain a competitive edge in the evolving financial landscape.

For policymakers and regulators, the research offers data that can inform the development of

supportive policies and regulatory frameworks that encourage the growth of e-banking while ensuring security, accessibility, and financial inclusion. Customers will also benefit from the study, as it highlights areas that need improvement to enhance user experience and build trust in digital banking platforms, ultimately encouraging more people to embrace e-banking.

Additionally, this study contributes to academic knowledge by providing empirical evidence on e-banking adoption in a developing country context. It serves as a useful reference for future research and comparative

studies in similar environments. Finally, technology providers and financial companies can gain insights into the technological and infrastructural challenges faced by users, enabling them to design and implement more user-friendly and accessible e-banking solutions tailored to the needs of Malawian customers.

RESEARCH METHODOLOGY

3.1 INTRODUCTION

This chapter outlines the methodological approach employed in the study titled “Investigating the Factors Affecting the Adoption of E-Banking Services in Banks: A Case Study of commercial banks.” It discusses the research design, research methods, population, sampling techniques, data collection instruments, data analysis procedure, and ethical considerations. The methodology is structured to align with the study’s objectives and ensure that data collected is both valid and reliable in addressing the research questions.

3.2 Research method and design

According to , research design are strategies that a researcher chooses to integrate the components of the study in a coherent and logical way, so that a researcher effectively addresses the research problem. A researcher conducted by , defined research design as the blueprint for collection, measurement, and analysis of data aiding the researcher in allocation of limited resources by posing crucial choices. In other words, research design is the set of methods and procedures used in collection and analyzing measures of the variable specified in the problem research.

In this research, mixed-methods approach was adopted, combining both quantitative and qualitative methods. This approach provided a comprehensive understanding by quantifying the impact through measurable data and exploring in-depth insights through qualitative data.

3.3 Research setting

This is the geographical or physical site where the researcher conducts the study. The study was

conducted at the commercial banks.

3.4 Target population

A population refers to the entire group of individuals, objects or things that share common attributes or characteristics and may not be found within the same geographical location. A target population is the total population a researcher specifies in his or her research. Therefore, the target population for this research included both male and female employees and customers at the selected bank across various departments at the Bank. According to Sunder (2016), defined the term population as a full set of cases from which a sample is taken. Thus, a population refers to the people that the researcher has in mind from whom data has been obtained. Population refers to all items that confirm to be part of specifications, consisting the overall group of items that is of interest of the researcher and to whom the results can be generalized.

3.7 Sample size

A sample size is a technique used to select a number of observations or replicates to include in a statistical sample. The sample measurement is an important function of any empirical learn about in which the intention is to make inferences about a populace from sample. In practice, the sample dimension used in study was usually determined based totally on the cost, time or comfort of accumulating the data and the need for it to provide adequate statistical power. In this study the researcher used the slovin formula to calculate the sample size.

3.8 Target population

For the study included both customers of the selected bank and bank employees who have direct involvement with e-banking services. Customers provided insights from a user's perspective, while employees offered valuable organizational and operational viewpoints.

3.9 Data collection

Involved both primary and secondary sources. Primary data is obtained using structured questionnaires and semi-structured interviews. The questionnaires include Likert-scale items designed to capture respondents' attitudes toward factors influencing e-banking adoption, such as perceived usefulness, ease of use, cost, trust, and risk variables commonly drawn from the Technology Acceptance Model (Davis, 1989). The semi-structured interviews with staff allow for in-depth exploration of internal processes, challenges, and institutional factors that influence e-banking implementation. Additionally, secondary data is collected through the

analysis of bank records, annual reports, internal memos, and customer feedback logs. This data is used to corroborate primary findings and provide background on historical trends in e-banking services.

3.10 Research instrument

Research instruments are measuring tools (for example a questionnaire or scales) designed to obtain data on a topic of interest from research subjects. Questionnaire

A questionnaire is an instrument used to collect data which comprises sets of questions and other prompts for the purpose of collecting data from respondents. Types of questionnaires are open format questions that are without a predetermined set of responses. Closed format questions that take the form of multiple choice question. Questionnaires allow collection of each subjective and objective information in a large pattern of learn about population in order to reap consequences that are statistically big. The advantages of using questionnaire are; there is low cost even when the universe is large and is widely spread geographically, it is free from the interviewer's favoritism as answers are in respondents' own words, respondents have adequate time to give well thought out answers, can be used therefore, the results can be made more reliable and trustworthy. However, there are also some disadvantages to this research instrument and they include; low rate of return of the duly filled in questionnaire, bias due to no response is often indeterminate, it can be used only when respondents are educated and cooperating and the control over questionnaire may be lost once it is sent.

3.11 Data Analysis

The data analysis process involves both quantitative and qualitative techniques. Quantitative data obtained from questionnaire was processed using tables, charts, and graphs which was done with the help of Microsoft Excel.

On the qualitative side, data from interviews is transcribed and analyzed using thematic analysis, as described by Braun and Clarke (2006). This process involves coding the data into key themes that reflect perceptions, experiences, and institutional dynamics related to the adoption of e-banking.

3.12 Ethical Consideration

These are paramount in this research, particularly given that human subjects are involved. All participants are provided with detailed information about the study and asked to give informed consent before participating. The principle of

voluntary participation is emphasized, and participants are informed that they may withdraw from the study at any point without penalty. To protect respondents' privacy, no personal identifiers are collected, and all data is stored securely and reported anonymously. The study was conducted in accordance with ethical guidelines outlined in The Belmont Report (1979), which emphasizes respect for persons, beneficence, and justice. Additionally, the study adheres to the Malawi National Commission for Science and Technology's ethics framework, ensuring that academic integrity, participant safety, and data confidentiality are maintained throughout the research process.

RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the results and discussion of data collected for the study. Information was obtained from employees of the selected bank through interview guide as well as from customers through questionnaire. A total of five interview guides were administered to employees working in different departments and all were completed. In addition, 35 questionnaires were distributed to customers and all were returned.

The analysis in this Chapter follows Braun & Clarke's (2006) thematic analysis approach and is aligned with the literature review in chapter two. The findings are presented, analyzed and interpreted in line with the study's research objectives and research questions.

4.3.3 Level of Education

The study found that, 21 (60%) had a Bachelor's degree, 14(40%) had postgraduate qualifications, nil (0%) had secondary education and nil (0%) had primary education. This indicates that most selected bank customers who use e- banking services have a tertiary level of education, which may explain their ability and willingness to adopt digital banking services.

4.4 Presentation of Research Findings

4.4.1 Awareness of E-Banking Services among the selected bank Customers The study established that all respondents 35 (100%) were aware of E-banking service offered by the selected bank. This high level of awareness indicates that selected bank has been effective in promoting its digital banking platforms. The finding suggests that customers are well informed about the bank's digital options, which forms a strong foundation for increased adoption of E-banking service.

4.4.1.1 The financial institution advertises e-banking to its customers

The findings reveal that a number of 30 respondents (86%) acknowledged that the selected bank advertises its e-banking services, with 11(31.4%) strongly agreeing and 19(54.6%) agreeing. This aligns with literature emphasizing the importance of awareness creation in driving technology adoption (Chitungo & Munongo, 2013; Yaseen & El Qirem, 2018). However, the predominance of moderate agreement suggests that while advertising efforts are visible, they may lack sufficient impact or reach. The 5 (14%) of respondents who were uncertain highlight gaps in communication, indicating that some customers remain uninformed. This supports the argument that awareness campaigns must be strengthened and diversified to ensure broader customer engagement and adoption.

4.4.1.2 The financial institution conducts training programs to use e-banking services

Only 11 (31.4%) of respondents agreed or strongly agreed that the selected bank conducts training programs, while 14 (40%) were uncertain and 10 (28.6%) disagreed. This reflects weak recognition of training initiatives compared to advertising efforts. Literature highlights that digital literacy and customer capability are critical barriers to adoption in developing countries (Ndayizigamiye & Maharaj, 2019; Azongu et al., 2018). The high level of uncertainty suggests that training programs, if they exist, are inadequately communicated or insufficiently accessible. This gap between awareness and capability underscores the need for targeted training interventions, particularly for Rural and less digitally literate customers, to build confidence and enhance adoption.

4.4.1.3 Customers of the financial institution frequently use e-banking services such as mobile app, internet banking, ATM, and USSD

The results show that 27 (77.1%) of respondents strongly agreed or agreed that customers frequently use e-banking services, with only 2 (5.7%) disagreeing. This indicates relatively high adoption and engagement with digital platforms, consistent with findings that convenience and accessibility drive usage (Polatoglu & Ekin, 2001; Ching'oma & Chirwa, 2018). However, 6 (17.1%) of respondents were uncertain, suggesting that some Customers either lack personal experience or awareness of usage patterns. These findings highlight that while adoption is strong, sustaining and expanding usage requires continuous investment in infrastructure, security, and customer support to address hesitancy and ensure inclusivity.

4.4.1.4 Information about e-banking services is easily accessible for customers at the financial institution

A number of 27 respondents (77.2%) agreed or strongly agreed that information about e-banking services is easily accessible, while 5 (14.3%) were uncertain and 3 (8.6%) disagreed. This suggests that the selected bank has made commendable efforts to provide information, aligning with literature that emphasizes the role of communication in adoption (Kwagala, 2018; KPMG, 2020). However, the predominance of moderate agreement 19 (54.3%) indicates that while information is available, it may not be sufficiently comprehensive or impactful. The presence of uncertainty and disagreement highlights the need for clearer, more user-friendly communication strategies, particularly tailored to rural and less digitally literate customers. Strengthening accessibility of information can further enhance trust and adoption.

4.4.2 To assess the factors influencing adoption of e-banking services at financial institution

4.4.2.1 E-banking services at the selected bank are simple and easy to use

The findings show that 26 (74.2%) of respondents (6 {17.1%} strongly agreed, 20 {57.1%} agreed) perceive the selected bank's e-banking services as simple and easy to use. This aligns with the Technology Acceptance Model (Davis, 1989), which emphasizes perceived ease of use as a critical determinant of technology adoption. However, 6 (17.1%) were uncertain and 3 (8.6%) disagreed, indicating that while most customers find the platform user-friendly, a minority still experience challenges. This suggests that continuous improvements in interface design, navigation, and customer support are necessary to ensure inclusivity and enhance adoption.

4.4.2.2 Security measures in the selected bank's e-banking platform make transactions safe.

A majority of respondents 28 (80%) agreed or strongly agreed that the selected bank's e-banking platform has adequate security measures, while 7 (20%) were uncertain. This reflects positively on the bank's efforts to build trust in digital transactions, consistent with literature highlighting security as a key factor in adoption (Yousafzai, Pallister & Foxall, 2005; Kalakopa & Mapira, 2020). The uncertainty, however, suggests that some customers remain unconvinced or lack awareness of the bank's security protocols. Addressing this gap through transparent communication and customer education on fraud prevention could further strengthen confidence and adoption.

4.4.2.3 Trust in the selected bank encourages customers to adopt e-banking services

The results indicate that 27 (77.1%) of respondents (9 {25.7%} strongly agreed, 18 {51.4%} agreed) trust the selected bank and are encouraged to adopt e-banking services. This finding supports the Unified Theory of Acceptance and Use of Technology (Venkatesh et al., 2003), which identifies trust and social influence as critical drivers of adoption. However, 6 (17.1%) were uncertain, and 4 (11.4%) {5.7%} disagreed, 2 {5.7%} strongly disagreed) expressed skepticism.

This highlights that while trust in the institution is generally strong, a small but significant group remains hesitant. Building stronger customer relationships and reinforcing transparency in digital operations could help convert skeptics into adopters.

4.4.2.4 Poor internet connectivity discourages customers from using e-banking services

The findings reveal that 23 (67.6%) of respondents (13 {38.2%} strongly agreed, 10 {29.4%} agreed) believe poor internet connectivity discourages e-banking adoption, while 9 (26.5%) disagreed and 2 (5.9%) were uncertain. This underscores infrastructural challenges as a major barrier, consistent with studies in developing countries that highlight connectivity deficits as impediments to digital financial inclusion (Mtekama, 2021; KPMG, 2020). The significant proportion of respondents acknowledging this issue demonstrates that despite customer willingness, external technological constraints hinder adoption. Addressing infrastructure gaps through partnerships with telecom providers and investment in reliable connectivity is essential for expanding e-banking usage.

4.4.2.5 Digital literacy levels among customers influence the adoption of e-banking services

The results show that 24 (68.6%) of respondents (10 (28.6%) strongly agreed, 14 (40%) agreed) recognize digital literacy as a key factor influencing adoption, while 8 (22.9%) were uncertain and 3 (8.6%) disagreed. This finding aligns with literature emphasizing the role of digital literacy in shaping technology adoption in developing countries (Ndayizigamiye & Maharaj, 2019; Azongu et al., 2018).

The uncertainty suggests that some customers may not fully appreciate the impact of digital skills on usage, while the minority who disagreed may represent more digitally confident users. Overall, the evidence highlights the need for targeted training and awareness programs to build digital competencies, particularly among rural and older customers, to enhance adoption.

4.4.4 To assess Customer Satisfaction at financial institution

4.4.4.1 Customers are satisfied with the overall quality of e-banking services provided by the selected bank

The findings reveal that 22 (62.8%) of respondents (6 {17.1%} strongly agreed, 16 {45.7%} agreed) expressed satisfaction with the overall quality of e-banking services, while 7 (20%) were dissatisfied and 6 (17.1%) uncertain. This indicates that although a majority of customers are satisfied, a significant minority remain unconvinced. Literature emphasizes that service quality is a critical determinant of customer satisfaction and continued usage (Sharma & Malhotra, 2015). The mixed responses suggest that while the selected bank's e-banking services meet expectations for many, improvements in reliability, user experience, and responsiveness are necessary to address dissatisfaction and uncertainty.

4.4.4.2 The selected bank provides adequate customer support for e-banking users A total of 21 (60%) of respondents (5 {14.3%} strongly agreed, 16 {45.7%} agreed) acknowledged that the selected bank provides adequate customer support, while 7 (20%) were uncertain and 7 (20%) disagreed. This reflects moderate satisfaction with support services but also highlights gaps in responsiveness and accessibility. According to Munyenembe & Banda (2017), customer support plays a vital role in building trust and confidence in digital platforms. The relatively high levels of uncertainty and disagreement suggest that the selected bank must strengthen its customer service channels, ensuring timely assistance and clear communication to enhance satisfaction and adoption.

4.4.4.3 The cost of using e-banking services (e.g., fees, charges) is fair and reasonable

The results show that 24(68.6%) of respondents (9 {25.7%} strongly agreed, 15 {42.9%} agreed) perceive the cost of e-banking services as fair and reasonable, while 8 (22.9%) were uncertain and 3 (8.6%) disagreed. This indicates that most customers are satisfied with the pricing structure, consistent with literature that highlights affordability as a driver of adoption in developing countries (Ching'oma & Chirwa, 2018). However, the uncertainty suggests that some customers may lack clarity on fee structures or perceive hidden costs.

Transparent communication of charges and continued affordability will be essential for sustaining satisfaction and encouraging wider adoption.

4.4.4.4 E-banking services at the selected bank are consistently reliable and available The findings reveal that 22 (62.8%) of respondents (6 {17.1%} strongly agreed, 16 {45.7%} agreed) believe the selected bank's e-banking services are reliable and consistently available, while 8 (22.9%)

were uncertain and 5 (11.4%) disagreed. This suggests that although reliability is generally recognized, service interruptions or connectivity challenges may affect customer perceptions. Literature emphasizes that reliability and availability are fundamental to customer satisfaction and trust in digital platforms (KPMG, 2020; Mtekama, 2021). Addressing infrastructural and technical issues will be critical to ensuring consistent service delivery and reinforcing customer confidence.

4.4.4.5 Overall customer satisfaction with the selected bank's e-banking

services encourage continued usage. The results indicate that 21 (60%) of respondents (7 {20% } strongly agreed, 14 {40% } agreed) believe overall satisfaction encourages continued usage, while 11 (31.4%) were uncertain and 3 (8.6%) disagreed. This demonstrates that satisfaction is a key driver of loyalty and sustained adoption, consistent with the diffusion of innovation theory (Rogers, 2003), which emphasizes the role of positive user experiences in influencing continued use. However, the high level of uncertainty suggests that some customers remain undecided about the long-term value of e-banking. Strengthening service quality, customer support, and reliability will be essential to convert uncertain users into loyal adopters.

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