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Customer Satisfaction with Digital Loan Services at Bank of Abyssinia

Thesis submitted to Addis Ababa University College of Business and Economics in Partial fulfillment of requirements for the Degree of Master of Business Administration

By

Eden Kalayu

Under the Guidance of

Meskerem Mitiku (PhD)

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MASTERS OF BUSINESS ADMINSTRATION PROGRAM

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Addis Ababa, Ethiopia

July 2026 G.C

Declaration

I hereby declare that this thesis entitled **"Customer Satisfaction with Digital Loan Services at Bank of Abyssinia"** is my own original work completed in partial fulfillment of the requirements for the degree of Master of Business Administration (MBA) under the close guidance of my advisor, Meskerem Mitiku (Ph.D.). In addition, it has not been previously presented by any researcher for the award of any degree in any university, and that all sources of materials used in this thesis have been duly acknowledged.

Eden Kalayu

Addis Ababa University

July 2026 G.C

Statement of Certificate

This is to certify that Eden Kalayu has carried out her thesis work on the topic entitled "Customer Satisfaction with Digital Loan Services at Bank of Abyssinia" under my guidance and supervision. I here assure that her work is appropriate to be submitted for examination with my approval as a thesis.



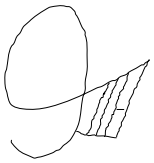
Meskerem Mitiku (Ph.D.)		10/06/2026 G.C
Name of Advisor	Signature	Date

College of Business and Economics

Graduate studies

This is certify that the thesis prepared by **Eden Kalayu Zeray** titled **"Customer Satisfaction with Digital Loan Services at Bank of Abyssinia"** and submitted in partial fulfilment of requirement for the degree of Masters of Business Administration, The thesis adheres to the University's regulations and accepted academic standards.

Approved by

Deribe Assefa (Ph.D.)		10/07/2026 G.C
External Examiner	Signature	Date
Amare Abawa (Ph.D.)		09/07/2026 G.C
Internal Examiner	Signature	Date
Meskerem Mitiku (Ph.D.)		10/06/2026 G.C
Advisor	Signature	Date

Addis Ababa, Ethiopia

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List of Abbreviation and Acronyms

Abbreviation	Full Form
AI	Artificial Intelligence
ANOVA	Analysis of Variance
API	Application Programming Interface
ATU	Attitude Toward Use
BMC	Business Model Canvas
BNPL	Buy Now, Pay Later
BOA	Bank of Abyssinia
CLRM	Classical Linear Regression Model
CRM	Customer Relationship Management
CS	Customer Satisfaction
CSS	Customer Service Support
EATS	Ethiopian Automated Transfer System
EIPS	Ethiopia Instant Payment System
ETB	Ethiopian Birr
FinTech	Financial Technology
IBM	International Business Machines
ISO	International Organization for Standardization
ML	Machine Learning
MSMEs	Micro, Small and Medium Enterprises
NBE	National Bank of Ethiopia
NBFCs	Non-Banking Financial Companies
OECD	Organization for Economic Co-operation and Development
OLS	Ordinary Least Squares
P2P	Peer-to-Peer
PEOU	Perceived Ease of Use
PLS-SEM	Partial Least Squares Structural Equation Modeling
PR	Perceived Risk
PU	Perceived Usefulness
Q-Q Plot	Quantile–Quantile Plot
R^2	Coefficient of Determination
RPA	Robotic Process Automation
SAFEE	Sustainable Access to Finance to Enable Entrepreneurship

Abbreviation	Full Form
SERVPERF	Service Performance Model
SERVQUAL	Service Quality Model
SME	Small and Medium Enterprise
SPSS	Statistical Package for the Social Sciences
SR	System Reliability
TAM	Technology Acceptance Model
TR	Transparency
USSD	Unstructured Supplementary Service Data
VIF	Variance Inflation Factor

ABSTRACT

The research titled "Customer Satisfaction on Digital Loan Services at Bank of Abyssinia" aims at assessing the determinants of customer satisfaction towards digital lending services offered by the Bank of Abyssinia. This was done by conducting an explanatory research design in which some independent variables, such as ease of use, usefulness, perceived risk, reliability, transparency, and customer service support, have been examined to determine their influence on the dependent variable. The research population consists of the clients of the Bank of Abyssinia who have made use of the digital loan services offered by the Bank through its Apollo portal. Primary data collection method used is a structured questionnaire that generated a total of 285 respondents. Analysis of the data generated was done using the Statistical Package for Social Sciences. The results revealed that perceived ease of use, perceived usefulness, system reliability, transparency, and customer service support positively and significantly affect customer satisfaction while perceived risk showed a negative but statistically insignificant relationship with customer satisfaction. The study recommends that Bank of Abyssinia enhance the usefulness and ease of use of its digital loan platform, improve system reliability and transparency, and strengthen customer service support to increase customer satisfaction and encourage greater adoption of digital loan services.

Keywords: *Digital Loan, Customer Satisfaction, Perceived Ease of Use, Perceived Usefulness, System Reliability, Perceived Risk, Customer Service Support, Bank of Abyssinia.*

CHAPTER ONE

1. INTRODUCTION

1.1.Background of study

Digital banking entails the provision of services to the customers through digital means. This includes the use of mobile banking apps, online banking, and ATMs. The digitization process is a modern means of providing services, which also determines how customers engage with the financial institutions (Chua & Zhan, 2024).

Digital lending is another aspect of digital banking. It involves carrying out the processes related to applying for a loan, conducting credit analysis, loan approval, loan disbursement, and repayment digitally without having to physically visit a bank branch (Akhileshwari & Majumdar, 2023). Most of the digital lending websites employ technologies like Artificial Intelligence (AI), Machine Learning (ML), and Big Data Analytics to do credit scoring and risk assessment (Singh et al., 2025).

The design of the attributes of digital loan service delivery largely influences customer satisfaction. These include the speed at which the processes involved occur, ease of application, clarity in the terms of the loan, interest rate, the cost of getting the loan, payment flexibility, system reliability, confidentiality of the data used, and customer support availability (Suroso & Wahjudi, 2021). In all digital contexts, these are some of the factors that influence perceived service quality (Rajasekar & Jagadeesan, 2025). Therefore, quick approval, transparency in pricing, proper handling of data, and easy-to-use user interface may improve satisfaction and trust (Singh et al., 2025; Rajasekar & Jagadeesan, 2025). On the contrary, disruptions obscure pricing, and delayed responses from the customer support team may worsen the experience (Suroso & Wahjudi, 2021).

Firstly, the satisfaction level of the client is one of the factors behind the popularity of digital loans. Indeed, customer satisfaction plays a role of mediator between service quality characteristics (ease, speed, transparency, security, and usability) and behaviors (such as loyalty, retention, and readiness to take additional loans) (Suroso & Wahjudi, 2021).

Digital lending experiences tremendous development worldwide owing to advanced technologies like artificial intelligence, machine learning, cloud computing, and robotic process automation (RPA). The aforementioned makes the process of obtaining a loan quicker, trackable in terms of decision-making and more manageable (Singh & Sinha, 2025). However, customer satisfaction cannot be taken for granted in light of the challenges related to the use of digital lending. Namely, there are problems associated with the reliability of software, privacy concerns, complicated algorithms, and the lack of customer assistance provided (Rajasekar & Jagadeesan, 2025).

Digital lending experiences tremendous development in Sub-Saharan Africa because of numerous reasons. Namely, digital lending is stimulated by the extensive use of mobile technology, growing digital payments, and fintech innovations. Such development helps borrowers obtain loans more quickly and easily due to the absence of collateral required. Instead of collateral, the alternative sources of information are used to assess the creditworthiness of the borrower, which allows for increased financial inclusion of underbanked and unbanked people, including MSMEs (OECD, 2024).

Finally, digital lending has become an integral part of improving access to credit in Ethiopia. A growing number of digital lending platforms have emerged, including – Michu developed in cooperation with the Cooperative Bank of Oromia and Kifiya Financial Technology and Telebirr microloans offered by Dashen Bank and the Commercial Bank of Ethiopia. Such developments show that there are technologies that may significantly contribute to credit provision without the need for collateral.

As far as private commercial banks are concerned, Bank of Abyssinia seems to be taking the lead mostly in relation to its digital banking platform called Apollo Digital Bank. Its entire procedure is intended for online operations, including enrollment, biometric login and then moving on towards immediate loan approval. Such an approach reflects positively on the country's banking industry (Temenos, 2023; Bank of Abyssinia, 2025b). At the same time, indications exist that there is an ongoing transformation within Bank of Abyssinia towards becoming a more digitized company due to an increasing number of clients and the adoption of customer relationship

management (CRM) software, as well as decision-making based on information (Bank of Abyssinia, 2025a).

While some positive changes have been observed, it should be noted that there are still a number of challenges. Namely, customer feedback provided through digital platforms continues to show problems such as delays, application breakdowns, login errors, low speed, and insufficient customer support. Such aspects are important because, within the digital financial services domain, reliability and speed serve as key components determining client satisfaction (Parasuraman et al., 1985; Suroso & Wahjudi, 2021; Singh & Sinha, 2025). Therefore, despite all the benefits brought by digital lending solutions, there could still be service delivery issues and underperforming systems resulting in a low level of customer satisfaction and usage continuance (Singh & Sinha, 2025; Suroso & Wahjudi, 2021).

Considering the above, it becomes necessary to consider the opinions of customers and assess their satisfaction with the digital loan services provided by Apollo Digital Bank of Bank of Abyssinia. Therefore, the current research examined the factors influencing customer satisfaction by evaluating customers' perceptions of key digital loan service attributes and their effects on overall satisfaction.

1.2.Statement of the problem

In a way, customer satisfaction can be considered as a base for business continuity and loyalty when talking about services, as the experiences offered affect customer satisfaction. However, the quality of a service should always be controlled in not only traditional face-to-face contact but also online (Ketema, 2020).

Though digital lending could contribute to the efficiency of operations and increase access, it should be kept in mind that the process of satisfaction involves more than mere efficiency or even convenience. Satisfaction can depend on the user-friendliness, reliability, and stability of the service offered. In digital lending, some common factors affecting service quality include a lack of transparency, hidden fees, communication failures, inefficient complaints management, and privacy problems. The list of potential issues can be extended by problems related to customers' limited technical literacy and challenges associated with the inability to navigate an

automated journey or solve a problem in case of dissatisfaction (Singh & Sinha, 2025; Rajasekar & Jagadeesan, 2025).

Given the above scenario, Bank of Abyssinia serves as a practical example to be considered because the Bank was one of the pioneer banking companies that embraced digital lending through its Apollo portal. Although the portal may have some additional features, such as instantaneous loan delivery, automation, and even real-time tracking of loans, a considerable number of customer complaints in Google Play reviews suggest ongoing problems with this product. Customers claim that system instability, application errors, login issues, and difficulties contacting customer support are just some of the issues associated with using the Bank of Abyssinia Apollo App (Google Play, 2023-2025). The significance of such customer concerns is evident because, for digital financial products, reliability and responsiveness of a service are often regarded as the primary determinants of customer satisfaction (Suroso & Wahjudi, 2021; Parasuraman et al., 1985; Singh & Sinha, 2025).

With an increase in adoption rates for Apollo digital loans in recent times, a dearth of empirical work related to the customers' perceptions about this type of digital lending services continues to be evident. There has been no adequate research to explain precisely which parameters determine the satisfaction of customers and what their experiences are when dealing with digital lending services. The majority of previous research done in Ethiopia has centered on mobile banking usage or electronic service quality generally; however, very little research has been conducted specifically on how people use digital lending and their experiences in this regard. As mentioned, studies have examined digital service quality in mobile banking services provided by Bank of Abyssinia, and others analyzed some of the major drivers of e-banking services in the country. Nonetheless, there has been insufficient discussion in such studies on the processes related to digital lending. For instance, these studies have failed to examine such factors as credit scoring, loan application process, repayment conditions, among others (Ketema, 2020; Ayinaddis et al., 2025).

It is clear from the above discussions that there has been an absence of institution-specific and product-specific studies on customer satisfaction in relation to the service quality offered by digital loans in Ethiopia, especially on the Apollo platform offered by Bank of Abyssinia. It

would be important to conduct an empirical examination of customer satisfaction from digital loans available in that platform and explore the most influential factors for that matter. Instead of focusing on a generalized analysis of mobile banking, this research proposes an examination of specific digital loan services and how customers perceive them. In other words, this research looked at some of the main digital loan factors and assess the level of importance of these factors for customer satisfaction.

1.3.Research question

1. To what extent are customers satisfied with the digital loan services provided by Bank of Abyssinia?
2. What relationship exists between digital loan service attributes and customer satisfaction?
3. Which digital loan service attributes most significantly influence customer satisfaction with digital loan?

1.4.Research objective

General objective

To examine customer satisfaction toward digital loan services provided by Bank of Abyssinia and to analyze the key factors influencing customer satisfaction.

Specific Objectives

1. To measure the level of customer satisfaction with digital loan services at the Bank of Abyssinia.
2. To examine the relationship between digital loan service attributes and customer satisfaction.
3. To evaluate the relative importance of digital loan service attributes influencing customer satisfaction.

1.5.Significance of the study

The findings of this study offered evidence-based insight into how customers perceive and evaluate digital loan services at the Bank of Abyssinia, helping the bank to improve its digital lending service by enhancing customer experience and satisfaction.

Academically this study also added to the limited Ethiopian literature on digital lending by giving context specific evidence from a market where these services are still emerging, so there is a lot to learn. It focused on the main determinant factors of customer satisfaction with digital loan services prioritizing their relative importance, and also looking at how those factors operate within the unique Ethiopian banking context.

Additionally, these insights might help digital lending practitioners and fintech firms, to build more customer centered and inclusive products, in a way that actually supports Ethiopia's broader digital finance transformation and enhances convenient access to credit.

1.6.Limitations of the Study

The limitations of this study include the use of Apollo as the digital lending application in one banking context, thus, making the generalization of results from other digital banking applications or other geographical locations difficult. In addition, this study used only cross-sectional data, which means that the perceptions were taken at one point in time, and hence, cannot be used to establish changes over time.

1.7. Scope of the study

The study scope was aimed at assessing customer satisfaction regarding digital loan services provided by the Bank of Abyssinia through their Apollo system. This research was primarily aimed at individuals having availed themselves of the digital loan services offered by Bank of Abyssinia. Broadly speaking, the study sought to uncover the important characteristics of digital lending and the way they affect customer satisfaction. The study did not cover branch lending, corporate / SME lending, or any other digital banking services apart from digital lending, for that matter.

CHAPTER TWO

LITERATURE REVIEW

2. Introduction

In this chapter, an overview of literature on the theory as well as practice of digital lending and customer perception and the construction of customer satisfaction are provided. With the increasing presence of digital lending in the domain of banking, it is becoming increasingly important to have an understanding of customer perceptions regarding such digital loan services and the way in which these perceptions can be quantified. This chapter also discusses some of the prominent theoretical perspectives that provide explanations for technology adoption and service quality. Particularly popular are Technology Acceptance Model (TAM) and SERVPERF framework. It also brings in the notion of digital lending itself, meaning how digital finance has developed in Ethiopia, and the different drivers that shape customer perception and satisfaction when people use digital loan services. Beyond that, a range of empirical studies from different settings are reviewed, so we can draw out the main determinants that usually end up affecting customer perception and satisfaction, for digital lending services.

2.1. Digital loan

First, digital lending is widely regarded as revolutionizing the lending ecosystem in terms of displacing the whole value chain from the process of applying for a loan and assessing creditworthiness through disbursements, loan management, and repayment into digital spaces. The emergence of digital lending eliminates the need to visit branches, thus eliminating or at least minimizing the amount of paper documentation associated with lending operations (Ravikumar, 2019; Akhileshwari & Majumdar, 2023). For Ravikumar (2019), digital lending refers to the practice of conducting loan transactions digitally. In particular, digital lending starts when the borrower applies for the loan and ends when the lender disposes of the borrowed funds. On the one hand, digital lending implies a series of loan applications, provisioning, and management that are conducted electronically. On the other hand, such an innovation allows

lenders to analyze digitalized data to enhance the quality of their credit decisions and interact with borrowers in a smarter fashion. Similarly, for Akhileshwari and Majumdar (2023), algorithms and automated underwriting along with other advanced technologies, including biometric data recognition (iris and fingerprint scanning), facial recognition, and blockchain technology, facilitate the process of origination, loan management, and appraisal.

The rising popularity of lending is mainly attributed to its convenience, speed, and lower costs than those associated with traditional bank-based lending practices, which tend to be slower and include numerous administrative procedures. At the moment, the accessibility associated with digital lending proves extremely important since people are hardly willing to waste much time on such burdensome practices, especially if they are not always available. In turn, recent progress in technologies, the introduction of alternative credit scoring models and improved data protection measures encourage further adoption of digital lending (Ravikumar, 2019; Akhileshwari & Majumdar 2023). These innovations lead to increased cooperation between fintech firms and legacy banks, expanding the lending ecosystem. Digital lending becomes increasingly popular, and, therefore, digital lending redefines the process of borrowing (Ravikumar, 2019; Akhileshwari & Majumdar 2023).

There is no single model of digital lending, as there are multiple digital lending practices and business models. According to Ravikumar (2019), there are two principal groups of lenders. The first group comprises online lenders providing borrowers with end-to-end lending solutions using web and mobile apps. The second category refers to hybrid lenders, digitizing only specific parts of the value chain, retaining some traditional elements in their operation. In practice, digital lending can vary dramatically. It might imply mere partial automation within brick-and-mortar banks or creation of entirely novel digital-first lenders. The latter tend to target underserved or excluded borrowers, who were unable to obtain loans prior to the advent of digital lending solutions (Ravikumar, 2019; Akhileshwari & Majumdar 2023).

First, the current global financial landscape has been partially altered by the relatively rapid development of digital credit. Although traditional banking institutions and capital markets continue to be dominant financing sources for individuals and enterprises, there is a rising emergence of digital lending platforms. Digital credit takes various forms that include peer-to-

peer lending, balance sheet lending, invoice trading, equity crowdfunding, fintech credit, big tech credit, and marketplace lending; specifically, all of these represent debt financing provided on digital platforms without involvement of intermediaries. The rapid proliferation of these models among developed and developing economies has drawn a lot of attention on the part of scientists and regulators. Still, the regulatory bodies are relatively cautious in regard to digital credit due to the lack of a proper regulatory framework (Le et al., 2023).

In developing economies, one of the breakthrough changes in digital credit is linked to the appearance of instant lending based on mobile phones. According to Björkegren and Grissen (2018), there are three technological inventions that made instant lending possible. First, there is a widespread adoption of mobile phones for communication purposes. Second, there is a growth of mobile money systems, such as the M-Pesa system that appeared in Kenya back in 2007. Third, digital behavioral data, such as the history of call details and mobile money transactions, is used for automated credit assessment. When all the technologies mentioned above work together, lenders have an opportunity to lend money remotely and rapidly without traditional banking institutions. As a result, the model becomes available for those who are typically excluded from conventional lending (Björkegren & Grissen, 2018).

In general, there are three pillars of digital lending. These pillars include digital customer interfaces, namely, websites, mobile apps, and USSD; digital signals or alternative data as an important factor allowing for quicker and better credit assessments; and automation of most processes within the lending chain (Stewart et al., 2018). It is necessary to mention that there are specific characteristics making programs successful. According to Stewart et al. (2018), they include customer-centered program designs, data-driven lending, a reasonable balance between technology and touch, and focus on simplicity and transparency (Stewart et al., 2018).

The existing scientific literature reports multiple types of digital lending that are intended for different customers. Specifically, the types include personal loans, microloans, business loans, peer-to-peer loans, and BNPL, as well as credit lines, payday loans, student loans, mortgages, auto loans, invoices trading, gold loans, and small ticket loans (Rajasekar & Jagadeesan, 2025).

Consumers appear to be satisfied with digital lending mainly because of its benefits, such as convenience, quickness, reduced documentation requirements, and customization of financial products. According to Rajasekar and Jagadeesan (2025), these benefits result in much higher consumer satisfaction. However, there are certain drawbacks to this innovation. First, there are some issues with data protection. Second, consumers cannot have a face-to-face interaction with representatives of lending institutions. Third, criteria of lending are sometimes difficult to figure out and understand (Rajasekar & Jagadeesan, 2025). Alongside the drawbacks listed above, Singh and Sinha (2025) report other problems. Specifically, there is little transparency in the lending process; consumers may see hidden costs; unhelpful notifications or messages may appear; grievance procedures fail to work properly; and consumers may experience privacy issues.

2.2.Digital finance in Ethiopia

In recent times, the country has experienced a significant rise in the uptake and use of digital financial services, attributed largely to governmental policy and private innovations. Some of the advancements are highlighted in the National Bank of Ethiopia's strategy, "National Digital Payments Strategy 2026–2030," which indicates an increase in infrastructure such as mobile money accounts to 139.5 million in 2025 from 12.2 million in 2020. The same is seen in the case of mobile banking accounts, rising from 9.1 million to 54 million (NBE, 2025). These improvements are largely influenced by improvements in infrastructure such as EIPS, Ethiopian Automated Transfer System moving towards ISO 20022, and national payment gateway supporting e-commerce transactions (NBE, 2025).

The low rate of usage and transaction despite a rise in access is another concern. For example, only 21% of adults reported receiving or making payments through digital means in the previous year, while the 30-day active use of mobile money accounts is roughly 16% (NBE, 2025). This brings up a need for further understanding and analysis of the perceptions and levels of satisfaction of customers regarding digital financial services, especially new services like digital loans. Issues like lack of trust, the complexity involved, and digital illiteracy levels contribute significantly to success or failure, especially for women who do not use digital services due to limited knowledge (66%). The rural areas also lag behind (NBE, 2025).

In relation to digital lending, there has been progress towards a data-driven system where collateral is not needed for loan disbursements. In essence, the process involves credit scoring through the use of AI and alternative sources of data, such as payment history and behavior. Bank of Abyssinia is one of the players in the sector, especially after the effects of demonstrating an uncollateralized lending model. After the effect, the Bank updated its credit policy to adopt an "Apollo" uncollateralized digital loaning model, like Dashen Bank (DubePay) and Anbessa Bank (Alegnta) (EEA, 2025).

Firstly, the program known as SAFEE (Sustainable Access to Finance to Enable Entrepreneurship), implemented by Kifiya Financial Technology together with six other banks (Bank of Abyssinia among them), proves that younger entrepreneurs and MSMEs viewed as risky can become creditworthy based on the application of digital procedures instead of physical collateral (EEA, 2025). Bank of Abyssinia has an online platform called Apollo that allows its clients to take out personal use loans and salary advances for the salaried employees. Moreover, this bank provides three ways to repay weekly, monthly, and quarterly (Bank of Abyssinia, Apollo platform features). Therefore, this case shows how criteria of granting credit have changed and this transition represents an important innovation (EEA, 2025).

For example, in 2024, the National Bank of Ethiopia introduced a strategy focused on providing financial education to individuals and small businesses. This strategy shows that educating people on financial matters help change their attitudes to financial services, including credits. For this purpose, the tools like the business model canvas and financial management framework should be used for making decisions (NBE, 2024). Secondly, in 2021, World Bank started implementing a project designed to enhance service delivery in Ethiopia. The focus is on improving both access to digital services and user knowledge regarding such services (World Bank, 2021). Thus, all these initiatives show potential of digital finance in Ethiopia.

All things considered, digital finance can play an active role in improving the financial situation in Ethiopia. At the same time, one needs to solve several challenges to make sure that all customers equally enjoy the benefits.

2.3.Customer Perception in Financial Services

Customer perception, therefore, describes how consumers perceive the services offered by an organization. Singh & Sinha (2025) believe that perception is greatly shaped by customer experience, expectations, and communications from the brand. Lending in particular, customer perception results from observable elements, such as loan processing period and unobservable elements such as fairness, security, and responsiveness of the lender (Singh & Sinha, 2025). Furthermore, service quality plays a role in shaping customer perception according to Singh & Sinha (2025).

According to Cronin and Taylor (1992), service quality is best assessed based on customers' perceptions of the actual performance of the service provider rather than by comparing expectations with perceived performance. The SERVPERF model argues that customers evaluate service quality through their direct experiences with the service delivered. Higher perceived performance across the dimensions of tangibility, reliability, responsiveness, assurance, and empathy leads to higher perceived service quality and greater customer satisfaction. Consequently, improvements in the actual performance of these service quality dimensions enhance customers' overall evaluation of the service provided (Cronin & Taylor, 1992).

Banks play a critical part in the economic environment in a country. Quality of service provision by the banks plays an important part in influencing consumer choice as far as selecting the best bank is concerned. Due to the nature of similar services offered by the banks, competition is centered more on improving services and handling customer relationship well (Debbarma & Somasundaram, 2023).

In a similar way, digital services must provide users with easy-to-use interface and good communication. Failure to give satisfactory answers to queries posed by the user or poor communication even if the backend functions well can negatively affect customer perception (Singh & Sinha, 2025).

2.4.Customer Satisfaction in Financial Services

Customer satisfaction is one of the key constructs in marketing and service management research, indicating whether a service performs at the expected level or even exceeds customers' expectations. Generally, customer satisfaction refers to the evaluation of products or services that combines initial expectations with real-life experiences of users (Kotler & Keller, 2012; Oliver, 1980). As it is based on evaluation, customer satisfaction tends to reflect consistent meeting of customers' needs and expectations over the course of using a particular service. Customer satisfaction is especially relevant for banking, which is highly based on servicing customers. Thus, understanding the construct helps improve bank clients' experience, loyalty, and retention (Kotler & Keller, 2012; Oliver, 1980).

Digital lending involves a range of factors influencing customer satisfaction, making the latter multidimensional. The attributes can be grouped into functional, technical, and relational aspects. Regarding functionality, speed, ease of use, and flexibility of payment plans are mentioned among the factors affecting customer satisfaction. From a technical perspective, reliability, stability, and data security play an essential role. Relationally, it is crucial that loan terms are transparent, and support is easily accessible and truly helpful. Another aspect emphasized by previous research is the transparency itself, meaning visible interest rates, fees, and repayment plans (Rajasekar & Jagadeesan, 2025). At the same time, data security is of high importance, as perceived risks regarding this matter negatively impact customer satisfaction, despite any other factors (Chen et al., 2023).

Customer satisfaction acts as an intermediary in linking customers and service providers in a number of ways. First, satisfaction is correlated with service performance and customer behavior. Customer satisfaction implies repurchase behavior, word-of-mouth referrals, and customer loyalty. On the other hand, customer satisfaction reflects successful operations, meaning that a satisfactory experience proves that the process went well. In the field of financial services, it was found that customers who felt comfortable using the service were likely to use it more often, conduct a greater number of operations, and refer their relatives and friends to it (Suroso & Wahjudi, 2021; Singh et al., 2025).

The retention of digital loans faces a number of challenges, including possible errors in the service, crashes, and slow transaction processing. If loans are automatically approved, it may be viewed by customers as unfairness and low transparency, causing dissatisfaction (Singh & Sinha, 2025). In Ethiopia, it can be argued that the experience of using digital financial services depends on some situational factors such as network quality, digital literacy, and institutional trust.

2.5.Determinants of Customer Satisfaction in Digital Lending

Satisfaction among digital lending customers is a multidimensional concept which emerges due to many technological considerations and qualities of service and the daily context of users. It is essential for organizations in the area of finance to acquire knowledge about the main drivers of satisfaction in order to improve customer experience. Main drivers of customer satisfaction among digital lending customers are presented below after an extensive review of relevant literature.

Perceived ease of use

Perceived Ease of Use (PEOU) refers to how individuals view the ease or difficulty of performing certain actions using a technology system (Davis, 1989). In relation to digital lending, PEOU may refer to how customers view the process of applying and handling their loan requests on digital platforms as an easy and effortless activity. It is expected that applications for digital loans have an interface that is simple and easy-to-use. This way, users are be able to apply for credits easily without requiring any previous knowledge about digital technologies (Boliya & Arora, 2025; Suroso & Wahjudi, 2021). Rajasekar and Jagadeesan (2025) argue that many digital lending systems were intentionally created in an effort to make the whole process easy. As such, digital loans do not require as much documentation as normal loans obtained from banking institutions (Rajasekar & Jagadeesan, 2025).

Perceived usefulness

Perceived Usefulness (PU) refers to how much one believes that using a specific system significantly improve his/her performance and make it more effective and time-efficient (Davis,

1989). As applied to the topic of digital lending, perceived usefulness refers to a quick evaluation of the effectiveness of a system that allows borrowers to receive credits faster, stabilize their finances, cut down on delays, and get more practical information on loans (Boliya & Arora, 2025; Suroso & Wahjudi, 2021). Many scholars emphasize the importance of quick approval processes, fast funding, round-the-clock availability, and flexible repayments (Rajasekar & Jagadeesan, 2025; Palang'a et al., 2020). Such characteristics may help users recognize the usefulness of the technology for themselves, especially those people having trouble getting credit from traditional banking institutions. As a result, if the customer finds out that digital lending helps him/her save time, be included in the banking process, and borrow money easily, he/she may form a positive attitude towards technology, which often goes hand in hand with greater customer satisfaction (Debbarma & Somasundaram, 2023; Boliya & Arora, 2025).

Perceived Risk

Perceived risk, especially when related to security and privacy issues, represents an important variable influencing customer perceptions concerning digital lending service and, consequently, attitude towards it. Perceived risk is basically the level of uncertainties and negative consequences that people personally envisage in the process of using online systems (Suroso & Wahjudi, 2021). In a context of digital lending, perceived risks are mainly financial risks as well as the risks of financial loss from frauds, errors, and hidden costs considered deceptive. Right after the mentioned above comes privacy risks that imply the risks of misusing the personal data including customers' sensitive information and finances (Adamek & Solarz, 2023).

Numerous studies have shown that fears of having personal and financial data hacked, stolen, or misused usually prevent people from using digital lending services. On the other hand, guarantees of safety and clear policies make customers feel more confident and secure. Moreover, the formation of trust is often associated with higher levels of satisfaction among customers of digital lending service (Singh & Sinha, 2025; Rajasekar & Jagadeesan, 2025). Consumer awareness and regulatory protection measures are important factors influencing perceived risk, especially in emerging spheres of digital finance (Palang'a et al., 2020).

System Reliability / Performance

System reliability and performance may be viewed as measures of how efficiently and without any interruptions digital lending systems operate while serving their users. Specifically, reliability is defined through stability of connections, efficiency of transactions execution, and flawless operation of the system as means of delivering reliable services to users (Suroso & Wahjudi, 2021; Boliya & Arora, 2025).

Some studies have shown that such aspects as system availability, application flexibility, fast loading of pages or apps, and fewer system errors may affect customers' assessment of these digital platforms, increasing users' satisfaction (Suroso & Wahjudi, 2021; Palang'a et al., 2020). Technological efficiency also contributes to making services more useful since processing of applications is much faster and obtaining a loan easier (Boliya & Arora, 2025).

Moreover, some scholars claim that uninterrupted uptime, efficient processing of information by the system, and few errors occurring in the course of operations are crucial for maintaining users' engagement. Disruptions like downtime or improper processing of loan applications decrease the degree of users' satisfaction (Palang'a et al., 2020). Therefore, ensuring system stability, efficiency of processing procedures, and reliable functioning of the platforms used by digital lenders is vital both for effective operation and satisfying customers (Singh & Sinha, 2025; Rajasekar & Jagadeesan, 2025).

Transparency

Lending transparency, therefore, relates to the way in which lenders convey important information about loans to borrowers. This usually involves information about loan terms, fees, interest rates, repayment deadlines, and the loaning process. Borrowers are then able to evaluate whether the cost and terms of the loan are favorable before agreeing. Transparency promotes trust between the borrower and lender, thereby giving the former an opportunity to make wise financial choices (Singh & Sinha, 2025; Rajasekar & Jagadeesan, 2025).

Research also shows that unclear pricing terms, additional fees without prior warning, and obscure deductions tend to contribute to customers perceiving a business transaction as unfair, despite its competitive pricing compared to other options. Regulatory authorities have

consequently emphasized the importance of fee clarity and full transparency during the lending process in order to promote wise digital finance transactions (Singh et al., 2025).

In addition to this, lending through online platforms commonly requires automated credit analysis. It is especially important to convey sufficient information about how the selection process works when applying an algorithm in order to appear credible and trustworthy to the customer. Overall, transparency is an objective factor and an integral part of the lending business since it helps foster trust and fairness perceptions in digital lending processes (Singh et al., 2025).

Customer Service Support

For digital lenders, it is not usual for clients to see face-to-face with those whom they interact with, thus making customer support always present very essential. This makes the service run smoothly without causing any frustrations to the clients, otherwise they would be disappointed rather than being satisfied (Singh & Sinha, 2025; Suroso & Wahjudi, 2021).

There have been some studies indicating that clients appreciate help that arrives promptly and when the explanation is understandable enough for everyone. Furthermore, they seem to enjoy when their problems are addressed swiftly. Digital lending companies use various mechanisms such as SMS, e-mails, and systems of monitoring and tracking to allow tracking how things go. However, problems might occur in case of delays and rejection of loans, where the client fail to get quick assistance and have trouble contacting someone (Singh & Sinha, 2025).

However, these lending systems are increasingly depending on technology too, for instance software capable of interaction, and online customer service systems that assist consumers in completing typical tasks. However, despite all this, the availability of trained human representatives should not be overlooked when dealing with difficult situations, and personalized help in case of emergencies should also be provided (Rajasekar & Jagadeesan, 2025; Debbarma & Somasundaram, 2023).

Contextual and Demographic Factors

From the analysis of literature considered, one can clearly conclude that both context and demographics play an important role in the assessment by customers of the provided digital lending service, as well as in reporting the level of satisfaction from it. Such factors as digital literacy, the geographical location of the customer, his socioeconomic status, gender, age, educational background, and profession can slightly adjust the relationship between a specific service attribute and overall customer satisfaction. Thus, according to the results obtained by Singh and Sinha (2025), digital lending processes are relatively easier for urban and salaried people, whereas those living in rural areas and having self-employed position can experience difficulties including navigating problems, delayed verification, and generally poor comprehension of loan terms. In a similar vein, Boliya and Arora (2025) described the gender gap in digital lending adoption, noting that males apply for loans more often although gender did not turn out to be a significant moderator of behavioral intention to use the analyzed financial services. Moreover, some studies indirectly suggest that younger people and technologically competent customers are more likely to use digital lending than those lacking necessary digital literacy skills, particularly in rural areas with poorly developed infrastructure. (Palang'a et al., 2020; Akhileshwari & Majumdar, 2023).

In addition, other external factors, including the regulatory environment, technological development, and the economy, also have a bearing on the customer's interaction with digital finance individually. For one thing, technological advancements, including artificial intelligence and automation, do provide increased efficiencies and expanded opportunities. However, on the other hand, the same developments may introduce new elements of opacity within the algorithms and lead to problems concerning consumer protection and overindebtedness, particularly within emerging economies (Suroso & Wahjudi, 2021; Adamek & Solarz, 2023; Le et al., 2023). Overall, it may be inferred that while specific characteristics, such as usability and efficiency, do encourage adoption, continued satisfaction and loyalty depend much more on the trust-building elements of transparency, reliability, and institutional credibility.

2.6.Theoretical Literature Review

To properly capture the essence of consumer satisfaction in digital lending, we need to somehow base ourselves on existing theories which shed light on how users determine what is going on, and then proceed to a technology-based approach. This part somehow covers two theories, Technology Acceptance Model and SERVPERF model.

Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM), introduced by Fred D. Davis in 1989, offers a sound theoretical basis for examining user adoption of information technology. In brief, according to TAM, two major constructs – perceived usefulness and perceived ease of use – have a critical role in both adopting the technology and the intention of usage of the system. Perceived usefulness indicates an estimate of how a system increases job performance. Perceived ease of use refers to the degree to which an individual expects that a system would be easy to operate without requiring too much effort (Davis, 1989).

It should also be noted that according to Fred D. Davis, it is common practice for users to choose whether to adopt an application depending on the expected effects of the system on their job performance. In addition, it is quite possible that a person perceives a particular application to be useful but at the same time too complicated to use. In this case, the benefits of the system would appear to be insignificant compared to the necessary effort involved, resulting in low usage rates. Therefore, apart from usefulness, ease of use affects usage (Davis, 1989). It is worth noting that similar studies have been carried out related to online banking and the effect of convenience on customers' satisfaction.

According to Boliya and Arora (2025), TAM has been used in order to investigate the initiation of adoption of digital loan systems by Non-Banking Financial Companies (NBFCs) in India. The authors revealed that, in comparison with Perceived Usefulness (PU), "Perceived Ease of Use (PEOU) has a greater influence than Perceived Usefulness (PU) on users' attitude toward use (ATU)."

SERVPERF (Service Performance) Model

The SERVPERF model was developed by Cronin and Taylor (1992) as an alternative to the SERVQUAL model that was introduced by Parasuraman, Zeithaml, & Berry (1985). While SERVQUAL measures service quality by comparing customers' expectations of service performance with their perceptions, SERVPERF argues that service quality can be more accurately assessed using customers' perceptions of actual service performance alone. Cronin and Taylor (1992) demonstrated that the performance-only approach provides greater reliability and stronger predictive validity in explaining customer satisfaction across various service industries, including banking (Cronin & Taylor, 1992).

SERVPERF retains the five dimensions originally proposed in the SERVQUAL framework: tangibility, reliability, responsiveness, assurance, and empathy. However, instead of measuring the gap between expectations and perceptions, the model evaluates customers' perceptions of the service actually delivered (Cronin & Taylor, 1992). The five dimensions remain widely applicable in digital financial services, although researchers have adapted their interpretation to reflect the characteristics of digital platforms. Recent studies have confirmed that these dimensions remain significant determinants of customer satisfaction in digital financial services, with particular emphasis on service reliability, responsiveness, system security, and user support (Singh & Sinha, 2025).

In this study, customer satisfaction with digital lending services is analyzed by integrating the Technology Acceptance Model (TAM) and the SERVPERF model. TAM explains customers' acceptance of digital lending platforms through perceived usefulness and perceived ease of use, whereas SERVPERF evaluates the quality of service delivery based on customers' perceptions of actual service performance. The integration of these two theoretical frameworks provides a comprehensive understanding of customer satisfaction by simultaneously capturing both technological factors and service quality dimensions. Consequently, the combined framework enables a more robust analysis of the factors influencing customer satisfaction with digital lending services in the Ethiopian banking sector.

2.7.Empirical Literature Review

Most of the empirical research works on customers' perception of digital lending and the satisfaction resulting from it use the same set of theories to explain the phenomenon. For instance, in the majority of cases, researchers rely on the Technology Acceptance Model (TAM) or other constructs linked to service quality when trying to find out how technological features, risk perceptions, and service-related factors impact customers' perceptions of digital lending and satisfaction. In turn, satisfaction and service usage are viewed as outcomes, which means a mediating effect.

Thus, for instance, Suroso and Wahjudi (2021) studied digital loan services provided by PT Bank XYZ in Indonesia. To this end, they applied an adapted version of TAM that included eight constructs, including Perceived Ease of Use, Perceived Usefulness, Perceived Risk, Perceived Service Quality, Perceived Functional Quality, Perceived Customer Experience, Brand Image, and Digital Innovation. As far as methodology is concerned, the research involved a quantitative study of 100 respondents whose data were analyzed using PLS-SEM. The ultimate purpose of the study was to uncover factors impacting customer satisfaction and loyalty (Suroso & Wahjudi, 2021).

The results showed that Perceived Ease of Use impacted customer satisfaction positively and significantly (path coefficient = 0.239; p=0.034). At the same time, Perceived Usefulness failed to show a statistically significant effect in this context, which implies that the construct has come to a halt in the direct relationship being studied (Suroso & Wahjudi, 2021).

Boliya and Arora (2025) examined the same issues associated with digital loan applications and their adoption by the users of non-banking financial companies (NBFCs) in India. Using the TAM theory and regression analysis, the scholars discovered that Perceived Ease of Use (PEOU) and Perceived Usefulness (PU) have a positive and significant effect on users' attitude towards such lending services. However, the former proved to be slightly more powerful because it has a stronger beta (PEOU: $\beta = 0.367$; PU: $\beta = 0.352$). Thus, making the digital loan application easier for people seems to be a key factor influencing their attitude.

Similarly, Adamek and Solarz (2023) showed that perceived risk is the only variable, having a significant negative impact on users' attitude towards using FinTech lenders for online borrowing services (β = -0.056, p = 0.020). Based on their findings, increased perceived risks both financially and operationally make customers less likely to use digital borrowing services provided by FinTech lenders (Adamek and Solarz, 2023). The same trend was revealed by the authors of another study in which they showed that perceived risk lowers the path coefficient value of customer loyalty (path coefficient = -0.206, p = 0.041) and thus tends to weaken long-term connections between customers and digital financial service providers (Suroso and Wahjudi, 2021).

It seems that other technology-based and service-oriented variables may affect customer satisfaction regarding using financial services provided by digital banks. For example, Dhungana et al. (2023) argued that security, convenience, and adaptability of such services actually define digital finance adoption and security appears to be the one playing the major role. Meanwhile, in a study by Divya (2023) examining mobile banking services, it has been found out that customer satisfaction increases due to the benefits offered by the platform. After that, as usual, there occurs a chain of events leading to increased levels of customer loyalty, trust in the institution, and finally good word of mouth. All these studies confirm that customer satisfaction can act as the mediating mechanism connecting service attributes and behavioral outcomes.

Another stream of research focused on studying switching behavior in the context of transition of customers from traditional banking services to fintech lending platforms. To explain customers' intentions to migrate, Afandi (2020) applied Push–Pull–Mooring (PPM) model to understand why millennials use FinTech lenders instead of banks for getting money in Indonesia. Having conducted ordinary least squares (OLS) regression based on data from a total of 245 surveys, Afandi (2020) discovered that push factors, in particular dissatisfaction with banking services, do not influence switching intentions significantly. Instead, pull factors (such as easier access and better price of the service) determine the transition process, while at the same time some mooring factors remained present; i.e., the wide range of financial products and good reputation of banking institutions made customers stay loyal to them (Afandi, 2020).

Two more research works support the fact that technological capability or efficiency is not necessarily sufficient to ensure customer satisfaction. Thus, according to Singh and Sinha (2025) and their case study of Cholamandalam Finance India using mixed methods, although digitalization increased the processing time and provided smoother experience of acquiring a loan, the issues with undisclosed fees, inconsistencies in delivering the services and customer complains related to agents' actions decreased the level of customer satisfaction. Nevertheless, 72% of respondents reported willingness to continue using the services provided by the company, which means that brand loyalty, more precisely, confidence in it, plays a critical role in maintaining customer relationship (Singh and Sinha, 2025).

In addition, Debbarma and Somasundaram (2023) conducted an empirical study of digital banking satisfaction of 385 individuals in the West Tripura District of India. As a result, it was found that 71.2% of respondents reported that they were satisfied or at least fairly satisfied with the services offered. Overall mean level of satisfaction was found to be 3.74. According to Debbarma and Somasundaram (2023), the sources of awareness regarding the digital bank in question were predominantly social media (67.5%) and online advertisements (62.3%). Thus, message pathways alone seem to influence consumer perceptions as well as their emotional attitudes toward the services provided (Debbarma and Somasundaram, 2023).

At this point, Rajasekar and Jagadeesan (2025) emphasized a number of potential benefits associated with digital lending, including convenience, quickness in processing loans, faster funds transfer, less documentation and application paperwork, increased visibility in transaction process, personalized offers and financial inclusiveness. However, numerous limitations were found as well, including concerns about data privacy, risk of overdrafting, low levels of financial literacy and high interest rates, which particularly affect those customers who are regarded to be risky. Furthermore, lack of regulations and decreased face-to-face interaction can be regarded as disadvantages, especially for clients interested in personalized services (Rajasekar & Jagadeesan, 2025).

The studies that were looked at show that what customers think and how they feel about lending isn’t just one single thing. It is formed by several elements, like the technology, the service they end up getting, and what is going on in their surroundings. Often it is more like factors such as

how easy it seems to use, the quality of the service, how much customers trust it, and how new or different it is that end up boosting satisfaction, and making them more willing to go for digital lending.

2.8.Summary of different related articles and journals

The following table attempts to provide an overview of the critical determinants that influence consumers' perceptions and satisfaction with digital lending and digital banking. The table is drawn from several empirical studies carried out in various parts of the world. In general, the academic literature continues to emphasize the importance of the positive drivers, which include perceived ease of use, perceived usefulness, and the aspect of convenience, along with other aspects like accessibility, speed, trust, and transparency. Service quality dimensions like reliability and responsiveness are also important in this regard. On the negative side, certain critical determinants tend to occur frequently as well.

Table 1 Summary of different related articles and journals

No.	Author(s) & Year	Title of the Study	Context/ Country	Key Factors Influencing Customer Perception & Satisfaction with Digital Lending/Banking	Positive (+) / Negative (–)
1	Arun Boliya & Sonam Arora (2025)	Exploring User Adoption of Digital Lending Platforms in NBFCs: Insights from the Retail Loan Segment	India (Gujarat)	Perceived Ease of Use (PEOU); Perceived Usefulness (PU); Attitude Toward Use (ATU); Technology in enhancing loan accessibility; Customized products for underserved sectors	+; +; +; +; +
2	Eyob Ketema (2020)	The impact of M-banking quality service on customer's satisfaction	Ethiopia	M-banking quality service; Ease of use; Reliability; Responsiveness; Security;	+; +; +; +; +; +

		during Covid-19 lock down: The case of Bank of Abyssinia, Ethiopia		Empathy	
3	Jacek Adamek & Małgorzata Solarz (2023)	Adoption factors in digital lending services offered by FinTech lenders	Poland	Technology Acceptance Model (TAM) factors (e.g., Ease of Use, Usefulness); Loan accessibility; Consumer behavior; Regulatory environment	+; +; +; –
4	Jarot S. Suroso & Yosep Wahjudi (Year not specified in excerpt, approx. 2021)	Analysis of Factors Affecting Satisfaction and Loyalty of Digital Loan Customer at PT Bank XYZ	Indonesia	Perceived Ease of Use; Perceived Usefulness; Perceived Risk; Perceived Service Quality; Perceived Functional Quality; Perceived Customer Experience; Brand Image; Digital Innovation	+; +; –; +; +; +; +; +
5	Josephat Nyongesa Palanga, Adrian Kamotho & Munene David (2020)	Mobile credit apps adoption and continuous use in a growing digital economy	Kenya	Economic factors; Accessibility; Convenience; Technological efficiency; Regulatory concerns; Debt burdens	+; +; +; +; –; –
6	Mr. S Rajasekar & Dr. P. Jagadeesan (2025)	A Study on Consumer Preferences and Satisfaction Towards Digital Lending	India	Convenience; Speed; Transparency; Cost-effectiveness; Personalized offerings; Data security; Eligibility concerns; Lack of physical interaction	+; +; +; +; +; –; – ; –

7	Samuel Godadaw Ayinaddis, Tilahun Getnet Mirete & Birhane Wondmaneh Getahun (2025)	Evaluating the factors influencing electronic banking adoption in Ethiopia: analysis from customer perspective	Ethiopia	Ease of use; Compatibility with customer needs; Accessibility; Perceived usefulness; Security concerns; Customer attitude	+; +; +; +; –; –
8	Tu D. Q. Le, Thanh Ngo & Dat T. Nguyen (2023)	Digital Credit and Its Determinants: A Global Perspective	Global	Regulatory frameworks (anti-money laundering/terrorist financing); Innovative capacity; Financial development; Regulatory skepticism	+; +; +; –
9	Vaivaw Kumar Singh & Dr. Kunal Sinha (2025)	Customer Perception And Satisfaction In Digital Loan Processing: A Case Study Of Cholamandalam Finance	India	Usability; Transparency; Processing time; Service quality; Trust; Undisclosed charges; Inconsistent service; Agent complaints	+; +; +; +; +; –; – ; –
10	Vaivaw Kumar Singh, Kunal Sinha & Sandeep Nath Sahdeo (2025)	Evaluating the Impact of Digital Lending Platforms on Customer Satisfaction in NBFCs in Jharkhand	India (Jharkhand)	Automation and AI for efficiency; Rapid disbursals; Financial inclusion; Tailored services; Exploitative practices (e.g., high interest, data privacy issues); Regulatory interventions	+; +; +; +; –; +

2.9. Research Gap

Even though extant literature highlights some important aspects of customers' perceptions, adoption and satisfaction with digital lending and digital banking services, a majority of the empirical studies conducted have been based on international data and focused on relatively generic constructs such as perceived ease of use, perceived usefulness, service quality, trust and perceived risks, all of them together or individually. On the other hand, studies conducted in Ethiopia have generally concentrated on mobile banking or e-banking in general, without addressing the issue of digital loans, hence leaving room for further research and empirical studies concerning customers' satisfaction with digital loans offered by Ethiopian commercial banks, following the recent launch of uncollateralized digital loan products via mobile platforms. Also, due to the lack of institution specific research on digital lending at Bank of Abyssinia, the proposed study seeks to bridge the mentioned gaps in the literature by examining factors affecting customer satisfaction with digital lending services at the Bank of Abyssinia.

2.10. Research Hypotheses

H1: Perceived Ease of use has a positive effect on customer satisfaction.

H2: Perceived Usefulness has a positive effect on customer satisfaction.

H3: Perceived Risk has a negative effect on customer satisfaction.

H4: System Reliability has a positive effect on customer satisfaction.

H5: Transparency has a positive effect on customer satisfaction.

H6: Customer Service Support has a positive effect on customer satisfaction.

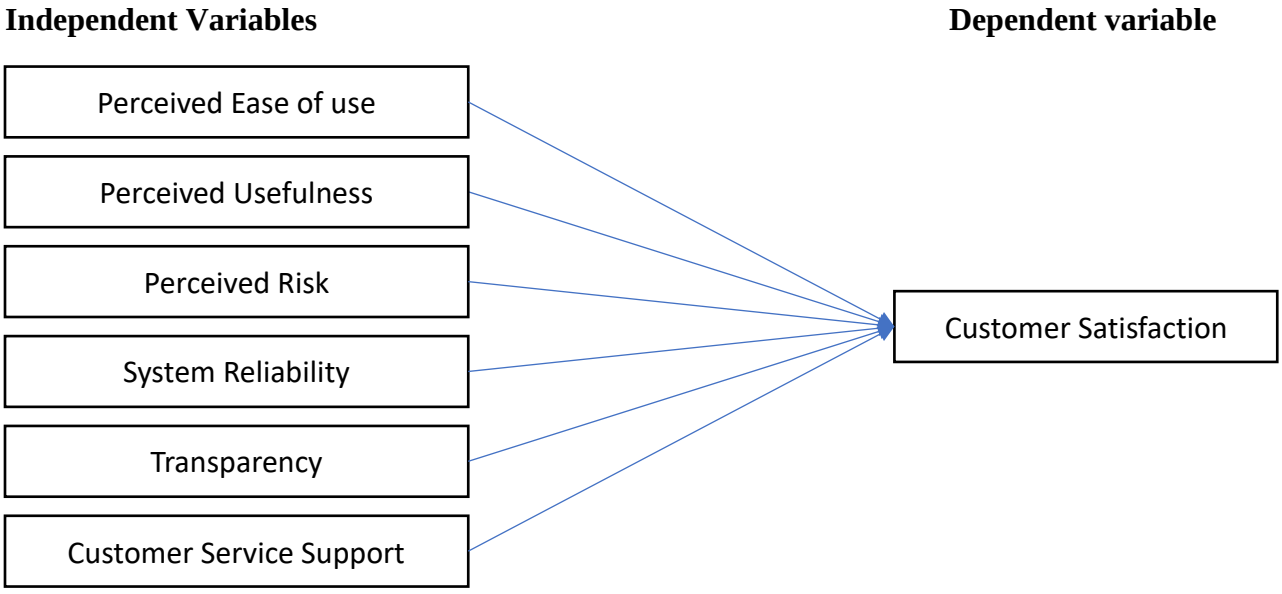
2.11. Conceptual Framework

This framework was created by using the Technology Acceptance Model (TAM) by Davis, 1989. At the same time, this framework is extended by including service quality perspective and reviewing the literature, scholarly journals and related articles. This framework provides a comprehensive understanding of relationships between independent and dependent variables

(Perceived Ease of Use, Perceived Usefulness, Perceived Risk, System Reliability, Transparency, and Customer Service Support) towards Customer Satisfaction.

Perceived Ease of Use and Perceived Usefulness are drawn from TAM. System Reliability and Customer Service Support were inspired from service quality perspectives that were associated with SERVPERF model by Cronin & Taylor, 1992. On the other hand, Perceived Risk and Transparency come from literature on risk and trust in digital financial services sector. Thus, all these independent variables have been chosen for customer satisfaction research on digital lending platforms, and it could be seen from this perspective.

Figure 1: Conceptual Framework



Source: Developed from the Technology Acceptance Model (Davis, 1989), with selected service quality constructs adapted from the SERVPERF model (Cronin & Taylor, 1992) and complemented by relevant literature in digital banking and technology adoption.

CHAPTER THREE

RESEARCH METHODOLOGY

3. Introduction

This chapter discusses the methodological framework that was used to examine, customer satisfaction on digital loan services at Bank of Abyssinia. It basically shows how the study was done, the way the research plan and design were put together. It also covers the target population and the sampling technique, how the sample size was determined, it describes the data gathering methods. In addition, the chapter discusses the validity and reliability of the research instrument, which are the tools that were tested, and it outlines the data analysis techniques that were employed. Finally, it ends with the ethical considerations that guided everything, so the methods stayed appropriate, and responsible throughout.

3.1. Research Approach

This study utilized a quantitative methodology for conducting the research. Generally speaking, quantitative research focuses upon data collection in a numeric format, which allows researchers to analyze and identify patterns or trends among different variables. The researcher uses these findings to evaluate the validity of their stated hypotheses. Further, based on the collected data the researcher generalized about the relationships identified in the sample and its implications for the larger population. In addition, quantitative methods emphasize the importance of objective measurement, statistical analysis, as well as replicability, and precision (Sekaran & Bougie, 2016; Creswell, 2009).

Quantitative research approaches were selected for use within this study due to the need for the systematic quantification of customers' satisfaction levels as well as an assessment of the strength of the relationships between independent variables and total customer satisfaction.

3.2.Research Design

The quantitative approach was used for both descriptive and explanatory research designs. Descriptive design was used to identify customer satisfaction levels as regards digital loan

services offered by Bank of Abyssinia. At the same time, the explanatory design was applied to explain why digital loan attributes (independent variables) change overall customer satisfaction (dependent variable), showing how movement on one end ultimately affects movement on the other.

Descriptive designs allow us to comprehend the phenomenon we are studying by summarizing characteristics, frequencies, patterns in data (Singh & Sinha, 2023). Explanatory designs tell us "what" is occurring beyond simply telling us "what", they seek to identify cause and effect. This typically occurs using statistical modeling. Therefore, we can identify independent variables that significantly predict customer satisfaction (Sekaran & Bougie, 2016).

3.3.Target Population and Sampling

The target population consists of all customers of Bank of Abyssinia's digital loan services who have made use of any of the bank's digital loans. Since the population under study is spread out and involves electronic interactions, non-probability sampling technique was used for sample selection. Specifically, convenience sampling was used to select the sample size. This was due to the fact that digital loan customers are distributed in different areas, and most of the communication is carried out through electronic media.

3.4. Sample Size Determination

The sample size was determined using the formula credited to William G. Cochran (1977) which tends to fit when the population is large or when the true size is not known:

$$\mathrm{n} = \frac{z^2 * p * (1 - p)}{e^2}$$

Where:

n = sample size

Z = Z-score (1.96 for 95% confidence level)

p = estimated proportion (0.5 used for maximum variability)

e = margin of error (0.05)

$$n = \frac{1.96^2 * 0.5 * (1-0.5)}{0.05^2} = \frac{0.9604}{0.0025} = 384$$

This process helped to ensure that the sample was statistically significant enough to be representative of the entire population. This is because the actual number of digital loan customers in Bank of Abyssinia cannot be known (Cochran, 1977; Israel, 2009). Although the required minimum sample size was 384, only 285 valid questionnaires were obtained after screening and were therefore used for analysis.

3.5.Data Collection Method and Instrument

The primary data was gathered using a structured questionnaire that was completed via digital means. The said questionnaire comprised dichotomous and categorical questions, mostly serving the purpose of screening as well as demographic data collection. Additionally, Likert scale questions, e.g., 1=strongly disagree to 5=strongly agree, provided an option to measure the level of respondents' satisfaction. Indeed, structured questionnaires are popular among researchers conducting quantitative studies due to their ability to facilitate statistical analysis (Sekaran & Bougie, 2016).

The link to the survey was shared with participants using different digital communication channels including Facebook groups, organizational emails, networking sites, among others where users of Bank of Abyssinia's services can be found. Using screening questions right at the beginning of the survey served the purpose of ensuring that only responses of individuals who have worked with the digital loan system were used for analysis.

The main advantages of conducting an electronic survey include cost-saving and fast data collection, especially in cases when the target population is scattered and difficult to reach (Andrews et al., 2002; Dillman et al., 2014).

3.6.Validity and Reliability of the Instrument

3.6.1. Validity

Testing for validity was done to determine whether the measure being used can actually measure what the measure is supposed to measure and not just some unrelated aspects. For this study, content validity is achieved by conducting a thorough review of the literature on the relevant topic to establish consistency in the items contained in the questionnaire and the goals of the study, and then an expert review of the measure before data collection.

3.6.2. Reliability

In order to establish the degree of reliability of the measure, we determined whether the test consistently produces reliable results when repeatedly applied. In this particular case, the reliability of the instrument has been tested using Cronbach's Alpha. A minimum coefficient of $\alpha \geq 0.70$ was deemed to be sufficient (Pallant, 2010; Field, 2018).

The test instrument used in this research study was developed based on the existing validated scales from empirical studies conducted in areas like digital banking, technology acceptance, service quality, and customer satisfaction. All of the constructs and their indicators were found to have satisfactory or even high levels of reliability in previous research. Moreover, many times these α coefficients exceeded the generally accepted 0.70 level (Davis, 1989; Adamek & Solarz, 2023; Kappil & Santhi, 2025; Harahap et al., 2024; Lalitha et al., 2025; Lakchan & Samaraweera, 2023).

3.7.Data Analysis

The analysis was conducted with the help of IBM SPSS Statistics software. The descriptive statistical analysis that included mean, standard deviation, frequency, and percentages was used for the purpose of summarizing the demographic characteristics of the respondents along with their levels of satisfaction. On the other hand, correlation analysis and multiple regression analysis were applied to find out the associations between the variables and identify the predictors of customer satisfaction. In general, all these methods are suitable for quantitative data.

3.8. Regression Model

After analyzing the empirical aspects as well as the theoretical assumptions of this research work, the mathematical model was developed for estimating the effect of independent variables Perceived Ease of Use, Perceived Usefulness, Perceived Risk, System Reliability, Transparency, and Customer Service Support on the dependent variable customer satisfaction. Multiple linear regression technique was used in which the functional model is as follows:

$$CS=\beta 0 + \beta 1\ PEOU+\beta 2\ PU + \beta 3\ PR + \beta 4\ SR + \beta 5\ TR + \beta 6CSS + \varepsilon$$

Where:

CS = *Customer satisfaction*

PEOU = *Perceived ease of use*

PU = *Perceived usefulness*

PR = *Perceived Risk*

SR = *System Reliability*

TR = *Transparency*

CSS = *Customer Service Support*

ε = the error component for company I at time t assumed to have mean zero$\varepsilon it = 0$

β0 = *constant parameter*

β = 1, 2, 3, 4, 5 & 6 the slop of the coefficient of parameter that were estimated

3.9.Ethical Considerations

Ethical standards regarding research that involves human subjects were maintained throughout the process. The participants were informed about the objectives of the research, the steps that would be taken during the course of the research, and their rights before the data was collected from them. They also provided written consent and could freely choose whether they wanted to participate or not, without facing any adverse consequences in case of opting out.

CHAPTER FOUR

DATA ANALYSIS AND DISCUSSION

4. Introduction

This chapter focuses on data interpretation. The objective of the study is to establish the level of satisfaction of clients with the electronic loan facility offered by Bank of Abyssinia, as well as factors affecting their level of satisfaction. Among the factors considered during the study are usefulness, usability, risk perception, reliability, transparency, and customer support. Data collection entailed the use of a structured questionnaire after which data was analyzed statistically using SPSS version 27. Both inferential and descriptive statistics were applied in data analysis. In addition, assumptions of Classical Linear Regression Model were examined.

4.1.Response Rate

Response Rate can be simply put as the percentage of questionnaires that have been received as suitable for analysis. In this study, the target sample size was set at 384 using Cochran's formula (1977). The survey was conducted through different electronic mediums. At the end, 300 questionnaires were returned which gave a return rate of 78.1 percent. However, after screening was made 15 respondents were excluded from the next steps. Then, the remaining 285 questionnaires were regarded as valid and appropriate for the study, producing an effective response rate of 74.2 percent. Fincham (2008) suggests that a response rate around 60 percent or higher is acceptable for survey research, so the figure we got here was considered adequate for trustworthy statistical analysis and discussion of the results. We can see the response rate in Table 3.

Table 2 Response Rate

Description	**Frequency**	**Percentage (%)**
Target Sample Size	384	100.0
Returned Questionnaires	300	78.1
Excluded (Did Not Use Apollo Digital Loan Service)	15	3.9
Valid Questionnaires Used for Analysis	285	74.2
Not Returned	84	21.9

Source: Primary Data (2026)

4.2.Background Information of Respondents

4.2.1. Demographic Characteristics

The study checked the demographic traits of the respondents, like their gender, age, level of education, employment situation and monthly income. We can see demographic results in Table 4.

Table 3 Demographic Characteristics of Respondents

Variable	Category	Frequency	Percentage (%)
Gender	Male	184	64.6
	Female	101	35.4
Age Group	Under 20	20	7.0
	21–30	114	40.0
	31–40	102	35.8
	41–50	27	9.5
	Above 50	22	7.7
Education Level	Diploma and Below	81	28.4
	Bachelor's Degree	153	53.7
	Master's Degree and Above	51	17.9
Employment Status	Employed	175	61.4
	Self-employed	63	22.1
	Student	36	12.6
	Other	11	3.9
Monthly Income (ETB)	Less than 10,000	89	31.2
	10,001–30,000	105	36.8
	30,001–60,000	64	22.5
	Above 60,001	27	9.5

Source: Primary Data (2026)

As we can see in Table 4 men consistes of 64.6% of the overall sample while women consistes 35.4%. Most of the respondents (40.0%) are found in the age range of 21–30 years, and then the 31–40 years age group follows (35.8%). Regarding education, the larger proportion of respondents held a Bachelor’s degree (53.7%). Regarding employment, we find that 61.4% were employed, while 22.1% were self-employed. In terms of income per month, the highest percentage of those who responded (36.8%) earned ETB 10,001-ETB 30,000.

4.2.2. Digital Loan Usage Characteristics

Moreover, the survey also considered various aspects associated with usage of such online loans by the respondents, including their access to smartphones and internet, the time spent on usage of the Apollo digital bank account, frequency of taking digital loans, reasons for taking digital loans, and the range of digital loan amount taken generally. Such factors have been analyzed in order to determine the extent to which the respondents knew about the digital loan service providers and the exposure that they had received through Apollo before giving responses regarding their customers' satisfaction. We may see the results in Table 5.

Table 4 Digital Loan Usage Characteristics of Respondents

Variable	Category	Frequency	Percentage (%)
Smartphone & Internet Access	Regular Access	227	79.6
	Occasional Access	41	14.4
	Limited Access	17	6.0
Duration of Apollo Usage	Less than 6 Months	73	25.6
	6 Months–1 Year	94	33.0
	1–2 Years	87	30.5
	More than 2 Years	31	10.9
Digital Loan Usage Frequency	1–2 Times	84	29.5
	3–5 Times	110	38.6
	More than 5 Times	91	31.9
Purpose of Loan	Personal Consumption	206	72.3
	Business Activities	11	3.9
	Emergency/Medical Needs	51	17.9
	Other	17	6.0
Typical Loan Amount	Less than 10,000 ETB	101	35.4
	10,000–30,000 ETB	111	38.9
	30,001–60,000 ETB	41	14.4
	Above 60,000 ETB	32	11.2

Source: Primary Data (2026)

From Table 5, majority of the respondents, 79.6%, reported that they had access to smartphones along with the internet facility. Coming to the duration of their experience with the Apollo digital bank, 33.0% reported that they have been using the service since six months to a year while 30.5% respondents claimed that they were using it for a period ranging from one to two years. Concerning the frequency of their use of digital loans, 38.6% stated that they used the service thrice to five times. On average, the major chunk of the respondents (72.3%) reported that they

mostly required digital loans for their personal consumption purposes. Considering the amount of the loan, 38.9% reported that they mostly borrowed loans from ETB 10,000 to ETB 30,000. Overall, these results indicate that the respondents were sufficiently exposed to Apollo digital loans, allowing them to give insightful opinions about customer satisfaction.

4.3.Reliability Analysis

Even though the items for measurement were borrowed from previous studies, where they were already tested, a new reliability test was conducted for the present sample because reliability is context/sample-dependent. The reliability analysis was done with Cronbach's Alpha in order to determine the degree of internal consistency of measurement scales used in this research. If Cronbach's Alpha equals 0.70 or higher, it may be considered reliable (Pallant, 2010). The results can be found in Table 6 below.

Table 5 Reliability Statistics

Variable	Items	Cronbach's Alpha
Perceived Usefulness	6	0.947
Perceived Ease of Use	6	0.947
Perceived Risk	4	0.891
System Reliability	4	0.922
Transparency	4	0.923
Customer Service Support	3	0.919
Customer Satisfaction	4	0.934

Source: researcher's own computation via SPSS Version 27

It can be said that the outcomes of testing indicate that each construct showed Cronbach's Alpha values exceeding the recommended cut-off of 0.70. This implies high reliability of internal consistency, meaning that the scales worked harmoniously and consistently. As a consequence, they became credible and suitable for further stages of the research process.

4.4.Level of Customer Satisfaction with Digital Loan Services

Descriptive Analysis

Descriptive statistics were used to rather summarize respondents perceptions about the study variables, and also to provide a rough overall idea about customer satisfaction with the Apollo digital loan service. The analysis included means and standard deviations for every construct.

The mean numbers show the typical level of agreement with the statements that were used for each construct, while the standard deviation numbers show how much the opinions among respondents vary, or deviating in a sense. Therefore, before moving into the inferential part, descriptive statistics are helpful as an initial look at the data, and they also allow the researcher to spot the wider sentiment of respondents about the various digital loan service attributes that were explored in the study. We can see the outcomes from the descriptive analysis in Table 7.

Table 6 Descriptive Statistics

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
PEOU	285	1.67	5.00	3.9824	.83614
PU	285	1.17	5.00	3.6785	.91438
PR	285	1.00	4.00	1.5307	.67212
SR	285	1.25	5.00	3.8044	.89803
TR	285	1.25	5.00	3.7325	.91455
CSS	285	1.00	5.00	3.4855	1.09572
CS	285	1.25	5.00	3.5053	.85630
Valid N (listwise)	285				

Source: researcher's own computation via SPSS Version 27

From the descriptive statistics above, the views held by the respondents regarding the Apollo digital loan platform were fairly positive. This is evident from the high mean values such as that of Perceived Ease of Use where its value was highest (M = 3.982), meaning that many respondents viewed the platform as easy to use. Other high mean values include System Reliability (M = 3.804), Transparency (M = 3.733) and Perceived Usefulness (M = 3.679).

In the case of Customer Satisfaction, the mean value was 3.505, implying that customer satisfaction levels regarding the whole process of the digital loan application were moderate and quite high. The lowest mean value was achieved by Perceived Risk (M = 1.531), which indicated that respondents did not perceive the Apollo platform to be risky enough to rate it accordingly.

Additionally, low standard deviation values were obtained for all constructs. Low spread values typically indicate that the opinions of the respondents were similar and not highly dispersed, so that the latter were quite close to one another.

4.5.Relationship between Digital Loan Service Attributes and Customer Satisfaction

Correlation Analysis

Pearson correlation test was carried out to determine the strength and the direction of the association between the independent variables and customer satisfaction, especially on the Apollo Digital Loan Platform. Correlation is useful in finding early associations between variables prior to performing regression and can also reveal potential problems like multi-collinearity, which occurs when predictors are tied up together (Field, 2018; Gujarati & Porter, 2009).

Table 7 Correlation Matrix

Correlations								
		CS	PEOU	PU	PR	SR	TR	CSS
CS	Pearson Correlation	1	.709**	.688**	-.463**	.613**	.649**	.539**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000
	N	285	285	285	285	285	285	285
PEOU	Pearson Correlation	.709**	1	.573**	-.532**	.529**	.581**	.463**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000
	N	285	285	285	285	285	285	285
PU	Pearson Correlation	.688**	.573**	1	-.397**	.458**	.530**	.433**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000
	N	285	285	285	285	285	285	285
PR	Pearson Correlation	-.463**	-.532**	-.397**	1	-.384**	-.433**	-.277**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000

	N	285	285	285	285	285	285	285
SR	Pearson Correlation	.613**	.529**	.458**	-.384**	1	.519**	.352**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000
	N	285	285	285	285	285	285	285
TR	Pearson Correlation	.649**	.581**	.530**	-.433**	.519**	1	.431**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000
	N	285	285	285	285	285	285	285
CSS	Pearson Correlation	.539**	.463**	.433**	-.277**	.352**	.431**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	
	N	285	285	285	285	285	285	285

**. Correlation is significant at the 0.01 level (2-tailed).

Source: researcher's own computation via SPSS Version 27

Table 8 Summary Table of Correlation Matrix

Variables	CS	PEOU	PU	PR	SR	TR	CSS
CS	1						
PEOU	.709**	1					
PU	.688**	.573**	1				
PR	-.463**	-.532**	-.397**	1			
SR	.613**	.529**	.458**	-.384**	1		
TR	.649**	.581**	.530**	-.433**	.519**	1	
CSS	.539**	.463**	.433**	-.277**	.352**	.431**	1

Source: researcher's own computation via SPSS Version 27

According to the correlation analysis, several crucial variables show themselves as statistically significant determinants of customer satisfaction from the usage of Apollo digital loan service. To begin with, Perceived Ease of Use seems to be one of those, since it is demonstrated by high positive correlation coefficient (r = 0.709). Consequently, it could be said that the level of satisfaction grows together with ease of using and comprehending the product or service.

Following this trend, Perceived Usefulness (r = 0.688) also indicates a high positive correlation between itself and customer satisfaction, which means that users who perceive the use of the platform as really useful for solving their finance-related matters demonstrate higher levels of satisfaction with the process. Then comes Transparency (r = 0.649), which still demonstrates a high positive correlation coefficient, implying that transparency plays an equally important role in forming user satisfaction.

System reliability (r = 0.613) also has a positive significant effect. From here, it is clear that consistent operation, less disruption and reliable service delivery did all contribute towards better customer experiences. Customer service support (r = 0.539) seems to be slightly lower than the rest of the predictors in terms of the magnitude of the correlation coefficient, but it is clearly still a highly significant factor, which is to say that faster response time and increased customer assistance definitely positively contribute to higher levels of customer satisfaction, though not as much as the key drivers of satisfaction.

Meanwhile, there is quite a substantial negative relationship between perceived risk and customer satisfaction (r = -0.463). As a result, perceived risk is a driver for customer dissatisfaction, which correlates with consumer behavior literature, since higher uncertainty translates into less trust and thus lower satisfaction with digital financial products (Hair et al., 2019).

All in all, if a financial institution wants to increase customer satisfaction significantly, it should focus on making the process of delivering online loans more user-friendly, adding value, being more transparent, increasing reliability, assisting customers, while simultaneously reducing their perception of risks.

4.6.Classical Linear Regression Model (CLRM) Assumptions

The following sections describe the diagnostic tests that have been done on the data to find out if the data fulfills the underlying assumptions of the Classical Linear Regression Model (CLRM). This is important because it enables us to determine that the estimated regression coefficients are unbiased, efficient, and statistically reliable as well. The testing has been done by using

appropriate tests for each assumption, while some graphical methods have also been used following the common econometric practice (Gujarati & Porter, 2009; Wooldridge, 2012).

4.6.1. Normality Test

Amongst the basic assumptions in linear regression, the distribution of the error terms follows a normal distribution, especially if there is need for proper hypothesis testing and estimation of confidence intervals (Field, 2018; Wooldridge, 2012). The assumption was tested using numerical techniques and graphs, kinda yes.

Table 9 Normality Test

Tests of Normality

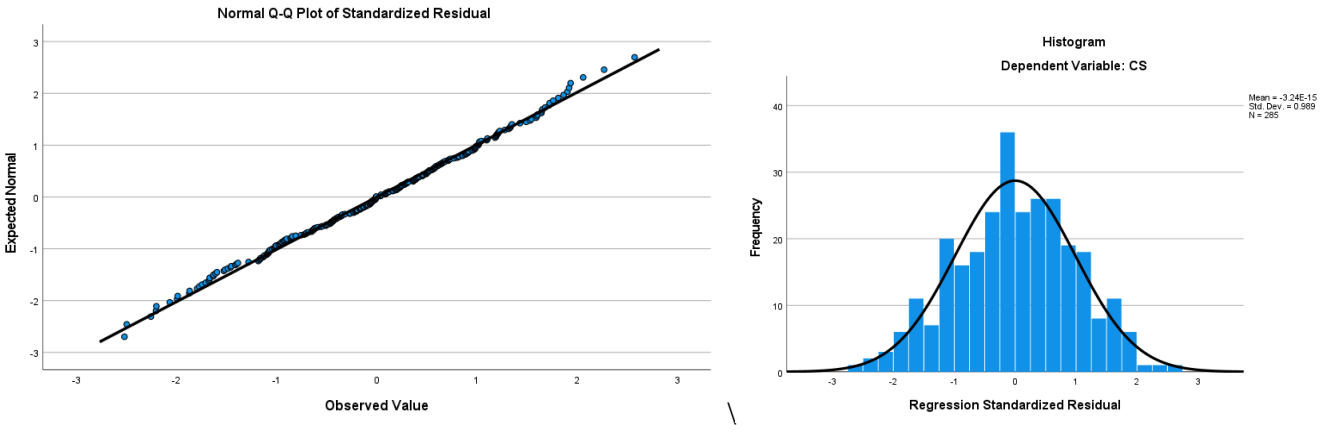
	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Standardized Residual	.030	285	.200*	.995	285	.444

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Source: researcher's own computation via SPSS Version 27

Figure 2 Normality Test Normal Q–Q Plot and Histogram



Source: researcher's own computation via SPSS Version 27

The significance value of Shapiro-Wilk was found to be 0.444. As this value is higher than 0.05, we may say that the hypothesis of normality cannot be rejected because it signifies that residuals

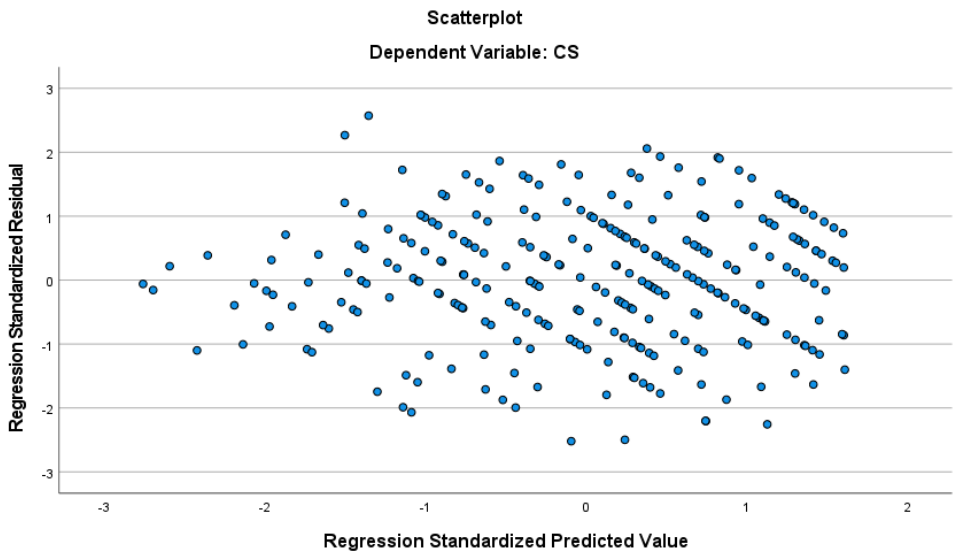
are normally distributed. Besides, the distribution of standardized residuals resembles a typical bell-shaped curve, and the points on the graph of Normal P-P plot and Q-Q plot almost coincided with the diagonal. In other words, there is more support for normality, although not sufficient.

Thus, we may draw a conclusion that the normality assumption holds true, which makes our statistical inference more reliable (Field, 2018; Pallant, 2010).

4.6.2. Homoscedasticity Test

Homoscedasticity basically refers to the condition where the variance of the error terms remains constant irrespective of the levels of the independent variables, and it is an essential assumption because it enables one to calculate efficient and unbiased standard errors (Gujarati & Porter, 2009; Wooldridge, 2012). In the case of this paper, the assumption of homoscedasticity was verified through the construction of a scatterplot of the standardized residual terms on the standardized predicted terms. From this plot, it is evident that there is random distribution of the residual terms around zero with no distinct funnel shape or pattern. Based on the above results, it would be correct to conclude that there is no change in the variance of the residuals as the predictions vary, hence meeting the homoscedasticity assumption.

Figure 3 Homoscedasticity Test



Source: researcher's own computation via SPSS Version 27

4.6.3. Autocorrelation Test

Autocorrelation is basically the correlation between the error terms in various observations, and in this case, it makes the concept of the errors being independent quite meaningless. As a result, the estimates may become less efficient even when everything seems good on paper (Wooldridge, 2012). For this reason, the assumption was tested through the use of the Durbin-Watson test, which is a popular tool to do just that. The model gave a score of 1.984, which is very close to that "ideal" score of two. The score also lies within that "acceptable" range of 1.5 to 2.5. This means that there is not any meaningful autocorrelation in the data.

Table 10 Durbin-Watson Test

Statistic	Value
Durbin-Watson	1.984

Source: researcher's own computation via SPSS Version 27

4.6.4. Multicollinearity Test

Multicollinearity happens when the independent variables are closely bound together, whic makes it hard to untangle the real, individual effect of each predictor (Gujarati & Porter, 2009; Wooldridge, 2012). In this study it was checked using the Tolerance measure together with the Variance Inflation Factor (VIF) scores.

Table 11 Collinearity statistics

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	-.224	.234		-.957	.339		
	PEOU	.273	.049	.267	5.541	.000	.462	2.163
	PU	.267	.040	.286	6.648	.000	.580	1.724
	PR	-.024	.050	-.019	-.482	.630	.684	1.462
	SR	.184	.039	.193	4.701	.000	.632	1.581

	TR	.161	.042	.172	3.866	.000	.543	1.840
	CSS	.113	.030	.145	3.752	.000	.720	1.389
a. Dependent Variable: CS								

Source: researcher's own computation via SPSS Version 27

Table 12 Summary table collinearity statistics

Variable	Tolerance	VIF
PEOU	0.462	2.163
PU	0.580	1.724
PR	0.684	1.462
SR	0.632	1.581
TR	0.543	1.840
CSS	0.720	1.389

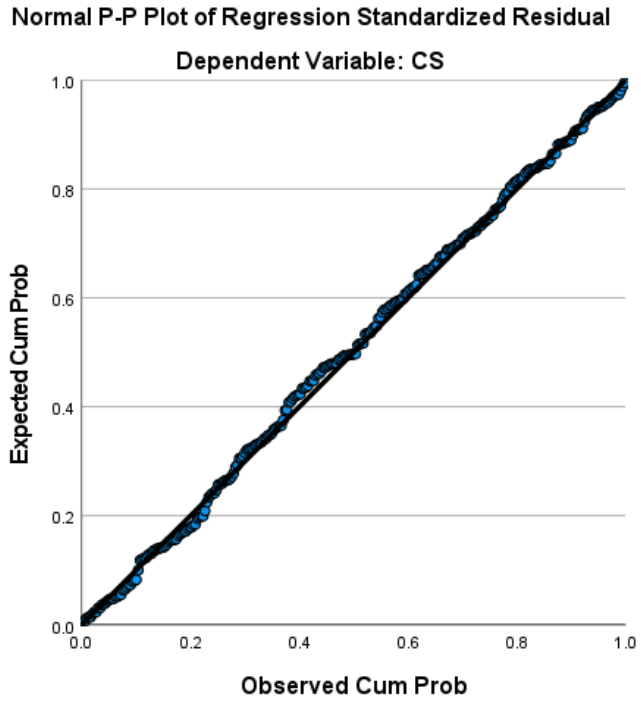
Source: researcher's own computation via SPSS Version 27

As seen from the findings, all variables recorded tolerance levels that remained above 0.10, and the VIF numbers stayed below 10. More specifically, the VIF values were about 1.389 up to 2.163. Since these results fall within the commonly accepted limits, it implies that multicollinearity is not a meaningful issue in this model. Therfore we can conclude that the distinct contribution of every predictor toward customer satisfaction can be explained in a dependable way without statistical distortion (Field, 2018; Pallant, 2010).

4.6.5. Linearity Test

Linearity is the idea that there is some sort of straight line relation between the independent variables and the dependent variable, and this matters a lot, so the regression estimates don't end up biased (Field, 2018; Wooldridge, 2012). In this study, the assumption was looked at by using a scatter plot of standardized residuals versus the standardized predicted values. From theresults we can see that the residuals are scattered in a pretty random manner around zero, without any curved shapes, not much clustering, or anything that looks like consistent, organized deviations. Therfore we can conclude that the relation between the predictors and customer satisfaction is linear. Overall, the linearity assumption appears to be satisfied which then lends weight to the overall credibility or validity of the regression model (Pallant, 2010; Field, 2018).

Figure 4 Linearity Test



Source: researcher's own computation via SPSS Version 27

4.7.Influence of Digital Loan Service Attributes on Customer Satisfaction

Multiple Regression Analysis

Multiple regression analysis was done to sort out both the combined effect, but also the separate impacts of Perceived Ease of Use, Perceived Usefulness, Perceived Risk, System Reliability, Transparency, and Customer Service Support on customer satisfaction . Regression analysis is pretty appropriate for looking at the predictive power of several independent variables, and also to see what each of them contributes while we control for the other aspects (Wooldridge, 2012; Gujarati & Porter, 2009).

The regression output is presented through ANOVA, a model summary, plus coefficient tables. These pieces, side by side, let us verify the overall model fit, how much variation is explained, and then whether each variable turns out to be significant.

4.8.Model Significance

As we can see in Table 14, the ANOVA results basically indicate that the regression model is statistically significant, with $F = 109.320$ and $p < 0.001$, so it seems like the independent variables together do have some real effect on customer satisfaction . In other words, the overall arrangement fits better than a version without any predictors, and those explanatory factors, as a group , make the prediction skill a bit more accurate (Field, 2018).

Table 13 ANOVA Results

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	146.255	6	24.376	109.320	.000[b]
	Residual	61.987	278	.223		
	Total	208.242	284			
a. Dependent Variable: CS						
b. Predictors: (Constant), CSS, PR, SR, PU, TR, PEOU						

Source: researcher's own computation via SPSS Version 27

4.9.Model summary

As we can see in the model summary in Table 15, there is a strong link between the observed and predicted values ($R = 0.838$). Here, R^2 is 0.702, which means that roughly 70.2% of the variation in customer satisfaction is accounted for by the independent variables, so the interpretive strength comes out as rather solid. The adjusted R^2 of 0.696 also points to the same general idea, namely that the model stays stable even after it is adjusted for the number of predictors. Overall, it suggests a good build quality and a decent specification (Wooldridge, 2012).

Table 14 Model Summary

Model Summary[b]					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.838[a]	.702	.696	.47220	1.984

a. Predictors: (Constant), CSS, PR, SR, PU, TR, PEOU

b. Dependent Variable: CS

Source: researcher's own computation via SPSS Version 27

4.10. Hypothesis Testing

In Table 16, the regression coefficients rather reveal how each predictor plays its own role while the other variables are "held constant". The estimated regression equation is:

CS = -0.224 + 0.273(PEOU) + 0.267(PU) − 0.024(PR) + 0.184(SR) + 0.161(TR) + 0.113(CSS)

Table 15 Regression Coefficients

Coefficients[a]						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	-.224	.234		-.957	.339
	PEOU	.273	.049	.267	5.541	.000
	PU	.267	.040	.286	6.648	.000
	PR	-.024	.050	-.019	-.482	.630
	SR	.184	.039	.193	4.701	.000
	TR	.161	.042	.172	3.866	.000
	CSS	.113	.030	.145	3.752	.000

a. Dependent Variable: CS

Source: researcher's own computation via SPSS Version 27

In this study six hypotheses were formulated. Statistical tests run for these hypotheses were briefly discussed below.

Table 16 Summary of Hypothesis Testing Results

Hypothesis	**Hypothesis Statement**	**Expected Relationship**	**Decision**
H1	Perceived Ease of Use has a positive effect on customer satisfaction.	Positive	Supported

H2	Perceived Usefulness has a positive effect on customer satisfaction.	Positive	Supported
H3	Perceived Risk has a negative effect on customer satisfaction.	Negative	Supported
H4	System Reliability has a positive effect on customer satisfaction.	Positive	Supported
H5	Transparency has a positive effect on customer satisfaction.	Positive	Supported
H6	Customer Service Support has a positive effect on customer satisfaction.	Positive	Supported

Perceived Usefulness displayed the strongest positive relationship with customer satisfaction ($\beta = 0.286$, $p < 0.001$). This indicates that if customers feel the Apollo platform is useful for their financial needs they will be more satisfied with the service. Perceived Ease of Use also had a strong positive relationship and remained statistically significant ($\beta = 0.267$, $p < 0.001$). This suggests that when the interface is easy to use, and navigation is intuitive user satisfaction increases. System Reliability ($\beta = 0.193$, $p < 0.001$) proved to also have a positive relationship. This can be interpreted as consistent and reliable system behavior allowing the user to have better overall experience. Transparency ($\beta = 0.172$, $p < 0.001$) was significant and points to the notion that being able to see what steps the loan is on helps users feel confident which translated to satisfaction. The same applies for Customer Service Support ($\beta = 0.145$, $p < 0.001$), as we can say that timely and attentive service lends itself to an overall smoother experience for the user.

On the other hand, Perceived Risk had a negative beta coefficient ($\beta = -0.019$), however it was insignificant as well ($p = 0.630$). Essentially, this could be interpreted that the negative relationship is good, but Perceived Risk doesn't do much to affect customer satisfaction within this model. Nonetheless, this does not negate the validity of this regression model. The fact that all the variables are jointly significant (the ANOVA F-test tells us $p < 0.001$), assures us that the model continues to provide a significant and statistically reliable explanation of customer satisfaction. The R^2 is also considered high, so we can say that there is substantial explanatory power - in other words, the significant predictors account for most of the variance in the dependent variable.

Meanwhile, the small magnitude of the influence of Perceived Risk could indicate that it's simply "picking up" on the impact from other influences or that it is being overshadowed by larger

impacts such as Perceived Usefulness and Perceived Ease of Use. Alternatively, respondents may be viewing their level of risk as relatively low compared to what would affect their decision-making regarding their satisfaction ratings; therefore, regardless of whether Perceived Risk individually predicts customer satisfaction in this study, the overall regression results are very good, have credibility, and provide some theoretical relevance. The study suggests that customer satisfaction with Apollo digital loan services is primarily due to perceived usefulness and ease of use of those services, followed by perceived system reliability, then transparency and lastly perceived customer service support.

4.11. Results and discussion

The research-based findings of this study provide a substantial amount of evidence for what factors actually lead to customer satisfaction of the digital loan services on the Apollo Platform by Bank of Abyssinia. The outcomes from the descriptive analysis and study data are combined with prior studies as well as several major theories presented within the literature review.

In general, it seems from the descriptive analysis that many respondents viewed their responses to perceived ease of use, perceived usefulness, system reliability, transparency and customer support through a very positive lens.

Customer Satisfaction was found to have a relatively large average value indicating that customers generally view themselves as being satisfied with the Apollo Digital Loan Services; however, based upon the standard deviations calculated, there does not appear to be any variation among customers' expectations. These results support previous empirical studies such as those done by Debbarma and Somasundaram (2023), who reported that most customers stated that they were satisfied with their digital banking experiences. Additionally, these results also support an argument made by Rajasekar and Jagadeesan (2025) that convenience, speed and accessibility can all positively impact the overall digital lending experience.

The results obtained by correlation analysis indicated that all the studied factors had a statistically significant correlation with customer satisfaction to a greater or lesser extent. Perceived ease of use, as well as perceived usefulness, appeared to have strong positive correlations with customer satisfaction, indicating that customers felt satisfied due to ease of use

of the digital loan platform and its useful features. The result obtained supports the Technology Acceptance Model (TAM) according to which perceived usefulness, along with perceived ease of use, becomes a primary factor driving attitudes toward using certain technology (Davis, 1989).

Furthermore, the findings are consistent with the idea offered by Suroso and Wahjudi (2021) that perceived ease of use positively impacts customer satisfaction in digital lending operations. In addition, according to the research conducted by Boliya and Arora (2025), both perceived usefulness and perceived ease of use have an impact on users' perceptions of digital lending platforms.

In turn, results from regression indicated that perceived usefulness emerges as the most significant predictor of customer satisfaction. This indicates that customers are most likely to prioritize the useful features provided by the Apollo platform, including fast loan applications, ease of accessing loans, and efficient service delivery. The findings seem consistent with the literature that highlighted perceived usefulness as an influential determinant behind acceptance as well as continued usage of digital lending services. Thus, one can conclude based on the findings that customers are likely to be satisfied with digital loan services when they align perfectly with customers' financial needs.

Similarly, perceived ease of use proves to have a positive influence on customer satisfaction. This finding corroborates the existing body of evidence in literature reviewed above that identified the ease of use as a key contributor to positive customer experience with digital financial services. Nonetheless, taking into consideration the context of Ethiopia and its diverse levels of digital literacy among different customer segments, perceived ease of use allows customers to use the platform effortlessly.

Moreover, the findings indicate that system reliability has a significant and positive influence on customer satisfaction. This result is consistent with the SERVPERF model, which considers reliability as one of the core dimensions of service quality and emphasizes customers' perceptions of the actual performance of services (Cronin & Taylor, 1992). In the context of digital lending, reliable system performance, including consistent service availability, accurate transaction processing, and dependable system functionality, enhances customers' overall satisfaction. This finding is also consistent with the study by Ketema (2020), which identified

service reliability as one of the major determinants of customer satisfaction with mobile banking services at the Bank of Abyssinia. Similarly, Suroso and Wahjudi (2021) found that well-functioning and dependable digital platforms significantly improve customer satisfaction by providing reliable and efficient service experiences.

It should be noted that transparency was yet another important factor affecting the degree of customers' satisfaction. Customers, apparently, felt better due to the fact that all aspects concerning loan terms, fees, repayment schedules, and loan processes were presented transparently. Indeed, such an approach is consistent with what Singh and Sinha (2025) and Rajasekar and Jagadeesan (2025) have discussed before. As stated above, transparency plays a significant role in building up trust towards digital lending. In summary, the current research finding suggests that presenting information about the loans transparently decreases the level of uncertainty and increases customers' trust towards the service provided.

Customer service support was also found to have a significant positive effect on customer satisfaction. This finding is consistent with the SERVPERF model, which emphasizes customers' perceptions of actual service performance, particularly the responsiveness and effectiveness of customer support in delivering high-quality services (Cronin & Taylor, 1992). In the context of digital lending, timely assistance, prompt resolution of customer inquiries, and effective handling of technical issues contribute substantially to customers' overall satisfaction. This finding is supported by Singh and Sinha (2025), Rajasekar and Jagadeesan (2025), and Ketema (2020), who reported that responsive and efficient customer support enhances customers' experiences with digital financial services. Although digital lending platforms automate many service processes, customers continue to require timely assistance to resolve technical difficulties, clarify loan-related information, and address repayment concerns. Therefore, the availability of reliable and responsive customer support remains an important determinant of customer satisfaction.

Unlike the other factors, the impact of perceived risk on customers’ satisfaction was negative, although it did not prove to be statistically significant. Even though the nature of the relationship between perceived risk and customer satisfaction conforms to the one reported in prior literature, the lack of statistical significance differs from that of Adamek and Solarz (2023), Singh et al. (2025), and Suroso and Wahjudi (2021). According to their findings, the relationship between

perceived risk and customer satisfaction is negative. This finding can be interpreted to mean that customers of Apollo trust the online banking platform and, therefore, perceive risks in terms of security or privacy to be minimal. This is consistent with the low mean value of the variable. In addition, this finding corroborates those of Ayinaddis et al. (2025) who indicated that the security threat was not the main motive for using electronic banking services in Ethiopia.

Overall, the findings are consistent with the theoretical foundations of both the Technology Acceptance Model (TAM) and the SERVPERF model. In line with TAM, perceived usefulness and perceived ease of use were found to be significant determinants of customer satisfaction, confirming that customers are more satisfied when digital lending services are useful and easy to use. Similarly, the significant effects of system reliability and customer service support are consistent with the SERVPERF model, which emphasizes customers' perceptions of actual service performance as a key determinant of service quality and satisfaction. Furthermore, the significant influence of transparency highlights the importance of providing clear, accurate, and accessible information throughout the digital lending process, while perceived risk underscores the role of security and trust in shaping customer satisfaction.

These findings suggest that customer satisfaction with digital lending services in Ethiopia is influenced by a combination of technological, service quality, and trust-related factors. Therefore, Bank of Abyssinia can enhance customer satisfaction by improving the usefulness and ease of use of the Apollo digital lending platform while ensuring reliable system performance, transparent communication, effective customer service support, and robust risk management practices.

4.12. Implications for Improving Digital Loan Service Delivery

The current study provides some important practical, managerial, and theoretical implications for digital banking service providers, especially those operating within the Ethiopian context. The findings have revealed that customer satisfaction with the digital loan offering provided by the Apollo bank has been mainly driven by usability factors, functional aspects, system quality, and service support. In other words, the variables such as Perceived Usefulness, Perceived Ease of Use, System Reliability, Transparency, and Customer Service Support were found to affect customer satisfaction positively.

In terms of management, the above result suggests that it would be prudent for the banks to invest more in system reliability, functionality, and accessibility. It is expected that optimization of the interactions between customers and the platform, including reduction in number of process steps, simplification of the interface design, and timely provision of services, could help banks to increase the degree of customer satisfaction, thereby contributing to the retention of customers in reality.

As far as the policy recommendations are concerned, the result of the study highlights the importance of the adoption of customer-centered approaches to digital banking. The financial organizations must pay attention to the development of reliable and efficient digital products which could serve customers' needs. Moreover, it appears necessary to improve the quality of services as well as to make systems operate faster to encourage more customers to use digital banking solutions in light of increasing popularity of such services in Ethiopia.

The present research has added value to the existing literature on digital financial services by offering evidence from the Ethiopian banking sector. This is because the results of the study have confirmed that TAM explains the influence of perceived usefulness and perceived ease of use in shaping users' attitudes and their satisfaction with technology-based services. Also, this study has found that perceived risk has a negative impact on customer satisfaction but becomes statistically insignificant once other variables are controlled for. In other words, satisfaction with digital lending services seems to be driven by functionality and convenience of the service rather than risk. On the whole, the results obtained may be used by managers and researchers in their further efforts aimed at improving customer satisfaction with the use of digital lending services.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5. Introduction

In this chapter the researcher discuss the important findings of the present research and draw our conclusions from them. Further, we move to the practical application part when the implications for both policy and management are described. Besides, we provide certain suggestions in order to increase customers' satisfaction with the Apollo digital loan product.

5.1.Summary of Major Findings

Regarding the current research, the aim was to explore the factors that determine customer satisfaction in terms of using the Apollo digital loans. In this case, the primary dependent variables that we investigating were six, including ease of use, usefulness, risk perception, reliability of the system, transparency, and customer support services. These variables have been selected based on how frequently they appear in previous literature (particularly with respect to studies on technology acceptance models and service quality).

As shown in our descriptive statistics results, most participants tend to think positively about the Apollo digital loan service platform. To begin with, Perceived Ease of Use proves quite high, meaning that users consider the system to be easy to operate and use, and not overly complicated. Perceived Usefulness is also high since customers see the platform as an efficient solution that helps make using loan services faster and easier. Moreover, System Reliability is also high as customers perceive the system to be reliable and unlikely to experience frequent failures. Transparency and Customer Service Support prove equally high since users appreciate the clarity in the whole procedure and support provided.

As can be seen from the correlation analysis, all independent variables have a statistically significant association with the level of customer satisfaction. Perceived Ease of Use and Perceived Usefulness are highly positively correlated, meaning that interaction convenience and efficiency play a critical role when people decide whether they are satisfied with the system or not. The same applies to such variables as System Reliability and Transparency, meaning that

system stability and clarity of loan procedures contribute to customer satisfaction significantly. Customer Service Support shows the same tendencies as the mentioned above variables. However, Perceived Risk is negatively correlated with customer satisfaction.

A further discussion can be derived from the following multiple regression analysis, which illustrates how much each of the predictors influences customer satisfaction when controlling for other variables. According to the results obtained in this part of the analysis, there is enough evidence for concluding that the overall regression model is statistically significant ($p < 0.001$). Thus, the independent variables used in this study have a significant influence on the dependent one and explain a certain percentage of the variance in it.

Speaking about each of the predictors considered individually, one should state that the most powerful predictor of customer satisfaction turns out to be Perceived Usefulness. This means that customers consider the usefulness of the service provided by Apollo highly significant in terms of influencing their satisfaction with this service. Perceived Ease of Use follows the former predictor, which shows that another important factor of satisfaction is its easiness and accessibility. Therefore, both of these factors determine the overall level of satisfaction experienced by customers. Besides, System Reliability, Transparency, and Customer Service Support proved statistically significant. On the contrary, the role played by Perceived Risk was negative but insignificant.

5.2.Conclusions

In accordance with the study's findings, several conclusions can be made concerning the determinants of customer satisfaction with the Apollo digital loan service. Customer satisfaction is determined by a relatively small number of factors, paying special attention to everyday performance of the system.

Firstly, customer satisfaction can be largely attributed to functional value and usability. Based on the regression analysis findings, Perceived Usefulness and Perceived Ease of Use can be regarded as the strongest predictors of satisfaction. Namely, customers care about the system's ability to facilitate their activities related to borrowing money online and its ease of use.

Therefore, usability combined with the perceived value is one of the key drivers of customer satisfaction.

Secondly, there is a considerable impact of quality-related elements of service on customer satisfaction. As follows from the empirical data, system reliability and transparency are two factors positively associated with user satisfaction. Namely, customers prefer reliable service and appreciate the transparency of the procedure that does not include numerous disruptions and discontinuities. Customers value comprehensible processes more than the opaque ones and prefer understandable loan steps. In other words, customer satisfaction is facilitated by the trustworthy and easy-to-comprehend process.

Thirdly, customer support as the component of service quality contributes to user satisfaction. Effective and timely customer support has an important role since interaction with people continues to be relevant in digital financial services.

Lastly, Perceived Risk shows a negative relationship with customer satisfaction, but fails to become a statistically significant determinant of satisfaction because of other stronger predictors in the model. Namely, customers' satisfaction is less sensitive to risk perception when such factors as usefulness and ease of use are considered. It can be concluded that customers do not worry much about the risks of using the Apollo digital loan platform.

In general the can conclude that customer satisfaction in the Apollo digital loan service is mostly driven by usability , perceived usefulness, system quality , and service support, while perceived risk plays a comparatively minor role in the satisfaction picture.

5.3.Recommendations

From the study, findings we can put a few recommendations that should help raise customer satisfaction with Apollo digital loan service.

1. Enhance the Functional Value of Apollo Platform

Since the strongest predictor of satisfaction was found to be Perceived Usefulness, we suggest the Bank of Abyssinia to work on increasing the usefulness of the Apollo digital loan service in

everyday use. In other words, the bank needs to continue upgrading the platform features and at the same time reduce the friction inside the loan application approval journey. “Making the process easier is key and adding new functionalities that respond to customers’ financial needs can be a clear differentiator.” Some effort is also needed for cutting processing time, and improving accessibility so customers can feel that using the platform is genuinely worth it, and not slow, or needlessly complicated.

2. Keep Improving Ease of Use and Overall User Experience

The next factor after perceived usefulness was the ease of use; therefore, we would suggest the bank works further in its direction by making its interface as user-friendly as possible. In order words, it means that the process of navigation needs to be improved and simplified as well as the whole transaction. Therefore, the process must not be too complicated, meaning that the instruction must be easy to follow, and the number of steps required in order to fill out the form and submit the loan application has to remain minimal. Usability tests and feedback from customers have to be done regularly as to immediately detect problem areas.

3. Strengthen System Reliability

In addition, the bank could be encouraged to develop robust technological foundations in order for it to minimize system downtime, transaction errors, and other technical interruptions. Furthermore, constant monitoring of the systems, coupled with maintenance and swift action whenever technical problems arise, is vital, not only as a means to maintain continuity of the services but also to build client confidence in the platform.

4. Improve Transparency in Loan Processes

It seems that transparency actually has a genuine impact on the level of customer satisfaction, hence our recommendation that the bank ensure that all necessary information about the conditions for applying for a loan, interest rates, payment plans, possible charges, penalties, and approval processes is communicated correctly to customers. In addition, it could do much good to provide notification updates at regular intervals throughout the process of taking out a loan, as such measures tend to build trust very quickly.

5. Enhance Customer Service Support

Even though the digital loan services depend on technology heavily, it can be observed that there are indications which prove that customer service support is one of the major factors that influence the level of satisfaction among customers. Thus, based on the above observation, we would like to advise the bank to enhance the practices relating to customer service support. This may include the improvement in response time, widening of customer service channels, and quick resolution of customers' problems.

6. Continue Maintaining Strong Security and Risk Management Measures

Even though there was no statistical evidence showing a relationship between perceived risk and customer satisfaction, there is some evidence suggesting that there is indeed a relationship between these two variables in that perceived risk negatively impacts customer satisfaction, and hence we should not overlook this. Hence, the bank needs to continue enforcing robust security measures, data protection policies, and fraud protection systems because customers require that feeling of reliability. Furthermore, informing them about security procedures and protection policies will go an additional way toward ensuring trust in the Apollo online lending system.

7. Adopt a Customer-Centered Continuous Improvement Approach

As the above-mentioned factors contribute significantly to the level of customer satisfaction, it is necessary for the bank to develop an ongoing customer feedback mechanism to assess whether or not the expectations and user experience of clients meet the standard. Through conducting customer satisfaction surveys, as well as service assessments, it makes it easier for management to identify issues and make decisions to improve performance and competitiveness of the service.

5.4.Suggestions for Future Research

This study has provided us with some insights into the factors that affect the customer satisfaction with the Apollo digital loan service; however, certain aspects of this research require further attention, which leaves open the possibility for further investigation. In particular, future research should consider additional variables that could impact satisfaction and adoption of

digital loans, such as customers' trust and sense of security, their level of financial literacy and technological readiness, as well as service quality and perceived convenience and even customer loyalty. Once all of these are incorporated into the analysis, we acquire a better understanding of people's behavior within the digital finance services environment.

Secondly, since the design used for conducting this study was cross-sectional in nature, there is no ability to measure changes that might be occurring over time. Researchers could look into using longitudinal designs in the future as customers' opinions and levels of satisfaction can vary over time as people gain additional experience with digital lending and as technology continues to evolve rapidly.

Third, the current study somewhat limited itself to the analysis of the Apollo digital loan service provided by Bank of Abyssinia. Future researches will be able to conduct a comparative analysis for different commercial banks or microfinance institutions, as well as for alternative digital loans providers operating within Ethiopia. This may serve to distinguish factors that are specific for individual companies and industries' wide factors affecting satisfaction and efficiency of digital financial services.

Fourth, the geographic scope of future studies may be broadened and the sample size may be increased slightly, thus making results more applicable to the broader context. Thus, for example, it would be reasonable to include participants coming from different Ethiopian regions, as well as from various demographics backgrounds. Such design may be helpful to reveal differences in perceptions of digital financial services among different customer groups or sub-groups.

In conclusion, there is a possibility that future research studies might adopt mixed-methods approach that would somehow be able to integrate both numerical evidence and narrative evidence. In quantitative methods, there is usually a tendency for numerical evidence to be collected on the basis of how relationships between variables occur. However, through qualitative methods such as interviews and focus groups, deeper meanings can be drawn out.

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APPENDIX

Customer Satisfaction with Digital Loan Services at Bank of Abyssinia (Apollo Platform)

Description:

Dear Respondent,

I am Eden Kalayu, a graduate student in the Master of Business Administration (MBA) program at the School of Business and Economics, Addis Ababa University. As part of my academic research, I am conducting a study entitled "Customer Satisfaction with Digital Loan Services at Bank of Abyssinia (Apollo Platform)."

Your participation in this study is voluntary and greatly appreciated. Completing the questionnaire will take approximately 10–15 minutes. All information provided will be treated with strict confidentiality and anonymity and will be used solely for academic and research purposes. No personal identification information will be collected, and the findings of the study will be presented only in aggregated form.

There are no right or wrong answers; therefore, you are kindly requested to provide your honest opinions and experiences. Your valuable responses will contribute significantly to understanding and improving digital banking and digital loan services within the Ethiopian banking sector.

For and inquiries, please contact: Researcher: Eden Kalayu (Email:Edenk2121@gmail.com, phone Number: 0946365205)

SECTION 1: Screening Questions

Q1. Have you ever used digital loan services offered through the Apollo platform of the Bank of Abyssinia?

- Yes
- No

(Note: If "No," the respondent may be excluded from continuing the survey.)

SECTION 2: Demographic Information

Q2. What is your gender?

- Male
- Female

Q3. What is your age group?

- Under 20
- 21–30
- 31–40
- 41–50
- Above 50

Q4. What is your highest level of education?

- Diploma or below
- Bachelor's Degree
- Master's Degree and above

Q5. What is your current employment status?

- Employed
- Self-employed
- Student
- Other _____

Q6. What is your average monthly income (in Ethiopian Birr – ETB)?

- Less than 10,000
- 10,001–30,000
- 30,001–60,000
- Above 60,001

Q7. What is your level of smartphone and internet access?

- Regular access
- Occasional access
- Limited access

SECTION 3: Digital Loan Usage

Q8. How long have you been using the Apollo digital banking platform?

- Less than 6 months
- 6 months – 1 year
- 1–2 years
- More than 2 years

Q9. Approximately, how many times have you used the Apollo digital loan service?

- 1–2 times
- 3–5 times
- More than 5 times

Q10. What is your typical purpose for using digital loans?

- Personal consumption (e.g., household expenses, shopping)
- Business use (e.g., working capital, inventory, small business activities)
- Emergency/medical needs
- Other (please specify): _____

Q11. What is your typical digital loan amount range?

- Less than 10,000 ETB
- 10,000–30,000 ETB
- 30,001–60,000 ETB
- Above 60,000 ETB

SECTION 4: Measurement Items

Section Description

This section is designed to assess your perceptions and experiences regarding the Apollo digital loan service provided by the Bank of Abyssinia. It focuses on key service quality and technology adoption dimensions, including ease of use, usefulness, perceived risk, system reliability, transparency, and customer support, as well as your overall level of satisfaction.

You are requested to evaluate each statement based on your actual experience with the service. Your responses will help identify strengths and gaps in the current digital lending system and provide insights for improving service delivery, customer experience, and trust in digital financial services within the Ethiopian banking sector.

Instruction

Please indicate your level of agreement with each of the following statements based on your experience using the Apollo digital loan service.

Rating Scale:

1 = Strongly Disagree

2 = Disagree

3 = Neutral

4 = Agree

5 = Strongly Agree

Perceived Ease of Use (PEOU)

Item Code	Questionnaire Item	1	2	3	4	5
PEOU1	Learning to use the Apollo digital loan platform is easy for me.					
PEOU2	I find it easy to apply for a loan through the Apollo platform.					
PEOU3	The loan application process on the platform is clear and understandable.					
PEOU4	I find the Apollo digital loan service flexible to interact with.					
PEOU5	It would be easy for me to become skillful at using the digital					

	loan system					
PEOU6	I find the digital loan service easy to use.					

Perceived Usefulness (PU)

Item Code	Questionnaire Item	1	2	3	4	5
PU1	Using the digital loan service enables me to accomplish loan transactions more quickly.					
PU2	Using the Apollo digital loan service improves my performance in obtaining loans.					
PU3	Using the Apollo digital loan service increases my productivity in accessing financial services.					
PU4	Using the Apollo digital loan system would enhance my effectiveness in managing financial needs					
PU5	Using the digital loan service makes it easier to obtain loans.					
PU6	I find the digital loan service useful.					

Perceived Risk (PR)

Item Code	Questionnaire Item	1	2	3	4	5
PR1	I believe that using Apollo's digital loan services may risk the					

	privacy of my personal or financial information.					
PR2	I believe that using Apollo's digital loan services exposes the borrower to a potential loss of cash or financial harm (e.g., hidden fees, fraud).					
PR3	I believe that a malfunction or technical issue with the Apollo app/platform could cause problems in applying for or managing the loan.					
PR4	Overall, I believe that using Apollo's digital lending services is risky.					

System Reliability (SR)

Item Code	Questionnaire Item	1	2	3	4	5
SR1	Apollo provides quick service when I apply for or manage my loan.					
SR2	Apollo adheres to its promises regarding loan processing times, disbursements, and terms.					
SR3	The information provided by Apollo on its platform (e.g., fees, interest rates, repayment schedules) is accurate and up-to-date.					
SR4	Apollo makes it easy for me to access and complete loan-related transactions without delays or errors.					

Transparency (TR)

Item	Questionnaire Item	1	2	3	4	5

Code						
TR1	I find access to Apollo's digital loan services and information very easy.					
TR2	Apollo always provides comprehensive and clear information for users (e.g., about loan terms, fees, and processes).					
TR3	Apollo is open and transparent in its services to every user.					
TR4	I trust every report, statement, and update provided by Apollo regarding my loan account.					

Customer Service Support (CSS)

Item Code	Questionnaire Item	1	2	3	4	5
CSS1	Apollo provides fast and helpful responses to my requests or inquiries regarding digital loans.					
CSS2	Apollo provides clear, accurate, and timely information when I face any issue or difficulty with my loan application or account.					
CSS3	Apollo's customer support staff effectively solve customer problems.					

Customer Satisfaction (CS)

Item Code	Questionnaire Item	1	2	3	4	5
CS1	Apollo’s digital loan services always meet my expectations.					
CS2	I am satisfied with the overall service quality of Apollo’s digital loan services.					
CS3	I would recommend Apollo’s digital loan services to my friends and family.					
CS4	I plan to continue using Apollo’s digital loan services in the future.					