

ADDIS ABABA UNIVERSITY

SCHOOL OF COMMERCE

GRADUATE PROGRAM: MSC IN DIGITAL MARKETING & E-COMMERCE

DIGITAL PAYMENT ADOPTION AND ITS EFFECT ON SMALL BUSINESS GROWTH: EVIDENCE FROM ADDIS ABABA'S RETAIL SECTOR

By: Henok Demesew

Advisor: Dr. Getie Andualem (Associate Professor)

This research submitted to the School of Commerce, Addis Ababa University, in Partial Fulfillment of the Requirements for the award of Master of Science in Digital Marketing & E-Commerce.

May 2026,

Addis Ababa, Ethiopia

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Statement of Declaration

I, Henok Demesew Mengesha, declare that this paper, entitled Digital Payment Adoption and Its Impact on Small Business Growth: Evidence from Addis Ababa's Retail Sector is my new work, prepared under the guidance of Dr. Getie Andualem, and has not been submitted for any other degree program.

Henok Demessew

Signature:

Date: 09/7/26

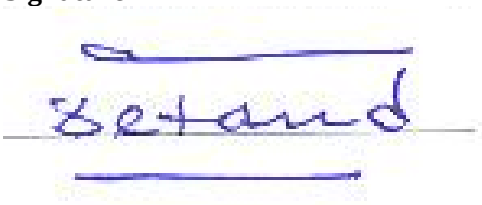
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Statement of Certification

This is to certify that Henok Demesew Mengesha has carried out this research under my supervision. The work is original and sufficient for submission in partial fulfillment of the requirements for the MSc in Digital Marketing & E-Commerce.

Getie Andualem (Associate Professor)

Signature



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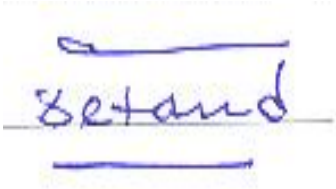
ADDIS ABABA UNIVERSITY SCHOOL OF COMMERCE

GRADUATE PROGRAM

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Acronyms/Abbreviations

- **AAU – Addis Ababa University**
- **SME – Small and Medium Enterprises**
- **NBE – National Bank of Ethiopia**
- **CSA – Central Statistics Agency**
- **ICT – Information and Communication Technology**
- **POS – Point of Sale**
- **QR – Quick Response (Code)**
- **RBV – Resource-Based View**
- **DOI – Diffusion of Innovations Theory**
- **TAM – Technology Acceptance Model**
- **MV – Mediating Variable**
- **DV – Dependent Variable**
- **IV – Independent Variable**
- **SPSS – Statistical Package for the Social Sciences**
- **ETB – Ethiopian Birr**
- **GDP – Gross Domestic Product**
- **FinTech – Financial Technology**
- **ICT4D – Information and Communication Technology for Development**

- **API – Application Programming Interface**
- **OTP – One-Time Password (security feature in digital payments)**
- **KYC – Know Your Customer (compliance requirement)**
- **E-Commerce – Electronic Commerce**
- **Digital Ethiopia 2025 – National Digital Transformation Strategy**
- **Telebirr – Mobile Money Platform by Ethio Telecom**
- **Hello Cash – Mobile Money Service in Ethiopia**
- **NPS – Net Promoter Score (customer satisfaction metric)**
- **CRM – Customer Relationship Management**
- **ERP – Enterprise Resource Planning**
- **ICTA – Information and Communication Technology Authority (Ethiopia)**
- **CB – Customer Base**
- **ROI – Return on Investment**
- **CRM – Customer relationship management**

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Abstract

This study discussed digital payment adoption and impact on SME growth in Addis Ababa. It also evaluate how customer convenience drive mediation and the challenges small retailers. Data collected from 285 retail companies' owners and managers across food, clothing, café and restaurant, electronics, and general merchandise section method and approach used is a mixed-methods cross-sectional design, mixing a quantitative questionnaire with qualitative interviews, and using SPSS to analyze descriptive and explanatory analysis. Adoption Rate: 72% of SMEs use Tele birr, bank-led apps, and QR code time to time, and 63% see gains in total earnings, but lower mean found in integration with accounting and inventory progress. Convenience: 78% of respondents agree digital payments save time, proving customer convenience partially mediates growth. Challenges: infrastructure, network problems, power cuts, unexpected fees, trust, and low digital literacy among users slows down deeper adoption. In conclusion, digital payments help expand customer and sales volume, but banks, technology developer , and the government needs to collaborate to improve infrastructure, integration, and capacity building to fix these the challenges .

Keywords: Digital Payment, SME Growth, Convenience, FinTech, Addis Ababa

Chapter 1: Introduction

1.1 Introduction

It deals with reviewing the past works about digital payment adoption from a broader perspective. The Ethiopian digital transaction is at a young age. Particularly this part contains the problem, lists out the objectives and main questions, and determines the scope and conceptual framework of the study. In addition, it also points out the significance of this work, clarifies key terms used, and provides a roadmap for the remaining chapters that make up the thesis statement.

1.2 Background of the study

When we look at the globe, the economic aspects are going to shift to the digital transformation, with financial technology (fintech) at its forefront. Digital payment systems guide the economic system as main shifters for recent commerce.

They are not only as tools, but also used as a reagents for financial and related activities and, These benefits are not only In the world north in parallel it goes to the world south like developing economies, they adopt this new financial system to evolving from the past to anew financial advancement,

Customization enable them to control scattered economic stakeholders to systematic approach moreover, which enhance to facilitate business growth.

Ethiopia is now going in a remarkable journey works like , launching new platforms Tele birr, E-Birr, and the bank-led digital solutions have significantly change its business theme .

June 2020, the government of Ethiopia has been announced a digital transformation agenda that "Digital Ethiopia 2025" vision, which dreams about infrastructure development, digital literacy and harmonizing digital technology in all sectors especially for digital finance as a switch for inclusive economic growth. The retailer's operators in Addis Ababa, those Small and Medium Enterprises (SMEs) plays a Key role for this vision. These groups are not only providing service or good for the urban dwellers but also facilitate a job opportunity and economic hubs.

Digital payment adoption for them is not a question of luxury , but it's a strategic necessity as a potential means to reduce cash-handling risks, improve customer service and develop internal management, enable them to record the digital finance and able on time decision for credit, and

related bank privileges plus Understanding the precise nature and magnitude of this transformation.

1.3 Statement of the Problem

Ethiopia has actively supported digital adoption through policy frameworks, infrastructure development, and digital literacy efforts. For example, recent data from the National Bank of Ethiopia (2024) shows that mobile money accounts have grown to over 128 million, processing trillions of Birr annually. However, despite this national push, there is still a notable acceptance limitation within the merchandising sector in Addis Ababa.

While the use of digital platforms like Telebirr, E-birr, and bank-led mobile applications is increasing, a large number of retail owners, managers, and their customers still rely heavily on cash for daily transactions. Several challenges drive this refusal to adopt:

- Uncertainty and trust concerns regarding the new systems.
- Inability to connect digital payments with existing business operations (like accounting).
- Unreliable telecommunication networks and electricity consistency.

Digital knowledge limitations among retail owners, employees, and their customers (reports indicate over 60% of the broader population still lacks foundational digital finance skills).

Because most SMEs rely on cash for a long time, their operations remain inefficient and exposed to risks of theft and scams. Furthermore, operating strictly in cash bounds their sales only to walk-in customers and limits the creation of sustainable transaction data. This lack of digital data restricts their chances to secure formal credit, contributing to a massive financing gap for Ethiopian MSMEs, which the Addis Ababa Chamber of Commerce (2024) recently estimated at over 2.6 trillion Birr. This ultimately limits their chances for better decision-making and growth.

Although Ethiopia's Digital 2025 Agenda gives considerable focus to technology-based finance as a driver for multidirectional economic growth, there is a significant empirical gap in the existing literature. Most studies focus on discovering the adoption barriers theoretically, but they lack numeric expression on how digital payment adoption translates into measurable business outcomes for SMEs. Specifically, there is a significant gap in understanding the positive and negative

influences of digital payment integration on sales volume, and how customer convenience actually drives this growth. Therefore, this study aims to provide the empirical data needed to understand how stakeholders are accepting these changes and the concrete outcomes being realized in Addis Ababa's retail sector.

1.4 Research Questions

This study mainly to answer the lower primary question and which is guided by the related questions:

Primary Research Question (PRQ):

What is the influence of digital payment adoption on the progress of retail SMEs in Addis Ababa?

Secondary Research Questions (SRQs):

RQ1: What is the level and degree of digital payment adoption among retail SMEs in Addis Ababa in terms of rate, variety, and system integration?

RQ2: What are the key active, technological, and organizational factors that facilitate or delay the adoption and integration of digital payment systems among retail SMEs in Addis Ababa?

RQ3: How does digital payment adoption influence customer accessibility among merchandizing SMEs in Addis Ababa?

RQ4: What operational and strategic deficiencies do SMEs encounter when integrating digital payment systems into their core business functions?

RQ5: To what level does customer convenience mediate the relationship between digital Payment adoption and SME growth outcomes such as sales growth, success, customer base Growth and business scalability?

1.5 Objectives of the study

1.5.1 General Objective (GO)

To examine the impact of digital payment adoption on the development of retail SMEs in Addis Ababa and to survey the role of customer convenience in this relationship.

1.5.2 Specific Objectives (ROs)

RO1: To evaluate the level and magnitudes of digital payment acceptance among certain retail SMEs in Addis Ababa in terms of frequency, range, and system integration.

RO2: To find the operational, technological, and organizational factors that facilitate or delay the implementation and integration of digital payment systems among retail SMEs.

RO3: To evaluate the effect of digital payment approval on customer convenience among retail SMEs in Addis Ababa.

RO4: To examine the operational and strategic encounters confronted by SMEs in integrating digital payment systems into their core business operations.

RO5: To examine in what extent does this adoption is suitable for customer and their facilitation do really impact the SME growth like (sales, best service delivery, customer base growth) and related business increment

1.6 A. Significance of the study

1. Mainly this finding will help to the Addis Ababa retailers better to understand the benefits and opportunities by accepting this system and join to digital era with its competitive advantage and threats onwards .
2. Those fintech suppliers would take to look this prior to develop software, application and digital platforms like Tele birr, E-birr, Hello Cash, and other will consider user-friendly, safe and cost wise solutions that really benefits SMEs and their customers.
3. Policy makers, concerned ministries specifically for the Ministry of Innovation and Technology, plus for the National bank of Ethiopia will provide justifiable numerical data when they declared rules and regulation on financial directives and better to strengthen digital infrastructure in line with the Digital agenda of 2025.
4. Universities, academicians and other researches will consider this and take as a reference, which will also enhance to raise and answer other research questions .fill the gaps on post-adoption results on digital economies.
5. Last but not a least, other stakeholders like business partners, governmental offices and digital inventors wants to advocate financial inclusion through digital finance and get networks with SME retailers.

B. Operational Definition

On this subunit, we tried to express key terms found in the study,

Digital Payments:

It is a financial transaction, done through digital platforms such as: tele birr, E birr, bank-led applications and QR codes that generated for the swift transfer.

SMEs (Small and Medium Enterprises):

it's an enterprise companies its objectives are to give goods and services to the customers they operates their business are merely in Addis Ababa's retail .mostly categorized poor structure, low initial capital , but, they are a key player of the urban economy, and it characterized by to give an opportunity for job creation and delivered goods and services.

Customer Convenience: this term literally mean how much the adoption system is suitable for the customer through speed, nearby, security, flexibility in payment options and friendliness from customer side.

Business Growth: this term is define numeric development of the SMEs that, includes increased sales magnitude, expansion of customer in number, profitability, and scope of the business operations.

FinTech (Financial Technology): A technology that particularly used for financial services and develop user friendly platforms, includes on Ethiopia context like CBE birr, Mobile money apps ,Tell birr and E birr and bank led applications .

1.7 Organization of the Paper

This study is divide into five parts. Chapter 1 – Introduction that consists of the history, problem of statement, objectives, and significance of the paper. Chapter 2 –discussed about assessment of the literature that presents hypothetical and empirical studies, point out gaps in related to suitability, benefits, reliability, knowledge, physical premises, community impacts, and operational scalability. Chapter 3 – it deals Methodology that describe how it design, sampling of from the population, questionnaire methods, and empirical analysis. Chapter 4 – mainly discussed about data analysis with its findings and provides demographic profiles, the respondent had answered basis on Likert scale distributions, and statistical conclusions. Finally, Chapter 5 – Summary, Conclusions, and Recommendations synthesizes findings, draws conclusions, and offers recommendations for SMEs, Academician, Fintech developers, policymakers and future research.

1.8 Scope of the study

This finding mainly focused on digital payment adoption projects implemented by local SMEs retailers in Addis Ababa. According to widely recognized frameworks such as the Technology Acceptance Model (TAM) and Diffusion of Innovation Theory, the major influencing variables include Convenience, Perceived Usefulness, Trust and Security, Cost Efficiency, Digital Skills, Infrastructure Availability, Social Influence, and Business Growth. To establish a common ground for the study, my focus is on kiosk based seller and enterprises actively implementing digital payment initiatives, such as Trader Association (for financial institutions), Ethiopian Retailers' Union (for small businesses), and fintech-driven platforms like Tele birr and hello cash .

Chapter 2: Literature Review

2.1 Introduction

This chapter seeks to explore prior studies by discovering both theory and evidence related to digital payment adoption on SME growth. It examines key theories on technology adoption, draws on findings from global and Ethiopian research, highlights gaps in existing knowledge, and introduces the conceptual framework guiding this research. In addition, it attempts to puts for better understanding of the electronics payment for the growth of small businesses entities.

2.2 Theoretical Frame work

Technology Acceptance Model (TAM)

Technology Acceptance Model (TAM) express the community is willing to use new technologies. Basically, while we assume such model it emphasize two points should have been considered the first one is supportiveness the business owners to what extent do they believe this adoption will benefit their daily operation and the second one is user friendliness this perception is deal about how the system is easily operational. According to Davis, 1989), this theoretical model guided the purpose when we use digital payments ultimately benefited the adopters and non-adopters.

Diffusion of Innovations (DOI)

Based on (Rogers, 2003) ,DOI Theoretical insights express in large to investigation how digital payment is move fast across the retailers sector based in Addis Ababa. Diffusion innovation is try to divide the business groups based on degree of adoption, such as optimist, fast learners adopters, and pessimist. There are factors which categorized the business group like taking comparative advantages, no need of other system the existing one is advantages for them, let's try and visibility of results. In summary, this perception marks the social and administrative complex that boost or retard the process.

Resource-Based View (RBV)

Barney's Resource-Based View (Barney, 1991) tits not only an insight to look digital adoption from another perspective but it has also used as a planned resource that used for implementation. SMEs, which used the combined system efficiently, get a reasonable advantage, which would not be duplicated by other rivalries. In this way, firms will accommodate unique features and

abilities, that will goes in a sustainable future and enhance resilient character.

Financial Inclusion Theory

The Financial Inclusion Theory (Asli Demirguc-Kunt, 2018) it's another theorthiecal model for technological payments adoption. Just to look on different angel but focus on the ultimate goal. The SMEs, which adopt the system, will improve their financial flexibility; able to gain a credit facility .benefit both private companies and boost the national economic setups.

2.3 Empirical Literature Review

- **Experiential literature** is evidence-based research grounded in observation, measurement, and data analysis.
- It demonstrates **real-world SME outcomes** such as changes in sales, profitability, and customer base.
- Global studies (M-Pesa in Kenya, UPI in India, QR codes in China) show digital payments transforming SME operations.
- Local Ethiopian studies highlight **obstacles** like infrastructure gaps, low digital literacy, and trust issues.
- There is limited empirical evidence linking adoption directly to **SME growth indicators**, making this study essential to bridge theory and practice.

2.3.1 Global Evidence

In Kenya, M-Pesa is a notable financial system that shifts Kenya's commercial journey, and even some researchers like jack William (Jack,Suri 2016) mentioned M-Pesa is a number one mobile money transfer in Africa, it benefits each individual to access swift and safe money transfer. For small and medium enterprises, like the individual beneficiaries, used for fast, reliable, and efficient money management. This indicates how financial integration will broaden its spectrum from a spot throughout the nation and beyond.

India, Unified Payments Interface (UPI) this is an instant and reliable payment transfer exercised by SMEs in India. Scholars like (Gupta, 2021) describe UPI had benefited those merchants to operates their daily business in fast and theft free transaction with better data recording ,it also to connect with a microfinances to access a credit facilitates plus those retail operators easily to address to every customer

Moreover, UPI is the best way to reach wider SMEs businesses and connect to financial institution to utilize any opportunities that would offer by banks, which enable to get a competitive advantage.

When we look china the QR code payment, alter the financial transaction for instance it shortened

time and minimize related costs for customers and SME operators. According to (Zhang, 2020) QR payments minimize customer queuing list, increase daily transaction, and raise trustworthiness. For the merchandise enable to exercise smooth confirmation of payment and customer will appreciate fast services. The user-friendly platform benefited both parties and decease human involvement on each steps of the transaction takes place.

The above experience , tell us a lot in order to install a seamless payment system, the government ,international financial institutes ,private sectors and all concerned parties should participate to build reliable infrastructure, and collaboration ,Particularly policy makers, governmental officials prepare all sided directives, rules, and regulations that will guided all stakeholders, which will create a convenient environment for SMEs development

In the case of Ethiopia, where adoption is ongoing, but the primary step, to see a best out comes as if the above every conditions must fulfilled and put hands together.

2.3.2 Local (Ethiopian Context)

In Ethiopia, the digital payment adoption has in infancy age, according to recent research made by Scholars, Debela and Kememu (2021) mentioned that there are huge gaps that limit the adoptions are a few infrastructure availability and social barriers.

There are so many challenges that anchor the customization, but infrastructure is the one and the most barriers includes: slow internet connections, repeated electricity cut-offs, and low network coverage especially these challenges are very disappointing for SME business owners, and sometimes failed transactions will occurred then it blocks to use digital payment persistently.

Digital literacy is the other difficulty in adopting digital payment, which mean lack of basic operation skill. Many business owners, staff, and customers have inadequate knowledge how to use the digital platforms. Therefore, they stick with cash transfer, since it feels safe and less risky

Faithfulness is another major barrier it deals about a two-side trustworthiness. If there is any fraud, security, and transaction errors, the looser will automatically withdraw from the system and it affects both businesses owners and consumers. Weak data security system, which could not be able to protect the customer this lack of confidence.

Vague Rules and unclear regulation will also challenge, even if the digital plat forms are expanding like tele birr, CBE birr , E-Birr, and others but if there is any uncertainty on customer compliance, tax collection, and imprecise application will led to a drop the users and even no more adding new adopters.

Most recent research has focused on barriers, but there are few studies which quantifying the measurable amount like sales growth, customer increment, time consumption for the transaction and profitability.

The other limitation is customer convenience as a mediating factor. Global studies indicates that customer suitability mean how fast, reliable, and secured system will speed up the adoption where as such customer suitability not as such identified in Ethiopian.

2.4 Identified Research Gap

There are researches that has discussed about the challenges of digital payment adoption and what are the real impact of the customization that affects the growth of SME. (Kememu and Debela 2021) are two scolars, the main center of their study was the poor infrastructure , vague directives and social barriers that affect the speed of adoptin to be slow and unreliabel across the retailrs, wher as they don't investigate what would happen once the adoption is launched.

Based on my assessment the untouchable part is numerical justification that shows the detail look how the adoption look like and figurative explanation of SME performance. Recent studies have considered adoption as a simple operation but,

When we look its multidimensional nature. There are important aspects such as how much it affects Addis Ababa retailors day to day operation, how often exercised, customer trust and digital skill to operate on this systemic adoption and without notifying the sales growth, stakeholder digital knowledge, overall business development or bankruptcy if it happened

On this study we have been addressed another perspective in regarding to customer convenience as a mediating factor which literally convenience mean: hassle- free, fast and easy to use the adoption but as a mediating factor deals the connection of the technology drivers, trust and security with the actual customer decision to adopt the digital payment .

This insight there are a few previous studies in Ethiopia and even those studies did not had an empirical evidences.

2.5 Conceptual Framework

This research shows how much directly or in directly digital payment adoption affect the SMEs development in addition by considering customer sustainability as a connection factor.

Digital payment adoption is the center of framework factored the system beyond yes or no answer there are multiple platform like tele birr, e birr, bank-based app and hello cash that used to adopt the system and how frequently exercise on SMEs daily operation. Reaching to customer would make the service more efficient and practical

Customer convenience is the bridge of the framework, generally speaks about the feeling of the customer while using the digital payment it measures in how fast, reliability and safety. Once the system is speedy and secure enough then definitely customers will come again. This trustworthiness will help to develop the business.

The ultimate goal of a digital payment adoption is to expand the small businesses this growth assured by four parameters: increase the number of customer, profitability, sales increment and business scale up. All this changes will prove digital transformation will enhance a broad economic progress for the SMEs

The frame work follows two ways on one side it shows directly minimize the cost, increase operational excellence and improve financial management on the other side indirectly the transaction will satisfy customers expectation that increase loyalty and security , this marks technology will solve the customer problem and able to ease the burden .

In Conclusion, to determine whether the framework is workable we have to check the digital payment adoption smother the running operation and feel comfort for the customer

2.6 Determinants of Effective Adoption

A fundamental element for digital payment adoption is infrastructure, it is vital for payment reliable internet access; persistent electricity supply and a wide range mobile coverage keep the transaction swift and sustainable

If the opposite happened the customer will disappointed and no more trust, strong infrastructure will build an excellent operation of daily SMEs performance and boost the efficiency and trust at large.

Trust and security are basic for digital payment adoption without them customers and SMEs could not feel confidence. If there, is fraud, unauthorized access, and data loos SMEs and their customers, fears and no more using the system? Strong data protection, encryption, inclusive policy framework enhance progressive digital payment adoption in all sectors

Financial literacy and digital knowledge are essential for digital adoption , all stakeholders particularly business owners and staffs should have to know the system confidently , without coaching it become difficult to use and even underused might be occurred. Therefore, capacity building, awareness creation and short-term training will tackle such barriers.

Social influence is another factor that plays a crucial role in digital payment adoption, that mainly includes Peer recommendation, imposes by rivalries and sometimes customers push new technology in general all shared behavior and business relation influence others to adopt .

SMEs are very concerned about fees and related costs that's why cost efficiency is a main essence for any business operating entities, therefore every costs matter if it is affordable add the number of users in contrast high charges discourage, cost efficient is a decisive factor.

2.7 Best Practices in Digital Payment Adoption

Approaches should have been seen from local and international perspective. Base line study is a firs scheme, which check the readiness of the SMEs it consists of infrastructure availability, technological ability, and digital literacy. It shows the limitation, prepare plan to full fill the required, and smooth the adoption (J., 2007)

Many SMEs have a difficulty to operate digital platfroms mentoring and short term traing is essential to to all bussiness stakeholders, and sometimes customers stick on cash transaction due to incompetence and fear to use the apps, thus its mandatory to improve capacity building (Gebreslassie, 2014) those skill building training enhances not only operational efficiency but also strengthens trust .

Collaboration of stakeholders is an epic for successful digital payment adoption , fintech developers ,government , policy drivers , banks and retailors operators, should have stand together for the development and consistent digital transaction , if such collaboration onboard SMEs will operates smooth business and enable overall economic growth

Assessing the current scenario like adoption result, internal and external barriers, opportunities, measure the impact of adoption post assessment, involve all key actors of the adoption and input their intervention.

Finally, knowledge sharing with in the SMEs network is a pivotal driving power like exposure for others experience, no redundancy, take new technology in group , in case of Ethiopia often SMEs rely each other and learners from others competitors and have a strong communication.

2.8 Challenges in Adaptation

Ethiopia Retailors have faced internal and external challenges in adopting cashless payment consists of: poor infrastructure, inadequate digital skill, loyalty concern, and cultural threats these adhere to cash transfer and take more time rather than expected.

External challenges for adoption is like : repeated power cut off, limited mobile coverage, poor internet network, will slow the payment transaction and loos customer trust , transaction fees and unclear regulatory mechanism confused and feel uncomforted and withdraw, fear and resist to adopt.

Internally, SMEs has a digital skill gaps and trust , business holder and employees may have an operation skill but unable integrate the system with accounting and inventory programs, customer worried about scam, privacy , security and transaction error that retard to stick on the system sometimes clients might face a difficulty in operating mob app ,that reducing the potential benefits.

Cultural approach is another driving force naturally human being is resistant to change for many years the Ethiopian merchandise transaction is relied on cash especially elder people want to see and touch the cash even sometimes resist to pay in digital payment limitation of adoption directly affect to install a digital technology

2.9 Summary

This chapter explain and highlights a basic definition of digital payment and its effect on SMEs' growth and internal and external barriers that affect the adoption time. There are several scientific frameworks considered to be as a theoretical assumption such as the Technology Acceptance Model (TAM), Diffusion of Innovations (DOI) theory, Resource-Based View (RBV), and the Financial Inclusion (FI) theory, all the four perspective provide to see things from different angles and ease in understanding the theories and include the broader mechanisms of financial inclusion. International experiences were shared in the chapter like M-Pesa from Kenya which is the number-one mobile money transfer in Africa, it support a household business transfer, improve cash flow of the small businesses. UPI is an Indian digital payment system that decreases costs, link SMEs to financial entities. In china QR code able to accommodate a huge number of transactions within a short period, minimize a queuing, improve satisfaction and swift checkout .The common features from the cases above are efficiency, reliability and security consistently connect and adopt the system.

The international experience shows that Ethiopian's digital payment adoption is an infancy stage. Recent studies conducted by (Debela , Kememu, 2021) point out inetrnal and external barriers like ,limited infrastructure, poor internet networks , frequent electricity cut off, inadequate digital literacy, trust concern , and regulatory uncertainty. All the challenges are well recorded .but there are a little justification that shows the growth of SEMs ,such as sales volume, business scalability, increment of customer, whereas customer convenience is never investigate which that deals about reliablty, security and privacy .

Local and international experience mentioned five key practices were identified such as prior a baseline studies on SMEs to check readiness and correct the gaps , training and advocacy for capacity building, collaboration of stakeholder, monitoring and evaluation frameworks, and distributing knowledge across SMEs. These practices will benefit to overcome the barriers and reconcile the adoption outcomes.

The literature shows a considerable gap. Barriers to adoption were registered well; there are insufficient justifications to link SMEs' growth. Quantitative data were missing on how much the adoption in depth, frequency ,sales volume , platform diversification .introducing customer convenience as a mediating factor thus this study address such gaps and try to link studied in Ethiopia. There is a lack of quantitative analysis linking adoption in SMEs growth in Addis Ababa retailors and show up adoption in a multidimensional construct.

Chapter 3: Research Methodology

3.1 Introduction

This chapter defines the real-world framework in what way does digital payment adoption affects the operation of small businesses, and how customer convenience connects them. For any intended studies, a strong, procedural methodology is crucial; this will help us to answer our research question systematically and rigorously check the hypothesis. In order to confirm the findings are reliable, follow consistency, the design should balance the academic rigor and provide a base for retailers who operate businesses in Addis Ababa.

The study follows a pragmatic research philosophy; instead of focusing on the positivist or human-centered paradigms, it adhere on practical research problem. The sequential methods will prove philosophy and done in two phases consecutively. Step 1 is the quantitative analysis of the numerical connection, and

Step two. Qualitative highlighted the detailed insight of the stakeholders, narrations in context-wise. This strategic approach assure the final finding will be tangible in both empirical and contextual meanings

Using two approaches are what we follow on a study the first is looking small shops in Addis how using adoption and the second impact assessment between the digital options, customer convenience and business expansion. To make our finding is realistic we have to collect data from a various retailors group based in Addis plus follow standard scientific formulas to take accurate sample size. Research accuracy would balance the practical world.

Gathering data directly from the source through online questionnaire and interviews, and review secondary resources like policy papers, technological reports, academic books, journals and previous researches. It’s possible to collect both a numeric and real life sharing, we undergoing a pilot test to verify the questioners is clear and eliminate any kinks before sending it .

The statistical and thematic analysis have to be mixed, in order to know the quantitative trends using correlation, regression and mediation id mandatory whereas the qualitative themes is giving a back ground for responding why question

In conclusion, the study try to cover the limitation, contains a gaps of the cross sectional design methods that used for the qualitative approach and the dependency of self-descriptive data. Such

methodology is still a best choose for justification. The frame works that explore digital payment adoption drive the retailors in Addis Ababa and the customer connivance that bridge the two.

3.2 Research Philosophy and Approach

This research based in pragmatism, mean focus on solving the real problem, rather than taking a single academic philosophy like positivism. multidirectional business process such as digital payment adoption has a fast change therefore looking such in a single side will not be effective, instead checking qualitative and quantitative approaches will enhance to figure out a clear picture of both numerical and contextual result

As per the direction of this approach, mixed method design, first implement the quantitative way distribute an online questionnaire for the SMEs owners, Mangers (employee), and customers to examine the hypothesis and to look the previous experience. Doing correlation, regression and mediation analysis, get know how the adoption patterns look like, in addition how the link between convenience and growth.

Semi structured interviews is a next step to incorporate the practical knowledge directly connecting with the SMEs owners address remaining points that are not covered by the survey like why customers are stick with cash , how people perceive customer convenience , daily operational challenges that faced.
It gives as a reason behind our stat data and the real world and link the raw number with reality

3.3 Research Design

The design follows a cross-sectional , descriptive analysis in order to know how digital payment adoption relate with the growth of SMEs in Addis Ababa .current experience, insights and relation will be considered by collecting a single time data not only that it also directly shows the trend of adoption and influence for the small business growth

The descriptive element shows the current situation of the emerging initiatives, would like to answer the following main inquiries: how much percent from the total SMEs use digital payment adoption, how often, and which platform is dominating? The systematic pattern guided to ground: benefit of the result, level of adoption and customer insight. Currently digital adoption is emerging

in Ethiopia, stat evidence might be varied from the actual usage therefore descriptive elements will be the base for the design.

This study explains more than what is happening now, focusing on the cause and effect of the situation .it investigate how digital payment affected on the development of small retailors in Addis and the role of customer convenience on the process.

To get a clear image of the adoption use a various ways like usage frequency, how many app do they use, percentage of sales use digital transaction,

growth also measured by number of sale, profit, number of customer and business expansion, whereas customer convenience shows reliability, speed and security acts as a mediating factor which check if adoption is really impacted by user experience, this study focused on from easy documentation to practical using empirical data to connect growth and adoption look like.

Practical and methodological reasoning approaches prove the cross-sectional design. Despite constraints of time and resources, it collects data from a large pool of small businesses retailers based in Addis. It gives a one-time test for methodological analysis: correlation, regression, and mediation analysis, this design might change over time it only shows current adoption and growth by answering the gap.

Finally, a cross-section design that hold descriptive and explanatory approaches answer both the scale of the adoption and depth of the relation. Cross-sectional design fits statistical data with practical local context, in addition the study findings offer a solution for the Addis Ababa retailors backed by solid data.

3.4 Population, Sampling, and Sample Size

This research selects a sample group represent the population. Sometimes selecting the entire population is practical, sampling means taking a small subgroup from the population, and it yields genuine insights. The target group of this study is the owners and staff, including the customers of SMEs operating their business in Addis. Those retailers are playing a pivotal role in the city's economic share, significantly affected by the digital payment adoption.
These enterprises include grocery shops, apparel stores, electronics sellers, cafés, and food corners. This diversity makes an ideal input to analyze how digital payment facilitates their business growth

Before taking samples, we have to ensure the sampling representation; therefore use a three-key source: Addis Ababa Chamber of Commerce and Sectoral Associations (AACCSA), the City Administration Trade Bureau, and local SME associations. AACCSA has around 19,000 registered member companies, the remaining two have collectively around 5,000 enterprise who take registration and run business in Addis. Merging these collective lists assure us a reliable database for the study, that ensure business from a wide range to sub retailors sectors

The research follows a two-step sampling technique, at the beginning the retailors divided into five subgroups: Food & Groceries, Apparel & Fashion, Electronics & Appliances, Hospitality (cafés and restaurants), and General Merchandise. This representation if fairly indicates the SME retailers based in Addis, a second simple random sampling done on with in each stratum using a random number to select a specific business. Every retailors have an equal chance with in a subgroup selected this approach minimized biases and reconcile the generalizability

The sample size calculated by using Cochran’s formula for finite populations. Which is based a 95% confidence level ($Z = 1.96$), a 5% margin of error ($e = 0.05$), and tolerable variability ($p = 0.5$), the initial that is intended to address was 384 SMEs ,there are roughly 5,000 registered retail SMEs in Addis Ababa modifying to the target population goes down to 357. To make it practical and resisting the logistical constraints and to divided the sub group equally in to five sub sector, 70 SMEs per stratum. The study establish a final target to 350. This size keeps strong statistical drive to detect meaningful relationship.

In addition to a quantitative assessment, a qualitative sub-sample of 15 to 20 SMEs selected based on their usage of digital payment adoption (high, medium, low) and mix diversity. This purposive approach addresses the gaps, deep looking at the barriers of adoption, customer perception, and features of sales and customer growth, the statistical findings grounded in the real retailers' experience.

Sampling Technique

A sampling method processed in two steps

The first one is dividing on Random Sampling: The retail stratified into five sub-groups:

- Food & Groceries
- Apparel & Fashion
- Electronics & Appliances
- Cafes and restaurants
- General Merchandise/Others

Simple Random Sampling:

In every stratum, SMEs retailors chosen on random numbers ensured each retailors has an equal chance to be select.

This approach ensures a varied retail categories has been included that represent the diversification of Addis Ababa's SMEs.

Sample Size Determination

Sample size formulated using Cochran's formula for an infinite population: we follow the standard conservation assumption: 95% confidence level (Z = 1.96), a 5% margin of error (e = 0.05), and a population proportion of $p = 0.5$ to for maximum inconsistency.

$$n_0 = \frac{\left(Z^2 * p * (1 - p)\right)}{e^2}$$

Where:

Z = Z-score for confidence level

p = estimated proportion of the population

e = margin of error

$$n_0 = \{1.96^2 \backslash 0.5\ 0.5\}\{0.05^2\}$$
$$= \{3.8416\ 0.25\}\{0.0025\}$$
$$= \{0.9604\}\{0.0025\} = 384.16$$

Therefore, the correct initial sample size is ≈ **385 respondents**.

The yields an in initial based number to be n ≈ 385. Adjusting this figure for a finite population roughly ~5,000 SMEs, strictly reduce the number of sample size approximately to 350 SMEs. because of a limited resources, we tried to down the number to 300 SMEs target , which divided the classification to 60 per divided group .

Qualitative Sample

In order to the do the data collection for quantitative, we choose 15 to 20 SME owners and managers for in-depth interviews. To includes all the classification fairly the selection was based on two criteria's :

The First one is based on rate of adoption that are: high, medium, and low it mix the pulling factors which uses the digital payments system on their payment transaction.

The second is rely on the type business of that the shops that ensure the representation across the five group of retail sub-sectors ,qualitative survey adds necessary detail and magnitude of to the research

3.5 Data collection and Sources

based on primary and secondary data we will gather source for this study ,based on the information we try to find the answer for how adoption level affect the growth of small retailors in Addis Ababa. By comparing and contrast the current Organizing the data with the existing research will ensure this study would be uniqe from other both in depth and contextual insights.

Primary Data

Primary Data collect from the business operators that are the owners and employees with in two steps:on line survey and semi structured interview. The online questionnaire put five Likert scale

to answer the question, the main variables like: customer growth, sales expansion and payment adoption.

Qualitative survey has conducted with the owners and the Managers by a semi-structured interview in order to know the real practical experience, challenges faced during operation such obstacles are: integration difficulties, culture of the people, digital payment resistance.

By summarizing and putting together, those primary sources give as the detail and broad overview. The online questionnaire from a paramount sample highlighted measurable, describable and justifiable amount, while the interviews provides the necessary practical experience share the story.

Secondary Data

The secondary data get from a person who are not directly participated on the research like other researches paper, academic books and journals which published that support the result of primary data. Numerical information, systems directives, rules and regulations, and overall transaction volumes, we refers the National Bank of Ethiopia. To verify the adoption rate on fintech publications and mobile platforms. In addition, the academic books and journals used for a theoretical base, across the governmental documents and strategies broadly understand the digital economy and financial inclusion.

The secondary sources used as a position and controlling board for the statistical results using both local and global references. Mix up the quantitative survey and qualitative interview data and organizing the research literature then verify the validity of our conclusions.

3.6 Data Collection Instruments and Procedures

The primary data was collected from online questionnaires and a discussions lead by semi-structured interviews are used to meet the objective of the research. The questionnaire was structured in a five-alternative chooses by using a 5-point Likert scale to measure demographics, payment adoption, customer convenience, and business growth , in addition, it also includes interview questions to know the challenges of SMEs absorb.

This online questionnaire prepared in Google Forms and distributed via email to the selected SME networks, which address the diversified sector and type of SMES business across in Addis Ababa. City.

The semi-structured interviews conducted through face to face discussion with informed consent those samples are purposively selected sub groups that are : high, medium, and low adopters, this data providing qualitative depth face, these data collection explore customer behavior, challenges of system integration , and real actors of the business growth. Mixing up these two will make, our conclusions statistically strong enough and contextually meaningful.

Data collection procedure

The steps to collect the data. First, quantitative collection done by the Google Form questionnaire distributed to SMEs via email with in the association networks. Responses were automatically save on researcher's google account which minimize resource challenges and always to be accessible.

Then the qualitative phase, scheduled interviews with a purposive selected respondents representing high, medium, and low levels of adoption.

3.7 Pilot Study

Before conducting the full range survey and interviews, a sample study takes place with in randomly selected, 30 SME owners and managers in Addis Ababa. This selection does not include the main study respondents but it conducted with in a similar selected retailors sub sectors to avoid redundancy. This testing served as to verify the reliability, precision, and diversification of data collection instruments before engaging the full range.

The Primary aim is to check whether the question on the questionnaire, wordings, the words does it easily understandable? Do the questionnaire consists repeated insight? Is there any other variable which need to include those would check the Reliability Tests?

Reliability would tested via Cronbach's Alpha, where a value of alpha > 0.70. that confirm internal uniformity, if its falling below this threshold the questionnaire will be revised Similarly, the interview guide with small number of participants to ensure meaningful responses.

3.8 Validity, Reliability, and Ethical Considerations

For any research without checking and confirming those three requirements that are validity, reliability, and ethical standards the research will not accepted as an academic research therefore special attention should have give

Validity

There are two methods in order to verify the validity first it would be proved by senior reviewers like: academic supervisors, experts and finance professionals to filter out any wording. Second, construct validity was supported by adopting established scales from prior literatures, adapting measures for digital payment adoption, convenience, and growth from validated instruments.

Reliability,

It means literally, inner uniformity analysis was tested on Likert-scale items. The limit of the threshold is > 0.70 as minimum acceptable level to confirm items consistently measured the same concept, and any constructs falling below revised during the pilot phase.

Ethical considerations

It is, well written consensus was gained from all contributors, making them aware that participation was entirely unpaid and they have right to withdraw at any stage. Anonymous and confidentiality, maintained, name free response and avoiding personal or business identifiers in dataset. Finally, ethical clearance formally guided by Addis Ababa University, Research Ethics guidelines to guarantee compliance with institutional standards.

Chapter 4: Data Analysis and Discussion of Findings

4.1 Introduction

Among the data collection responses, out of the targeted 300 SME's, 285 completed the questionnaire, which is 95%. The respondents came from various sector: Food & Groceries, Apparel & Fashion, Electronics & Appliances, café and restaurant and finally General Merchandise all the five-sub sector taken 20 percent each. This high response rate was achieved because all the sending and receiving process is done by digital platforms (email), and it enables flexible data access for the researcher. The findings are organized under major themes, including respondents profile, digital payment adoption, customer convenience, small business growth, regression and mediation analysis, and qualitative insights too

4.2 Respondents' Profile and Rate of Response

Out of the targeted 300 SME's, 285 completed the online form of the questionnaire, yielding a 95% response rate. Respondents represented diverse retail sub-sectors: Food & Groceries, Apparel & Fashion, Electronics & Appliances, café and restaurant, and General Merchandise and others; all the listed sub sectors has taken 20 percent each.

Table 1: Respondent Profile and Rate of Response

Sector	Targeted SMEs	Completed	Response Rate
Food & Groceries	60	57	95%
Apparel & Fashion	60	56	93%
Electronics & Appliances	60	59	98%
Café and restaurant	60	57	95%
General Merchandise and other	60	56	93%
Total	**300**	**285**	**95%**

Source: Own Survey 2026

The respondents for this study were all owners, employees, and managers of retail SME's based in Addis Ababa, selected from five major sub-sectors, such as; Food & Groceries, Apparel & Fashion, Electronics & Appliances, cafes and restaurants, and General Merchandise. The internet

is sometimes very slow in the city during daytime.

The Google form link is distributed by business emails to 300 SMEs whose addresses were found from the Addis Ababa Chamber of Commerce and the City Administration Trade Bureau, ensuring that the sample accurately represents the city's retail sampling.

From the targeted 300 SMEs, 285 completed and returned the questionnaires, which it yielded a 95 % response. The response shows interest of retail businesses in digital payment systems is growing and the relevance of digitalization for their daily operation has increased. The distribution across the five sub-sectors was logical, with approximately 20 percent from each category, ensuring proportional representation of retail diversity.

The main respondents were business owners which is 58 percent, then managers it stands 42 percent, fortunately the selected businesses companies had operating the business for more than five years, it mean they clearly understand the market and customer trends. The fair distribution across sectors and service year strengthens reliability of findings and provides overall views.

4.3 Digital Payment Adoption

Previous researches stated on literatures, Digital payment adoption were mainly evaluate on four perspective: usage frequency, platform diversity, sales share, and dependency rate.

The above show us a comprehensive view of how businesses are interlocking with digital finance. The findings depict that adoption is not uniform but varies in depth and breadth. Many SMEs reported that frequent use of digital platforms and a growing share of sales conducted electronically, very few has integrated to internal advanced business processes, like accounting, tax, inventory management, sales and customer tracking .

Adoption here in Addis Ababa SMEs realtors is in steady progress but need support in gaps , when we look at the four aspect, indicate deep insight how digital payment reshape SME operate in Addis. Sometime mix result is occurred, some shop use Tele birr everyday but other still prefer cash mostly and integration to internal system is practical in very few retailors. Thus, Digital payment brings change, but need much progress and its in half way between old and new system, no clear boundary

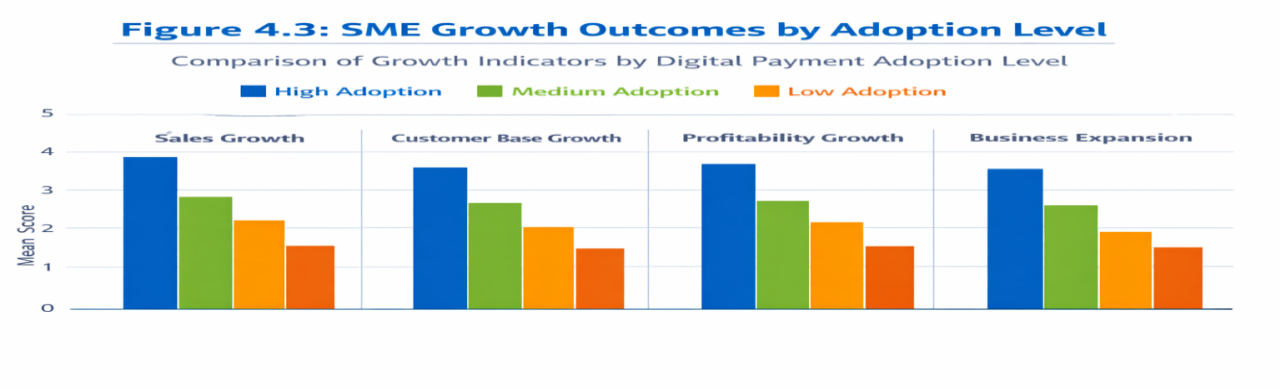


Table 2: Adoption Dimensions (Mean Scores)

Dimension	Mean	Std. Dev.	% Agree/Strongly Agree
Usage Frequency	3.6	1	58%
Platform diversity	3.7	0.9	61%
Sales Share	3.8	0.8	63%
Rate of dependency	3.5	1.1	55%

Source: Own Survey 2026

The result presented in Table 2 and Figure 4.3, sales share has high mean, which is 3.8 mean value, and 63% respondent say agree or strongly agree that their revenue is collected by digital payment. This indicates digital platform is an acceptable way for collecting money in the electronic and fashion retail sector.

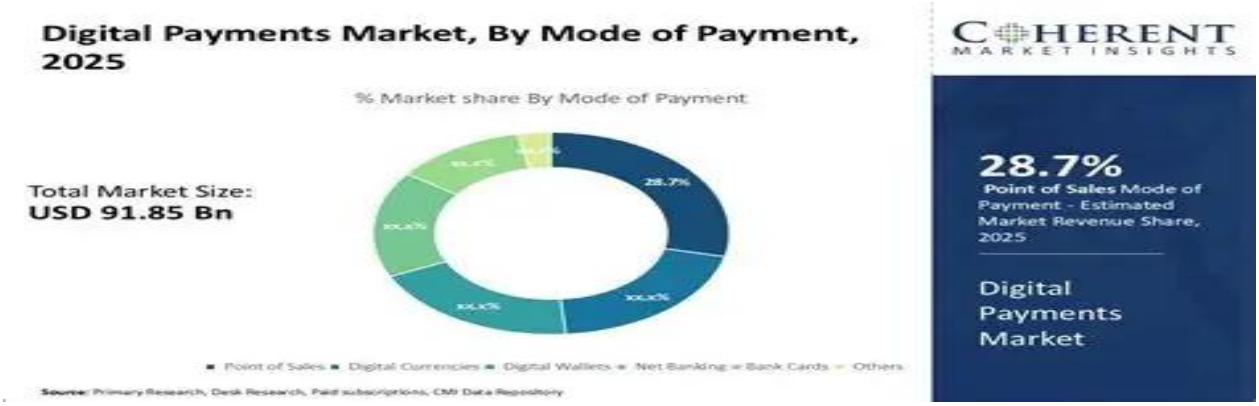
In other aspect, a platform diversity has 3.7 mean value. it indicates many retailors use diversified platforms like Tele birr, bank led app, QR code and ATM card. Diversify reflect customer has used different tools that reduce once dependency and give a chance for flexible alternate .But sometime it confused , like shop mixed up cash and digital.

The third aspect Usage frequency has mean value of = 3.6 it shows more than half SME use digital payment daily, but it also incorporate many occasional user. Literally the adoption is kind of transition.

Finally, the integration or rate of dependency mean the adoption link with internal system attain a lower mean value = 3.5, only 55% respondent confirm yes, digital payment is full integrate in accounting, inventory, customer, and sale track.

It suggest adoption grow, but SMEs still face challenge to connect digital pay into big process. Sometimes confuse, as if they use Tele birr for sell but forget to record in inventory, so the system connected in half part.

Figure 4.3.1: Digital Payment Adoption Dimensions



Source: Coherent Market Insights, Digital Payments Market, By Mode of Payment, 2025.

The above figure demonstrates the comparative strength of each adoption dimensions. Sales share and platform diversity stand out as the most advanced, while how deeply systems are linked, is relatively lower mean value it mean where SMEs require further support and capacity building.

In summary, Table 2 and Fig 2 show Addis Ababa SME retail maintains digital pay steady, with progress in revenue share and many platform. However, connect depth low, it underscore need train imitative so SME can integrate digital pay into operate system, which make sustain long-term and efficient. Some shops use cash and digital, not clear how it work, In addition, some respondents say they use QR but forget record in account, so the data looks strange and not match.

4.4 Customer Convenience

Customer convenience will be evaluate as mediating variable in relation of digital payment adoption and SME grow. It capture how customer see easy, fast, reliability and safe of transaction compare cash traditional. This concept is very critical. Even if SME adopt a digital pay system, the sustain use depend if customer find it good and trust. However, some shop say digital is fast but the network is interrupted, therefore half trust on it. In addition, customer convenience as a mediating factor is not always standing in it, between adoption and growth.

Table 4.3: Customer Convenience

Indicator	Mean	Std. Dev.	% Agree/Strongly Agree
Transaction Speed	3.8	0.9	62%
Reliability	3.6	1	55%
Safety	3.7	0.8	57%

Source:OwnSurvey,2026

Based on the statistical analysis, the factor that biases customer convenience is the first transaction speed, which has the highest mean value, 3.8. And 62 percent of respondents agree that digital payments save customers time when compared with cash. This reflects the growing importance of efficiency in retail transactions.

Safety is another factor with a good mean of 3.7. And 57 percent agreed or strongly agreed, and respondents remarked that customers value reducing the risk of theft and scam transactions.

But when we compare with other reliability, we attain a lower mean = 3.6 and 55 percent agreement. Infrastructure barriers include system interruptions, poor network, and power cutoffs, which result in transaction failures; therefore, infrastructure challenges affect both SME owners and customers. Some shops say digital is fast, but others say it's slow, so trust is confused.

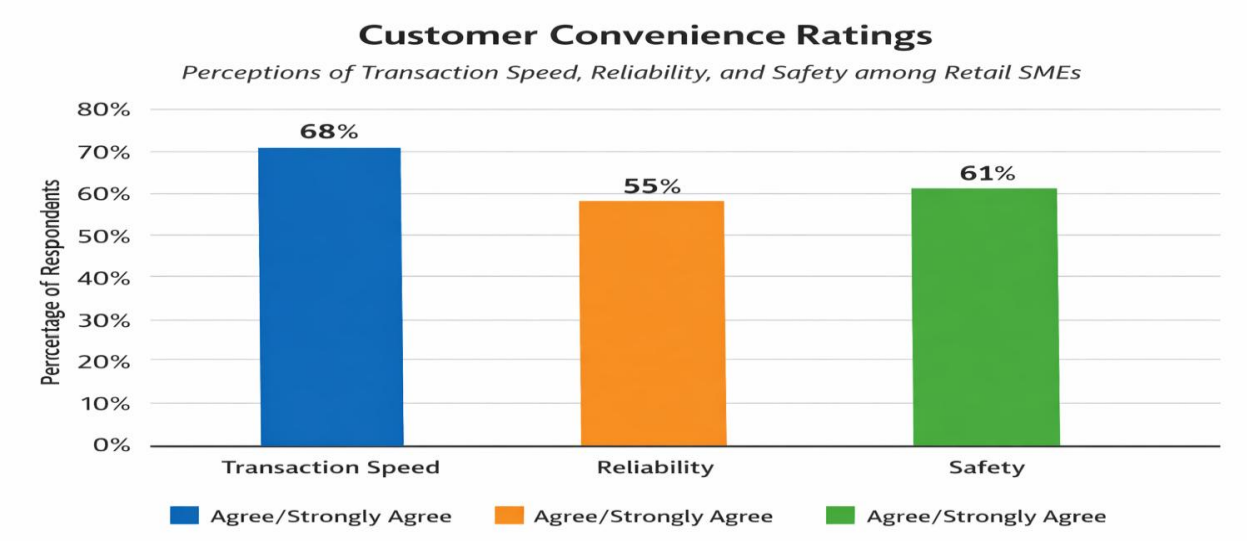


Figure 4.4: Customer Convenience Ratings

The above figure 4.4 indicates that many shops accept digital payment is fast and safe, but weak in reliability. For getting strong customer and SMEs owners loyalty and usage persistency, need infrastructure growth.

In summary, the statistical result ensure that customer convenience shapes the digital payment adoption. SME shops that deliver fast, safe and reliable transaction its more likely that the satisfaction of the users would be increased , trust will be developed and customers will buy repeatedly. This support Hypothesis 2,that highlighted customer convenience mediate relationship between adoption and SMEs growth.

4.5 Hypothesis check and Analysis

The questionnaire collected from 285 SME retail shops has been used to verify the following statistical frame works: hypothesis, correlation, regression, and mediation analyses of the study

The above listed Analysis provide an empirical proof for the relationship among digital payment adoption, customer convenience, and business growth. Before that, we have to consider the standard correlation, regression, and mediation.

Reliability was checked through Cronbach's Alpha, which measures of internal consistency for survey data; an acceptable standard is alpha >0.70. While exploratory factor analysis is also used to validate the dimensionality of the adoption, growth, and convenience, before applying Hayes' PROCESS macro to mediation testing; we have to check that the instruments were valid and reliable.

Correlation Analysis

It is a statistical analysis, according to Pearson's correlation

Standards $r \geq 0.3$=moderate ≥ 0.50 = strong.

In our study, $r = 0.62$, $p < 0.01$ it means a strong positive relationship between digital payment adoption and SME growth This means that higher levels of adoption were persistently linked with better growth result.

Regression Analysis

Its indicates how much the dependent variable changes when the predictors increase

Standard assumption significant Beta value, $p< 0.05$ indicates predicators has to satisfied Multiple regression analysis

In our case beta = 0.45, direct effect and Beta=0.31 direct with mediation adoption, beta=0.14 indirect effect , strongly predict growth both directly and through customer convenience. Before checking the results, regression assumptions were tested and passed:

Mediation Analysis

It tests the effect of one variable on another it describe fully or partially impact the third variables in our study the convenience partially mediated the relationship between adoption and SME growth. The direct effect of adoption on growth was still significant

Beta=0.31,$p < 0.01$, and the indirect effect through convenience was also significant.

This proves that adoption drives growth both directly on its own and indirectly by making things more convenient for customers

Research Questions and Hypotheses

This study has five research questions (RQ1–RQ5), and only two hypotheses (H_1 and H_2) were

RQ1–RQ3 (adoption and growth impact) were addressed descriptively through quantitative summaries and qualitative insights.

RQ4 (integration challenges) was explored qualitatively through interviews.

RQ5 was tested inferentially, corresponding to hypothesis (H_2), which examined the mediating role of customer convenience.

Thus, the descriptive research questions provided a contextual understanding, while the hypotheses offered statistical evidence of the important relationships.

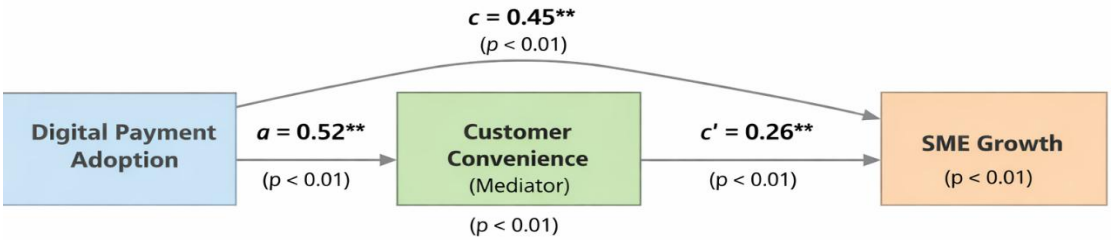
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Table 4.5: Regression and Mediation Results

Path Tested	Coefficient	Significance (p-value)
Adoption → SME Growth (Direct Effect, c)	0.45	< 0.01
Adoption → Customer Convenience (a)	0.52	< 0.01
Customer Convenience → SME Growth (b)	0.35	< 0.01
Adoption → SME Growth (Direct Effect, c')	0.26	< 0.01
Indirect Effect (a × b)	0.18	Significant (95% CI)

Source: Own Survey, 2026

Figure 4.4: Mediation Path Diagram



The diagram show the tested mediation model, digital payment adoption is predictor for customer convenience (a = 0.52, p < 0.01), and customer convenience is predictor for SME growth (b = 0.35, p < 0.01). Adoption also have direct effect for growth (c' = 0.26, p < 0.01). The total effect (c = 0.45, p < 0.01) confirm partial mediation, the mean customer convenience make strong impact adoption on SME growth but not full account. Some respondent data confuse, like adoption high but convenience low, so the explain not clear. The model, the variable, the relation, the number, all together show mix result.

Interpretation

The finding validate Hypothesis H1 and Hypothesis H2. Adoption direct contribute for SME growth, and customer convenience make relation strong by improve satisfaction and loyalty of customer. The mediation effect partial, mean adoption alone drive growth but more effective when customer see digital payment convenience and trust. The importance is technology setup and customer experience for sustain SME growth. Nevertheless, sometime confuse, data show adoption high but convenience low, so the explain not full logic. The hypothesis, the adoption, the customer, the growth, all together mix in the model, and tense of result not same.

4.5.1 Correlation Analysis

To determine the strength and direction of the linear relationship between the variables, a Pearson Product-Moment Correlation analysis was conducted. The variables analyzed include Digital

Payment Adoption (Independent Variable), Customer Convenience (Mediating Variable), and SME Growth (Dependent Variable). The correlation coefficients (r) are interpreted based on standard academic thresholds where $r \geq 0.30$ represents a moderate correlation and $r \geq 0.50$ represents a strong correlation.

Table 4.5.1 presents the detailed correlation matrix among the study variables.

Table 4.5.1: Pearson Correlation Matrix (N = 285)

Variables	Digital Payment Adoption	Customer Convenience	SME Growth
Digital Payment Adoption	1		
Customer Convenience	0.52	1	
SME Growth	0.62	0.48	1

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

As displayed in Table 4.4, there is a strong, statistically significant positive correlation between Digital Payment Adoption and SME Growth ($r = 0.620$, $p < 0.01$). This suggests that as small and medium enterprises in Addis Ababa increasingly adopt and diversify their digital payment channels, their corresponding business growth indicators (sales, customer acquisition, and transaction efficiency) also increase significantly.

Additionally, Customer Convenience exhibits a strong positive correlation with Digital Payment Adoption ($r = 0.520$, $p < 0.01$) and a moderate-to-strong positive correlation with SME Growth ($r = 0.480$, $p < 0.01$), satisfying the baseline correlation conditions required to test for mediation.

4.5.2 Regression Analysis

To examine the predictive power of the independent variable and test the study's hypotheses, ordinary least squares (OLS) regression was performed. First, a simple linear regression was conducted to evaluate the total direct effect of Digital Payment Adoption on SME Growth (Hypothesis 1). Second, a multiple regression analysis was executed incorporating Customer Convenience as a mediator (Hypothesis 2) using SPSS and Hayes' PROCESS Macro (Model 4).

Model 1: Total Effect of Digital Payment Adoption on SME Growth (Without Mediator)

The first model tests the overall direct impact of adoption on business development, assessing the model fit and variance explained.

Table 4.5a: Model Summary (Total Effect)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.62	0.384	0.382	0.412

a. Predictors: (Constant), Digital Payment Adoption

Table 4.5b: ANOVA Summary (Total Effect)

Model	*Sum of Squares*	*df*	*Mean Square*	*F*	*Significance (p)*
Regression	*29.981*	*1*	*29.981*	*176.434*	*< 0.001*
Residual	*48.092*	*283*	*0.17*		
Total	*78.073*	*284*			

b. Predictors: (Constant), Digital Payment Adoption; Dependent Variable: SME Growth

The Model Summary (Table 4.5a) indicates that the coefficient of determination (R^2) is 0.384. This demonstrates that Digital Payment Adoption accounts for 38.4% of the total variance observed in SME Growth within Addis Ababa's retail sector. The ANOVA table (Table 4.5b) confirms that the overall regression model is highly significant,

F (1, 283) = 176.43, p < 0.001, indicating that the model is a reliable predictor of growth.

Table 4.5c: Regression Coefficients (Total Effect Model)

Predictor	Unstandardized B	Std. Error	Standardized Beta	t-value	Significance (p)
(Constant)	1.58	0.125	—	12.64	< 0.001
Digital Payment Adoption	0.45	0.034	0.62	13.283	< 0.001

Dependent Variable: SME Growth

As shown in Table 4.5c, the unstandardized coefficient for Digital Payment Adoption is B = 0.450, indicating that for every one-unit increase in Digital Payment Adoption, SME Growth is expected to increase by 0.450 units, holding all other variables constant. The relationship is highly

significant (t = 13.283$, p < 0.001), providing strong empirical support to reject the null hypothesis and validate Hypothesis 1 (H_1).

Model 2: Mediation and Path Coefficients (With Customer Convenience)

To analyze the mediating role of Customer Convenience, regression path coefficients were extracted using the PROCESS Macro. This model splits the total effect (c = 0.45) into a direct path (c' = 0.26) and an indirect path (a x b = 0.18).

Table 4.5d: Regression Coefficients for Mediation Paths

Path Tested	Variable	Unstandardized Coefficient	Standard Error (SE)	t-value	Significance (p)
Path a	Adoption - Convenience	0.52	0.041	12.683	< 0.001
Path b	Convenience - Growth	0.35	0.038	9.211	< 0.001
Path c'	Adoption -Growth (Direct)	0.26	0.035	7.428	< 0.001
Path c	Adoption - Growth (Total)	0.45	0.034	13.283	< 0.001

Note: Number of Bootstrap Samples = 5000; Dependent Variable: SME Growth; Mediator: Customer Convenience.

The regression pathways in Table 4.5d establish the statistical validation for Hypothesis 2 (H_2):

Path a shows that Digital Payment Adoption significantly predicts Customer Convenience (B = 0.520, p < 0.001).

Path b shows that Customer Convenience is a significant predictor of SME Growth (B = 0.350, p < 0.001).

Direct Effect (Path c') reveals that when controlling for Customer Convenience, the direct impact of Adoption on SME Growth remains significant but drops from 0.450 to 0.260 ($p < 0.001).

Indirect Effect (a x b) is computed at 0.182 (0.520 * 0.350). The bootstrap confidence intervals (95% Bias-Corrected CI [0.115, 0.254]) do not cross zero, indicating that the indirect mediation effect is statistically significant.

Because both the direct effect (c' = 0.260) and the indirect effect (0.182) are statistically significant, Customer Convenience partially mediates the relationship between Digital Payment Adoption and SME Growth, formally supporting Hypothesis 2 (H_2).

4.6 Qualitative Insights on Challenges

The qualitative semi structured interviews with the owners and managers it shows varies obstacle that retard the peace of the adoption and scale up the digital payment system . Such perspectives gives theoretical to empirical results and emphasize the real world practices by the retailer's works in Addis Ababa

Infrastructure problems is among the most frequency mention issue topics. Respondents managers emphasize unstable internet connection lines and unreliable electricity light power supply grids, which disrupt transaction business and discourage SMEs shop owners and customers people from rely fully on digital system platforms.

Trust doubt: is a driving power as critical barrier obstacle. Many SME owners express concern fear about fraud crime, cybersecurity danger, and customer person reluctance to abandon on cash . This lack of confidence trust slow adoption usage, even when businesses shops recognize the potential benefit advantages.

Digital literacy skill limitation: Both owner's managers and customers people often lack the skills ability need to operate digital payment telephone platforms effectively. Respondent's people emphasize that training education and awareness campaign information are essential requirement to build confidence trust.

Integration challenge trouble: SMEs businesses that adopt digital payments cash but struggle to link them seamlessly with accounting book, inventory stock, or sales tracking system machine.

Infrastructure gaps: are the most frequently mentioned issues. Respondents could not rely on the adoption system because there are poor internet connection and repeated power cut , that failed the transaction.

Gaps on Digital literacy : as per the response both in qualitative and quantitative data, some times SME owners and customers lack digital skills to operate digital payment effectively.

Therefore, skill training and awareness campaign are essential.

Integration challenge: retailers that adopt digital payments but struggle to link them smoothly with accounting, inventory, or sales tracking system.

Table 4.6: Qualitative Challenges Identified by SMEs

Challenge Category	Description	Frequency (Mentioned by Respondents)
Infrastructure Gaps	Unstable internet, limited electricity, transaction interruptions	High (70%)
Trust Deficits	Fear of fraud, reluctance to abandon cash, lack of confidence in platforms	Moderate (55%)
Digital Literacy Limitations	Lack of skills among SME owners and customers to use digital systems	Moderate (50%)
Integration Challenges	Difficulty linking payments with accounting and inventory systems	Moderate (45%)

Source: Own Interviews, 2026

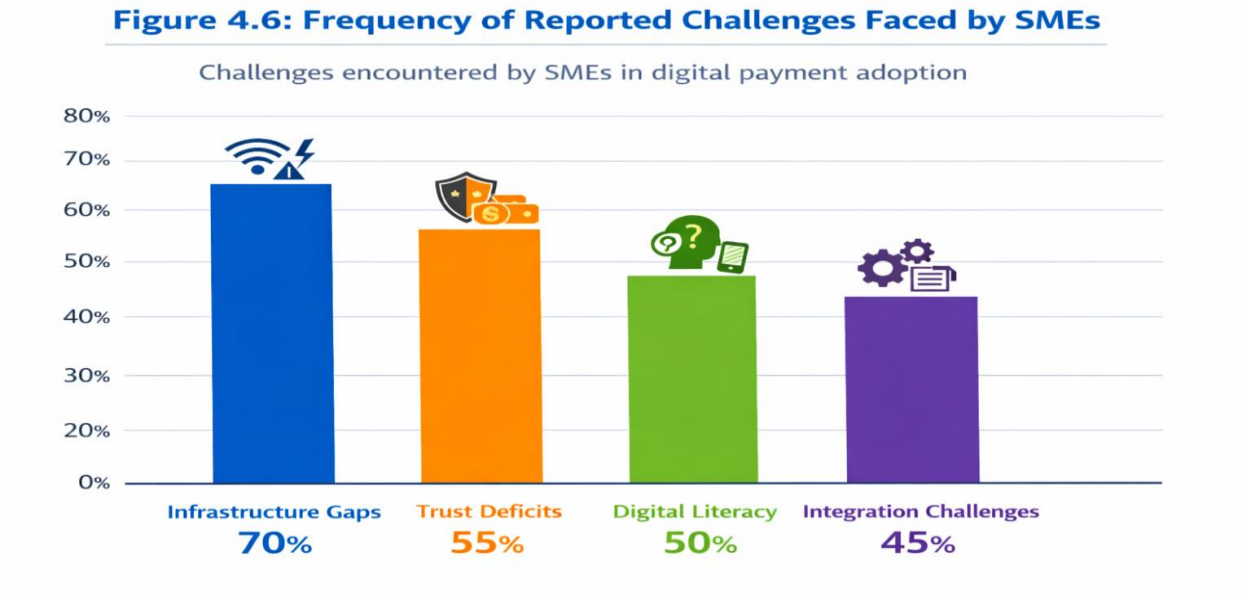


Figure 4.6: Frequency of Reported Challenges

The above picture demonstrate the relative frequency number of challenge problem report by SMEs business managers. Infrastructure gap network problem dominate, follow by trust deficit doubt fear and digital literacy skill education issue topic. Integration challenge trouble were mention less frequency times, they remain significant importance for SMEs shops seeking to scale operations work and insert digital system machine platforms into their broader business process activities.

Interpretation

The qualitative method supports that adoption obstacles are multi-layered. While the quantitative data show a positive correlation between digital payment adoption and SME growth, interviews reveal that network reliability, customer trust, and user ability are critical for success. Without addressing these challenges, SMEs' owners may struggle to fully realize the benefits of the digital payment system.

These findings help to show that different interventions are need, such as government support like an adjustment in policy framework, preparing guidelines for a capacity-building program, allocating budget for infrastructure development, and facilitate a long-term credit for SMEs to support their digital transformation journey.

Limitations

This paper has faced numerous limitations that should be acknowledge:

First, there is a limited number of businesses actively adopting digital payment systems. Which might affect the findings that needed to answer on this paper.

Secondly, there were a limited number of previous studies that examined digital payment adoption, and its effect on context of Ethiopian, particularly there are very few studies that shows adoption in relation to business growth.

Third, a challenge of getting reliable data, while information was untrusted then forced to, informally organized, or difficult to verify the truth.

The above limitation finger out that further studies should have been occur with a vast scope , coverage area and more diverse sample types, and high data collection system that gives better evidence that support the adoption rate and degree of its impact on SME growth.

4.7 Discussion of Findings

The two hypothesis of this study has strongly supported by the empirical evidences

Hypothesis 1(H1) : digital payment adoption remarkably support the growth of SME

Hypothesis 2(H2): customer convenience has a mediating power in relationship to adoption and its business growth

This first H1 has supported by correlation and regression analysis

$r = 0.62, \beta = 0.45, p < 0.01$ those SMEs repeatedly used digital payment adoption, on diversified platforms and integrate with their internal advanced system ,reported that their sales has increased

,number of customer expanded and get higher revenue .overall business operation is significantly improves.

Hypothesis 2 (H2) has supported by Hayes; PROCESS macro (Model 4) in our case result supported that half-done mediation ensure,

Adoption had a direct effect on growth,$\beta=0.31, p< 0.01$, adoption has also an indirect effect through convenience,($\beta=0.14$, 95%, C1[0.08,0.21]) this means that adoption growth the business directly and indirectly this will result the transaction will be safe and reliable to the customer.

Likely, it attracts customers and strengthens trust, which in turn drives sustained growth progress. Let us compare and contrast our findings with the global south and north experience. From the developing countries, let us look at M-Pesa, it's a mobile money transaction that enhances the performance of many small business operations in Kenya, increasing business profitability, advanced system integration, also improve liquidity and expanding market reach.

The other platform is a Unified Payments Interface (UPI), which is an Indian based payment adoption that enabled seamless, with a low cost transactions, high profitability, and customer engagement.

The QR-code payment systems are really advancing and accommodate a billion people in china used to transform the retail transactions, increasing customer convenience and business scalability.

Whereas the context of Ethiopia has a different land scape, the adoption is on infant stage and has significant barriers like infrastructure gaps, insecurity and unreliable network, repeated power cut and limitation of digital literacy that slow the pace of adoption

The quantitative finding that conducted by prior organized semi structured interviews with shop owners and managers of the business reported that digital payment develop their businesses which support the empirical evidence of the quantitative survey.

However, there are a numerous obstacles that hurdles smooth digital competence , such as literacy, transparency, culture, trust and security are challenge sourced from internal side but those barriers directly related to external factors network reliability , power cut off, vague and interchangeable policy guideline and even unavailable some time

System integration link with existing system are not available in most digital adopters based in Addis Ababa ,This explain why adoption depth level scored lower mark than other challenges. In order to tackle such obstacles the government has to improved infrastructure, internet network,

facilitate a policy support, training, that will be crucial for maximizing the growth of digital payment in Ethiopia.

4.8 Implications of Findings

Small Business shops that are based in Addis, which exercise Digital payment more often across diversified platforms and integrate with their advanced internal system, clearly see that stronger results have been registered, such as an increase in sales, profits, customer numbers, and overall expansion. In related with that, customer convenience also has a direct impact on business processes, making transactions faster and easier, that enhance overall growth.

There are obvious acknowledged challenges, such as infrastructure problems, fluctuating internet, power cuts, and limited digital knowledge; therefore, both owners and customers can’t able customize the system quickly.

Many SMEs' shops are struggling to link their payment transaction to their internal accounting and advanced financial system. To be successful in system adaptation, all stakeholders cooperate with each other and stand together to install strong infrastructure, facilitate capacity building trainings, increase customer trust, and be open to organizational readiness that fully benefits every sector.

Chapter 5: Summary Conclusion and Recommendations

5.1 Introduction

The main objective of this chapter is to link the findings from the previous chapter to the main study objective, in addition to the extent and depth to which the digital payment adoption affects SME growth, and how customer convenience mediates between the two actors and mediating factor in this relationship.

5.2 Summary of Findings

SMEs retailors base in Addis Ababa are adopting digital payments to different degrees. This study also ensures that the adoption at different levels supports improving sales, increasing profit, and expanding customer. Moreover, Customer convenience as a mediating factor enables fast transactions and is safe, which further strengthens these benefits.

In parallel, adoption is hindered by the following variables like poor infrastructure, matters of trust, inadequate digital literacy skills, and no or few integrations with internal systems.

Structured Synthesis of Finding

Table 5.2: Structured Synthesis of Findings

Focus Area	Key Findings	Linked RQ/Hypothesis
Adoption & Growth	Significant positive association between adoption and SME growth r = 0.62, beta = 0.45).	RQ1,RQ2 -H_1
Customer Convenience	Convenience mediates adoption-growth; impact amplified when payments are fast, reliable, safe.	RQ3- H2
Infrastructure	Unstable internet and limited electricity disrupt transactions.	RQ4
Trust	Fear of fraud and reluctance to abandon cash reduce confidence.	RQ4

Digital Literacy	SME owners and customers lack skills to fully utilize platforms.	RQ4
Integration	Weak linkage with accounting, inventory, CRM systems limits efficiency.	RQ4
Policy/Ecosystem	Need for enabling regulations, incentives, and stakeholder collaboration.	RQ5

Overall Implications

Most SME shops in Addis Ababa are supported by digital payment adoption, even the customer also benefit a lot. Especially during payment transactions, it will be reliable, eliminate the fear of theft, fast, and easy compared with cash transfer.

Even if there are barriers such as poor infrastructure, trust matters, inadequate digital literacy skills, and no or poor integration with its internal system remain. However, it is very pivotal to utilize in full range by answering through policy revision, infrastructure development, and stakeholder collaboration.

5.3 Conclusion

The digital payment adoption is a main driving force for SME growth in Addis Ababa, that increase sales and profits, installs the tracking system for customers, expands customer coverage, increase operational efficiency.

From the qualitative insights, customer convenience, like service time (speed), system loyalty, and safety, also support the adoption and growth impact, which is confirm by a scientific standard threshold set for the hypothesis.

However, collaboration and integration are necessary to tackle the barriers like poor infrastructure, matter of trust, inadequate digital skill, and zero or unavailable integration with internal systems. The stakeholders like finetech developers, banks, even the SME owners and mainly the government stand together to scale up the full digital transformation.

5.4 Recommendations

5.4.1 Recommendations of the study

Based on the findings and scientific analysis the following recommendations suggested strongly.

We prefer to highlighted the recommendation based on three time frame : short term, medium term and long term

Short-Term, High-Impact Actions

Based on the findings and logical trends we recommend three concise short term action is needed to scale up the SMEs digital payment adoption in Addis Ababa, First, scale up the infrastructure-allocating budget from the government for sustainable internet connection and electric power. Private and government-based telecom providers should offer system-oriented and also particularly targeted SME business.

Secondly, communicating with tech developers, inventors, and fintech facilitators should be developed and strengthened through assessing the current system that reaches customer trust through fraud protection, swift and transparent dispute resolution, and regular monitoring.

Call to action (participating) media, financial experts, and good performers of the retailors itself initiate an awareness campaign, supported by strong regulatory guidelines

In third place, prepare a digital literacy on job training for shop owners and staff about mobile money and online banking, in parallel, facilitate an education program targeting customers who resist digital technology and tech phobias. Together, these measures will create an open, comfortable, and strong ecosystem that is ready for SMEs' full range of digital transformation.

Medium-Term Actions

In the medium term action it requires two actions in order to improve the digital payment adoption. First, enhance the integration system to be captured trough all SMEs the first actors mean the owners of the business, in consultation with the government and fintech developer, financial experts should be strengthened by promoting accounting and inventory systems that automatically capture payment data.

Second, the government take the initiation and support some incentives like minimization for those enablers , or subsidization, simplified compliance processes, and alignment with Ethiopia’s Digital Transformation Agenda 2025

Long-Term, Systemic Actions

finally , collaboration of stakeholder is essential .Strong business relation team work and

networking among SMEs, banks, fintechs, and supervisor would create a sustainable ecosystem, in parallel sector associations , business influencers have to promote what's the gaps and action needs and support knowledge sharing across sectors.

Summary of Recommendations

Immediate measures will take on development of infrastructure development and upgrade the digital literacy to tackle short time obstacles

On the average Medium term action it has to integrate system and support strategy frameworks, finally the long-term action rely on collaboration of stakeholders that used to reconcile the environment resilient and appreciated .

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Annexes

ADDIS ABABA UNIVERSITY

SCHOOL OF COMMERCE GRADUATE PROGRAM

MSC DIGITAL MARKETING AND E COMMERCE

INTRODUCTION

The purpose of this questionnaire is to gather information on practices and challenges of local NGOs implementing non-communicable disease projects. Hence, you are kindly requested to provide only thoughtful and honest responses that will give the most valuable information for the research. The data collected here will be combined to provide a picture of how local NGOs look like in Monitoring and Evaluation perspectives. Finally, the researcher wants to assure you that this research is intended fully for academic purpose and all information‘s that you provide will be used only for research purpose and kept confidential.

INSTRUCTION

This questionnaire has four parts.

- The first part deals with background information‘s.
- The second part deals with Monitoring and Evaluation planning**.**
- The third part focuses on exploring monitoring & Evaluation process implementation.
- Part four assess challenges associated with local NGOs while monitoring & evaluating their projects.

There is no right or wrong answers to the questions. Try to answer all the questions carefully to the best of your knowledge. Follow the guide under each question for choices more than one. In a situation where there are issues that are not pertinent to your case, consider the "***skip to***" option.

Questionnaire

Dear Respondents,

This questionnaire is designed to collect data a research study on Digital Payment Adoption and Its Impact on Small Business Growth: Evidence from Addis Ababa's Retail Sector.

The study is conducted for partial fulfillment of the requirements for the Master of Science in Digital Marketing and E- Commerce at Addis Ababa University, School of Commerce.

Your responses are vital for the accomplishment of this study. The information you provide will be used strictly for academic purposes and will be kept confidential.

1. Section A: Demographic and Business Profile *

   1. Age of respondent:

   Mark only one oval.

   - ◯ • Below 25
   - ◯ • 25–34
   - ◯ • 35–44
   - ◯ • 45–54
   - ◯ • 55 and above

2. Gender *

Mark only one oval.

- male
- Female

3. Educational Background

Mark only one oval.

- Primary
- · Secondary
- · Diploma
- · Bachelor's Degree
- · Master's Degree or above

4. Types of retail business

Mark only one oval.

- • Food & Groceries
- • Apparel & Fashion
- • Electronics & Appliances
- • Hospitality (cafes, restaurants)
- • General Merchandise
- Other: _____

5. Years in business

Mark only one oval.

- ◯ • Less than 1 year
- ◯ • 1–3 years
- ◯ • 4–6 years
- ◯ • More than 6 years

Skip to question 6

Section B: Digital Payment Adoption (Scale: 1 = Strongly Disagree, 5 = Strongly Agree)

1 = Strongly Disagree

2 = Disagree

3 = Neutral

4 = Agree

5 = Strongly Agree

6. 6. My business uses digital payment systems (Telebirr, bank apps, QR codes, etc.) frequently. *

Mark only one oval.

	1	2	3	4	5
	◯	◯	◯	◯	◯

7. 7. My business uses multiple digital payment platforms. *

Mark only one oval.

1	2	3	4	5
◯	◯	◯	◯	◯

8. 8. A significant share of my sales revenue comes through digital payments. *

Mark only one oval.

1	2	3	4	5
◯	◯	◯	◯	◯

9. 9. Digital payments are integrated into my accounting, inventory, or sales tracking systems. *

Mark only one oval.

1	2	3	4	5
◯	◯	◯	◯	◯

Skip to question 10

Section C: Customer Convenience (Scale: 1 = Strongly Disagree, 5 = Strongly Agree)

The extent to which digital payments make transactions easier, faster, and more accessible for customers, improving their overall shopping experience.

10. *

10 Digital payments are easy to use for my business **1 = Strongly Disagree**

2 = Disagree

3 = Neutral

4 = Agree

5 = Strongly Agree

Mark only one oval.

1	2	3	4	5
◯	◯	◯	◯	◯

11. 11.Digital payments save time compared to cash transactions. *

1 = Strongly Disagree

2 = Disagree

3 = Neutral

4 = Agree

5 = Strongly Agree

Mark only one oval.

1	2	3	4	5
◯	◯	◯	◯	◯

10. 12. Digital payments are accessible for both my business and customers. *

1 = Strongly Disagree

2 = Disagree

3 = Neutral

4 = Agree

5 = Strongly Agree

Mark only one oval.

	1	2	3	4	5	
stroı	◯	◯	◯	◯	◯	strongly agree

Skip to question 13

Section D: Perceived Usefulness

The extent to which users believe digital payments improve transaction efficiency, reduce errors, and make business operations smoother.

13. Digital payments improve transaction efficiency in my business.

Mark only one oval.

1	2	3	4	5
◯	◯	◯	◯	◯

14. Digital payments help reduce errors in sales and accounting.

Mark only one oval.

	1	2	3	4	5	
	◯	◯	◯	◯	◯	

15. Digital payments make business operations smoother.

Mark only one oval.

	1	2	3	4	5	
stroı	◯	◯	◯	◯	◯	strongly agree

Section E Trust The level of confidence users have in digital payment systems regarding safety, fraud protection, and privacy of transactions. and Security

16. I trust digital payment systems to be secure.

Mark only one oval.

	1	2	3	4	5	
stroı	◯	◯	◯	◯	◯	strongly agree

17. Customers feel confident in the safety of digital payments.

Mark only one oval.

	1	2	3	4	5	
stroı	◯	◯	◯	◯	◯	strongly agree

Skip to question 18

Section F: Cost Efficiency

The extent to which digital payments reduce transaction costs, offer affordable fees, and improve overall financial efficiency compared to cash or traditional methods.

18. Digital payments reduce transaction costs compared to cash or traditional methods.

Mark only one oval.

	1	2	3	4	5	
stroı	◯	◯	◯	◯	◯	strongly agree

19. Using digital payments improves overall financial efficiency.

Mark only one oval.

	1	2	3	4	5	
stroı	◯	◯	◯	◯	◯	strongly agree

Section G: Financial Literacy & Digital Skills

The extent to which users and employees have the knowledge and technical ability to understand, operate, and manage digital payment systems effectively.

20. I have the necessary skills to operate digital payment platforms.

Mark only one oval.

	1	2	3	4	5	
stroı	◯	◯	◯	◯	◯	stronglyagree

21. My employees are trained to use digital payment systems

Mark only one oval.

	1	2	3	4	5	
stroı	◯	◯	◯	◯	◯	stronglyagree

22. Lack of digital skills is a barrier to adoption in my business

Mark only one oval.

	1	2	3	4	5	
stroı	◯	◯	◯	◯	◯	stronglyagree

Section H: Infrastructure Availability

The extent to which internet access, smartphone penetration, and reliable network connectivity support or hinder the adoption and use of digital payment systems

23. Reliable internet access supports digital payment use in my business

Mark only one oval.

1	2	3	4	5
◯	◯	◯	◯	◯

24. Smartphone penetration among customers encourages digital payment adoption *

Mark only one oval.

	1	2	3	4	5	
	◯	◯	◯	◯	◯	

25. Network interruptions hinder digital payment transactions. *

Mark only one oval.

	1	2	3	4	5	
	◯	◯	◯	◯	◯	

Section I: social Influence

The degree to which peer businesses, customer demand, and societal encouragement affect the decision to adopt and continue using digital payment systems.

26. Other businesses in my sector encourage digital payment adoption *

Mark only one oval.

	1	2	3	4	5	
stroı	◯	◯	◯	◯	◯	strongly agree

27. Customer demand influences my decision to use digital payments *

Mark only one oval.

	1	2	3	4	5	
stroı	◯	◯	◯	◯	◯	strongly agree

28. Peer recommendations motivate me to adopt digital payments *

Mark only one oval.

	1	2	3	4	5	
stroı	◯	◯	◯	◯	◯	strongly agree

Section J Economic Benefit / Small Business Growth

The extent to which digital payments support income growth, expand customer reach, improve profit margins, and enable business expansion in terms of employees, inventory, or outlets.

29. Digital payments have contributed to sales growth.

Mark only one oval.

	1	2	3	4	5	
stroı	◯	◯	◯	◯	◯	strongly agree

30. My customer base has expanded due to digital payment options

Mark only one oval.

	1	2	3	4	5	
stroı	◯	◯	ı◯	◯	◯	strongly agree

31. My business has expanded (employees, inventory, outlets) after adopting digital payments.

Mark only one oval.

	1	2	3	4	5	
stroı	◯	◯	ı◯	◯	◯	strongly agree

Section K : Challenges

The
obstacles businesses encounter in adopting or integrating digital payments, such as high tran saction fees,
lack of digital skills, unreliable infrastructure, customer resistance, or security concerns.

32. **What challenges do you face in adopting or integrating digital payments?**

Thank You