



ST. MARY'S UNIVERSITY

SCHOOL OF GRADUATE STUDIES

**PRACTICE AND CHALLENGES OF DIGITAL LENDING IN ETHIOPIA,
IN THE CASE OF WEGAGEN BANK SC**

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JULY, 2025

ADDIS ABABA, ETHIOPIA

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**A Thesis Submitted to St. Mary's University, School of Graduate Studies in Partial
Fulfillment of the Requirements for the Degree of Master of Business Administration**

July, 2025

Addis Ababa

ST. MARY'S UNIVERSITY
SCHOOL OF GRADUATE STUDIES
DEPARTMENT OF BUSINESS ADMINISTRATION

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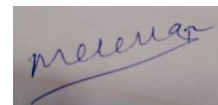
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Declaration

I, Hailemichael Merkinah, declare that this work entitled “Practice and Challenges of Digital Lending in Ethiopia, in the case of Wegagen Bank S.C”, is the outcome of my own effort and study and that all sources of materials used for the study have been duly acknowledged. I have produced it independently except for the guidance and suggestion of the Research Advisor. This study has not been submitted for any degree in this University or any other University. It is offered for the partial fulfillment of the degree of Masters of Business Administration (MBA).

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Endorsement

This thesis has been submitted to St. Mary's University, school of Graduate Studies for examination with my approval as a university advisor.



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Acknowledgments

This research was completed with immeasurable gratitude, beginning with unlimited thanks to God for His Goodness, grace, and favor throughout my life. I extend my sincere appreciation to everyone who contributed to this study. My deepest gratitude goes to my advisor, Dr. Tewodros Mekonnen, whose invaluable guidance, constructive feedback, and continuous motivation were crucial in shaping this thesis.

I am also profoundly thankful to Wegagen Bank S.C. for granting permission to conduct this study, and particularly to the managers and staff of the Digital Lending Unit, whose time, insights, and data were indispensable. Furthermore, I am deeply indebted to all the Wegagen Bank S.C. customers who participated in the survey, providing essential quantitative data. Finally, my heartfelt thanks go to my family and friends, whose unwavering encouragement, understanding, and patience provided the necessary support and motivation to complete this academic endeavor.

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Abbreviations and Acronyms

ADB: Asian Development Bank

AfDB: African Development Bank Group

AI: Artificial Intelligence

APA: American Psychological Association

CGAP: Consultative Group to Assist the Poor

DOI: Diffusion of Innovations

EBA: European Banking Authority

ETB: Ethiopian Birr

EY: Ernst & Young

FCA: Financial Conduct Authority

FINTECH: Financial Technology

GSMA: Groupe Spécial Mobile Association (often referred to simply as GSMA)

IMF: International Monetary Fund

KPMG: Klynveld Peat Marwick Goerdeler (a multinational professional services network)

MSME: Micro, Small, and Medium-sized Enterprises

NBER: National Bureau of Economic Research

OECD: Organisation for Economic Co-operation and Development

PEU: Perceived Ease of Use

PU: Perceived Usefulness

PwC: PricewaterhouseCoopers

S.C.: Share Company

SME: Small and Medium-sized Enterprise

Std. Dev.: Standard Deviation

TAM: Technology Acceptance Model

UNCDF: United Nations Capital Development Fund

UX: User Experience

Abstract

This study employs a convergent parallel mixed-methods design to comprehensively assess digital lending at Wegagen Bank S.C., integrating quantitative customer perceptions with qualitative insights from bank managers and staff. It addresses a significant research gap by evaluating the specific features, operational realities, influencing factors, and challenges of digital lending within the Ethiopian commercial banking sector. Findings indicate that Wegagen Bank offers a strategically diversified portfolio of short-term digital loans (WASE, Edget, Melegna, & Mekoya) and possesses a strong understanding of digital lending's role in financial inclusion and SME development, with customers largely valuing the speed of process and information accessibility. However, the study reveals pervasive variability in customer experience, particularly regarding awareness and application clarity, often linked to underlying challenges in digital literacy and trust. Operationally, while processes are streamlined, the bank faces hurdles from outdated core banking systems, fragmented data, manual interventions, and skill gaps, impacting. Customer concerns about low loan limits and unclear repayment processes underscore the need for product and user experience refinement, while external pressures. The study concludes that sustainable growth for Wegagen Bank's digital lending hinges on a holistic strategy addressing both customer-centric pain points and internal operational and infrastructural limitations.

CHAPTER ONE

INTRODUCTION

1.1. Background of the Study

The evolution of digital banking dates back to 1985 when the Scottish Bank introduced an electronic home banking service for its customers. Subsequently, the introduction of the first banking website 1994 by Stanford Credit Union signaled a significant milestone in the development of digital banking. As highlighted by Kunytska-Iliash, (2022). These developments illustrate how digital finance has revolutionized banking and financial services, making them more efficient and accessible than ever before.

digital lending started after the innovation of smartphones in 2007 when the banks in America and Europe began to make customers' accounts accessible online for emergency usage, such as purchase of household commodities. This technology later evolved to become a platform of application for loans by potential borrowers from the bank in 2013 (Ramdani, Rothwell, & Boukrami, 2020). Overtime, the digital loans attracted many business people who needed money to facilitate their day-to-day transactions. Today, the worldwide digital lending industry is projected to increase from \$5.1 trillion in 2018 to over 12.1 trillion by 2023 or an annual Compound Annual Growth Rate (CAGR) of 18.7% (Gupta & Tham, 2018).

Digital lending was founded by Amazon Lending in 2012 to extend credit to small businesses selling on Amazon's platform in the USA. At first, the company offered the service only in the US and Japan, but has extended business loan programme for sellers in the UK and seven more countries, including China. Amazon uses internal algorithms to choose sellers based on data points, such as the frequency at which merchants run out of stock, the popularity of their products and inventory cycles. Amazon offers three- to six-month loans of \$1,000 to \$600,000 to help merchants buy inventory. The company is reportedly charging annual interest rates ranging up to 13% (World economic forum, 2015). Digital lending was started by the subsidiary Rakuten Card to offer Rakuten Super Business Loans to its merchants in Japan. Businesses were not preselected but invited to submit loan applications. The Rakuten Super Business Loans are intended to provide financial support mainly for business expansion and flexible working capital finance. Loans range

from 1 million to 10 million yen (about \$8,000 to \$80,000) (World economic forum, 2015). Digital lending in the e-commerce platform was launched by Alibaba launched Alipay Financial, a microcredit company, to offer loans from its own cash resources to existing small business clients in China. It offered 30 day working capital advances of up to \$80,000 to fund sales of goods via its Taobao marketplace. Subsequently, the business expanded geographically and began offering a wider range of loan products. It also expanded its capital base by partnering with China Construction Bank and the Industrial and Commercial Bank of China. According to Chinese sources, it has now made loans worth RMB 13 billion (\$2.1 billion) within the first two years (Begum, 2014).

The global financial landscape is undergoing a profound transformation driven by rapid technological advancements, leading to the rise of digital finance and, more specifically, digital lending. This paradigm shift involves the delivery of credit services through online platforms, mobile applications, and other digital channels, effectively bypassing traditional physical branch networks (IMF, 2019). Globally, digital lending has emerged as a critical tool for enhancing financial inclusion, particularly in emerging markets, by extending credit access to individuals and Small and Medium Enterprises (SMEs) previously underserved by conventional banking systems due to stringent requirements or geographical barriers (World Bank, 2017 & CGAP, 2019). Characterized by its speed, convenience, and often reduced paperwork, digital lending has gained significant traction, fueled by increasing smartphone penetration and the widespread adoption of mobile money platforms, especially across Africa (AfDB, 2022 and GSMA, 2023).

Across the globe, several nations have adopted digital lending. For example, Statista (2020) highlights that in North America, 8775 fintech firms provide digital lending services. Similarly, Europe has 7,385, while Africa and Asia altogether have a total of 4,765 fintech firms in both Africa and Asia. For instance, the United States has the Lending Club, Prosper and SoFi, Britain has British Zopa, while France has Prêt d' Union and China's Alibaba as some of their digital lending firms (Totolo, 2018).

A survey on African banking status done by the World Bank in collaboration with McKinsey and Company in 2018 reported that in South Africa, Angola and Botswana uptake of bank loans among the under-banked categories had rose by 40 — 60 percent, in the 4 period 2015 - 2017, following adoption of mobile phone-based lending platforms by the countries banks. The survey observed

that banks in countries where digital lending had taken root such as Kenya, Tanzania, Ghana, Nigeria and South Africa reported better performances, attributable to increased uptake of loans on the digital platforms, compared to banks in countries lagging behind in adoption of digital lending such as Chad, Cameroon, CAR, Mozambique and Malawi (World Bank, 2019). The International Finance Corporation observes that while Africa's sub-Saharan region has done remarkably well in adoption of digital credit innovations and banks are beginning to enjoy the fruits of improving profitability and asset quality, the gains will only accrue to those banks that will be quick to shift from the conventional lending approaches to digital lending practices (IFC, 2019).

In Ethiopia, the financial sector is also experiencing a gradual but significant transition towards digitalization. As a leading institution in this transformation, Wegagen Bank has proactively embraced digital lending, aligning with both national aspirations for financial inclusion and global trends in digital banking. The bank's initiatives in this area are supported by a dedicated team and a forward-looking mindset, aiming to empower customers in achieving their business goals through accessible digital credit. This strategic move positions Wegagen Bank not only as an innovator but also as a contributor to the broader digital transformation of the Ethiopian economy. However, as with any nascent but rapidly evolving digital service in an emerging market, the implementation and expansion of digital lending come with a unique set of challenges and opportunities that warrant detailed investigation (NBE, 2024).

1.2. Statement of the Problem

Despite the growing importance of digital lending in Ethiopia and Wegagen Bank's proactive engagement, there is limited understanding of the specific digital lending products and services the bank offers and how effectively these meet customer needs. Internally, Wegagen Bank faces operational challenges such as outdated core banking systems, fragmented data, and reliance on manual processes to deliver digital services. These issues raise concerns about the efficiency, scalability, and sustainability of digital lending operations (World Bank, 2020). At the same time, customer-related factors such as low digital literacy, technical platform issues, and limited awareness of loan terms contribute to low adoption and satisfaction. Additionally, while data security is a global concern, there is a lack of context-specific research on how local laws and

cultural factors influence customer trust in digital lending platforms (McKinsey & Company, 2023).

Although some global and regional studies highlight regulatory and operational barriers (IMF, 2019 & ResearchGate, 2025), little is known about the interplay between customer perceptions and internal operational realities in Ethiopian commercial banks like Wegagen. Key challenges also include customer dissatisfaction, security concerns, low loan limits, and inadequate support services, all of which impact the perceived effectiveness of digital lending. Without a clear understanding of these issues, Wegagen Bank risks failing to fully leverage digital lending as a strategic growth opportunity. This study, therefore, seeks to explore: the products and services offered, the bank's operational practices, the factors influencing adoption, and the challenges faced addressing a critical research gap and guiding improvements in digital lending delivery.

1.3. Research Questions

This study was guided by the following research questions:

1. What are the digital lending products and services offered by Wegagen Bank ?
2. What are the operational practices employed in digital lending at Wegagen Bank?
3. What factors influence the effectiveness of digital lending among Wegagen Bank customers?
4. What are the key challenges faced by Wegagen Bank in the implementation of its digital lending services?

1.4. Objectives of the Study

The general objective of this study is to comprehensively assess digital lending at Wegagen Bank from both customer and bank perspectives, identifying key influencing factors, challenges, and operational practices of digital lending.

1.4.1 The specific objectives of the study are:

1. To assess the digital lending products and services offered by Wegagen Bank.
2. To examine the operational practices of digital lending at Wegagen Bank.

3. To identify factors influencing digital lending effectiveness among Wegagen Bank customers.
4. To explore key challenges in digital lending implementation at Wegagen Bank.

1.5. Significance of the Study

The study on the practice and challenges of digital lending in Ethiopia, focusing on Wegagen Bank SC, is significant for several reasons:

This study is significant as it explores how digital lending practices at Wegagen Bank can enhance financial inclusion in Ethiopia, particularly for underserved groups such as MSMEs, salaried employees, and young entrepreneurs. By assessing the products and services offered, along with customer experiences and operational practices, the study provides valuable insights into the strengths and limitations of digital lending systems. It highlights how digital platforms can expand access to credit, promote economic participation, and support business growth, especially for those traditionally excluded from formal financial systems.

Furthermore, It identifies key institutional and customer-related challenges such as outdated banking infrastructure, technical issues, low digital literacy, and service gaps that hinder the effective implementation of digital lending. The findings will guide Wegagen Bank and similar institutions in improving their service delivery, refining product design, and building trust in digital platforms. Additionally, the study supports national efforts to promote inclusive economic development by providing recommendations that strengthen digital finance strategies and regulatory frameworks.

1.6. Scope of the Study

This study focuses exclusively on the digital lending services provided by Wegagen Bank, rather than its full range of digital banking products. It aims to examine both customer perceptions and internal operational practices related to digital loan offerings. The study concentrates on customers who have interacted with the bank's digital lending services, with additional qualitative insights gathered from key personnel involved in managing and implementing these services. Although Wegagen Bank operates across Ethiopia, the findings are influenced by a stronger representation of customers from Tigray and Addis Ababa, where digital lending usage appears to be more prominent.

Methodologically, the study adopts a mixed-methods approach, combining quantitative data from customer surveys with qualitative responses from structured written questionnaires completed by bank staff. This approach allows for a balanced analysis of both user experiences and internal operational realities. The data reflects a specific point in time, providing a snapshot of the current state of digital lending at Wegagen Bank. As such, the study does not cover long-term trends or other digital services beyond lending, and its findings are context-specific to the period and locations studied.

1.7. Definitions of Key Terms

For clarity and consistency, the following key terms are defined within the context of this study:

- **Digital Lending:** The provision of credit services through online platforms, mobile applications, and other digital channels, bypassing traditional physical branch networks (IMF, 2019). It encompasses the entire loan lifecycle, from application to disbursement and repayment, conducted primarily through digital means.
- **Financial Inclusion:** The state where individuals and businesses have access to useful and affordable financial products and services that meet their needs – transactions, payments, savings, credit, and insurance – delivered in a responsible and sustainable way (World Bank, 2017). Digital lending is often seen as a significant driver of financial inclusion, particularly in underserved populations.
- **Fintech (Financial Technology):** The application of new technology to improve and automate the delivery and use of financial services. Fintech companies are often agile startups that leverage technology to innovate traditional financial products and services, creating significant competition for conventional banks (EY, 2023).
- **Technology Acceptance Model (TAM):** A theoretical framework that explains how users come to accept and use a technology. It posits that an individual's intention to use a system is determined by two main factors: Perceived Usefulness and Perceived Ease of Use (Davis, 1989).
- **Digital Literacy:** The ability of an individual to find, evaluate, produce, and communicate information and use digital technology to achieve personal, civic, or professional goals. In

the context of digital finance, it refers to the skills and knowledge required to effectively and safely use digital financial services (UNCDF, 2021 & Chen & Fan, 2022).

- **Customer Satisfaction (in Digital Lending):** The overall positive feeling or contentment a customer experiences with the digital lending services, including aspects like ease of application, speed of disbursement, clarity of terms, interest rates, and quality of customer support (KPMG, 2021; Forrester, 2023).
- **Operational Efficiency (in Digital Lending):** The capability of the bank's internal processes and systems to deliver digital lending services effectively and with minimal waste of resources. This includes aspects like automation levels, seamless system integration, speed of processing, and accuracy of data (ResearchGate, 2025).
- **Credit Scoring (Digital/AI-Powered):** The automated process of assessing a borrower's creditworthiness using algorithms and data. Digital or AI-powered credit scoring leverages traditional and alternative data points (e.g., mobile usage, transaction history) for real-time, dynamic risk assessment (Uniquis, 2024 & Accenture, 2024).
- **Small and Medium-sized Enterprises (SMEs):** Businesses characterized by their size, typically defined by criteria such as number of employees, annual revenue, or assets, which often face difficulties accessing traditional credit and are

1.8. Limitations of the Study

This study, though thorough for Wegagen Bank in Ethiopia, has limitations affecting its broader applicability. Its findings are specific to this bank's unique operational environment, making direct generalization to other financial institutions, diverse digital services, or different countries challenging. Furthermore, the reliance on self-reported data collected via structured Google Forms means responses could be influenced by biases like social desirability or potential misinterpretations. For qualitative insights from managers and staff, the use of written questionnaires, while practical, may have sacrificed the depth and nuance typically gained from more interactive, face-to-face interviews with real-time probing.

1.9 Organization of the thesis

This mixed-methods study is structured into five comprehensive chapters, systematically addressing the complexities of digital lending at Wegagen Bank. Chapter One sets the foundational context by introducing the study's background, clearly stating the problem it aims to solve, outlining its specific research questions and objectives, and detailing its significance for both academic understanding and practical application. This introductory chapter also defines key terms and establishes the study's scope and limitations. Chapter Two then delves into the existing literature, offering a thorough review of relevant research on digital lending, its operational practices, influencing factors, and challenges, culminating in the presentation of the study's conceptual framework that visually links these objectives.

Chapters Three and Four provide the empirical core of the thesis. Chapter Three meticulously describes the research methodology, including the mixed-methods design, sample size determination, and the specific data collection and analysis procedures for both quantitative customer surveys and qualitative insights from bank staff. Chapter Four presents the analyzed data, integrating findings from both quantitative and qualitative sources to offer a comprehensive discussion of customer perceptions, operational realities, and the challenges encountered in digital lending at Wegagen Bank. Finally, Chapter Five concludes the thesis by summarizing the key findings, drawing overall conclusions, and proposing actionable recommendations for Wegagen Bank, alongside suggestions for future research, thereby providing a holistic view of the study's contributions.

CHAPTER TWO

REVIEW OF LITERATURE

2.1 Introduction

This chapter describes and contain a theoretical, empirical and conceptual explanations of practice and challenges of digital lending in Ethiopia, in the case of Wegagen Bank SC in what way it is helping the world particularly in Ethiopia.

2.2 Review of Theoretical Literature

2.2.1. Definition of Digital lending

Digital lending refers to the process of borrowing and lending money through online platforms, utilizing technology to streamline the application, approval, and disbursement processes. It encompasses a range of financial products, including personal loans, business loans, peer-to-peer lending, and other credit facilities, all facilitated via digital channels. This approach enables borrowers to apply for loans at any time and from anywhere, significantly reducing the traditional paperwork and in-person visits required for securing a loan (Ghosh, 2021).

Moreover, digital lending enhances the customer experience by offering a more convenient and user-friendly interface. Borrowers can monitor their loan status, receive updates, and manage repayments through online dashboards. However, it also raises concerns regarding data security, predatory lending practices, and regulatory compliance. As the landscape of digital lending continues to evolve, both borrowers and lenders must navigate these challenges to ensure a fair and sustainable lending ecosystem (Fintech News, 2023).

Digital lending simplifies loan provision by leveraging digital platforms, enabling online applications, approvals, and disbursement without requiring physical interaction (Barker, 2020). Peer-to-peer (P2P) lending, a popular model, directly connects individual borrowers with lenders through digital platforms, bypassing traditional financial institutions (Zohar & Shneor, 2020).

Digital lending leverages financial technology (fintech) to enhance lending processes through innovations like alternative credit scoring, which evaluates borrowers using unconventional data such as mobile usage and social media activity (Fensel et al., 2019). Processes such as credit risk assessments and automated loan origination, supported by machine learning and data analytics,

streamline operations while ensuring efficiency and accuracy (Beck et al., 2018 & Zohar & Shneor, 2020). Advances like mobile lending, instant loan disbursement, and crowd funding platforms have further expanded access, particularly for populations with restricted banking infrastructure (Morawczynski, 2009 & Mollick, 2014).

Digital lending operations increasingly rely on RegTech innovations to comply with financial regulations like Know Your Customer (KYC) and Anti-Money Laundering (AML), safeguarding identity verification, fraud prevention, and operational transparency (Arner et al., 2017 & Bohme et al., 2018). These advancements ensure smoother operations while maintaining compliance. However, challenges like over-indebtedness, caused by easy credit access, and concerns over interest rates and fees highlight the need for responsible lending practices (Ghosh, 2014 & Frost & Horn, 2017).

2.2.2. Theoretical Implications

The study contributes empirical evidence from an Ethiopian context, specifically illuminating how foundational factors like reliable internet connectivity and general trust in digital platforms moderate the core constructs of the Technology Acceptance Model (TAM) and Diffusion of Innovations (DOI) theory in emerging markets (Chen & Fan, 2022 & GSMA, 2023). It underscores the necessity of addressing basic infrastructure and trust before maximizing the impact of perceived usefulness and ease of use.

The research reinforces that achieving financial inclusion through digital lending extends beyond mere access, emphasizing critical roles for digital literacy, transparent information, and robust security measures in driving actual utilization and sustained engagement (UNCDF, 2021 & World Bank, 2017).

Digital Lending Products & Services This foundational component represents the specific credit offerings provided through digital channels by Wegagen Bank. Consistent with the literature, these products are characterized by their digital accessibility and often focus on meeting short-term financial needs or supporting SMEs (IMF, 2019 & CGAP, 2019). Their design is crucial for fostering financial inclusion (AfDB, 2022 & World Bank, 2017).

Operational Practices of Digital Lending Building upon the digital products, this component outlines the internal processes and mechanisms through which these services are delivered by the

bank. This includes automated application processes, digital credit scoring, loan disbursement, and repayment management. The literature emphasizes the increasing reliance on AI and alternative data for efficient and dynamic credit assessment in modern digital lending operations (Accenture, 2024 & Infosys BPM, 2025 & Uniquis, 2024).

Factors Influencing Digital Lending Effectiveness This central component encompasses the various drivers and perceptions that significantly shape how effectively digital lending is adopted and utilized by customers. Drawing from established theories like the Technology Acceptance Model (TAM), perceived usefulness and perceived ease of use are critical influencers (Davis, 1989; Barua, 2025). External factors such as reliable internet connectivity (GSMA, 2023), digital literacy (Chen & Fan, 2022), customer trust, and robust security perceptions (EY, 2023 & OECD, 2022) are also crucial. Additionally, competitive pricing influences customer choice (ADB, 2023 & NBER, 2025) and overall awareness drives initial engagement (World Bank, 2018).

Key Challenges in Digital Lending Implementation. This component represents the significant obstacles encountered by both customers and the bank in the digital lending ecosystem. These challenges, as highlighted in the literature, span technical issues such as outdated legacy systems and poor integration (ResearchGate, 2025 & Deloitte, 2023), product limitations (e.g., loan limits, repayment complexity), information gaps, pervasive security concerns (EY, 2023), internal skill gaps, and external market pressures from agile fintech competition (Global Data, 2029). There is a bidirectional arrow between "Factors Influencing" and "Key Challenges" to illustrate that many factors (e.g., low digital literacy, security concerns) can simultaneously be barriers/challenges and negatively impact overall effectiveness.

2.2.3. Understanding Digital Lending Products and Services

The rapid proliferation of digital technologies has fundamentally reshaped the financial services landscape, with digital lending emerging as a transformative force, particularly in developing economies. This literature review synthesizes existing research pertaining to the objectives of this study: understanding digital lending products and services, examining operational practices, identifying influencing factors and key challenges, and exploring strategic recommendations for future growth.

Digital lending refers to the provision of credit through online platforms, mobile applications, and other digital channels, bypassing traditional brick-and-mortar branches (IMF, 2019). Its rise is largely attributed to increasing smartphone penetration and the widespread adoption of mobile money, especially in Sub-Saharan Africa (AfDB, 2022 & GSMA, 2023). Digital loans are characterized by their speed, convenience, and accessibility, enabling quick approvals and disbursements with minimal documentation compared to conventional lending (Infosys BPM, 2025 & World Bank, 2018). These products are often short-term, designed to meet immediate liquidity needs for individuals and provide working capital or expansion funds for Small and Medium Enterprises (SMEs) that traditionally face significant barriers to accessing formal credit (CGAP, 2019). Beyond mere access, digital lending is lauded for its potential to foster financial inclusion, extending financial services to underserved populations, including those in rural areas, who might otherwise be excluded from the formal banking system (World Bank, 2017 & UNCDF, 2021).

2.2.4. Operational Practices of Digital Lending

The operational core of digital lending platforms involves a streamlined, automated process. This typically begins with digital application submission, followed by automated data verification and sophisticated digital credit scoring (Infosys BPM, 2025). Modern digital lending platforms increasingly leverage Artificial Intelligence (AI) and machine learning for real-time credit assessments, moving beyond traditional credit reports to incorporate alternative data sources such as behavioral patterns, digital footprints, and utility payments (Uniquis, 2024 & Accenture, 2024). This allows for dynamic risk profiling and enables faster, often instant, loan approvals for eligible applicants. Automated identity verification and streamlined Know Your Customer (KYC) processes further enhance efficiency (McKinsey & Company, 2020). Post-approval, electronic disbursement into customer accounts or mobile wallets and automated repayment tracking with reminders contribute to efficient loan lifecycle management. Despite these advancements in automation, operational challenges often persist, including issues with data quality, integration complexities with legacy systems, and the occasional necessity for manual intervention in complex or larger loan cases (ResearchGate, 2025).

2.2.5. Factors Influencing Digital Lending Effectiveness

The effectiveness of digital lending are influenced by a multifaceted array of factors, consistently highlighted in literature on technology acceptance and financial behavior. The Technology Acceptance Model (TAM) remains a foundational theory, asserting that perceived usefulness (PU) and perceived ease of use (PEU) are primary drivers of user intention to adopt a new technology (Davis, 1989). In digital lending, PU manifests as convenience, speed of access, and reduction in physical branch visits (Barua, 2025). PEU is linked to the simplicity of the application process and the stability and responsiveness of the platform (UX Design Institute, 2023).

Beyond core usability, external factors significantly shape adoption. Internet connectivity and reliability are fundamental, as inadequate infrastructure directly impedes access to digital services (GSMA, 2023). Digital literacy is another crucial determinant; low levels of digital literacy can create significant barriers to understanding and confidently using digital financial products, particularly for vulnerable populations (Chen & Fan, 2022 & UNCDF, 2021).

Trust and security concerns are paramount in digital finance. Customers' willingness to use digital platforms is heavily influenced by their perceived security against fraud and scams, and their confidence in data privacy (EY, 2023 & IJIRT, 2025 & OECD, 2022). Transparent communication about data handling and robust cybersecurity measures are essential for building and maintaining this trust (Consumers International, 2023). Pricing, including interest rates and fees, also plays a critical role, as customers are sensitive to the cost of digital loans, seeking affordability and competitive terms (ADB, 2023). Finally, awareness campaigns and effective customer education are vital in informing potential users about available products and their benefits. (World Bank, 2018).

2.2.6. Key Challenges in Digital Lending Implementation and Expansion

Despite its immense potential, digital lending faces significant challenges in implementation and expansion, particularly in emerging markets. Internal challenges often revolve around technological infrastructure. Many traditional banks grapple with outdated legacy core systems and fragmented data sources, leading to integration issues, slower performance, and limitations in scalability (ResearchGate, 2025). Skill gaps within the workforce, particularly in specialized areas like data analytics, cybersecurity, and digital product management, can constrain innovation and operational efficiency (Deloitte, 2023). Cybersecurity threats are a constant and evolving concern,

demanding continuous investment in robust security measures and adherence to strict data protection standards (Uniquis, 2024). Furthermore, the upfront investment required for technological upgrades, staff training, and marketing can be substantial, posing a financial hurdle (PwC, 2022).

External challenges are equally potent. Low digital literacy, particularly in rural and underserved areas, continues to limit customer adoption (GeoPoll, 2024). Persistent concerns about data privacy and the fear of fraud or scams create a psychological barrier for many potential users (EY, 2023). The regulatory landscape for digital finance is often nascent and evolving, with unclear compliance requirements and slow product approval processes potentially delaying innovation and market entry (Infosys BPM, 2025). The rise of agile fintech startups creates intense market competition, forcing traditional banks to innovate rapidly or risk losing market share. This competition, coupled with price pressures and evolving customer expectations, demands that banks not only enhance their digital capabilities but also deliver consistently fast, reliable, and user-friendly lending experiences (Global Data, 2029 & NBER, 2025).

2.3. Review of Empirical Literature

This section specifically reviews empirical studies that have investigated various facets of digital lending, its adoption, customer experiences, and associated challenges, particularly in contexts relevant to emerging markets. This review aims to contextualize the current study's findings within the broader body of evidence-based research.

2.3.1. Empirical Evidence on Digital Lending Influencing Factors

Empirical studies consistently confirm the influence of perceived usefulness (PU) and perceived ease of use (PEU) on the adoption of digital financial services, as postulated by the Technology Acceptance Model (TAM). For instance, Barua (2025), in a study assessing online banking adoption in Bangladesh, empirically demonstrated that both PU and PEU significantly predict users' intention to use digital financial platforms. Similarly, research focusing on digital payment systems in various developing countries has provided strong empirical support for TAM's predictive power, showing that convenience (PU) and simplicity of interface (PEU) are paramount drivers for diverse populations (Accenture, 2024 & EY, 2023).

Beyond core TAM constructs, empirical evidence highlights the critical role of external factors. Chen and Fan (2022), drawing empirical evidence from China, found that digital literacy significantly mediates the relationship between digital technology access and digital financial inclusion, underscoring its importance for effective utilization rather than mere availability. Studies by GSMA (2023), through their State of Mobile Internet Connectivity reports, empirically illustrate how persistent gaps in internet connectivity and affordability in sub-Saharan Africa remain a fundamental barrier to widespread digital financial service adoption, directly impacting the perceived ease of use. Furthermore, IJIRT (2025), in their empirical study on internet banking in India, provided evidence that cybersecurity awareness positively impacts customer trust, which in turn significantly influences the adoption and continued use of digital platforms, reinforcing the link between security perception and trust (OECD, 2022). Empirical data from PwC's (2022) Digital Banking Consumer Surveys often reveal that while digital channels are appreciated for convenience, concerns about privacy and security remain high among users across different regions, acting as deterrents.

2.3.2. Empirical Findings on Customer Experience and Satisfaction

Empirical research on customer experience in digital financial services consistently points to speed and convenience as primary drivers of satisfaction. KPMG's (2021) Customer Experience Excellence reports, based on extensive consumer surveys, frequently identify efficiency and seamless digital journeys as top attributes for positive customer sentiment in banking. Conversely, these reports also empirically highlight that technical glitches, slow loading times, and complex navigation significantly detract from the digital experience, leading to dissatisfaction. Forrester's (2023) research on digital banking customer experience often provides empirical data showing that while basic functionality is expected, highly satisfied customers benefit from personalized experiences and proactive problem resolution, going beyond mere transactional efficiency.

However, some empirical studies also reveal discrepancies between customer perception and bank operational realities. For example, while customers may report high satisfaction with transactional speed, deeper operational analyses or qualitative studies sometimes uncover extensive manual workarounds within banks to achieve that speed, leading to internal inefficiencies not immediately visible to the customer (ResearchGate, 2025). This suggests a nuanced empirical finding where perceived efficiency might mask underlying operational challenges.

2.3.3. Empirical Insights on Operational Challenges

Empirical studies examining the implementation of digital lending often highlight significant operational hurdles. Research on digital transformation in traditional banks, as compiled by various consulting firms, empirically demonstrates that outdated core banking systems and fragmented data silos are prevalent challenges that impede seamless digital integration and scalability (Deloitte, 2023 & Accenture, 2024). These studies frequently provide case examples where data incompatibility and system legacy issues lead to manual processes, operational risks, and hinder the rapid deployment of new digital products.

In terms of risk management, empirical evidence supports the effectiveness of advanced analytics. The Global Findex Database (World Bank, 2018, 2021), through its extensive empirical data, has shown how the use of alternative data sources (like mobile phone usage or utility payments) can significantly expand credit access for individuals lacking traditional credit histories, while maintaining manageable risk levels when coupled with sophisticated algorithms. Similarly, case studies on fintech lending empirically demonstrate that AI-powered credit scoring models are increasingly capable of dynamically updating risk profiles and improving predictive accuracy, allowing for more responsible lending decisions even with limited conventional data (Uniquis, 2024).

2.3.4. Empirical Perspectives on Market Dynamics and Competition

Empirical research consistently points to intense competition from agile fintech startups as a major external challenge for traditional banks in the digital lending space. Studies tracking fintech adoption (e.g., EY's Global FinTech Adoption Index, 2023) provide empirical data showing the increasing market share gained by non-traditional lenders due to their faster innovation cycles, lower operational costs, and often more customer-centric digital experiences. This competition puts significant price pressures on traditional banks, as empirically demonstrated by market analyses (GlobalData, 2029 & NBER, 2025), forcing them to reassess their interest rates and fee structures to remain competitive. Furthermore, the empirical evidence often shows that banks that fail to rapidly enhance their digital capabilities risk significant market share erosion.

2.4 Research gap

Specifically, while the literature describes various digital lending products and services globally, there is a lack of comprehensive studies that assess the particular features, market relevance, and customer perceptions of the digital lending products offered by Wegagen Bank within its unique operational and socio-economic context in Ethiopia. Similarly, while general operational practices of digital lending are documented, there is a distinct absence of empirical research examining the day-to-day operational realities, including the interplay of automation and manual interventions, data management complexities, and their direct impact on efficiency within a specific Ethiopian commercial bank's digital lending unit. Finally, while general challenges like technical issues, competition, and regulatory hurdles are acknowledged, there is a clear need for empirical investigation into the precise nature, severity, and bank-specific manifestation of these implementation and expansion challenges for Wegagen Bank, considering its specific internal constraints and the dynamic external market conditions in Ethiopia. This study, therefore, aims to bridge these specific knowledge gaps by providing a holistic and context-specific analysis.

2.5 Conceptual Framework of the Study

The conceptual framework for this study, is a unified representation of the research objectives, illustrating how they interrelate to provide a holistic understanding of digital lending at Wegagen Bank. It begins by grounding the study in the Digital Lending Products & Services offered by the bank, which naturally inform the Operational Practices of Digital Lending. These products and operations are then critically examined through the lens of Factors Influencing Digital Lending Effectiveness & Adoption, such as perceived usefulness, ease of use, trust, and digital literacy. Simultaneously, the framework acknowledges Key Challenges in Digital Lending Implementation & Expansion, encompassing technical hurdles, product limitations, and external market pressures, which often interact with the influencing factors. This comprehensive analysis of products, operations, influencing factors, and challenges forms the core of understanding the current state and specific dynamics of digital lending at Wegagen Bank.

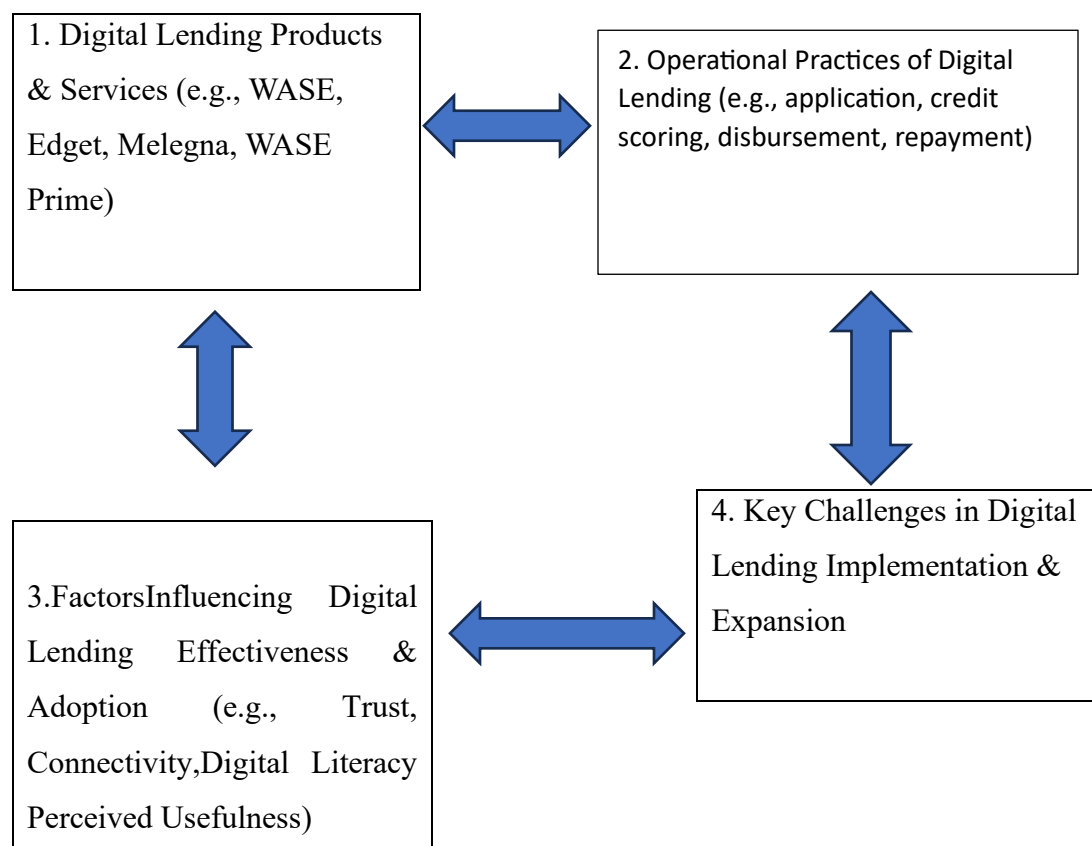


Figure 1 Conceptual Diagram

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Research Approach

This study employs a mixed-methods research approach, which enables the collection and analysis of quantitative and qualitative data concurrently, followed by the integration of results to provide a comprehensive understanding of digital lending practices at Wegagen Bank SC. This design is particularly suitable for studies where both numeric trends and detailed contextual information are essential for answering research questions (Creswell & Plano Clark, 2018).

Quantitative data gathered through structured questionnaires distributed to customers and employees to capture the availability and usage patterns of digital lending products. Simultaneously, qualitative data collected through semi-structured interviews with key personnel such as digital service managers and product developers. This approach provides both breadth and depth in understanding the bank's digital offerings (Bryman, 2016).

Survey data helped assess the extent of digital lending practices in terms of frequency, customer engagement, and service utilization. Complementary qualitative data from interviews and document analysis provided insight into how these services were implemented in practice and how they aligned with institutional goals and customer expectations (Tashakkori & Teddlie, 2010).

Quantitative responses regarding common challenges (e.g., cybersecurity issues, system errors, limited customer awareness) were supported by qualitative insights into operational, regulatory, and user-experience challenges, offering a multi-dimensional view of the obstacles the bank faced (Denzin, 2012).

By integrating findings from both data types, this approach helped validate the results, reduce bias, and offer practical recommendations for enhancing digital lending strategies at Wegagen Bank SC. The convergent parallel design ultimately strengthened the validity, reliability, and applicability of the research outcomes (Creswell & Plano Clark, 2018).

3.2 Research Design

The term ‘research design’ is used in variety of ways by researchers. It is referred as a master plan, blueprint, and even as a sequence of research tasks and activities. A research design is a procedural plan that is adopted by the researcher to answer questions validly, objectively, accurately and economically (Kumar, 2011).

This study utilize a convergent parallel mixed-methods design. This approach involves collecting and analyzing both qualitative and quantitative data concurrently, and then merging the findings during the interpretation phase. This allows for triangulation of data, enhancing the validity and reliability of the research findings (Creswell & Plano Clark, 2018).

The quantitative data will provide statistical insights into the adoption and usage of digital lending services, while the qualitative data offer a deeper understanding of the experiences, perceptions, and challenges faced by stakeholders.

3.3 Data Source and Data Type

In line with the convergent parallel mixed-methods design, the study collects and analyze both quantitative and qualitative data simultaneously, with each data type addressing different but complementary aspects of the research objectives. The integration of multiple data types and sources strengthens the credibility, depth, and scope of the findings (Creswell & Plano Clark, 2018).

This study primarily rely on primary data sources to gather firsthand information directly relevant to the research objectives. For the quantitative arm of the study, data collected through structured questionnaires administered to a sample of 385 Wegagen Bank customers. The responses from these questionnaires will constitute quantitative data, primarily in the form of ordinal scale ratings, allowing for statistical analysis of customer perceptions, practices, and challenges related to digital lending (Creswell & Plano Clark, 2018). This type of data is crucial for assessing the prevalence of certain opinions and identifying statistically significant trends among the customer base.

Concurrently, for the qualitative arm of the study, primary data will be obtained through in-depth, open-ended interviews conducted with four selected staffs, one digital lending manager, one principal digital lending officer, and two digital lending officers of Wegagen Bank they are directly involved in digital lending operations. The verbatim transcripts and detailed notes from these

interviews will generate rich qualitative data. This type of data provides nuanced insights into internal processes, strategic considerations, operational challenges, and potential areas for improvement from the perspective of those managing and implementing digital lending services. Qualitative data, unlike quantitative data, focuses on understanding context, meaning, and subjective experiences (Patton, 2015).

Triangulation of Data Sources

Utilizing multiple data sources and types allows for triangulation, which enhances the validity of the research by cross-verifying information and revealing different dimensions of the same phenomenon (Denzin, 2012). This approach is particularly important in studies exploring technology adoption in financial institutions, where user behavior, organizational capacity, and technological infrastructure all play interconnected roles.

3.4 Population, Sample Size and sampling techniques

3.4.1 Population

The target population for this study comprised three key stakeholder groups at Wegagen Bank S.C.: customers, digital lending staff (one principal officer and two officers), and the digital lending manager. These groups were specifically chosen to ensure a comprehensive understanding of the bank's digital lending practices, customer experiences, and associated challenges.

For the quantitative component, the population consisted of Wegagen Bank's customers who use or have access to digital lending services. Since the total number of customers was unknown, the study treated the population as infinite for sampling purposes.

For the qualitative component, the population included internal stakeholders, specifically staff members and managers involved in the development, implementation, or oversight of digital lending services within the bank.

This multi-group population structure allowed the study to explore both external (customer) and internal (staff/manager) perspectives, ensuring a well-rounded view of digital lending operations and associated challenges.

3.4.2 Sample size

This study employed a mixed-methods approach, incorporating both quantitative and qualitative data to explore digital lending practices at Wegagen Bank S.C. Each component required a distinct sample size determination strategy aligned with its methodological goals.

For the quantitative component, which focused on customer perspectives, a total of 385 customers were targeted for participation through a structured questionnaire. The questionnaire was distributed via Google Forms, allowing for efficient and wide-reaching data collection. This sample size was calculated using Cochran's formula for infinite populations, which is appropriate in cases where the total number of customers is unknown. The calculation was based on standard assumptions: a 95% confidence level and a 5% margin of error, ensuring statistical robustness and the potential to generalize findings to Wegagen Bank's broader customer base (Cochran, 1977 & My Research Lab, n.d.).

From this distribution, 288 valid responses were collected, representing a 75% response rate. This is notably high, particularly for online surveys, where average response rates typically range from 10% to 30% (Webropol, 2024 & Delighted, n.d.). Achieving such a high rate strengthens the representativeness of the sample and significantly reduces the risk of non-response bias, thereby enhancing the reliability and generalizability of the results (Interview, n.d. & GeoPoll, 2024).

Qualitative Sample Size

The qualitative component involved four participants—managers and staff members directly engaged in digital lending operations at Wegagen Bank. These individuals were selected using purposive sampling based on their knowledge, roles, and experience in the bank's digital lending initiatives. The number of participants was guided by the concept of theoretical saturation, whereby data collection was concluded once no new themes or insights emerged from participant responses (Glaser & Strauss, 1967 & Guest et al., 2006).

Due to the participants' busy schedules, data were collected using open-ended written questionnaires, allowing respondents the flexibility to provide thoughtful, detailed responses. This approach facilitated the collection of rich, nuanced insights into the operational, technical, and strategic challenges associated with digital lending implementation (Hennink & Kaiser, 2022).

Together, the quantitative and qualitative sample sizes supported the study's objective of achieving data triangulation, contributing to the overall validity and depth of the findings (Creswell & Plano Clark, 2018).

3.4.3 Sampling Technique

This study employed different sampling strategies for its quantitative and qualitative components, consistent with the convergent parallel mixed-methods design.

Quantitative Sampling

For the quantitative component, which focused on customers of Wegagen Bank S.C., a probability sampling approach was used. Specifically, Cochran's formula for infinite populations was applied to determine the required sample size, given that the total number of the bank's digital lending customers was unknown. Using a 95% confidence level and a 5% margin of error, the resulting sample size was calculated to be 385 respondents. This approach ensures that the survey results are statistically valid and can be generalized to the broader customer population using digital lending services at Wegagen Bank.

The sample of customers was selected using simple random sampling, where feasible, from the customer base available at selected branches. This helped reduce selection bias and improve the representativeness of the sample.

Qualitative Sampling

For the qualitative component, a purposive sampling technique was used to select key internal stakeholders—managers and staff members are directly involved in the planning, implementation, or operation of digital lending services within Wegagen Bank S.C. A total of 4 participants were interviewed. The number was determined based on the principle of theoretical saturation, whereby data collection continued until no new themes or insights emerged from the interviews.

This purposive approach enabled the research to gain in-depth, context-specific insights into the technical, operational, and managerial challenges of digital lending implementation. The combination of these two sampling strategies supported the study's goal of triangulating data from multiple sources, thus enhancing the validity and richness of the findings.

3.5 Sampling Strategy

This study employed a convergent parallel mixed-methods strategy, integrating quantitative and qualitative data collected simultaneously to comprehensively examine digital lending practices at Wegagen Bank S.C. The sampling strategies for each component were deliberately chosen to align with the study's four research objectives and to ensure methodological rigor.

For the quantitative component, the study targeted customers of Wegagen Bank who had access to or experience with digital lending services. Due to the absence of a centralized, accessible database indicating the total number of such customers, the population was treated as infinite. Accordingly, Cochran's formula for an infinite population was used to calculate the sample size, resulting in a target of 385 respondents, based on a 95% confidence level and a 5% margin of error (Cochran, 1977).

A simple random sampling technique was employed to invite customers to complete the structured questionnaire via Google Forms, which allowed for broad distribution across branches. A total of 288 valid responses were collected, representing a 75% response rate, which is well above average for online surveys and enhances the generalizability and reliability of the findings (Webropol, 2024 & GeoPoll, 2024).

the qualitative component focused on internal stakeholders—managers and staff directly involved in digital lending operations. A non-probability purposive sampling strategy was used to select four participants based on their expertise, roles, and firsthand experience.

Given the participants' tight schedules and senior positions, data were collected through open-ended written questionnaires, allowing flexibility and encouraging thoughtful responses. The number of participants was guided by the principle of theoretical saturation, where data collection continues until no new themes or perspectives emerge (Glaser & Strauss, 1967 & Guest et al, 2006).

This dual sampling approach quantitative sampling from customers and qualitative sampling from key internal stakeholders—was intentionally designed to provide a well-rounded understanding of digital lending at Wegagen Bank. It enabled data triangulation, contributing to the validity, depth, and alignment of the research findings with the stated objectives (Creswell & Plano Clark, 2018).

3.6 Data Collection Methods:

Data collection for this mixed-methods study was executed concurrently, aligning with a convergent parallel mixed-methods design (Creswell & Plano Clark, 2018). This parallel approach allowed for the independent analysis of each dataset before their eventual integration, providing a more holistic understanding of digital lending at Wegagen Bank.

For the quantitative component, primary data was systematically gathered from customers. We targeted 385 customers for participation. A structured questionnaire, designed to capture perceptions regarding the practices, challenges, influencing factors, and potential areas for improvement in the bank's digital lending services, was conveniently administered via Google Forms. To ensure broad reach and ease of access for the target customer demographic, the questionnaire link was disseminated through various digital communication channels, including Telegram, WhatsApp, and Email Outlook. Before full-scale deployment, a pre-test of the questionnaire was conducted with a small, representative group of customers to verify its clarity, relevance, and overall usability.

Concurrently, the qualitative data was collected via structured written questionnaires with 4 selected managers and staff members of Wegagen Bank who possess direct operational or strategic involvement in digital lending. An interview guide featuring open-ended questions was utilized to elicit nuanced insights into the bank's internal processes, strategic considerations, operational hurdles, and innovative prospects for digital lending. This written approach was adopted due to the demanding schedules of the managers and staff, facilitating comprehensive responses at their convenience. Crucially, all data collection activities adhered to stringent ethical guidelines, including obtaining informed consent from every participant, ensuring their voluntary participation, and upholding strict anonymity and confidentiality of all responses (Patton, 2015).

3.7 Reliability and Validity Analysis

Table 1 Test of Reliability

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No of Items	Case valid
0.947	0.944	32	288

SOURCE - SPSS (May 2025)

To assess the internal consistency of the quantitative instrument used in this study, Cronbach's Alpha was computed across the 32 items included in the structured customer questionnaire. The results show a Cronbach's Alpha value of 0.947, and a standardized Alpha of 0.944, indicating an excellent level of internal reliability (Nunnally, 1978). These values suggest that the questionnaire items consistently measure the intended constructs such as customer trust, digital infrastructure, system usability, and perceived effectiveness of digital lending at Wegagen Bank S.C. Generally, a Cronbach's Alpha above 0.90 is considered excellent, reflecting a high degree of consistency among items (Tavakol & Dennick, 2011).

The instrument was administered to 288 valid cases, with a mean score of 119.76, a variance of 504.813, and a standard deviation of 22.468, indicating a reasonable distribution of responses. These statistics further confirm the robustness and consistency of the dataset, supporting the reliability of the findings derived from the customer survey.

3.8 Methods of Data Analysis

This study utilized a convergent parallel mixed-methods design, where both quantitative and qualitative data were collected concurrently, analyzed separately, and then integrated to produce a comprehensive understanding of digital lending practices at Wegagen Bank S.C. Each data type was analyzed using methods appropriate to its nature, ensuring methodological rigor and alignment with the study's objectives.

Quantitative Data Analysis

The quantitative data, collected through a structured Google Forms questionnaire distributed to customers, were exported to Statistical Package for the Social Sciences (SPSS) version 25 for

analysis. Descriptive statistics (frequencies, percentages, means, and standard deviations) were used to summarize the demographic characteristics of respondents and their responses to key survey questions.

Qualitative Data Analysis

The qualitative data, obtained from open-ended written questionnaires completed by staff and managers, were analyzed using thematic analysis. This approach involved systematically coding the responses, identifying recurring patterns and themes, and interpreting the data to capture participants' perspectives on operational, strategic, and technological challenges in digital lending (Braun & Clarke, 2006). Manual coding was applied to ensure close engagement with the data and to maintain the richness of responses.

The process followed Braun and Clarke's (2006) six-phase framework: familiarization with the data, generation of initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the final report. This method ensured a transparent and rigorous analysis of qualitative insights, grounded in participants' real-world experiences.

Integration of Quantitative and Qualitative Findings

After separate analyses, the results from the quantitative and qualitative components were compared and integrated during the interpretation phase. This process of data triangulation enabled the study to validate findings across data types, reduce bias, and enhance the credibility and applicability of the research conclusions (Creswell & Plano Clark, 2018; Patton, 2015). The integration offered a multi-dimensional understanding of digital lending at Wegagen Bank by combining broad customer perspectives with in-depth institutional insights.

3.9 Data Saturation

In the qualitative component of this study, data saturation was a guiding principle in determining the appropriate number of participants. Data saturation refers to the point at which no new information, themes, or insights emerge from the data, making further data collection unnecessary (Glaser & Strauss, 1967). This concept is widely recognized in qualitative research as a marker of sufficient sample size and depth of inquiry.

The study engaged four purposively selected participants—comprising staff and managers directly involved in the planning, implementation, and oversight of digital lending services at Wegagen Bank S.C. These participants were identified based on their relevance, role, and firsthand experience with digital lending, making them well-suited to address the research objectives related to operational practices and challenges in digital lending implementation and expansion.

Although the number of participants was relatively small, this is consistent with established qualitative research practice. Prior studies suggest that saturation can often be reached with as few as 4 to 6 interviews when participants are information-rich and closely aligned with the research topic (Guest, Bunce, & Johnson, 2006; Hennink & Kaiser, 2022). In this study, data from the open-ended written responses revealed strong thematic consistency and minimal variation across participants, indicating that theoretical saturation had been achieved.

Using open-ended written questionnaires also encouraged reflective, detailed responses from participants, further contributing to the depth and richness of the data. Therefore, the sample size was considered adequate for capturing the essential insights needed to fulfill the qualitative objectives of the research and to ensure valid, meaningful thematic analysis.

3.10 Ethical Considerations

This study adhered to established ethical standards in both the quantitative and qualitative components. Before data collection began, participants were informed of the purpose, scope, and voluntary nature of the research. For the quantitative survey distributed via Google Forms, an informed consent statement was included at the beginning of the questionnaire, clearly explaining participants' rights, including the right to withdraw at any time without penalty. No personally identifiable information was collected, and all responses were treated with strict confidentiality. Data were stored securely and used solely for academic purposes, in accordance with data protection principles.

In the qualitative component, ethical considerations were paramount for managers and staff. Participants were approached officially, provided with detailed information on confidentiality and data usage, and assured anonymity by delinking names/titles from responses. Ethical approval was secured beforehand, and the research prioritized respect, transparency, and voluntary participation to ensure study integrity and participant protection.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1. Introduction

This chapter serves as the culmination of the data analysis, offering a comprehensive presentation and interpretation of the findings directly in relation to the study's stated objectives. Adhering to a convergent parallel mixed-methods design, the quantitative data, comprising 288 valid responses from customer questionnaires, and the qualitative insights, derived from 4 in-depth interviews with managers and staff, were independently analyzed. The primary aim of this chapter is to systematically unveil the patterns, trends, and themes that emerged from both datasets, subsequently integrating them to provide a holistic and nuanced understanding of the practice and challenges of digital lending within Wegagen Bank S.C. (Creswell & Plano Clark, 2018).

By converging these distinct data sources, this chapter will not only highlight statistical realities from the customer's perspective but also provide deep, contextual explanations from internal stakeholders, offering a robust and triangulated view of the phenomenon under investigation (Tashakkori & Teddlie, 2003).

4.2 Response Rate

The quantitative data for this study was collected through an online questionnaire distributed via Google Forms. Out of an intended sample size of 385 customers, 288 complete responses were successfully collected. This yields a response rate of approximately 75% ($288 \div 385 \times 100\%$), indicating a robust level of participation from the target customer base. Conversely, 97 customers (approximately 25%) did not complete or submit the questionnaire. This achieved response rate is considered favorable for online surveys and supports the representativeness of the collected data for statistical analysis (Dillman et al., 2014 & Sheehan, 2001).

Table 2: research survey 2025

Categories	Respondent	Percentage
Responded	288	75 %
Not Responded	97	25%
Total	385	100 %

Source: research data (May,2025)

4.3 Demographic Profile of Respondents

This section presents the demographic characteristics of the 288 customers who participated in the quantitative survey. Understanding the demographic profile of the respondents is crucial as it provides context for interpreting their perceptions and experiences with digital lending. As detailed in the previous section, complete data was obtained for all demographic variables, with no missing responses.

Table 3 - Demographic representation

No.	Demographic profile		Frequency	Percentage	Valid Percentage	Cumulative Percent
1	Gender	Male	129	44.8	44.8	44.8
		Female	159	55.2	55.2	100
2	Age	18-24 years	45	15.6	15.6	15.6
		25-34 years	107	37.2	37.2	52.8
		35-44 years	108	37.5	37.5	90.3
		45-55 years	28	9.7	9.7	100
3	Educational Level	Below High School				
		High School Graduate	77	26.7	26.7	26.7
		Diploma	46	16	16	42.7
		Bachelor's Degree	109	37.8	37.8	80.6
		Master's Degree and above	56	19.4	19.4	100
4	Occupation	Employed (Private Sector)	51	17.7	17.7	17.7
		Employed(Government Sector)	35	12.2	12.2	29.9

		Self Employed/Business Owner	170	59	59	88.9
		Student	26	9	9	97.9
		Retired	6	2.1	2.1	100

Source: SPSS, (May 2025)

The demographic data of the 288 respondents reveal a relatively balanced gender distribution, with a slight female majority (55.2%). The age distribution indicates that the majority of respondents (74.7%) fall within the 25–44 age range, which is typically considered the most economically active and digitally engaged demographic. This suggests that Wegagen Bank's digital lending services are particularly appealing to young and middle-aged adults, who are more likely to adopt and utilize digital financial platforms. The relatively lower representation of respondents aged 45–54 (9.7%) may indicate either limited access to or lower engagement with digital banking services among older customers.

Educationally, a significant portion of respondents (57.2%) hold a bachelor's degree or higher, suggesting that higher educational attainment may positively influence digital lending adoption. This finding aligns with prior research indicating that individuals with advanced education levels are more likely to engage with digital financial technologies due to greater digital literacy and trust in electronic systems. Additionally, the occupational distribution shows strong participation from self-employed individuals (24.3%), private sector employees (17.7%), and government workers (12.2%), reflecting a diverse user base. The presence of students and retirees, though smaller, indicates the broad reach of digital lending services across different life stages and professional backgrounds, reinforcing the inclusive potential of digital finance at Wegagen Bank S.C.

4.4 Discuss the characteristics of the customer sample

4.4.1 Digital Lending Products and Services

This section presents the findings related to customers' perceptions of Wegagen Bank's digital lending products and services, drawing from Section 2 of the questionnaire. Descriptive statistics, including means, standard deviations, for agreement levels, were computed to summarize customer awareness, understanding, and perceived adequacy of these offerings.

Table 4: Rating of Digital Lending Products and Services responses

	N	Mean	Std. Deviation
I am aware of Wegagen Bank's digital lending products	288	3.45	1.128
Wegagen Bank's digital lending application process is clear and easy to understand.	288	3.70	1.210
The digital lending services offered by Wegagen Bank meet my financial needs.	288	3.66	1.222
I find the terms and conditions of digital loans from Wegagen Bank to be transparent.	288	3.69	1.189
Wegagen Bank's digital lending platform (app) is user-friendly and intuitive.	288	3.63	1.162
I can easily access information about Wegagen Bank's digital lending services through their digital channels.	288	3.76	1.164
The speed of loan application and disbursement through Wegagen Bank's digital channels is satisfactory.	288	3.70	1.161
Wegagen Bank offers a variety of digital lending products suitable for different purposes (e.g., personal, business).	288	3.60	1.159
Valid N (listwise)	288		

Sources – SPSS, (May 2025)

The provided data offers valuable insights into customer perceptions of Wegagen Bank's digital lending services. While several attributes demonstrate generally positive average perceptions, the consistently high standard deviations across most items underscore a significant variability in customer experiences, suggesting that while the service works well for many, specific segments of customers encounter challenges or hold differing views.

Awareness (Mean = 3.45 & Std. Dev. = 1.128): Despite a moderate average awareness, the relatively high standard deviation indicates a notable spread in customer knowledge. This suggests that a significant portion of the customer base remains unfamiliar with digital lending products, which aligns with challenges of digital literacy and awareness often found in emerging markets (Chen & Fan, 2022 & UNCDF, 2021). Effective awareness campaigns are crucial for bridging this knowledge gap and expanding reach (World Bank, 2018).

Application Clarity (Mean = 3.70 & Std. Dev. = 1.210): The application process is generally perceived as clear, placing it among the higher-rated attributes. However, the substantial standard deviation highlights that a significant minority of customers still experience confusion. This suggests that while adherence to principles of "perceived ease of use" (Davis, 1989) is present for many, further optimization of the interface and clearer guidance could reduce friction for all users (Liferay, 2023 & UX Design Institute, 2023).

Meets Financial Needs (Mean = 3.66 & Std. Dev. = 1.222): Digital lending generally appears to meet the financial needs of most customers. Nevertheless, the highest standard deviation in the dataset points to a wide range of experiences, implying that for a considerable portion of customers, the current digital lending offerings may not fully align with their specific or diverse financial requirements. This highlights a common challenge in financial inclusion, where product suitability is as important as access (CGAP, 2019 & ADB, 2023).

Transparency of Terms (Mean = 3.69 & Std. Dev. = 1.189): Transparency of terms is largely viewed positively, which is a critical factor for building customer trust in digital financial services (OECD, 2022 & Consumers International, 2023). Yet, the fairly high standard deviation suggests that some customers are still seeking more detailed or clearer information, indicating that communication around terms and conditions, while generally effective, could be enhanced for universal understanding and greater confidence (FCA, 2021 & EBA, 2023).

App Usability (Mean = 3.63 & Std. Dev. = 1.162): The digital lending application is generally perceived as user-friendly, supporting the importance of "perceived ease of use" in technology adoption (Barua, 2025 & Davis, 1989). However, the standard deviation indicates that a minority of users might still struggle with the interface or specific functionalities, underscoring the need for continuous usability testing and iterative improvements to cater to diverse user capabilities (UX Design Institute, 2023).

Information Accessibility (Mean = 3.76 & Std. Dev. = 1.164): This is the strongest performing area, with customers finding it easy to obtain needed information. This high mean signifies a key strength in the bank's communication and information provision efforts for digital lending, contributing positively to the overall customer experience (KPMG, 2021 & Forrester, 2023).

Speed of Process (Mean = 3.70 & Std. Dev. = 1.161): The speed of loan processing is generally satisfactory, aligning with a key advantage and expectation of digital lending (Infosys BPM, 2025 & World Bank, 2018). While the standard deviation shows some variability in experience, the overall positive mean confirms that efficiency is a recognized strength for most users (Gartner, 2023).

Product Variety (Mean = 3.60 & Std. Dev. = 1.159): While generally acceptable, this item has one of the lower mean scores. The standard deviation further supports the interpretation that there is room for improvement in diversifying loan products. This indicates that current offerings may not sufficiently cater to the varied and evolving needs of the customer base, suggesting a strategic opportunity for product development aligned with consumer needs (Ejbm, 2025 & ADB, 2023).

Wegagen Bank's digital lending services demonstrate strengths in information accessibility and processing speed, consistent with the benefits highlighted in digital finance literature. However, the consistent presence of relatively high standard deviations across most attributes, even those with positive average ratings, underscores the importance of addressing the diverse needs and challenges of different customer segments. Strategic interventions focusing on improving product awareness, enhancing clarity in applications and terms, and diversifying product offerings are crucial for maximizing overall customer satisfaction and adoption, and for fully leveraging the potential of digital lending in the Ethiopian context.

WASE (Personal Digital Loans): These are rapid access, short-term liquidity loans ranging from 5,000 to 15,000 ETB, with terms typically spanning two weeks to one month. A facilitation fee of 2% and a daily fee of 0.95% apply, alongside a penalty interest of 0.5%. This product exemplifies the characteristic speed and minimal documentation associated with modern digital lending, aimed at addressing immediate personal liquidity needs (IMF, 2019 & World Bank, 2018).

Edget and Melegna (Business/SME Digital Loans): Tailored for small and medium enterprises and petty traders, these loans provide working capital ranging from 5,000 to 31,000 ETB for a two-week term, at an interest rate of 3.75% and a penalty interest of 0.5%. These offerings streamline the application process for businesses seeking quick funding, aligning with the literature on the critical role of digital credit in supporting the burgeoning SME sector in developing economies (CGAP, 2019).

Wase Prime (Payroll-linked Loans): An innovative product providing salary advances or loans directly tied to payroll accounts for employees managed by Wegagen Bank. Loan sizes range from 5,000 to 75,000 ETB, with terms from one to four months, a 2% facilitation fee, 0.95% daily fee, and 0.5% penalty interest. This product highlights the bank's strategy to offer convenient and secure borrowing channels leveraging existing financial relationships.

Beyond their specific product suite, the bank's leadership demonstrated a robust understanding of the broader digital lending landscape in Ethiopia. They acknowledged its accelerating momentum, which they attribute to increasing smartphone penetration and the widespread adoption of mobile money (GSMA, 2023). From their perspective, digital lending is recognized as a vital mechanism for fostering financial inclusion, particularly in reaching underserved and rural populations (AfDB, 2022 & World Bank, 2017). They further emphasized its inherent advantages in speed and convenience through expedited approval processes, aligning with core benefits often cited for digital financial services (Infosys BPM, 2025), and its critical role in bolstering the burgeoning SME sector by providing much-needed accessible funding for business development. This comprehensive view indicates that Wegagen Bank is not merely offering digital loan products but is strategically aligning its services with broader national and regional financial development goals.

This integrated analysis reveals that Wegagen Bank's digital lending services exhibit both commendable strengths and areas needing strategic attention. The bank's clear intent to provide swift and convenient digital loans, as articulated by its staff, largely aligns with customer perceptions of processing speed and information accessibility. This strong performance in these core digital advantages supports global trends in digital financial services. Furthermore, the bank's understanding of digital lending's vital role in financial inclusion and SME support aligns well with broader development objectives for emerging markets, reflecting a strategic alignment with market needs and a proactive approach to leveraging digital transformation (IMF, 2019 & World Bank, 2017).

However, significant variability in customer experience, highlighted by consistently high standard deviations, points to critical areas for improvement. Despite diversified product offerings, there's a clear need to boost awareness and enhance application clarity for all segments of customers, as

many still struggle with familiarity and navigation (Chen & Fan, 2022 & UNCDF, 2021). The data also suggests that current product variety may not fully meet the diverse financial needs of all customers, and while terms are generally transparent, some users desire greater clarity. These gaps, particularly in universal usability and tailored product offerings, indicate that the inherent benefits of digital lending are not yet consistently translated into seamless experiences for all users, mirroring challenges in broader digital financial service adoption in contexts like Ethiopia (ResearchGate, 2023). Addressing these inconsistencies is crucial for unlocking the full potential of Wegagen Bank's digital lending initiatives.

4.4.2 Practice of Digital Lending in Wegagen Bank

This section presents the findings related to customers' perceptions of Wegagen Bank's Practice of Digital Lending in Wegagen Bank, drawing from Section 3 of the questionnaire. Descriptive statistics, including means, standard deviations, for agreement levels, were computed to summarize customer awareness, understanding, and perceived adequacy of these offerings.

Table 5 – Rating of Practice of Digital Lending in Wegagen Bank

	N	Mean	Std. Deviation
I regularly use Wegagen Bank's digital lending services when I need a loan.	288	3.57	1.127
The process of applying for a digital loan with Wegagen Bank is faster than traditional methods.	288	3.80	1.163
I feel secure providing my personal and financial information on Wegagen Bank's digital lending platform.	288	3.77	1.146
Wegagen Bank's customer support for digital lending issues is responsive and helpful.	288	3.73	1.152
I am satisfied with the interest rates and repayment terms offered on digital loans by Wegagen Bank.	288	4.05	.952
The eligibility criteria for digital loans at Wegagen Bank are fair and accessible.	288	4.11	.884
I would recommend Wegagen Bank's digital lending services to others.	288	4.18	.842

The digital lending process at Wegagen Bank reduces the need for physical branch visits.	288	3.91	.971
Valid N (listwise)	288		

Source - SPSS, (May 2025)

Regular Use (Mean = 3.57 & Std. Dev. = 1.127): While the mean suggests moderate usage, indicating many customers use the service when needed, the relatively high standard deviation points to a notable segment that isn't yet a regular user. This implies that despite the service being available, it hasn't fully integrated into the routine financial habits of all eligible customers. This aligns with findings that adoption, beyond initial trial, often requires consistent utility and integration into daily life (Rogers, 2003 & World Bank, 2018).

Faster than Traditional (Mean = 3.80 & Std. Dev. = 1.163): Customers generally perceive digital lending as significantly faster than traditional in-branch processes. This is a core strength and a primary advantage of digital financial services, as highlighted in literature on digital transformation in banking (Infosys BPM, 2025 & World Bank, 2018). The mean score strongly confirms that the speed and efficiency of digital lending meet customer expectations in this regard.

Security Confidence (Mean = 3.77 & Std. Dev. = 1.146): There's high customer trust in the security of the digital lending platform. This is a critical factor for adoption and sustained use of any digital financial service (EY, 2023 & OECD, 2022). High security confidence indicates that Wegagen Bank has successfully instilled trust in its digital channels, which is paramount given the sensitivity of financial data and transactions.

Customer Support (Mean = 3.73 & Std. Dev. = 1.152): Customer support is mostly viewed positively. However, the standard deviation suggests some variability, indicating that while many users find support consistent and helpful, a minority may encounter inconsistencies. This highlights an area where enhancing the uniformity and responsiveness of digital customer support channels could further improve overall satisfaction (KPMG, 2021 & Forrester, 2023).

Satisfaction with Interest & Repayment Terms (Mean = 4.05 & Std. Dev. = 0.952): Customers express very strong satisfaction with the interest and repayment terms, making this a key strength of the digital lending offering. The lower standard deviation further indicates a relatively consistent positive experience across the customer base. Fair and transparent pricing, along with flexible

repayment options, are crucial for customer satisfaction and responsible lending (CGAP, 2019 & Consumers International, 2023).

Fairness of Eligibility Criteria (Mean = 4.11 & Std. Dev. = 0.884): This is the strongest performing area, with customers strongly agreeing that the eligibility criteria are accessible and inclusive. The lowest standard deviation in the dataset further emphasizes this consistent positive perception. Inclusive and accessible eligibility criteria are fundamental to achieving financial inclusion through digital lending (World Bank, 2017 & AfDB, 2022).

Willingness to Recommend (Mean = 4.18 & Std. Dev. = 0.842): This item demonstrates excellent performance, indicating that most customers are highly willing to recommend the service. As the highest mean score with the lowest standard deviation, this reflects strong overall satisfaction and customer loyalty, a powerful indicator of success and potential for organic growth (PwC, 2022 & Delighted, n.d.).

Reduction in Branch Visits (Mean = 3.91 & Std. Dev. = 0.971): Customers strongly agree that digital lending effectively reduces the need for physical branch visits. This confirms a primary benefit of digital financial services for both customers (convenience) and banks (operational efficiency), aligning with the broader trend of digital transformation in banking (McKinsey & Company, 2020 & Liferay, 2023).

Overall, Wegagen Bank's digital lending services demonstrate significant strengths in key areas highly valued by customers. The strong positive perceptions regarding fairness of eligibility criteria, satisfaction with interest and repayment terms, security confidence, and the speed of process collectively drive a high willingness to recommend the service. These findings suggest that the bank has successfully capitalized on core advantages of digital lending, effectively reducing the need for branch visits and building substantial trust.

However, the data also highlights areas for strategic focus to convert moderate usage into more regular engagement. While generally positive, variations in perceptions around customer support suggest an opportunity to enhance consistency and ensure all users receive optimal assistance. This continuous refinement, particularly in converting occasional users into regular ones, will be key to maximizing the reach and impact of Wegagen Bank's digital lending portfolio.

Perceptions of Digital Lending Effectiveness

This data provides a detailed view of customer perceptions regarding various aspects of digital lending services, offering critical insights into areas of strength and opportunities for enhancement. The interpretation below considers the mean score, indicating the average level of agreement or perception, and the standard deviation, which reflects the variability or consistency of responses among customers.

The operational flow commences with customer application via online platforms or mobile applications, followed by automated data verification and leveraging digital credit scoring tools for immediate creditworthiness assessment (Uniquis, 2024 & Accenture, 2024). Eligible cases receive instant approval and digital notifications, with funds directly disbursed into customer accounts or mobile wallets. Post-disbursement, the system manages repayment tracking and automated reminders, contributing to smooth loan lifecycle management (Infosys BPM, 2025). Interviewees specifically highlighted the efficiencies gained from seamless digital application submission, robust automated data validation, rapid electronic disbursement, and timely digital notifications. These aspects collectively enhance both customer convenience and the bank's operational efficiency, aligning with the core benefits of digital transformation in financial services (World Bank, 2018).

Despite these efficiencies, managers and staff consistently acknowledged persistent operational hurdles. Key challenges include delays caused by unclear document uploads and limited access to comprehensive and reliable credit data, which often necessitate manual intervention for more complex or larger loan cases. This points to limitations in fully automating the credit assessment process and the need for improved data infrastructure, a common challenge in nascent digital lending ecosystems (ResearchGate, 2025 & Deloitte, 2023). Furthermore, technical issues such as poor system integration were cited, impacting the seamless flow of operations (McKinsey & Company, 2020). Customer-centric barriers, including low digital literacy among some users and the submission of inaccurate data, also contribute to operational friction, underscoring the interplay between bank processes and customer capabilities (Chen & Fan, 2022 & EY, 2023). These identified elements collectively highlight critical areas requiring continuous improvement to further optimize the digital lending ecosystem at Wegagen Bank.

This integrated interpretation of both quantitative customer perceptions and qualitative operational insights reveals a robust yet evolving digital lending landscape at Wegagen Bank. From the customer's perspective, the service exhibits significant strengths, particularly in its perceived speed of process (Mean=3.80) and information accessibility (Mean=3.76), aligning with the bank staff's emphasis on rapid electronic disbursement and timely digital notifications (Infosys BPM, 2025; World Bank, 2018). Moreover, customers report high satisfaction with interest and repayment terms (Mean=4.05) and perceive eligibility criteria as fair (Mean=4.11), contributing to strong security confidence (Mean=3.77) and a high willingness to recommend the service (Mean=4.18) (EY, 2023 & OECD, 2022 & PwC, 2022). These positive indicators underscore the effectiveness of digital lending in reducing the need for traditional branch visits, enhancing customer convenience, and fostering trust in the digital platform, consistent with broader financial inclusion objectives (World Bank, 2017& AfDB, 2022).

Despite these commendable strengths and a streamlined end-to-end operational process, the data also highlights critical areas for optimization. Customer feedback reveals moderate awareness (Mean=3.45) and persistent issues with application clarity (Mean=3.70) for some segments, reflecting a challenge in digital literacy and user comprehension common in emerging markets (Chen & Fan, 2022 & UNCDF, 2021). Furthermore, while digital lending meets general needs, the variability in responses suggests that the current product variety (Mean=3.60) may not fully cater to diverse customer requirements, echoing calls for more tailored digital financial products (CGAP, 2019 & ADB, 2023). Operationally, these customer-facing gaps are often rooted in internal challenges such as unclear document uploads, limited access to comprehensive credit data, and the necessity for manual intervention in complex cases (ResearchGate, 2025 & Deloitte, 2023). Technical issues like poor system integration and customer-driven issues like inaccurate data submission also contribute to operational friction (McKinsey & Company, 2020). Addressing these internal operational hurdles and enhancing consistent clarity and product suitability will be pivotal for improving the overall customer experience and driving more regular use of Wegagen Bank's digital lending services.

4.4.3 Factors Affecting Digital Lending

Table 6 – Rating Of Factors Affecting Digital Lending

	N	Mean	Std. Deviation
My trust in digital platforms, in general, influences my use of Wegagen Bank's digital lending.	288	3.51	1.075
The availability and reliability of internet connectivity affect my ability to use digital lending services.	288	4.05	.988
My level of digital literacy (comfort with technology) affects my use of digital lending services.	288	3.63	1.214
Concerns about data privacy and security influence my willingness to use digital lending.	288	3.56	1.254
The processing fees or charges associated with digital loans affect my decision to use them.	288	3.72	1.164
Awareness campaigns and promotions by Wegagen Bank influence my knowledge and use of digital lending.	288	3.82	1.108
The ease of integration with other digital payment systems (e.g., mobile money) influences my use of digital lending.	288	3.57	1.124
The speed at which I receive a decision on my loan application influences my preference for digital lending.	288	3.79	1.107
Valid N (listwise)	288		

Source - research data, SPSS may 2025.

Internet Connectivity (Mean = 4.05 & Std. Dev. = 0.988): This factor demonstrates the strongest positive influence on digital lending adoption. The high mean indicates that the availability and reliability of internet access are critical enablers for customers, consistent with global findings that robust digital infrastructure is a prerequisite for financial technology adoption (GSMA, 2023 & World Bank, 2018). Its relatively low standard deviation suggests a widespread recognition of its importance.

Digital Literacy (Mean = 3.63 & Std. Dev. = 1.214): Digital literacy has a noticeable impact on adoption, yet the high standard deviation indicates that a significant portion of users still struggle with the confidence and skills required to fully utilize digital platforms. This aligns with research highlighting digital literacy as a persistent barrier to financial inclusion in emerging markets (Chen & Fan, 2022 & UNCDF, 2021).

Trust in Digital Platforms (Mean = 3.51 & Std. Dev. = 1.075): Trust moderately influences use, with some hesitation among users about fully trusting digital systems. This underscores the critical role of security and reliability in building customer confidence in online financial transactions, a foundational requirement for sustained adoption (EY, 2023 & OECD, 2022).

Data Privacy Concerns (Mean = 3.56 & Std. Dev. = 1.254): This factor indicates moderate concern among customers, which can cause hesitation, particularly among less tech-savvy users. The high standard deviation suggests varied levels of concern across the customer base, reinforcing the importance of clear privacy policies and robust data protection measures to foster broader acceptance (Consumers International, 2023 & IJIRT, 2025).

Awareness Campaigns (Mean = 3.82 & Std. Dev. = 1.108): Promotional efforts significantly influence digital lending adoption, helping to drive usage and knowledge. This supports the Diffusion of Innovations theory, where effective communication and awareness are crucial for the spread and acceptance of new technologies (Rogers, 2003 & World Bank, 2018).

Speed of Loan Decision (Mean = 3.79 & Std. Dev. = 1.107): The quickness of loan decisions strongly drives customer preference for digital over traditional channels. This confirms that efficiency and rapid access to funds are key advantages and strong motivators for using digital lending services, as often emphasized in financial technology literature (Infosys BPM, 2025).

Fees & Charges (Mean = 3.72 & Std. Dev. = 1.164): Pricing plays a significant role in customers' decision-making processes. While the mean is positive, the standard deviation indicates that perceptions of fees and charges vary, underscoring the need for competitive and transparent pricing strategies to attract and retain users in a competitive digital lending landscape (CGAP, 2019).

Integration with Payment Systems (Mean = 3.57 & Std. Dev. = 1.124): The integration of digital lending with other services, such as mobile money, is somewhat influential. This highlights the importance of an interconnected digital ecosystem, where seamless interoperability can enhance convenience and utility, aligning with trends in digital financial service ecosystem development in Africa (AfDB, 2022).

Interviews revealed that Wegagen Bank's digital lending effectiveness is significantly shaped by a dynamic interplay of internal strengths and external market forces.

Internally, the bank leverages key strengths, including a young, adaptable workforce, robust managerial support, and increasing investments in technology infrastructure. These foundational elements contribute to efficient digital banking operations, effective risk management, and the capacity for innovative product design. However, managers acknowledged internal challenges such as limited staff capacity, the presence of outdated or fragmented systems, and critical gaps in system integration. These issues, they noted, can impede scalability and introduce operational risks. Despite these challenges, the bank actively mitigates credit risk through sophisticated mechanisms including AI-powered credit scoring, alternative data analysis, real-time decision engines, fraud detection systems, loan monitoring tools, and strategic partnerships, thereby underpinning responsible and data-driven lending practices.

Externally, the bank identifies its early-mover advantage in Ethiopia's burgeoning digital lending market as a significant competitive edge. This position, however, exposes it to various external risks, including political and economic instability, market volatility, and an underdeveloped digital financial ecosystem. Other critical external influencers on digital lending adoption include evolving regulatory clarity, intense market competition from fintechs and mobile money providers, and diverse levels of digital literacy across the population. Interviewees emphasized that customer trust in the bank, coupled with the platform's accessibility and convenience, are primary drivers of customer engagement. Conversely, prevalent issues such as digital illiteracy, awareness gaps, and inconsistent connectivity pose significant barriers to broader adoption. To counter these, Wegagen Bank implements awareness campaigns and strategically leverages its branch-level support network. Ultimately, while the digital lending process demonstrates considerable efficiency, managers stressed that sustainable

growth hinges on continuously expanding internal capacity, enhancing digital inclusion efforts, and robustly strengthening system integration and infrastructure across the entire digital ecosystem.

However, the qualitative data elaborated on complexities not fully captured by customer surveys, providing crucial context for the observed variability in quantitative responses. Bank staff highlighted significant internal operational challenges such as limited staff capacity, outdated systems, and critical system integration gaps, which can impede scalability and efficiency, indirectly impacting customer experience (Accenture, 2024 & Deloitte, 2023). Furthermore, the qualitative insights brought to light external market dynamics, including political and economic instability, intense competition from fintechs, and the evolving regulatory environment, which profoundly shape the operational landscape and growth potential of digital lending (IMF, 2019 & World Bank, 2020). This integrated view underscores that sustainable growth in digital lending hinges not only on meeting customer expectations for convenience and accessibility but also on continuously enhancing internal capacity and infrastructure, while strategically navigating external complexities.

4.4.4 Challenges of Digital Lending in Wegagen Bank.

Table 7 – Rating Of Challenges of Digital Lending in Wegagen Bank.

	N	Mean	Std. Deviation
I sometimes face technical issues when using Wegagen Bank's digital lending platform.	288	3.53	1.072
The digital lending loan limits offered by Wegagen Bank are often too low for my needs.	288	3.77	1.181
I find the process of digital loan repayment to be complicated or unclear.	288	3.65	1.303
Lack of sufficient information or guidance from Wegagen Bank about digital lending is a challenge.	288	3.55	1.212
The fear of fraud or scams on digital platforms deters me from using digital lending services more often.	288	3.66	1.269

I experience difficulties with customer support when I encounter problems with digital lending.	288	3.58	1.247
The interest rates on digital loans from Wegagen Bank are higher than what I would prefer.	288	3.70	1.199
I have concerns about the privacy of my data when using digital lending services.	288	3.66	1.164
Valid N (listwise)	288		

Source - SPSS (May 2025)

This data sheds light on key challenges impacting digital lending implementation and expansion at Wegagen Bank, as perceived by customers (Objective 4). The analysis reveals that customers encounter various hurdles, ranging from product-specific limitations to broader concerns about platform reliability and security, consistent with common issues in the evolving digital finance landscape.

Technical Issues (Mean = 3.53 & Std. Dev. = 1.072): Customers perceive technical issues as somewhat frequent, indicating that while not severe enough to halt usage entirely, they nonetheless hinder a smooth user experience for a segment of users. This aligns with findings that system stability and reliability are crucial for positive digital service engagement (Infosys BPM, 2025 & ResearchGate, 2025b). The relatively low standard deviation suggests this is a widespread, though not critical, concern.

Loan Limits Too Low (Mean = 3.77 & Std. Dev. = 1.181): This emerges as a major concern, with many customers feeling that the loan amounts offered are insufficient for their needs. This indicates a potential mismatch between the bank's current digital lending product design and the actual financial requirements of a significant portion of its customer base (CGAP, 2019 & ADB, 2023). The high standard deviation points to varied expectations, but the high mean underscores widespread dissatisfaction.

Repayment Process is Unclear (Mean = 3.65 & Std. Dev. = 1.303): A notable number of users struggle with the clarity of the repayment process. The highest standard deviation in this dataset (1.303) emphasizes a wide divergence of experiences, indicating that while some customers find it clear, a substantial segment faces confusion. This highlights a critical need for enhanced

communication and simpler, more intuitive design in the post-disbursement phase (Liferay, 2023 & UX Design Institute, 2023).

Lack of Info/Guidance (Mean = 3.55 & Std. Dev. = 1.212): Some customers feel under-informed, suggesting gaps in onboarding or ongoing communication regarding the digital lending service. This concern, coupled with the variability in responses, points to inconsistent information dissemination or a lack of readily accessible, comprehensive guidance for all users (Chen & Fan, 2022 & UNCDF, 2021).

Fear of Fraud or Scams (Mean = 3.66 & Std. Dev. = 1.269): This represents a moderate but widespread concern that impacts trust and adoption. Even if not directly experienced, the ambient fear of fraud or scams can serve as an ongoing deterrent for users, particularly in environments where digital security awareness is still developing (EY, 2023 & OECD, 2022). This underscores the need for continuous reassurance and visible security measures.

Poor Customer Support Experience (Mean = 3.58 & Std. Dev. = 1.247): Several users face challenges getting timely or effective help, pointing to a service delivery issue. Inconsistent or poor customer support can significantly erode trust and hinder problem resolution, impacting the overall customer journey in digital services (KPMG, 2021 & Forrester, 2023).

Interest Rates Too High (Mean = 3.70 & Std. Dev. = 1.199): Pricing emerges as a significant barrier for many customers, indicating perceived or real rate sensitivity. While digital lending offers convenience, the cost of borrowing remains a crucial factor in customer decision-making and competitiveness (CGAP, 2019 & World Bank, 2018).

Data Privacy Concerns (Mean = 3.66 & Std. Dev. = 1.164): Privacy worries remain an ongoing deterrent for customers, even if they still engage with the service. This concern is pervasive in digital environments where personal data is collected and processed, necessitating robust privacy policies and clear communication on data handling practices to maintain customer confidence (Consumers International, 2023 & FCA, 2021).

In customer perceptions highlight that while Wegagen Bank's digital lending offers convenience, it faces considerable challenges related to product design (loan limits, interest rates), user experience (unclear repayment, lack of guidance), and trust/security (fear of fraud, privacy concerns). The high variability in responses across most items underscores that these are not

universal issues but significant pain points for various customer segments, demanding targeted improvements to enhance overall satisfaction and drive further adoption.

Interviews with managers and staff illuminated several key internal challenges hindering Wegagen Bank's ability to effectively scale its digital lending services. A primary obstacle is the presence of outdated core banking systems and fragmented data sources, which collectively lead to significant integration issues, impede platform performance, and ultimately limit scalability. Furthermore, critical skill gaps were identified, particularly in specialized areas such as data analytics, cybersecurity, and digital product management, thereby constraining the bank's capacity for innovation. Internal resistance to change and the constant demand for ongoing staff training also hamper operational agility. Security emerged as another pressing concern, with growing exposure to cyber threats necessitating stringent adherence to data protection standards. Lastly, managers highlighted the substantial upfront investment required for infrastructure upgrades, comprehensive staff training, and effective marketing of digital products, often without immediate returns on investment, posing a financial hurdle to expansion.

On the external front, interviewees pointed to several significant barriers to wider customer adoption and market expansion. Low digital literacy, particularly pronounced in rural areas, continues to hinder uptake, compounded by persistent customer concerns regarding privacy, security, and fraud. A general lack of awareness about the specifics and benefits of digital loan products also limits their broader acceptance. From a regulatory perspective, evolving compliance requirements and slow product approval processes were cited as factors that can delay innovation and market entry. Moreover, the landscape is intensely competitive, with rising competition from agile fintech startups placing immense pressure on traditional banks to innovate rapidly to avoid market share erosion. Finally, managers acknowledged that price pressures and constantly evolving customer expectations necessitate not only continuous enhancement of digital capabilities but also the consistent delivery of fast, reliable, and user-friendly lending experiences to maintain competitiveness within Ethiopia's increasingly dynamic digital finance ecosystem.

Both quantitative and qualitative data converge on several critical issues. Customers report experiences with technical issues (Mean=3.53) and poor customer support (Mean=3.58), which align with internal acknowledgements from staff regarding outdated core banking systems, fragmented data sources, system integration issues, and skill gaps impacting operational agility

(Infosys BPM, 2025 & Accenture, 2024). Furthermore, customer concerns about fear of fraud or scams (Mean=3.66) and data privacy (Mean=3.66) are directly corroborated by bank staff identifying growing exposure to cyber threats and the necessity for stringent data protection standards as pressing internal concerns (EY, 2023 & OECD, 2022). Lastly, while customers find Interest Rates Too High (Mean=3.70), staff acknowledge price pressures from intense market competition, highlighting pricing as a shared challenge (CGAP, 2019 & World Bank, 2018).

The integrated analysis also reveals challenges more predominantly highlighted by one data source, offering unique insights. Customers keenly feel loan limits are too low (Mean=3.77) and the repayment process is unclear (Mean=3.65), issues that point to product design and user experience complexities that the bank may need to refine for broader adoption (CGAP, 2019 & Liferay, 2023). Qualitatively, bank staff elaborate on deep-seated internal challenges such as limited staff capacity, internal resistance to change, and substantial upfront investment required for infrastructure and training, which directly impede scalability and innovation (Deloitte, 2023 & Accenture, 2024). On the external front, staff detail evolving regulatory clarity, slow product approval processes, and fierce competition from agile fintech startups as significant barriers to market expansion (KPMG, 2021 & World Bank, 2020). These combined insights underscore that overcoming challenges for sustainable growth requires a holistic approach addressing both external market pressures and internal operational and strategic deficiencies, alongside direct customer-perceived pain points.

CHAPTER FIVE

SUMMARY, CONCLUSION, AND RECOMMENDATIONS

5.1. Summary of Major Findings

This study aimed to comprehensively assess digital lending at Wegagen Bank from both customer and bank perspectives, identifying key influencing factors, and challenges, utilizing a convergent parallel mixed-methods design, the study integrated quantitative data from customer surveys with qualitative insights from bank managers and staff.

5.1.1. Digital Lending Products and Services

Qualitative findings revealed that Wegagen Bank offers a diversified portfolio of short-term digital loan products tailored to distinct market segments. These include WASE (personal liquidity loans), Edget and Melegna (SME and petty trader working capital loans), and Mekoya (payroll-linked salary advances). The bank's leadership demonstrated a robust understanding of Ethiopia's accelerating digital lending landscape, recognizing its vital role in fostering financial inclusion and bolstering the SME sector through speed and convenience.

5.1.2. Operational Practices of Digital Lending

Interviews with bank staff highlighted a streamlined, end-to-end digital lending process, encompassing online application, automated credit scoring, rapid electronic disbursement, and automated repayment tracking. Key efficiencies were noted in seamless digital submission, data validation, and timely notifications. However, significant operational hurdles persist, including delays from unclear document uploads, limited access to comprehensive credit data, necessity for manual intervention in complex cases, technical issues like poor system integration, and customer-centric barriers such as low digital literacy and inaccurate data submission.

5.1.3. Factors Influencing Digital Lending Effectiveness

Both quantitative and qualitative analyses identified several critical factors influencing customer engagement. Customers overwhelmingly viewed Internet Connectivity and the Speed of Loan

Decisions as essential enablers. They also expressed high confidence in security, satisfaction with interest rates and repayment terms, and perceived fairness in eligibility criteria, all of which contributed to a strong willingness to recommend the platform. Bank staff confirmed that trust and platform accessibility are key drivers. Conversely, perceptions of Digital Literacy, Trust in Digital Platforms, and Data Privacy Concerns varied among customers and were recognized by staff as barriers especially digital illiteracy and unreliable connectivity. Additionally, awareness campaigns were shown to be effective in increasing platform usage.

5.1.4. Key Challenges in Digital Lending Implementation

Customer perceptions identified Loan Limits Too Low and an Unclear Repayment Process as major concerns. Other notable customer challenges included Technical Issues, Lack of Info/Guidance, Fear of Fraud or Scams, Poor Customer Support Experience, Interest Rates Too High, and Data Privacy Concerns. These customer-perceived challenges were largely corroborated and elaborated upon by bank staff, who identified outdated core banking systems, fragmented data sources, skill gaps, internal resistance to change, substantial upfront investment, and growing cyber threats as significant internal hurdles. Externally, staff highlighted evolving regulatory clarity, slow product approval processes, intense competition from agile fintech startups, and price pressures as major barriers to wider market expansion.

5.2. Conclusion

This study concludes that Wegagen Bank has made commendable strides in embracing digital lending, strategically positioning itself as a key player in Ethiopia's evolving financial landscape. The bank's digital lending products are well-defined and strategically diversified to target various segments, demonstrating an understanding of market needs and the broader goals of financial inclusion. Operationally, the digital lending process exhibits notable efficiencies in terms of speed and digital disbursement, which is highly valued by customers.

However, despite these strengths, significant challenges remain, impacting the full realization of digital lending's potential. A critical finding is the pervasive variability in customer experience, particularly concerning awareness, application clarity, and product suitability (e.g., loan limits). This is often rooted in underlying issues of digital literacy and trust, which are common in

developing digital ecosystems. Furthermore, the bank faces substantial internal operational and technological hurdles, including legacy systems and integration gaps, which require significant investment and capacity building. Externally, an evolving regulatory landscape and intense competition from fintechs necessitate continuous innovation and agility. Ultimately, while Wegagen Bank has established a strong foundation, sustainable growth hinges on a concerted effort to address both customer-centric pain points and internal operational limitations, ensuring a seamless, transparent, and responsive digital lending experience for all users.

5.3. Recommendations

Based on the findings and conclusions of this study, the following strategic recommendations are proposed for Wegagen Bank to enhance its digital lending services:

Enhance Digital Literacy and Awareness Campaigns:

To enhance digital lending adoption and effectiveness, Wegagen Bank should develop comprehensive digital literacy programs, potentially collaborating with NGOs or community centers, to boost confidence and understanding of digital platforms, especially among less tech-savvy and rural populations. Concurrently, the bank must intensify awareness campaigns through diverse channels like local radio, community meetings, and mobile messages to clearly communicate the benefits, features, and precise terms of its digital loan products.

Refine Product Design and Suitability:

To refine its digital lending offerings, Wegagen Bank should re-evaluate current loan limits by conducting granular customer segment analysis and considering flexible tiers to meet more substantial financial needs. The bank should also explore further product diversification, such as longer-term loans or specialized products for micro-enterprises, to better cater to varied customer demands and enhance the perceived value proposition. Additionally, a review of interest rates and fees, informed by customer perceptions, is necessary to ensure competitive pricing and transparent communication of all costs.

Optimize User Experience and Communication:

To enhance the digital lending user experience and communication, Wegagen Bank should simplify the repayment process by offering multi-channel, easily understandable guidance, including in-app tutorials, animated videos, and clear FAQs, to reduce customer confusion. Furthermore, the bank must strengthen its onboarding processes to ensure new users receive comprehensive information and guidance, thereby minimizing initial "lack of info/guidance" issues. Finally, customer support channels need enhancement to ensure consistency, responsiveness, and robust problem-solving capabilities, potentially through dedicated digital support teams or AI-powered chatbots for instant queries.

Strengthen Internal Operational and Technological Infrastructure:

To bolster its internal foundations and strategy for digital lending, Wegagen Bank should prioritize investment in upgrading outdated core banking systems and integrating fragmented data sources to enhance overall system performance, scalability, and seamless data flow. Concurrently, the bank must address existing skill gaps by investing in specialized training programs for staff in critical areas such as data analytics, cybersecurity, digital product management, and digital customer support. Furthermore, it is essential to implement robust cybersecurity measures and continuously update fraud detection systems, alongside transparent communication to customers regarding data privacy practices, to mitigate fears of fraud and strengthen overall security confidence.

5.4. Recommendations for Future Research

Based on the study's findings and limitations, future research should explore several key areas. These include conducting a longitudinal study on digital lending adoption to track changes in customer behavior and usage patterns over time, and a comparative study across other Ethiopian commercial banks to broaden the understanding of the local digital lending ecosystem. Further research is also recommended on the impact of digital lending on specific SME segments, examining its effects on their growth and efficiency. Investigating the role of alternative data in credit scoring in Ethiopia, including its effectiveness and ethical implications, is crucial.

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APPENDIX

ANNEX 1

QUESTIONNAIRE St. Mary's University School of Graduate Studies DEPARTMENT OF MASTERS OF BUSINESS ADMINISTRATION

Questionnaire

Dear Respondents,

I would like to extend my deep gratitude in advance for volunteering to devote your valuable time to fill this questionnaire. The main objective of the study is to assess **practice and challenges of digital lending in Ethiopia, in the case of Wegagen Bank SC..** Thus I kindly request your assistance in responding to the questions listed below. Any information you present will be kept utterly confidential and will be used only for academic purposes. I thank you very much for your willingness to spare 10 minutes of your precious time to complete the questioner. Your cooperation and prompt response will be highly appreciated.

Contact Address: - Hailemichael Merkinah

Tel +251 920715550

General Instruction

- **Writing your name is not necessary**
- **Put “√” for your choice in the box provided**
- **Thank You in advance!**

Section 1: Demographic Information

Please mark the appropriate box.

1. Gender:

○ Male ☐

○ Female ☐

2. Age Group:

- 18-24 years
- 25-34 years
- 35-44 years
- 45-54 years
- 55 years and above

3. **Educational Qualification:**

- Below High School
- High School Graduate
- Diploma
- Bachelor's Degree
- Master's Degree and above

4. **Occupation:**

- Employed (Private Sector)
- Employed (Government Sector)
- Self-Employed/Business Owner
- Student
- Retired
- Other (please specify): _____

○ **Instructions for Sections 2-5:**

- Please indicate your level of agreement with the following statements by circling the appropriate number, where:
- 1 = Strongly Disagree (SD)
- 2 = Disagree (D)
- 3 = Neutral (N)

- 4 = Agree (A)
- 5 = Strongly Agree (SA)
- _____
- Section 2: Digital Lending Products and Services.

No.	Statement	SD	D	N	A	SA
1.	I am aware of Wegagen Bank's digital lending products (e.g., Efoyta Digital Lending).					
2.	Wegagen Bank's digital lending application process is clear and easy to understand.					
3.	The digital lending services offered by Wegagen Bank meet my financial needs.					
4.	I find the terms and conditions of digital loans from Wegagen Bank to be transparent.					
5.	Wegagen Bank's digital lending platform (app) is user-friendly and intuitive.					
6.	I can easily access information about Wegagen Bank's digital lending services through their digital channels.					
7.	The speed of loan application and disbursement through Wegagen Bank's digital channels is satisfactory.					
8.	Wegagen Bank offers a variety of digital lending products suitable for different purposes (e.g., personal, business).					

-
- Section 3: Practice of Digital Lending in Wegagen Bank

No.	Statement	SD	D	N	A	SA
1.	I regularly use Wegagen Bank's digital lending services when I need a loan.					
2.	The process of applying for a digital loan with Wegagen Bank is faster than traditional methods.					
3.	I feel secure providing my personal and financial information on Wegagen Bank's digital lending platform.					
4.	Wegagen Bank's customer support for digital lending issues is responsive and helpful.					
5.	I am satisfied with the interest rates and repayment terms offered on digital loans by Wegagen Bank.					
6.	The eligibility criteria for digital loans at Wegagen Bank are fair and accessible.					
7.	I would recommend Wegagen Bank's digital lending services to others.					
8.	The digital lending process at Wegagen Bank reduces the need for physical branch visits.					

○

○ Section 4: Factors Affecting Digital Lending

No.	Statement	SD	D	N	A	SA
1.	My trust in digital platforms, in general, influences my use of Wegagen Bank's digital lending.					
2.	The availability and reliability of internet connectivity affect my ability to use digital lending services.					
3.	My level of digital literacy (comfort with technology) affects my use of digital lending services.					
4.	Concerns about data privacy and security influence my willingness to use digital lending.					
5.	The processing fees or charges associated with digital loans affect my decision to use them.					
6.	Awareness campaigns and promotions by Wegagen Bank influence my knowledge and use of digital lending.					
7.	The ease of integration with other digital payment systems (e.g., mobile money) influences my use of digital lending.					
8.	The speed at which I receive a decision on my loan application influences my preference for digital lending.					

○ Section 5: Challenges of Digital Lending in Wegagen Bank

No.	Statement	SD	D	N	A	SA
1.	I sometimes face technical issues (e.g., app crashes, slow loading) when using Wegagen Bank's digital lending platform.					
2.	The digital lending loan limits offered by Wegagen Bank are often too low for my needs.					
3.	I find the process of digital loan repayment to be complicated or unclear.					
4.	Lack of sufficient information or guidance from Wegagen Bank about digital lending is a challenge.					
5.	The fear of fraud or scams on digital platforms deters me from using digital lending services more often.					
6.	I experience difficulties with customer support when I encounter problems with digital lending.					
7.	The interest rates on digital loans from Wegagen Bank are higher than what I would prefer.					
8.	I have concerns about the privacy of my data when using digital lending services.					

○

ANNEX 2

Interview Questions for Managers and Staff: Digital Lending at Wegagen Bank S.C.

Dear

Thank you for agreeing to participate in this interview. My research focuses on the "Practice and Challenges of Digital Lending in Ethiopia, in the case of Wegagen Bank S.C." Your insights are invaluable given your direct experience and knowledge of the bank's operations.

Please feel free to elaborate on your answers. All information shared will be kept strictly confidential and used solely for academic research purposes.

1. Could you describe the current digital lending products and services Wegagen Bank offers? In your opinion, how well do these products meet the evolving needs of the Ethiopian market and our customer base?
2. From an operational standpoint, walk me through the typical process of a digital loan application and disbursement at Wegagen Bank. What are the most efficient parts of this process, and where do you commonly observe bottlenecks or inefficiencies?
3. What key internal factors (e.g., technology infrastructure, staff expertise, risk management frameworks) and external factors (e.g., regulatory landscape, competition, customer digital literacy) do you believe most significantly influence the success or limitations of digital lending at Wegagen Bank?
4. In your experience, what are the primary challenges Wegagen Bank faces in scaling up or enhancing its digital lending services? These could be related to technology, human resources, market acceptance, or security.
5. How does Wegagen Bank assess and manage the credit risk associated with digital loans, especially given the potentially limited traditional data points? What tools or strategies are employed?
6. Regarding customer adoption, what have you observed as the main drivers and deterrents for customers using Wegagen Bank's digital lending platforms? How does the bank address these?