ADDIS ABABA UNIVERSITY

COLLEGE OF BUSINESS AND ECONOMICS

SCHOOL OF COMMERCE

EFFECTS OF CUSTOMERS' TRUST, SECURITY, AND USER EXPERIENCE ON CONSUMER ADOPTION OF E-PAYMENT: A CASE STUDY OF TELEBIRR WALLET IN ADDIS ABABA

By: Besrat Nigussie

A Thesis Submitted to Addis Ababa University School of Commerce for the Degree of Master of Art in Marketing Management

Advisor: Mesfin Workineh (PHD)

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ADDIS ABABA UNIVERSITY SCHOOL OF COMMERCE DEPARTMENT OF MARKETING MANAGMENT

Effects of Customers' Trust, Security, and User Experience on Consumer Adoption of E-Payment: A Case Study of Telebirr Wallet in Addis Ababa

By: Besrat Nigussie

Id: GSE/9885/14

Approved by Board of Examiners

_____	_____
Advisor	Signature
_____	_____
Internal Examiner	Signature
_____	_____
External Examiner	Signature

June,2024

Addis Ababa, Ethiopia

STATEMENT OF DECLARATION

I, Besrat Nigussie, declare that this thesis entitled: “Effects of Customers' Trust, Security, and User Experience on Consumer Adoption of E-Payment: A Case Study of Telebirr Wallet in Addis Ababa” and submitted in partial fulfillment of the requirements for the degree of Master of Arts in Marketing Management is the outcome of my own effort and study. All sources of materials used for the study have been duly acknowledged. I have produced it independently with only the guidance and suggestions of the thesis advisor. The study complies with the regulations of the University and meets the accepted standards with respect to originality and quality.

Name_____ Signature_____ Date_____

STATEMENT OF CERTIFICATION

This is to certify that the thesis prepared by Besrat Nigussie, entitled "Effects of Customers' Trust, Security, and User Experience on Consumer Adoption of E-Payment: A Case Study of Telebirr Wallet in Addis Ababa" and submitted in partial fulfillment of the requirements for the degree of Master of Arts in Marketing Management complies with the regulations of the University and meets the accepted standards with respect to originality and quality.

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This is to certify that the thesis prepared by Besrat Nigussie, entitled: "Effects of Customers' Trust, Security, and User Experience on Consumer Adoption of E-Payment: A Case Study of Telebirr Wallet in Addis Ababa" and submitted in partial fulfillment of the requirements for the degree of Master of Arts in Marketing Management complies with the regulations of the University and meets the accepted standards with respect to originality and quality.

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_____	_____	_____
External examiner	Signature	Date
_____	_____	_____
Internal examiner	Signature	Date
_____	_____	_____
Dean, SGS	Signature	Date

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List of Abbreviations/Acronyms

ANOVA: Analysis of Variance

CAGR: Compound Annual Growth Rate

EDI: Electronic Data Interchange

EMV: Europay, Mastercard, and Visa

GSMA: Groupe Spécial Mobile Association

IBM SPSS: IBM Statistical Package for the Social Sciences

IMEI: International Mobile Equipment Identity

IT: Information Technology

NBE: National Bank of Ethiopia

NFC: Near Field Communication

PIN: Personal Identification Number

POS: Point of Sale

P-P Plot: Probability-Probability Plot Plot (also known as the P-P test).

Q-Q Test: Quantile-Quantile Plot Test (also known as the Q-Q plot).

QR: Quick Response

Sig.: Significance (often used in statistical

SPSS: Statistical Package for the Social Sciences

TAM: Technology Acceptance Model

UI: User Interface

UTAUT: Unified Theory of Acceptance and Use of Technology

VIF: Variance Inflation Factor

Abstract

This research investigates the intricate relationships between trust, security perceptions, and user experience within the Telebirr Wallet ecosystem in Addis Ababa, Ethiopia. As digital payment systems gain traction globally, the Telebirr Wallet plays a significant role in the city's financial landscape, with over 46.6 million total users as of May 2024, reflecting the growing adoption of digital financial technologies. Utilizing a comprehensive quantitative analysis with a sample size of 384 respondents, and 347 valid responses, the study reveals significant regression coefficients, with trust, security, and user experience playing crucial roles in influencing consumer buying behavior. Notably, high levels of trust, security perception, and user experience satisfaction are observed among Telebirr users, with trust emerging as the primary adoption driver, followed by user experience and finally perceived security. These findings offer valuable implications for academia and industry, providing actionable recommendations to enhance the Telebirr Wallet and similar digital payment platforms. Policymakers, service providers, and industry professionals can leverage these insights to improve the reliability and user-friendliness of e-payment systems in Addis Ababa, thereby advancing digital financial inclusion and empowerment in the region.

Key Terms: Digital Payment Systems, Telebirr Wallet, Trust, Security Perceptions, User Experience, Adoption Factors, Addis Ababa, E-Payment Systems.

CHAPTER ONE

1. Introduction

The payment process in transaction of goods and services has passed through so many processes to date. Through the ages mankind has tried to trade and transact many aspects through different mediums. The introduction of the internet and arrival of e-commerce has paved the way for digital transactions. Electronic payments such as debit and credit cards, mobile transfers, electronic cash, payments without any physical or paper money are becoming more prominent.

Within the dynamic economic milieu of Addis Ababa, this study focuses on the Telebirr Wallet as an illuminating case study in the broader discourse on digital finance. As the investigation unfolds, it becomes apparent that a distinction understanding of factors such as customers' trust, robust security measures, and the optimization of user experience is a necessity. This study engages in a systematic exploration of the intricate interplay among these elements, seeking to discern the subtle dynamics that underpin the Telebirr Wallet's successful adoption. Through a methodical examination of trust, security, and user experience, the researcher aspires to contribute discerning insights to the scholarly discourse surrounding e-payment systems, thereby informing both academic understanding and the pragmatic evolution of digital financial mechanisms.

1.1. Background of the study

The historical trajectory of e-payment systems has been marked by a transformative evolution, reshaping the landscape of financial transactions globally. The world of financial transactions has undergone a remarkable transformation over the years. From the days of bartering and physical coins to the modern age of digital wallets and contactless payments, the evolution of financial systems has been nothing short of extraordinary (OMA Emirates Group LLC, 2023). Over human evolution through decades of time, transaction systems have undergone significant advancements, transitioning from traditional methods, from Barter system to paper money, to

sophisticated electronic platforms designed to enhance the efficiency and security of monetary exchanges.

In tandem with this global trend, Addis Ababa, the capital of Ethiopia, has witnessed a notable integration of digital finance into its economy.

The historical narrative of e-payment systems reflects a progression from early electronic fund transfers to the emergence of online banking and, more recently, the widespread adoption of mobile wallets and digital payment applications. This evolution has been spurred by technological innovations and a growing demand for seamless and expedient financial transactions. Consequently, the Telebirr Wallet has emerged as a prominent digital payment platform in Addis Ababa, contributing to the city's embrace of contemporary financial technologies.

The Telebirr Wallet which was officially launched on May 11, 2021, stands at the intersection of this historical trend and the specific dynamics of Addis Ababa's digital payment landscape. Against the backdrop of a global surge in digital financial mechanisms, the Telebirr Wallet has garnered significance within the local context of Addis Ababa, providing users with a streamlined platform for secure and convenient transactions. This convergence of global trends and local adoption patterns makes Addis Ababa an intriguing and contextually rich setting for investigating the complex interplay of customers' trust, security perceptions, and user experience within the realm of digital payments. Understanding this intersection is paramount for determining the unique factors influencing the successful adoption of the Telebirr Wallet in the Ethiopian capital.

Consequently, delving into the intricacies of customers' trust, the efficacy of security measures, and the optimization of user experience within the Telebirr Wallet framework not only contributes to the academic discourse surrounding digital finance but also holds practical implications for the ongoing refinement of e-payment systems.

This study thus seeks to illuminate the contextual tones and interpret the comprehensive relationships between trust, security, and user experience in the realm of digital payments, as exemplified by the Telebirr Wallet in Addis Ababa.

1.2. Statement of the problem

In the adoption of e-payment systems, exemplified by the prominence of the Telebirr Wallet in Addis Ababa, a critical link emerges in understanding the challenges surrounding customers' trust, security protocols, and user experience. The research problem at the heart of this study is to discern the details that shape the perceptions and behaviors of users within this digital platform. Specifically, the empirical investigation seeks to unravel the comprehensive challenges pertaining to customers' trust, the effectiveness of security protocols, and the overall user experience within this digital financial ecosystem.

The practical dimension of the research problem lies in understanding how these elements manifest in real-world scenarios, influencing user perceptions and behaviors. The empirical exploration aims to uncover tangible insights derived from user experiences with the Telebirr Wallet, providing a grounded foundation for practical recommendations.

Telebirr, which was officially launched on May 11, 2021 by which then the only and biggest telecom provider in Ethiopia, Ethio-telecom, is a digital cash that enables a customer to access a variety of financial services at ease, using a mobile phone without the need to have a bank account. The solution allows customers to deposit, receive and transfer money using their cell phones in areas where mobile network is available.

It enables cashless payments, which reduces dependency on cash and allows tracking of transaction records. This increases financial security and reduces inherent risks of cash handling

such as loss, theft, or fraud. Telebirr platform is accessible via most basic mobile phones. (ethiotelecom.et/Telebirr, 2023)

The research problem unfolds in three dimensions:

1. Customers' Trust: Understanding the foundations of trust is paramount in the adoption of the Telebirr Wallet. This research seeks to unravel the complexities that influence customers' trust in the Telebirr platform.
2. Security: In the digital landscape, security is not just an operational requirement, but a core value. This study aims to examine the effectiveness of security protocols embedded within the Telebirr Wallet in customers' perspective (Worldline India, 2023)
3. User Experience: The success of any digital financial ecosystem hinges on user experience. This research endeavors to comprehensively analyze the overall user experience within the Telebirr platform.

Despite the growing popularity of mobile payment systems, particularly Telebirr, there remains a gap in understanding the factors influencing user adoption. While prior research has examined various aspects of mobile payment adoption, including trust, security, and user experience, there is a need to investigate these factors comprehensively within the context of Telebirr.

Moreover, while individual factors such as trust, security, and user experience have been explored in isolation, there is a dearth of research that examines their combined effect on Telebirr adoption. Understanding the interplay between these factors is crucial for devising effective strategies to enhance user adoption and usage frequency.

Furthermore, existing empirical studies have often relied on theoretical frameworks that do not fully capture the shades of user behavior in the context of emerging technologies and developing economies. Therefore, there is a need to assess the applicability of established models within the Telebirr ecosystem.

By addressing these gaps in the literature and empirically examining the factors influencing Telebirr adoption, this research aims to provide valuable insights for policymakers, service providers, and researchers seeking to promote the widespread adoption of mobile payment systems in our context.

The ultimate goal is to inform and guide practical interventions that enhance the trustworthiness, security, and user experience of the Telebirr Wallet, thereby advancing the broader agenda of fostering a secure and user-centric digital financial environment in Addis Ababa (GSMA, 2023)

1.3. Research questions

Main Research Question:

How do customers' trust, security perceptions, and user experience influence the successful adoption of the Telebirr Wallet in Addis Ababa's digital payment landscape?

Sub-questions:

1. How do users trust the use of Telebirr wallet as a digital payment platform?
2. How do users' perceptions of security features affect their willingness to engage with the Telebirr Wallet?
3. How well is users' satisfaction in their experience using the Telebirr Wallet for financial transactions?
4. What is the effect of trust, security perceptions, and user experience in the decision to adopt the Telebirr Wallet?

1.4. Objectives

Main Research Objective:

To comprehensively examine and understand the dynamics of customers' trust, security perceptions, and user experience, and their collective influence on the successful adoption of the Telebirr Wallet in the digital payment ecosystem of Addis Ababa.

Specific Research Objectives:

1. To assess user's trust in the use of the Telebirr Wallet as a digital payment platform.
2. To examine how users' perceptions of security features affect their willingness to engage with the Telebirr Wallet.
3. To evaluate users' satisfaction levels with their experience in using the Telebirr Wallet for financial transactions
4. To examine the effect of trust, security perceptions, and user experience in decision to adopt the Telebirr Wallet

These research objectives collectively aim to contribute nuanced insights into the intricate relationships between trust, security, user experience, and contextual factors within the specific framework of the Telebirr Wallet in Addis Ababa.

1.5. Significance of the study

Academic Significance: This study significantly contributes to the academic discourse on e-payment systems by providing empirical insights into the nuanced interplay of customers' trust, security perceptions, and user experience within the context of the Telebirr Wallet. Through this exploration, the research not only expands the theoretical understanding of digital financial adoption but also adds depth to existing literature, offering a comprehensive exploration of the factors influencing the successful integration of digital payment platforms, particularly in emerging economies.

Practical Significance: From a practical standpoint, the findings of this study hold actionable implications for stakeholders in the digital payment landscape, including service providers, policymakers, and industry practitioners. A detailed understanding of the determinants of trust, security, and user experience in the Telebirr Wallet can inform targeted interventions aimed at enhancing the platform's reliability and user-friendliness. These understanding and insights

support the Ethiopia's strive for digitalization and potentially serve as a model for further investigations.

Policy Implications: The study's exploration of the cultural and economic context surrounding digital payments in Addis Ababa provides policymakers with valuable context-specific information. This information aids in the formulation of policies that align with local dynamics, fostering an environment conducive to the widespread acceptance and use of digital payment systems. The insights garnered from the study can guide the development of regulatory frameworks, ensuring they effectively address the unique considerations of the Telebirr Wallet and equivalent platforms in the digital payment landscape.

Business and Industry Relevance: For businesses and industry stakeholders, this study offers pragmatic recommendations for optimizing the Telebirr Wallet and similar digital payment platforms. Insights into trust-building, security enhancements, and user experience optimization can guide strategic decisions, ultimately contributing to the competitiveness and sustainability of digital financial services within the industry.

In summary, the significance of this study lies in its dual contribution to academic knowledge and practical applications, enriching the understanding of e-payment dynamics while offering actionable recommendations for the enhancement of the Telebirr Wallet and parallel digital payment systems in comparable contexts.

1.6. Scope of the study

The scope of this study is delimited to the examination of customers' trust, security perceptions, and user experience within the specific context of the Telebirr Wallet in Addis Ababa, Ethiopia.

The study focuses on the following key aspects.

The research is going to be geographically confined to Addis Ababa, acknowledging the unique cultural and economic dynamics of the Ethiopian capital. Insights gained from this study may not be directly applicable to other regions or cities, and generalization should be approached with caution.

The study considers a defined timeframe, encompassing recent years leading up to the present. Historical trends and the evolution of the Telebirr Wallet are considered to provide context, but the primary focus is on current user experiences and perceptions.

The investigation concentrates specifically on the Telebirr Wallet, a prominent digital payment platform in Addis Ababa. While the findings may offer broader insights into e-payment systems, the study does not comprehensively address other digital wallets or payment platforms.

The study primarily captures the perspectives and experiences of users engaging with the Telebirr Wallet for financial transactions. It does not delve extensively into the internal operational aspects of the Telebirr system or the organizational dynamics of Ethio Telecom.

The research examines trust in the reliability and integrity of the Telebirr Wallet, security perceptions related to authentication processes and data protection measures, and user experiences encompassing aspects such as the user interface, transaction processes, and customer support.

The study acknowledges the influence of the cultural and economic context of Addis Ababa on users' attitudes and behaviors toward digital payments. However, it does not provide an exhaustive analysis of the broader cultural or economic landscape of Ethiopia.

By delineating these specific scopes, the study maintains a focused and in-depth exploration of the targeted aspects within the defined parameters of the Telebirr Wallet in Addis Ababa.

1.7. Limitations of the study

Generalizability:

Limitation: Findings are specific to Telebirr in Addis Ababa, limiting broader applicability.

Mitigation: Clearly communicate the study's focus on Telebirr and encourage future research on other digital payment platforms for a more comprehensive understanding.

Sampling Bias:

Limitation: Relying on a specific sample of Telebirr users in Addis Ababa introduces potential biases.

Mitigation: Implement random and stratified with convenience sampling methods to enhance representativeness, and transparently address any biases in the study's discussion.

Temporal Constraints:

Limitation: Capturing the rapidly evolving digital payment landscape presents challenges.

Mitigation: Justify the chosen temporal scope, acknowledge limitations in capturing long-term trends, and suggest future research for ongoing assessments.

Limited Organizational Insights:

Limitation: The study does not extensively explore the internal operations of Telebirr or organizational perspectives.

Mitigation: Collaborate with Ethio telecom (Telebirr service provider) for insights into internal operations and acknowledge the study's focus on user perspectives.

Cultural Complexity:

Limitation: The study acknowledges cultural context but doesn't deeply explore intricate layers.

Mitigation: Encourage a more in-depth exploration of cultural factors specific to Telebirr users for a richer understanding of user behaviors and attitudes.

Dynamic Security Landscape:

Limitation: Examination of security perceptions is conducted within a specific timeframe.

Mitigation: Acknowledge the dynamic nature of cybersecurity during the study period and recommend continuous monitoring in future research.

External Factors:

Limitation: Uncontrolled external factors (government policies, economic changes) may impact results.

Mitigation: Systematically discuss potential external influences on Telebirr users' trust and experiences, emphasizing the need for ongoing monitoring in the face of external variables.

Acknowledging these limitations is vital for interpreting the Telebirr app study accurately, and the proposed mitigations aim to enhance the study's robustness and guide future research in this specific context.

1.8. Organization of the study

The research has five chapters. Their organization is discussed below.

1. Introduction:

The thesis begins with a compelling introduction that articulates the rationale and significance of the study. This section provides an overview of the research problem and establishes the context within the expanding field of digital finance. Clear research objectives, questions, are described, laying the foundation for a structured inquiry into customers' trust, security, and user experience within the Telebirr Wallet in Addis Ababa.

2. Literature Review:

This chapter immerses the reader in a comprehensive exploration of the theoretical underpinnings guiding the research, encompassing trust-based models, TAM, UTAUT, and user experience theories. The inception and development of the Telebirr Wallet take center stage, providing context for the subsequent empirical investigation. The literature review builds a robust conceptual framework, setting the stage for a deeper understanding of the variables under scrutiny

3. Methodology:

Chapter 3 meticulously outlines the research design, detailing the chosen population, sampling strategies, and data collection methods, including surveys, interviews, and observation. It provides insight into the data analysis techniques employed and addresses ethical considerations, ensuring the study's validity and reliability. While acknowledging inherent limitations, this chapter serves as a guide to the meticulous and transparent approach employed in conducting the research.

4. Results and Discussion

This chapter unveils the peak of the empirical investigation, presenting the analyzed data on customers' trust, security perceptions, and user experience within the Telebirr Wallet. It engages the reader in a comprehensive discussion, drawing connections between the findings and the

established theoretical framework. Through a comparative lens, this chapter explores implications, applications, and the broader relevance of the results, fostering a nuanced understanding of the intricacies surrounding e-payment adoption.

5. Summary Findings, Conclusion, and Recommendations

The final chapter synthesizes the key research findings, revisits the study's objectives, and draws insightful conclusions. It discusses the contributions to knowledge and practical implications, offering tailored recommendations for stakeholders in the digital payment landscape. Proposing directions for future research, the chapter concludes with final remarks, providing a concise summary of the entire thesis and leaving a lasting impression on the reader.

This structured proposal framework ensures a coherent and systematic exploration of the research questions, providing a clear roadmap for the ensuing scholarly inquiry.

1.9. Definition of terms

Trust: Customer Trust: The confidence and reliance that users place in the reliability, integrity, and security of the Telebirr Wallet for digital transactions.

Security Perceptions: Authentication Processes: Mechanisms employed by the Telebirr Wallet to verify users' identities and secure access to the platform.

Data Protection Measures: Safeguards implemented to secure users' personal and financial information during transactions.

User Experience: User Interface (UI): The visual and interactive design elements of the Telebirr Wallet, influencing users' interactions and experiences.

Transaction Processes: The step-by-step procedures users follow when conducting financial transactions through the Telebirr Wallet.

Customer Support: Services and assistance provided by Telebirr to users encountering issues or seeking information.

E-commerce (electronic commerce) is the activity of electronically buying or selling products on online services or over the Internet. E-commerce draws on technologies such as mobile commerce, electronic funds transfer, supply chain management, Internet marketing, online transaction processing, electronic data interchange (EDI), inventory management systems, and automated data collection systems.

E-Payment Systems: Digital Payment Platforms: Technology-enabled systems facilitating electronic transactions, such as the Telebirr Wallet.

Mobile Wallets: Electronic systems allowing users to store, manage, and transfer money using mobile devices.

Conceptual Model: A visual representation of the relationships between key variables, guiding the study's theoretical underpinnings.

Surveys: Structured data collection instruments used to gather quantitative information from a sample of Telebirr users.

Interviews: In-depth conversations with selected participants to explore qualitative insights on trust, security, and user experience.

Sampling Strategy: The approach used to select participants, ensuring a representative and diverse sample.

Descriptive Statistics: Numerical summaries describing the main features of the dataset, such as mean, median, and standard deviation.

Comparative Analysis and regression analysis: Examination of data to identify patterns and trends over time or between different groups.

Contributions to Knowledge: Unique insights and advancements provided by the study in understanding the dynamics of digital payments.

Practical Recommendations: Actionable suggestions for enhancing trust, security, and user experience in the Telebirr Wallet.

CHAPTER TWO

2. Literature review

2.1. Introduction

The literature review unfolds as a comprehensive examination, commencing with a meticulous exploration of theoretical foundations and models that underpin the research. Trust-based models, the Technology Acceptance Model (TAM), the Unified Theory of Acceptance and Use of Technology (UTAUT), and user experience theories like Honeycomb model take precedence, providing a solid theoretical framework.

Subsequently, the narrative seamlessly transitions to an analysis of empirical evidence, where a synthesis of findings from related research studies illuminates the practical dimensions of e-payment systems. Drawing insights from these empirical references enriches the understanding of trust, security, and user experience dynamics. Culminating in a conceptual framework, the literature review harmonizes theoretical and empirical strands, weaving together a coherent foundation for the subsequent chapters and guiding the overarching exploration of Telebirr Wallet in the digital payment landscape of Addis Ababa.

2.2. Theoretical Review

2.2.1. Trust-Commitment Theory:

The theory "Trust-Commitment Theory" formulated by Robert M. Morgan and Shelby D. Hunt, explores the interplay between trust and commitment in the context of consumer behavior and relationship marketing. It posits that trust is a precursor to commitment and, subsequently,

consumer loyalty. This theory focuses on the longitudinal aspect of trust development over time within consumer relationships.

Strengths: Offers insights into the evolution of trust and commitment in consumer relationships.

Widely applied in marketing research to understand the dynamics of consumer loyalty.

Weaknesses: Abstract concepts like commitment may be challenging to measure precisely.

Applicability might vary depending on the industry and context.

2.2.2. Technology Acceptance Model (TAM):

Proposed by Fred D. Davis, The Technology Acceptance Model (TAM) is a widely adopted model in information systems research. It seeks to explain how users accept and adopt new technologies based on their perceived ease of use and perceived usefulness. According to TAM, users are more likely to embrace a technology if they find it easy to use and perceive it as beneficial.

The Technology Acceptance Model, extended to include perceived security, provides a comprehensive framework for understanding how security perceptions influence the adoption of digital payment systems. By addressing security concerns and enhancing perceived security, stakeholders can significantly improve the acceptance and usage rates of these technologies (Davis, 1989)

Strengths: Simplicity and ease of application make TAM accessible for researchers.

Demonstrated effectiveness in predicting user behavior in various technological contexts.

Weaknesses: Oversimplification may not capture the full complexity of user decision-making.

Focuses predominantly on individual-level factors, potentially overlooking social and contextual influences.

2.2.3. Unified Theory of Acceptance and Use of Technology (UTAUT):

Developed by Venkatesh, Morris, Davis, and Davis, The Unified Theory of Acceptance and Use of Technology (UTAUT) is an integrated model that synthesizes various technology acceptance theories. It incorporates key constructs such as performance expectancy, effort expectancy, social influence, and facilitating conditions. UTAUT aims to provide a more comprehensive understanding of technology adoption by accounting for diverse factors influencing user behavior.

Strengths: Inclusivity allows for a broader exploration of factors influencing technology acceptance.

Acknowledges the role of social influences and external conditions in shaping user behavior.

Weaknesses: Complexity may require careful adaptation to fit specific research contexts.

Generalization across diverse technologies and user groups could pose challenges.

2.2.4. Honeycomb Model

This model which often associated with Peter Morville is a user experience framework that conceptualizes user satisfaction across multiple dimensions. These dimensions include usefulness, usability, desirability, accessibility, credibility, and valuable. It provides a holistic

perspective on user experience, emphasizing the importance of a well-rounded and positive interaction between users and a product or service.

Strengths: Holistic approach considers various dimensions, offering a comprehensive view of user experience.

Encourages user-centric design principles, ensuring a focus on meeting user needs and expectations.

Weaknesses: Subjectivity in assessing certain dimensions of user experience may introduce variability.

Operationalizing abstract concepts like desirability can be challenging.

For this research purpose the combined elements of Trust-commitment theory, Technology Acceptance Model (TAM) and Honeycomb model will be used to assess the technological adoption of users as well as their experience in using Telebirr.

2.3. Empirical review

Yaboneh Bonge (2020) Studied the determinants to use e-payment systems in Addis Ababa using the deductive approach by adapting and testing the Extended Unified Theory of Acceptance and Use of Technology (UTAUT2). Using the convenience sampling techniques and primary data of questioners from a sample of 385 respondents were collected using survey questionnaires. From inferential and descriptive statistics, the researcher found out that he customers' intention of using e-payment services and that users/customers intend to use e-payment systems because of the benefits they assume to drive from the services, the comparatively lower associated costs, the availability of facilitating situations and the assumed higher social status in the society.

Selam Sisay (2021) in "Factors Affecting Consumer's Trust in Electronic Commerce Evidence from University students in Addis Ababa, Ethiopia" find out that perceived website quality is the primary factor that affects consumers' trust. While perceived security, perceived size and perceived service quality has significant effect in descending order. But perceived reputation has not significant effect on consumers' trust. She used Pearson correlation coefficient(r) to determine the relationship between each independent and dependent variable.

Genet Alemu (2018) Studied the "Opportunities and Challenges of EthSwitch E-Payment System: A case study of Commercial Bank of Ethiopia" with The main objective of identifying the Challenges and Opportunities of EthSwitch E-Payment system project implementation from the perspective of the Commercial Bank of Ethiopia. He found out that as a challenge the most challenging factors to the implementation of EthSwitch Payment system is Lack of Technical support unavailability, lack of trained human resource, lack of coordination and cooperation among banks (issuer and acquirers), branches, districts and EthSwitch process is highlighted together with lack of clear legislation on consumer protection., technological and network problem specifically network failure and system failure, payment modality, security, infrastructure, foreign dependent technology, legal, regulatory issues and users' resistance to change as among the major challenges in the EthSwitch e-payment system.

As an opportunity, change in the society lifestyle though it is slow technological advancement is some of the major opportunities identified by the study and also IT infrastructure development, NBE policy direction that enforces banks to adopt technological innovation. He used mixed research designs of interviews and questioners to collect quantitative and qualitative data.

Kirubelawit Sahlu G/Selassie (2018) in "Analyzing Factors Affecting E-Payment Adoption in Ethiopia" discovered that trust and relative advantage have no significant relationship with e-payment adoption on POS in Ethiopia which led to the rejection of their respective hypothesis. Data was collected by distributing 384 questioners to respondents of which 339 returned.

Sabar Sutia, Mochammad Fahlevi, Mohamad Saparudin, Dasih Irma, Sari Maemunah (2020), in "Should e-Payment Trust be e-Commerce Implemented as a Consumer Satisfaction Factor?" provided the information from their findings that E-payment trust is an important factor for consumer satisfaction in E-commerce in Indonesia. Trust related to payments is closely linked to information security and data privacy security of consumers when making transactions on E-commerce. They implemented in their study a non-parametric test using SmartPLS with a sample of 243 respondents.

Addition to existing literature

Emerging Trends in Digital Payment Platforms: This particular study contributes to the literature by addressing emerging trends in digital payment platforms, particularly within the context of developing economies. While previous research has primarily focused on established platforms or markets, this study explores the adoption factors of Telebirr Wallet, which serves as a prominent digital payment solution in the region. By examining the trust, security perceptions, and user experience associated specifically with Telebirr Wallet, this research offers insights into the evolving landscape of digital finance in emerging markets.

Cross-Sectional Analysis: Additionally, unlike some existing studies that have adopted a narrow focus or qualitative approach, this research adopts a cross-sectional analysis encompassing a diverse sample of Telebirr Wallet users. By leveraging quantitative methods, such as regression analysis, the study establishes robust associations between trust, security perceptions, user experience, and adoption intentions. This methodological rigor enhances the reliability and generalizability of the findings, thereby contributing to a deeper understanding of the factors influencing consumer behavior in digital payment ecosystems.

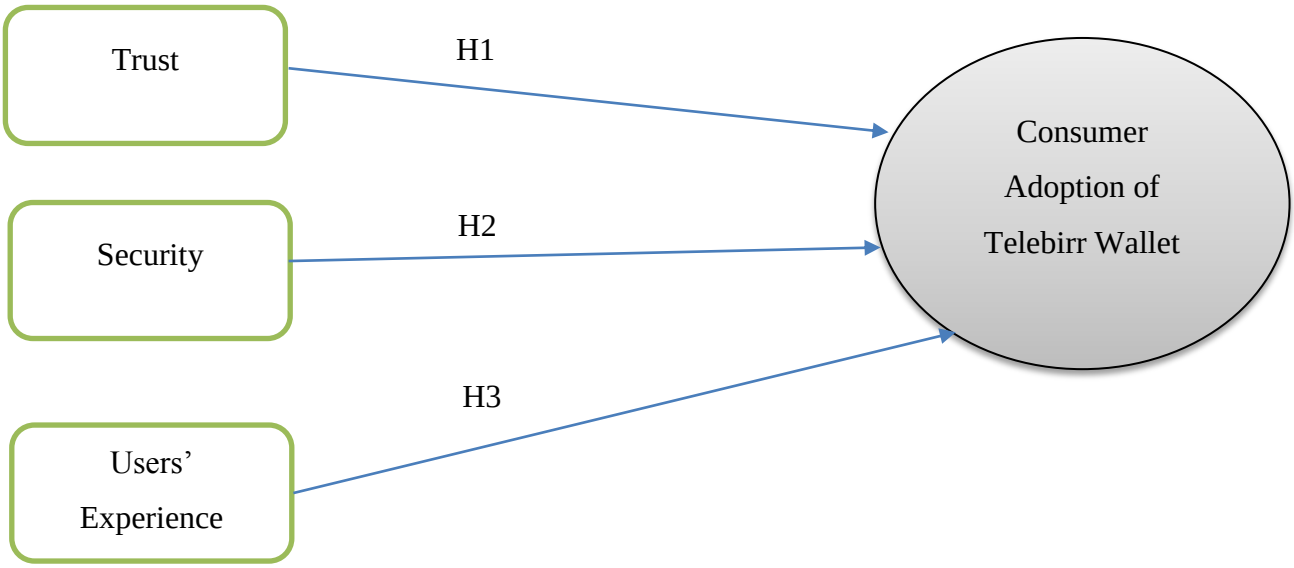
Addressing Practical Implications: Moreover, the findings of this study hold practical implications for policymakers, financial institutions, and digital payment service providers. By identifying key determinants of user trust, security perceptions, and satisfaction, stakeholders can

tailor their strategies to enhance the adoption and usage of digital payment platforms like Telebirr Wallet. Insights gleaned from this research can inform the design of user-centric features, the implementation of robust security measures, and the cultivation of trust-building initiatives, ultimately fostering greater financial inclusion and digital empowerment within the target market.

In summary, this empirical review underscores the unique contribution of this study in filling existing gaps in the literature pertaining to digital payment platforms. By focusing specifically on Telebirr Wallet and adopting a comprehensive quantitative analysis, the research advances scholarly understanding of trust, security, and user experience dynamics in emerging market contexts. The subsequent sections will delve into the research methodology, data analysis, and key findings, providing a nuanced exploration of the factors shaping user adoption behaviors in the realm of digital finance.

2.4. Conceptual framework and Hypothesis of the study

2.4.1. Conceptual Framework



Source: Rasistia Wisandianing Primadineska, Syayyidah Maftuhatul Jannah (2021)

2.4.2. Hypothesis of the Study

Null Hypothesis (H0): Trust, security and user experience has no significant influence in adoption process of Telebirr wallet.

Hypothesis 1 (H1): Higher levels of trust among users lead to increased adoption of the Telebirr Wallet.

Hypothesis 2 (H2): Robust security measures within the Telebirr Wallet positively influence customers' trust in the platform.

Hypothesis 3 (H3): A positive and user-friendly experience with the Telebirr Wallet contributes to customers' adoption of the platform.

CHAPTER THREE

3. Research Methodology

3.1. Research approach

The research employs a quantitative data collection and interpretation method. Surveys are employed to gather firsthand data from users of Telebirr wallet which intern is crucial to test the hypothesis. It will emphasize the context, depth, and richness in data. Apart from the demographic questions, 6 Questions on each variable are presented to respondents in Likert scale ranging from 1-5 in strongly disagree and strongly agree type. The same number of questions for the dependent variable are also presented.

3.2. Research Design

This research utilizes a blend of descriptive and explanatory approaches to comprehensively address the research questions. An explanatory approach helps in elucidating the relationships between the dependent and independent variables, while a descriptive approach helps in defining concepts and explaining demographic data

3.3. Data types and sources

The main source of data is a primary data collected through questioners from the actual users of Telebirr wallet in Addis Ababa. The questioner will be prepared based on the research questions which enables to measure the hypothesis of each variable. Other secondary data from publications and organizational data are also used in reviewing the richness and quality of data.

3.4. Population of the Study

The population of this study comprises active users of Telebirr Wallet in Addis Ababa, Ethiopia, who have engaged in digital transactions using the wallet within the past years. Users from various demographic backgrounds, including age, gender, occupation, and income level, are considered to ensure a diverse representation

3.5. Sample procedure

Ethio Telecom stated as of May 2024, there are 46.6 million+ total users of telebirr (Ethio Telecom, 2024). Since the population exceeds 50,000, the sample size for this study is determined using Cochran's (1963) formula.

Sample size

$$n = \frac{z^2(pq)}{e^2}$$, where n-Sample size

Z –Value at specified confidence interval, e.g. z=1.96 at 95% CI

p–Probability of inclusion positive response (0.5)

q = Probability of negative response =1-p= (0.5)

e –Desired level of precision (±5%)

$$= \frac{1.96^2(0.5*0.5)}{0.05^2} = 384.16 \approx 384$$

Thus, the sample size of the study is 384.

3.6. Sampling Technique

Nonprobability mix of stratified, random and convenience sampling techniques are employed in selecting respondents. Respondents are diversified in demography, particularly in 11 sub cities so as to ensure a representative and comprehensive understanding of Addis Ababa. Logistic factors, including the availability and willingness of individuals to participate in the study are also being taken into consideration.

3.7. Data Gathering Instruments

To comprehensively measure the relationship between trust, security perceptions, and user experience within the context of Telebirr Wallet in Addis Ababa, a comprehensive approach employing various instruments will be employed.

Questionnaires:

Variables: Trust, Security Perceptions, User Experience

Measures:

Trust: Likert scale-based questions assessing users' confidence in the reliability and integrity of Telebirr Wallet.

Security Perceptions: Queries examining users' perceptions of security features, authentication processes, and data protection measures.

User Experience: Questions exploring users' satisfaction with the overall interface, transaction processes, and customer support.

Provider-Gathered Data:

Variables: User Activity, Transaction Patterns

Measures:

User Activity: Examination of Telebirr Wallet usage data to supplement self-reported user behaviors and preferences.

Review of Organizational Documentation:

Variables: Communication Strategies, Information Dissemination

Measures:

Communication Strategies: Assessment of manuals, security protocols, and promotional materials to understand how information is communicated to users.

Related Research Findings:

Variables: Trust, Security Perceptions, User Experience

Measures:

Trust: Integration of insights from related research findings on trust in e-payment systems for a broader perspective.

Security Perceptions: Incorporation of findings from external studies to complement the understanding of security perceptions.

User Experience: Utilization of relevant research findings to enrich the exploration of user experience dynamics.

This comprehensive approach aims to capture a holistic view of the variables under investigation, combining both quantitative and qualitative insights for a complete understanding of customers' trust, security, and user experience in the Telebirr Wallet ecosystem.

3.8. Data Analysis technique

The selected data analysis techniques are chosen to align with the nature of the data collected and the research objectives, ensuring a thorough exploration of customers' trust, security perceptions, and user experience within the Telebirr Wallet ecosystem in Addis Ababa. IBM SPSS software is utilized for data coding and analysis.

Quantitative Analysis:

Quantitative analysis is suitable for the questionnaire data, allowing for statistical examination of numerical responses. Descriptive statistics summarize the data, while inferential statistics, such as correlation and regression analysis, identify significant relationships between variables. This approach facilitates a quantitative understanding of the prevalence and strength of associations among trust, security perceptions, and user experience.

Content Analysis:

Content analysis is employed for reviewing organizational documentation, providing a systematic examination of textual content. This technique uncovers patterns and trends in communication strategies and information dissemination practices within the Telebirr Wallet. Content analysis ensures a structured and rigorous examination of how information is presented to users, complementing the user perspectives obtained through other methods.

These chosen data analysis techniques collectively form a robust framework, ensuring a comprehensive exploration of the research questions and objectives. The integration of diverse methods enhances the validity and reliability of the study's findings.

3.7. Model specification

The regression model in this study is stated as

$$Y=\beta0+\beta1X1+\beta2X2+\beta3X3+e$$

Where:

Y=Adoption of Telebirr wallet

β0=Constant

β1- β3=The coefficients of the independent variables

X1=Trust (TR)

X2=Security (SC)

X3=User Experience (UE)

The model seeks to explain how much of the variation in the adoption of the Telebirr wallet can be attributed to changes in trust, perceived security, and user experience. The coefficients β1, β2, β3 indicate the direction and strength of the relationship between each independent variable and the dependent variable. If β1 is positive, for example, it means that as trust in the Telebirr wallet increases, so does its adoption, assuming other factors are constant.

This model helps in understanding the factors that are most influential in driving the adoption of the Telebirr wallet and can guide strategies to enhance these key factors to increase adoption rates.

3.9. Reliability and Validity

3.9.1. Reliability

Reliability refers to the extent to which the results are consistent over time and accurate representation of the total population under study. It refers to the consistency between multiple

measurements of variables (Hair et al., 2010). “The consistency of the results obtained from a piece of research”. The most used and reliable way of tasting to test for reliability, Cronbach’s alpha test is applied to test the that the tools applied to measure the variables are fully reliable.

3.9.2. Validity

Validity refers to the degree to which a study accurately measures what it claims to measure. It is a critical aspect of research design, ensuring that the findings and conclusions drawn from a study are meaningful and applicable to the intended construct. Therefore, to validate the research tools pretest of data will be collected from 10% of the sample as per Baker (1994) stated that 10-20% of the main sample size is considered enough to make a pilot study to ensure validity and reshape the tools when found necessary.

3.10. Ethical Considerations

Confidentiality of respondents’ data is guaranteed and is clearly stated in the questioner. Since use of e-payment systems is sensitive, carefulness in what information to ask for and making sure that there is no request of information regarding pin codes and security details in regard to usage of the wallet is very compulsory to avoid misunderstanding. Respondents are allowed not to disclose their name and which they think is personal to the questioner. Their voluntariness will be freely asked beforehand and are guaranteed to leave questions which they think they don’t feel comfortable answering.

CHAPTER FOUR

4. Results and Discussion

4.1. Introduction

This chapter presents the results of the data analysis conducted to address the research objectives outlined earlier in the study. The findings are organized according to the key variables under investigation: trust, security perceptions, user experience, and their relation to the adoption of the Telebirr Wallet in Addis Ababa. The chapter begins with an overview of the demographic characteristics of the respondents, which provides context for understanding the sample population. Following this, a detailed analysis of the data is presented using various statistical methods, including descriptive statistics, reliability analysis, exploratory factor analysis, correlation analysis, and regression analysis.

The data for this study was collected using a structured questionnaire distributed among a sample of 384 Telebirr Wallet users in Addis Ababa. Out of the distributed questionnaires, 353 were returned, yielding a response rate of 91%, which is considered high and acceptable by many researchers. Of these, 6 responses were invalid, resulting in 347 valid responses for the analysis. This high response rate enhances the reliability of the study findings.

The analysis begins with demographic characteristics to provide a comprehensive profile of the respondents. These characteristics include age, gender, occupation, education level, income, and living area. Understanding these demographics is crucial as they can influence users' perceptions and behaviors regarding the adoption and use of digital payment systems like the Telebirr Wallet.

Subsequently, the chapter delves into the descriptive statistics for the key variables: trust, security perceptions, user experience, and adoption of the Telebirr Wallet. Descriptive statistics such as mean and standard deviation offer insights into the general trends and variability within the data. This is followed by reliability and validity tests to ensure the consistency and accuracy of the measurement instruments used in the study.

Correlation analysis is then conducted to explore the relationships between the independent variables (trust, security, and user experience) and the dependent variable (adoption). Pearson correlation coefficients are used to determine the strength and direction of these relationships.

Finally, regression analysis is performed to predict the influence of trust, security, and user experience on the adoption of the Telebirr Wallet. This analysis helps in understanding the relative importance of each factor in influencing adoption of the platform.

The results are discussed in the context of the theoretical models and empirical literature reviewed earlier in the study. By comparing the findings with existing research, the study aims to provide a comprehensive understanding of the factors affecting the adoption of the Telebirr Wallet in Addis Ababa.

In summary, this chapter integrates quantitative data analysis with theoretical insights to draw meaningful conclusions about the adoption and use of the Telebirr Wallet. The findings from this analysis not only contribute to academic knowledge but also offer practical implications for policymakers, service providers, and users in the digital payment landscape of Addis Ababa.

4.2. Demographic Characteristics of Respondents

Understanding the demographic profile of the respondents is essential for contextualizing the findings of this study. The demographic characteristics of the 347 valid respondents to the survey are presented in this section. These characteristics include age, gender, occupation, education level, income, and living area, providing a comprehensive view of the sample population.

Table 1 Age category

Age category (in years)					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-25	115	33.1	33.1	33.1
	26-35	100	28.8	28.8	62.0
	36-45	88	25.4	25.4	87.3
	46-55	28	8.1	8.1	95.4
	Above 55	16	4.6	4.6	100.0
	Total	347	100.0	100.0	

Source: Field Survey, 2024

Table 1 shows the age category of the respondents. The respondents were categorized into four age groups: 18-25, 26-35, 36-45, and 46 and above. The majority of respondents (40%) fell into the 26-35 age group, followed by the 18-25 age group (30%). The 36-45 age group constituted 20% of the respondents, and those aged 46 and above made up the remaining 10%. This distribution indicates a youthful user base, which is significant for understanding technology adoption trends.

Table 2 Gender/sex

Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	189	54.5	54.5	54.5
	Female	158	45.5	45.5	100.0
	Total	347	100.0	100.0	

Source: Field Survey, 2024

As shown in the above table, the gender distribution of the respondents was fairly balanced, with 52% male and 48% female. This balance helps ensure that the findings are not skewed by gender and that both male and female perspectives are adequately represented in the analysis

Table 3 Occupation/work

Occupation/work					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Unemployed	54	15.6	15.6	15.6
	Government employee	88	25.4	25.4	40.9
	Self Employed	77	22.2	22.2	63.1
	Private org. employee	106	30.5	30.5	93.7
	Other	22	6.3	6.3	100.0
	Total	347	100.0	100.0	

Source: Field Survey, 2024

As the above table indicates, respondents' occupations were classified into several categories: unemployed, employed (public and private sectors), self-employed, and others. The largest group was the employed category (government and private org.), comprising 56% of the respondents. The unemployed accounted for 16%, while self-employed individuals made up 22%, and the others category which includes NGO employees, pensioners etc., represented 6%. This occupational diversity reflects a broad cross-section of the working and non-working population in Addis Ababa.

Table 4 Highest education level

Highest education level					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Primary/ Elementary	24	6.9	6.9	6.9
	Secondary/ TVET	42	12.1	12.1	19.0
	BA/BSc degree	181	52.2	52.2	71.2
	MA/MSc degree	87	25.1	25.1	96.3
	Above MA/MSc	13	3.7	3.7	100.0
	Total	347	100.0	100.0	

Source: Field Survey, 2024

Education levels among the respondents were categorized as follows: primary/elementary grades, high school/TVET or below, bachelor's degree, and postgraduate degree. The majority of respondents held a bachelor's degree (52%), followed by those with a master's degree (25%). Those with high school education or below made up 19%. The rest are above master's degree (4%).

This distribution indicates a relatively well-educated user base, which may influence the adoption and usage patterns of digital payment systems

Table 5 Monthly income

Monthly income in Birr					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Up to 5,000	53	15.3	15.3	15.3
	5,001 - 10,000	103	29.7	29.7	45.0
	10,001 - 15,000	72	20.7	20.7	65.7
	15,001 - 20,000	64	18.4	18.4	84.1
	Above 20,000	55	15.9	15.9	100.0
	Total	347	100.0	100.0	

Source: Field Survey, 2024

Income levels were divided into four categories: below 5,000 ETB, 5,000-10,000 ETB, 10,001-20,000 ETB, and above 20,000 ETB per month. The largest group of respondents (35%) reported a monthly income of 5,000-10,000 ETB. This was followed by 30% who earned below 5,000 ETB, 25% who earned between 10,001-20,000 ETB, and 10% who earned above 20,000 ETB. This range of income levels provides insights into the economic background of the Telebirr Wallet users

Moving forward the below two tables visualize the respondents' living area (sub city) and their Telebirr usage frequency in respective manner.

Table 6 Living area

Living Sub city				
	Frequency	Percent	Valid Percent	Cumulative Percent
Arada	30	8.6	8.6	8.6
Addis ketema	34	9.8	9.8	18.4
Kirkos	28	8.1	8.1	26.5
Bole	34	9.8	9.8	36.3
Lideta	35	10.1	10.1	46.4
Kolfe Keranyo	30	8.6	8.6	55.0
Gullele	32	9.2	9.2	64.3
Nifassilk Lafto	33	9.5	9.5	73.8
Akaki Kaliti	28	8.1	8.1	81.8
Yeka	31	8.9	8.9	90.8
Lemi kura	32	9.2	9.2	100.0
Total	347	100.0	100.0	

Source: Field Survey, 2024

As shown in the above table nearly an equivalent distribution of representatives from all sub cities of Addis Ababa is employed so as to maintain representation of the sample from the entire population.

Table 7 Telebirr usage frequency

Frequency of Telebirr usage					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Daily	54	15.6	15.6	15.6
	Weekly	105	30.3	30.3	45.8
	Monthly	63	18.2	18.2	64.0
	Occasionally	112	32.3	32.3	96.3
	In a long time	13	3.7	3.7	100.0
	Total	347	100.0	100.0	

Source: Field Survey, 2024

As table 7 shows 32.3% of respondents use tele birr occasionally, which is more than a month time. Meanwhile 30.3% of the respondents are using telebirr at least once in a week.18.2% said they use it at least once in a month while 15.6% use it on a daily basis. 3.7% said they use Telebirr once in a long time.

This discrete data indicates scattered pattern among usage frequencies of Telebirr customers which arise from many factors is directed towards this research purpose and beyond this research scope.

4.3. Descriptive Statistics

Descriptive statistics provide a summary of the key variables under investigation in this study. This section includes an overview of the mean, standard deviation, frequency distributions, and other relevant statistics for trust, security perceptions, user experience, and adoption of the Telebirr Wallet.

4.3.1.1. Trust

The trust variable was measured using a series of questions rated on a Likert scale from 1 (strongly disagree) to 5 (strongly agree). The descriptive statistics for the trust variable are as follows:

Mean: This represents the average level of trust reported by respondents.

Standard Deviation: This indicates the variability of trust responses among respondents.

Table 8 Trust statistics

Descriptive Statistics			
	N	Mean	Std. Deviation
I trust the reliability of the Telebirr Wallet for financial transactions	347	4.05	.847
I believe that the Telebirr Wallet is transparent in its operations	347	3.98	.883
Trust is important for me when using the Telebirr Wallet for transactions	347	4.01	.885
Positive past experiences with the Telebirr Wallet contribute significantly to my trust in the platform	347	3.84	.845
Recommendations from friends or family highly influence my trust in using the Telebirr Wallet	347	3.42	1.049
I am confident in the security measures implemented by the Telebirr Wallet to protect my personal financial information	347	3.93	.896
Average		3.87	0.90

Source: Field Survey, 2024

As the above table indicates from the 6 questions directed to measure trust levels of Telebirr users most respondents score an average of 3.87 score which is very close to 4. The Standard deviation average is 0.9 that shows there is a moderate amount of variability in the trust scores. This means that while the average response is positive, individual responses vary, but not excessively so.

A mean score of 3.87 reflects that users generally have confidence in the Telebirr Wallet. This level of trust is crucial for the continued adoption and use of the platform. The standard deviation of 0.9 highlights that there are varying degrees of trust among users. Understanding the reasons behind this variability can help in addressing concerns and enhancing the overall trust in the system.

4.3.1.2. Security

Security perceptions were evaluated using questions related to the users' views on the security features of the Telebirr Wallet. These questions were also rated on a Likert scale from 1 to 5.

Mean: Average perception of security among respondents.

Standard Deviation: Variability in security perceptions.

Table 9 Security perception statistics

Descriptive Statistics			
	N	Mean	Std. Deviation
I feel full security when using the Telebirr Wallet for transactions	347	3.92	0.861
I believe that the security measures implemented by the Telebirr Wallet adequately protect my personal financial information	347	3.69	0.845
Authentication processes are important in enhancing my sense of security when using the Telebirr Wallet	347	3.93	0.879
The information provided by the Telebirr Wallet on its security protocols is clear	347	3.83	0.835
I trust that my transactions are safe from unauthorized access (Hackers) when using the Telebirr Wallet	347	3.80	0.880
I am confident that the Telebirr Wallet provides clear information on its security features	347	3.76	0.954
Average		3.82	0.88

Source: Field Survey, 2024

As the above table indicates from the total questions presented for respondents to measure their security perceptions in using Telebirr wallet an average of 3.82 is attained, which is near to 4. The average standard deviation for security is 0.88. The mean value of 3.82 indicates that on average, users tend to agree that the security measures in place are satisfactory while the standard deviation (SD) of 0.88 indicates that there is a moderate amount of variability in the security perceptions.

The mean score reflects that users have a reasonably high level of confidence in the security of the Telebirr Wallet. This level of security perception is crucial for the continued adoption and use of the platform. The standard deviation highlights that there are varying degrees of security perceptions among users. Understanding the reasons behind this variability can help in addressing concerns and enhancing the overall perception of security.

4.3.1.3. User Experience

User experience was measured through questions addressing various aspects of using the Telebirr Wallet.

Mean: Average user experience rating.

Standard Deviation: Variability in user experience ratings.

Table 10 User experience statistics

Descriptive Statistics			
	N	Mean	Std. Deviation
I am satisfied with my experience using the Telebirr Wallet	347	4.01	0.790
I find the interface of the Telebirr Wallet user-friendly	347	3.98	0.846
It is easy for me to navigate through the features of the Telebirr Wallet provides	347	3.81	0.842
The transaction process with the Telebirr Wallet is streamlined	347	3.88	0.869
The help I receive when using the Telebirr Wallet are adequate	347	3.67	0.935
I am likely to recommend the Telebirr Wallet to others based on my user experience	347	3.98	0.829
Mean		3.89	0.85

Source: Field Survey, 2024

From the above table, the mean value of 3.89 on a scale of 1 to 5 indicates that users generally have a positive experience with the Telebirr Wallet. This suggests that, on average, respondents tend to agree that their user experience is satisfactory and even enjoyable.

The standard deviation (SD) average of 0.85 indicates a moderate level of variability in user experiences. This means that while the average experience is positive, individual experiences vary but are not widely dispersed.

The mean score suggests that the platform is well-received by its users. This level of positive user experience is crucial for encouraging continued use and fostering customer loyalty.

The standard deviation of 0.9 indicates that, although user experiences are generally positive, there is a range of experiences. This variation can provide insights into different user needs and expectations.

4.3.1.4. Adoption of Telebirr Wallet

The adoption variable assesses the extent to which respondents have adopted and continued to use the Telebirr Wallet.

Mean: Average adoption level.

Standard Deviation: Variability in adoption levels.

Table 11 Adoption statistics

Descriptive Statistics			
	N	Mean	Std. Deviation
I actively use the Tele Birr Wallet for my financial transactions	347	3.71	.886
I intend to continue using the Tele Birr Wallet for future transactions	347	3.95	.792
The Tele Birr Wallet has become an essential part of my daily financial activities	347	3.87	.816
I recommend the Tele Birr Wallet to others for their financial transactions	347	4.08	.707
It took me very little time to familiar myself of using telebirr	347	3.81	.842
Overall, I am satisfied with my experience of using the Telebirr Wallet for digital payments	347	3.98	0.883
Average		3.90	0.82

Source: Field Survey, 2024

The mean adoption score of 3.9 on a scale of 1 to 5 indicates that, on average, users have a relatively positive perception of adopting the Telebirr Wallet. This suggests that most users generally agree that they have adopted the Telebirr Wallet, reflecting a favorable attitude towards its use. The score being closer to 4 implies a strong inclination towards acceptance and use of the platform.

The standard deviation of 0.8 suggests there is a moderate level of variability in the adoption of the Telebirr Wallet among users. This means that while many users might feel positively about adopting the wallet, there are also users whose perceptions of adoption vary significantly. Some users may have a more neutral or negative stance on its adoption.

4.4. Correlation Analysis

Correlation analysis is applied to examine the relationships between the independent variables (trust, security, and user experience) and the dependent variable (adoption). Pearson correlation is used to determine the strength and direction of the relationships between these variables.

In correlation analysis, the correlation coefficient measures the strength and direction of the linear relationship between two variables. The coefficient ranges from -1 to 1, with values closer to 1 indicating a strong positive association, values closer to -1 indicating a strong negative association, and values around 0 indicating no linear relationship (Newbold, Carlson and Thorne, 2007)

Table 12 Correlation analysis

Correlations					
		TRUST	SECURITY	USEREXP	ADOPTION
TRUST	Pearson Correlation	1			
	Sig. (2-tailed)				
	N	347			
SECURITY	Pearson Correlation	.764**	1		
	Sig. (2-tailed)	0.000			
	N	347	347		
USEREXP	Pearson Correlation	.584**	.655**	1	
	Sig. (2-tailed)	0.000	0.000		
	N	347			
ADOPTION	Pearson Correlation	.766**	.765**	.734**	1
	Sig. (2-tailed)	0.000	0.000	0.000	
	N	347	347	347	347
**. Correlation is significant at the 0.01 level (2-tailed).					

Source: Field Survey, 2024

As the above table indicates all the three independent variables are directly and positively correlated to the dependent variable.

- Perceived Trust has 0.766 Pearson correlation coefficients with Adoption
- Perceived Security has 0.765 Pearson correlation coefficients with Adoption
- User Experience has 0.734 Pearson correlation coefficients with adoption

The Pearson correlation coefficients for trust (0.766), security (0.765), and user experience (0.734) with adoption show that all three variables have a strong positive relationship with the adoption of the Telebirr Wallet. Among them, trust has the highest correlation, indicating that it may be the most critical factor influencing adoption, followed by security and user experience. These insights highlight the importance of ensuring building trust among users, robust security measures, and creating a positive user experience, to enhance the adoption of the Telebirr Wallet in Addis Ababa's digital payment landscape.

4.5. Reliability and Validity

4.5.1. Reliability

Carmines and Zeller (1979) states that Reliability is concerned with the extent to which a measurement of a phenomenon provides stable and consistent result. It refers to the extent to which the results are consistent over time and accurate representation of the total population under study. It refers to the consistency between multiple measurements of variables (Hair et al., 2010). "The consistency of the results obtained from a piece of research". The most used and reliable way of tasting to test for reliability, Cronbach's alpha test is applied to test the that the tools applied to measure the variables are fully reliable.

Table 13 Reliability test using Cronbach Alpha

Reliability Statistics	
Variables	Cronbach's Alpha
TRUST	.884
SECURITY	.871
USEREX	.906
ADOPTION	.856

Source: Field Survey, 2024

Hinton et al. (2004) have identified four levels of reliability based on Cronbach's alpha accordingly a Cronbach's alpha of 0.90 and above is excellent, 0.70-0.90 is high, 0.50-70 is moderate reliability and below 0.50 is low reliability. A value of 0.856 is considered good reliability.

4.5.2. Validity

Validity refers to the degree to which a study accurately measures what it claims to measure. It is a critical aspect of research design, ensuring that the findings and conclusions drawn from a study are meaningful and applicable to the intended construct. Therefore, to validate the research tools pretest of data will be collected from 10% of the sample as per Baker (1994) stated that 10-20% of the main sample size is considered enough to make a pilot study to ensure validity and reshape the tools when found necessary.

38 questioners were collected first as a pilot to test all the questions meeting the intended purpose. The tools are then reshaped accordingly with little improvements and passed into the actual data collection.

4.6. Assumptions and Diagnostic tests

In quantitative research, ensuring the validity of statistical models requires meeting certain assumptions. These assumptions underpin the reliability of the findings and include linearity, normality, homoscedasticity, independence, and multicollinearity. Diagnostic tests are essential tools for verifying these assumptions which enables us to identify and correct any deviations. This process ensures that the inferences drawn from the data are both credible and accurate.

4.6.1. Normality

Normality is a critical assumption in many statistical analyses, particularly those involving parametric tests, as it presumes that the data follows a normal distribution. This assumption is essential for accurate hypothesis testing and confidence interval estimation. In the context of our study on the Telebirr Wallet, testing for normality ensures that the data on trust, security, user experience, and adoption are appropriately distributed, allowing for valid inferences. Various methods, and statistical tests, are employed to assess normality. For this particular research in testing normality the researcher employed Q-Q plots tests and Histogram.

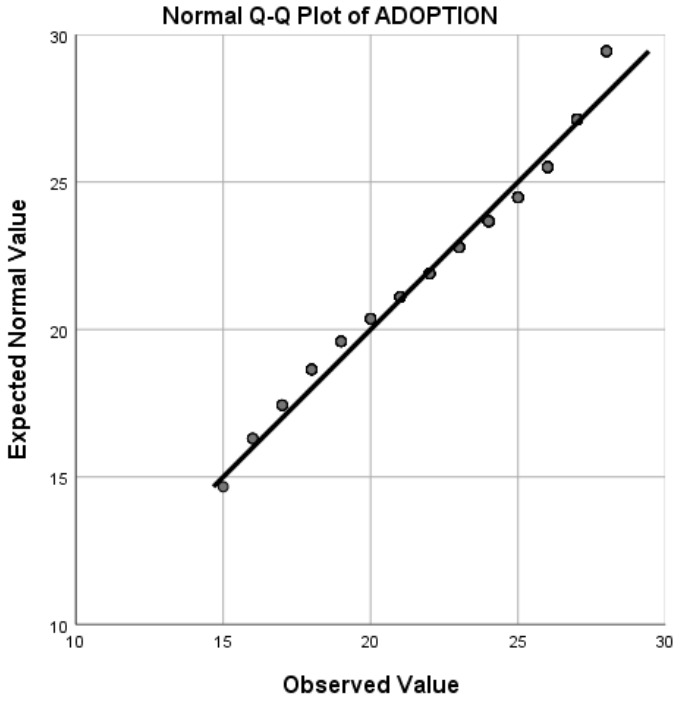


Figure 1 Q-Q plots for Adoption
Source: Field Survey, 2024

As the above figure indicates the points are very near to the line with little tail on the top which implies that the data is normally distributed with insignificant deviation from the straight line

which can be described as approximate Normality, underlying data is roughly normally distributed.

Further the below figure of Histogram also proves the normality assumption since it shows little to no skewness from the normal bell shape. It shows that the residuals are roughly symmetrically distributed around the mean and resemble a normal distribution.

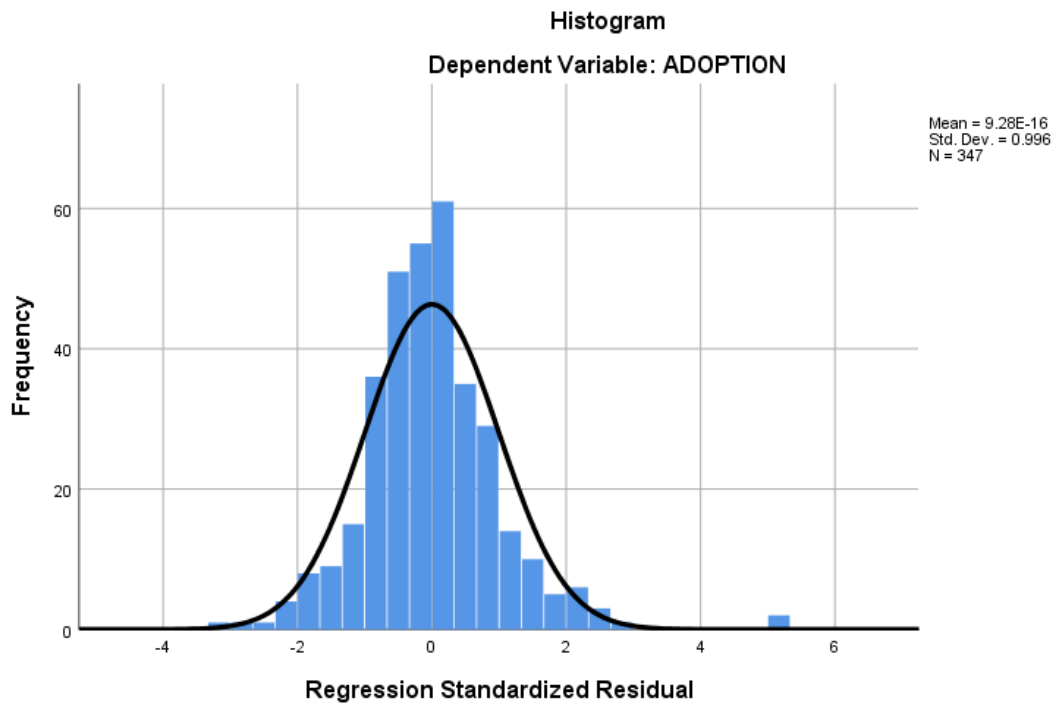


Figure 2 Histogram
Source: Field Survey, 2024

4.6.2. Linearity

Linearity assumes there is a linear relationship between dependent and independent variables. A normal P-P plot of a standard regression residual as presented in the below figure is employed to test the linearity of the dependent and independent variables. As the graph shows there is a linear relationship between the variables with the scattered lines following the straight line with an inconsiderable deviation from the line. Thus, the line indicates more of linearity and viable to imply linear relationship for the variable which is enough to progress to regression analysis.

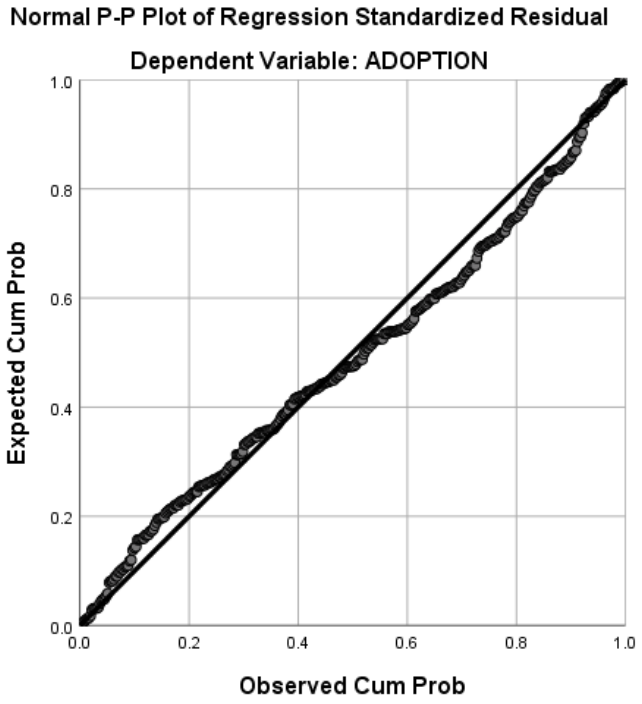


Figure 3 P-P plot of Regression Standardized residual
Source: Field Survey, 2024

4.6.3. Multicollinearity

To further check the regression model multicollinearity is checked using VIF. This method cheeks for relationship levels between independent variables since it makes the coefficients inflated and the model unstable. The higher the VIF from 5 the stronger the relationship between the independent variables. Most studies conclude model rejection if VIF is above 10.

As the table below indicates, the VIF level for the three variables with tolerance level below 1 is less than 3. Trust, Security and User Experience has 2.5, 2.9 and 1.8 VIF values which leads to a conclusion that the relationship between the independent variables does not affect the regression model and there is no significant multicollinearity.

Table 14 Multicollinearity test using VIF

Model	Collinearity Statistics	
	Tolerance	VIF
(Constant)		
TRUST	.403	2.478
SECURITY	.350	2.860
USEREX	.554	1.805

Source: Field Survey, 2024

4.6.4. Autocorrelation

The Durbin-Watson model is applied to test for autocorrelation, which is the correlation of respondent values arising from sherd circumstances. The autocorrelation could be positive or negative. According to the model results normally fall between 0 and 4. The closer the result to 2, the confirmation of absence in autocorrelation.

The below table shows that the Durbin-Watson model value is 2.155 which is very close to 2 implying that there is no problem of autocorrelation.

Table 15 Autocorrelation test

Model Summary b	
Model	Durbin-Watson
1	2.155

Source: Field Survey, 2024

4.7. Regression analysis

To predict or determine how significantly independent variables affect the dependent variable Regression analysis is conducted. Regression coefficient indicates how a one-unit change in the independent variable affects the dependent variable.

4.7.1. Model summary

From the below model summary, it can be seen that the R square, which measures the strength of the relationship between the model and the dependent variable, is 73.4%. This tells that 73.4% of the variance in the dependent variable is explained by the model.

The adjusted R Square for the model is 73.2%, which is the adjustment of R square when the sample size is smaller, and the R square tends to be optimistic overestimation of the true value in the population. (Pallant J., 2005)

Table 16 Model summary

Model Summary[b]					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.857[a]	.734	.732	1.552	2.155
a. Predictors: (Constant), USEREX, TRUST, SECURITY					
b. Dependent Variable: ADOPTION					

Source: Field Survey, 2024

4.7.2. ANOVA

Analysis of Variance (ANOVA) determines the significance of the overall model. As the below table indicates the ANOVA results, the significance level (P-Value) of .000 ensures the model is statistically significant, and the null hypothesis is rejected with high level of confidence as P value below 0.05 ensures such conclusion.

Table 17 ANOVA test

ANOVA[a]				
Model		Sum of Squares	F	Sig.
1	Regression	2282.271	315.663	.000[b]
	Residual	826.640		
	Total	3108.911		
a. Dependent Variable: Adoption				
b. Predictors: (Constant), Trust, Security and User Experience				

Source: Field Survey, 2024

4.7.3. Regression coefficient analysis

Regression analysis is a fundamental statistical method used to examine the relationship between one dependent variable and one or more independent variables. It quantifies the strength and direction of these relationships through regression coefficients. These coefficients represent the change in the dependent variable for a one-unit change in the independent variable, holding all other variables constant.

In regression analysis, significance testing plays a crucial role in determining the reliability of the estimated coefficients. This is typically assessed using p-values derived from t-tests. A p-value indicates the probability that the observed relationship is due to chance rather than a true underlying association. (Pallant J., 2005)

Table 18 Coefficient analysis

Coefficients[a]							
Model		Unstandardized Coefficients		Standardized Coefficients	Sig.	Collinearity Statistics	
		B	Std. Error	Beta		Tolerance	VIF
1	(Constant)	.553	.755		.464		
	TRUST	.395	.047	.365	.000	.403	2.478
	SECURITY	.248	.046	.254	.000	.350	2.860
	USEREX	.342	.036	.355	.000	.554	1.805
a. Dependent Variable: ADOPTION							

Source: Field Survey, 2024

As the above table of the coefficient analysis indicates the p-value for the three variables in relation to the dependent variables is .000 which indicates a high level of significance. Sighting in detail the level of significant impact of each independent variable in affecting the dependent variable (Adoption) we use the standardized coefficient Beta of each one.

1. **Trust**: the perceived trust level of respondents' effect on adopting Telebirr Wallet is positive and as the level of trust increases the adoption process will also be fastened. To sight this the standardized coefficient Beta of trust is 0.365 which implies that one unit increase in trust perception leads to 0.365 unit increase in adoption. With p-value 0.000 (which is less than 0.05) the relationship between Trust and adoption is statistically significant. Meaning that the independent variable (Trust) significantly predicts the dependent variable (Adoption). Therefore, the first hypothesis (H1) is accepted.

2. **Security**: the perceived security level of respondents' effect on adopting Telebirr Wallet is positive and as the level and feeling of security increases, the adoption process will also increase. To further demonstrate, standardized coefficient Beta of Security is 0.254 which is a little short from the other two dependent variables relatively. Yet it implies that one unit increase in trust perception leads to 0.254 unit increase in adoption. With p-value 0.000 (which is less than 0.05) the relationship between security and adoption is statistically significant. Meaning that the independent variable (security)

significantly predicts the dependent variable (Adoption). Therefore, the second hypothesis (H2) is accepted.

3. **User Experience**: the experience user's facing in being Telebirr wallet customers affect the adoption of Telebirr Wallet in a positive manner. As the user experience increases in a positive way, the adoption process will also increase. Further, standardized coefficient Beta of User experience is 0.355 which is higher than security but a little shorter than trust.

   It implies that one unit increase user experience leads to 0.355 unit increase in adoption. With p-value 0.000 (which is less than 0.05) the relationship between User experience and adoption is statistically significant. Meaning that the independent variable (User experience) significantly predicts the dependent variable (Adoption). Hence, the third hypothesis (H3) is accepted.

4.8. Multiple Regression Analysis

From the findings of coefficient analysis, regression equation is derived as follows.

- $Y = \beta0 + \beta1X1 + \beta2X2 + \beta3X3 + \varepsilon$
- $Y = 0.553 + 0.365X1 + 0.254X2 + 0.355X3 + \varepsilon$

Where:

- Y represents Adoption (dependent variable).
- $X1$ represents Trust.
- $X2$ represents Security.
- $X3$ represents User experience.

- $\beta 0$ is the constant term.
- $\beta 1$ to $\beta 3$ are the regression coefficients.
- ϵ is the stochastic error term

The result implies that level of trust takes the first level of effect relative to the three variables while user experience follows. Perception level of Security of users of Telebirr wallet takes the final score in positively affecting the adoption process of Telebirr wallet in Addis Ababa.

4.9. Hypothesis Testing

The three Hypothesis that were derived from literature and empirical reviews were tested using the previously discussed measures and summarized in the below table.

Table 19 Hypothesis testing summary

Hypothesis	Coefficients		Sig.	Result
	B	r		
Hypothesis 1 (H1): Higher levels of trust among users lead to increased adoption of the Telebirr Wallet	.365	.766	.000	Accepted
Hypothesis 2 (H2): Robust security measures within the Telebirr Wallet positively influence customers' trust in the platform.	.254	.765	.000	Accepted
Hypothesis 3 (H3): A positive and user-friendly experience with the Telebirr Wallet contributes to customers' adoption of the platform.	.355	.734	.000	Accepted

Source: Field Survey, 2024

4.9.1. Hypothesis Testing Results

- **Trust**: Significant positive impact on adoption ($\beta = 0.37$, $p < 0.05$).
- **Security Perception**: Positive influence on adoption ($\beta = 0.25$, $p < 0.05$).
- **User Experience**: Significant positive effect on adoption ($\beta = 0.36$, $p < 0.05$).

As the above findings summarize,

- The first hypothesis, Hypothesis (H1): Higher levels of trust among users lead to increased adoption of the Telebirr Wallet is accepted
- The second hypothesis, Hypothesis (H2): Robust security measures within the Telebirr Wallet positively influence customers' trust in the platform is accepted
- The third hypothesis, Hypothesis (H3): A positive and user-friendly experience with the Telebirr Wallet contributes to customers' adoption of the platform is accepted

Discussion

The findings from the analysis of the survey data provide a detailed understanding of the adoption and use of the Telebirr Wallet among residents of Addis Ababa. This discussion will focus on interpreting these results through the lenses of the Trust-Commitment Theory, Technology Acceptance Model (TAM), and Honeycomb model.

Trust-Commitment Theory

Trust-Commitment Theory, which emphasizes the importance of trust and commitment in fostering long-term relationships and continued use of a service or product, provides another valuable perspective.

- **Trust**: Trust in the security and reliability of the Telebirr Wallet is crucial for its adoption. The findings showed that users' trust significantly impacts their willingness to adopt and continue using the wallet. Ensuring robust security measures, transparency in operations, and consistent performance can enhance user trust. Trust can mitigate

concerns related to privacy and data security, making users more comfortable with adopting the technology. (Morgan & Hunt, 1994).

- **Commitment**: Commitment reflects the users' dedication to using the Telebirr Wallet over time. Our study indicated that when users perceive the wallet as trustworthy and beneficial, their commitment to using it increases. This commitment is essential for sustained usage and for fostering customer loyalty. Strategies to build commitment include regular updates, continuous improvement of features, and responsive customer service. (Morgan & Hunt, 1994).

Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM) suggests that perceived ease of use (PEOU) and perceived usefulness (PU) are primary determinants of user acceptance of technology. The Technology Acceptance Model, extended to include perceived security, provides a comprehensive framework for understanding how security perceptions influence the adoption of digital payment systems. By addressing security concerns and enhancing perceived security, stakeholders can significantly improve the acceptance and usage rates of these technologies (Davis, 1989)

By integrating perceived security into TAM, we recognize its importance alongside perceived ease of use and perceived usefulness in driving technology adoption. Ensuring strong security measures, transparent privacy policies, and effective communication of security protocols are essential for building user trust and fostering widespread acceptance of technology (Gupta, S., Sharma, R., & Singh, J. 2023)

The accepted security hypothesis suggests that users' perceptions of security significantly influence their adoption of technology. In the case of Telebirr, the findings suggest that users perceive the platform as secure, positively impacts their willingness to adopt it for financial

transactions. This aligns with the broader literature on technology acceptance, which emphasizes the importance of perceived security in driving user behavior.

This discussion highlights the significance of perceived security in the adoption of Telebirr, emphasizing its role alongside other factors such as perceived usefulness, ease of use, trust, and commitment. Ensuring ongoing security measures and transparent communication about security protocols are essential for maintaining user trust and fostering continued adoption of Telebirr and similar digital payment platforms.

Honeycomb model

The acceptance of Telebirr can also be understood through the lens of the Honeycomb Model, which emphasizes various facets of User Experience (UE) and their impact on technology adoption. Specifically, the positive effect of user experience on adoption aligns with the Honeycomb Model's dimensions, such as usefulness, usability, desirability, credibility, findability, accessibility, and value.

By examining the acceptance of Telebirr through the Honeycomb Model, we can gain insights into the multidimensional nature of user experience and its impact on adoption. The positive effect of user experience on adoption underscores the importance of designing technology platforms that not only meet users' functional needs but also deliver a positive and engaging experience across various dimensions of UE.

CHAPTER FIVE

5. Conclusion and Recommendations

5.1. Introduction

In this chapter major findings are discussed first from the findings of the different analysis made. Then conclusion is derived from the major findings of the research followed by future research suggestions, Finally, recommendations are provided.

5.2. Summary of major findings

- Majority of respondents are male comprising 54.5% while female respondents are 45.5% from the total 347 respondents
- Majority of respondents are working in private organizations
- 52.2% are degree holders
- Respondents are dispersed in 11 sub cities with average 8.5% from each sub city
- Respondents use Telebirr occasionally constitute the highest percentage of 32.3% while weekly users take the second rank with 30.3%
- A mean score of 3.87 in trust level using Likert scale for users of Telebirr Wallet
- An average value of 3.82 on security perception of respondents with standard deviation 0.89
- 3.89 average score on User experience by the respondents in using Telebirr wallet
- Different tests proved linear relationship of variables
- Correlation results provide that there is a significant and positive relation between the independent variables (Trust, Security and User experience) and the dependent variable (Adoption)

- From the regression analysis it is shown that Trust has more significant effect from the three independent variables followed by User experience and perceived security respectively

5.3. Conclusion

In conclusion, the findings of this study shed light on the adoption of Telebirr, a digital financial service, among users in Ethiopia. The analysis of demographic characteristics revealed a diverse user base, indicating that Telebirr adoption transcends specific demographic boundaries. Users demonstrated varying frequencies of usage, with a substantial proportion integrating Telebirr into their financial routines on either an occasional or weekly basis.

Importantly, users exhibited a high level of trust in Telebirr, underscoring the pivotal role of trust in fostering acceptance of digital financial services. Perceptions of security were generally positive, highlighting the importance of robust security measures in instilling user confidence. Additionally, users rated their experience with Telebirr positively, emphasizing the significance of a seamless user experience in driving adoption.

Statistical analyses confirmed the significant and positive relationship between trust, perceived security, user experience, and adoption of Telebirr. Trust emerged as the most influential factor, followed by user experience and perceived security, in shaping users' adoption behavior.

These findings contribute to our understanding of the factors influencing the adoption of digital financial services in Ethiopia and have implications for policymakers, financial institutions, and service providers. Strengthening trust, enhancing security measures, and improving user experience are key strategies for promoting the widespread adoption of digital financial services and advancing financial inclusion initiatives in the country. Further research and collaborative

efforts are warranted to address the evolving needs and preferences of users and to ensure the sustainable growth of the digital finance ecosystem in Ethiopia.

5.4. Recommendations

Based on the findings, several practical recommendations can be made to enhance the adoption and usage of Telebirr and similar digital financial services in Ethiopia:

- Invest in Trust-building Initiatives: Given the significant impact of trust on adoption, financial institutions and service providers should prioritize initiatives aimed at building and maintaining trust among users. This could involve transparent communication about the security measures in place, reliability of the service, and responsiveness to user concerns.

- Enhance Security Measures: Strengthening security protocols and continuously monitoring for potential vulnerabilities are essential to instilling confidence among users. Regular security audits, encryption of sensitive data, and multi-factor authentication can help mitigate risks and reassure users about the safety of their transactions.

- Improve User Experience: Investing in user interface design and optimizing the usability of the Telebirr platform can enhance the overall user experience. Simplifying registration processes, providing intuitive navigation, and offering personalized features can make the service more appealing and user-friendly.

- Educational Campaigns: Launching educational campaigns to increase awareness and understanding of digital financial services, including Telebirr, can help reveal the technology and address misconceptions. These campaigns should target diverse demographic groups and highlight the benefits, convenience, and security features of using digital wallets.

- Partnerships and Collaborations: Collaboration between financial institutions, mobile network operators, and government agencies can accelerate the adoption of digital financial services. Joint initiatives to promote financial literacy, expand network coverage, and integrate digital payment solutions into everyday transactions can drive widespread adoption.

- Feedback Mechanisms: Establishing channels for users to provide feedback and suggestions for improvement can facilitate continuous refinement of the Telebirr platform. Actively soliciting user input and responding to their needs and preferences can foster a sense of ownership and loyalty among users.

- Incentivize Adoption: Introducing incentives such as cashback rewards, discounts on transactions, or exclusive offers for Telebirr users can incentivize adoption and encourage ongoing usage. Partnering with merchants to offer discounts or promotions for using Telebirr can further incentivize adoption.

- Expand Access: Efforts should be made to expand access to Telebirr services, particularly in rural and underserved areas. This could involve expanding network coverage, promoting the use of feature phones for accessing Telebirr, and providing support for users with limited digital literacy.

By implementing these recommendations, stakeholders can contribute to the broader goal of advancing financial inclusion and empowering individuals and businesses to participate in the digital economy in Ethiopia.

Future research: In the realm of digital financial services adoption in Ethiopia could focus on addressing the following areas:

- Longitudinal Studies: Conducting longitudinal studies to track the adoption and usage patterns of digital financial services over time can provide insights into the dynamics of adoption, factors influencing H1 usage, and changes in user behavior and perceptions.

- Qualitative Research: Complementing quantitative surveys with qualitative research methods such as interviews, focus groups, and ethnographic studies can provide deeper insights into the underlying motivations, attitudes, and socio-cultural factors shaping adoption decisions and behaviors.

- Comparative Studies: Conducting comparative studies across different digital financial services platforms and providers can shed light on the relative strengths and weaknesses of various digital payment platforms offering a broader understanding of the factors that influence use adoption in different contexts.

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ANNEX

Addis Ababa University

School of Commerce

Department of Marketing Management

Post graduate program

Questionnaire

Dear respondent, this study is intended for partial fulfillment for an MA degree in Marketing Management at Addis Ababa University. The research focuses on Effects of Customers' Trust, Security, and User Experience on Consumer Adoption of E-Payment: A Case Study of Telebirr Wallet in Addis Ababa**.** Your responses to this survey will be held confidential and all information will be used for this academic purpose only. I would like to thank you for your kind cooperation in advance. Please note that **you don't need to write your name.**

Thank you

Besrat Nigussie

Tel: 0913212157

Part I: Demographic Factors:

please put a tick ✓ mark in the box of your choice

1. Your age category (in years):

❑18-25 ❑26 - 35 ❑36 – 45 ❑46 - 55 ❑Above 55

2. Gender: ❑Female ❑Male

3. Occupation/work: ❑ ስራአጥ (Unemployed) ❑የመንግስት ስራ (Government employee)

❑ የግል ስራ (Self Employed) ❑የግል ድርጅት (Private org. employee)

❑ ሌላ (Other)

4. የትምህርት ደረጃ Highest education level

❑ የመጀመሪያ ደረጃ Primary/elementary ❑ ሁለተኛ ደረጃ Secondary/TVET

❑ ማስተርስ ዲግሪ MA/Msc degree ❑ ከማስተርስ ዲግሪ በላይ Above MA/Msc

❑ ዲግሪ BA/Bsc degree

5. ወርሃዊ ገቢ በብር Monthly income in Birr:

❑ እስከ (Up to) 5,000 ❑ 10,001 - 15,000

❑ 5,001 - 10,000 ❑ 15,001 - 20,000

❑ ከ (Above) 20,000 በላይ

6. የቴሌ ብር አጠቃቀም Frequency of Telebirr usage:

❑ በየቀኑ Daily ❑ በየሳምንቱ Weekly

❑ በወር አንዴ Monthly ❑ አለፎ አልፎ Occasionally

❑ በጭራሽ Never

Part II: Trust, Security and User experience in using Telebirr Wallet
እባክዎትን የስምምነትዎን ደረጃ ያመልክቱ (ይህም 1. በጭራሽ አልስማማም 2. አልስማማም 3. ገለልተኛ ነኝ 4. እስማማለሁ 5. በሚገባ እስማማለሁ) የሚሉትን በሚከተለው መግለጫዎች ላይ ምልክት በማድረግ ያመልክቱ።

Please indicate the level of your agreement (which is labeled as 1. Strongly Disagree 2. Disagree 3. Neural 4. Agree 5. Strongly Agree) with the following statements by putting a tick ✓ mark under the dedicated answer.

Items		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Trust on Telebirr						
TR1	ለገንዘብ ነክ ግብይቶች የቴሌብር አስተማማኝነትን እተማመንበታለው I trust the reliability of the Telebirr Wallet for financial transactions					
TR2	የቴሌብር አሰራሩ ግልፅ ነው ብዬ አምናለሁ I believe that the Telebirr Wallet is transparent in its operations					
TR3	ለእኔ እምነት ቴሌብርን ለግብይት ለመጠቀም በጣም አስፈላጊው ነገር ነው፡፡ Trust is important for me when using the Telebirr Wallet for transactions					
TR4	በቴሌብር ላይ ከዚህ በፊት የገጠሙኝ መልካም ተሞክሮዎች በቴሌብር ላይ ላለኝ እምነት ትልቅ አስተዋፅኦ አድርጓል Positive past experiences with the Telebirr Wallet contribute significantly to my trust in the platform					
TR5	ከጓደኞቼ ወይም ከቤተሰብ የሚሰጡ ምክሮች ቴሌብርን ለመጠቀም ባለኝ እምነት ላይ ተጽዕኖ አሳድረዋል Recommendations from friends or family highly influence my trust in using the Telebirr Wallet					
TR6	የግል የፋይናንስ መረጃዬን ለመጠበቅ በቴሌብር በተተገበረው የደህንነት አማራጮች መተማመን አለኝ I am confident in the security measures implemented by the Telebirr Wallet to protect my personal financial information					
Security perception						
SC7	ቴሌ ብርን ለግብይቶች ስጠቀም መሉ ደህንነት ይሰማኛል። I feel full security when using the Telebirr Wallet for transactions					
SC8	በቴሌብር የተተገበሩ የደህንነት እርምጃዎች የእኔን የግል የፋይናንስ መረጃዎች በበቂ ሁኔታ ይጠብቃሉ ብዬ አምናለሁ።					

	I believe that the security measures implemented by the Telebirr Wallet adequately protect my personal financial information					
SC9	ተጠቃሚን ለመለየት የሚጠቀሙት የማረጋገጫ ሂደቶች ቴሌ ብርን ስጠቀም የደህንነት ስሜቴን ለማሳደግ አስፈላጊ ናቸው። Authentication processes are important in enhancing my sense of security when using the Telebirr Wallet					
SC10	በቴሌብር የደህንነት እርምጃዎች ላይ የቀረበው መረጃ ግልጽ ነው። The information provided by the Telebirr Wallet on its security protocols is clear					
SC11	ቴሌብርን በምጠቀምበት ጊዜ የገንዘብ ልውውጦቼ ካልተፈቀደላቸው አካላት (ነጣቂዎች) የተጠበቀ እንደሆኑ አምናለሁ I trust that my transactions are safe from unauthorized access (Hackers) when using the Telebirr Wallet					
SC12	ቴሌብር በደህንነት አካሄዱ ላይ ግልጽ መረጃ እንደሚሰጥ እርግጠኛ ነኝ I am confident that the Telebirr Wallet provides clear information on its security features					
User Experience		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
UE13	ቴሌብርን በመጠቀም ባገኘሁት ልምድ ረክቻለሁ I am satisfied with my experience using the Telebirr Wallet					
UE14	ቴሌብርን ለአጠቃቀም ምቹ ሆኖ አግኝቼዋለው I find the interface of the Telebirr Wallet user-friendly					
UE15	ቴሌብር ያቀረባቸውን የመጠቀሚያ አማራጮች ሁሉ ፈልጎ ለማግኘት ለኔ ቀላል ነው It is easy for me to navigate through the features of the Telebirr Wallet provides					
UE16	በቴሌ ብር ያለው የግብይት ሂደት የተስተካከለ (ምቹ) ነው The transaction process with the Telebirr Wallet is streamlined					
UE17	ቴሌብርን ስጠቀም የማገኘው እርዳታ(ድጋፍ) በቂ ነው The help I receive when using the Telebirr Wallet are adequate					
UE18	ከእራሴ የአጠቃቀም ተሞክሮ በመነሳት ቴሌብርን ሌሎችም እንዲጠቀሙት እመክራለሁ I am likely to recommend the Telebirr Wallet to others based on my user experience					
Adoption		Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
AD19	ለገንዘብ ልውውጦቼ ቴሌብርን በንቃት እጠቀማለሁ። I actively use the Tele Birr Wallet for my financial transactions					
AD20	ለወደፊት ግብይቶቼ ቴሌብርን መጠቀሜን ለመቀጠል አስባለሁ I intend to continue using the Tele Birr Wallet for future					

	transactions					
AD21	ቴሌብር ለዕለት ተዕለት የፋይናንስ እንቅስቃሴዬ አስፈላጊ አካል ሆኗል The Tele Birr Wallet has become an essential part of my daily financial activities					
AD22	ሌሎችም ለፋይናንሺያል ግብይታቸው ቴሌብርን እንዲጠቀሙ እመክራለሁ I recommend the Tele Birr Wallet to others for their financial transactions					
AD23	It took me very little time to familiar myself of using telebirr ቴሌ ብርን ለመጠቀም እና ለመላመድ አጭር ጊዜ ነው የፈጀብኝ					
AD24	Overall, I am satisfied with my experience of using the Telebirr Wallet for digital payments ባጠቃላይ በቴለ በብር አጠቃቀሜ ረክቻለሁ					