

## Effect of Cashless Policies on Operations of Market Women in Akpan Andem Market, Uyo, Akwa Ibom State

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### Abstract

This study investigates the effects of Effect of Cashless Policies on Operations of Market Women in Akpan Andem Market, Uyo, Akwa Ibom State. For the objectives of this study to be achieved, two hypotheses were formulated and tested. A survey research design was utilized. A sample of 400 respondents were selected using stratified random sampling technique. Regression technique was used to analyze the hypotheses. The results of the regression analysis presented inconsistent findings which showed positive and significant effect of variables of cashless policies on the operations of market women. Based on the findings, the study recommended that it is important to offer easy-to-understand, hands-on education and raise awareness in ways that truly connect with them. Making affordable devices and reliable internet more accessible will remove key obstacles, while ongoing training and nearby technical support can build their confidence in using these new tools. At the same time, clear and transparent communication about security will help ease worries and build trust. Finally, continuing to explore what helps or holds back adoption will ensure that solutions are tailored to fit their unique needs and realities, making the shift to cashless payments smoother and more successful.

## 1. Introduction

### 1.1 Background

The swift move towards digital financial services has truly transformed how economic transactions happen around the globe. This shift has led many countries to embrace cashless policies, which aim to lessen our dependence on physical cash. Essentially, cashless policies are initiatives from governments and institutions that promote or even require the use of electronic payment methods—think mobile money, debit and credit cards, and online banking—to make trade smoother and tackle the downsides of cash transactions (Ncube & Ndou, 2022). In Nigeria, these policies have really picked up steam over the past ten years, thanks to the Central Bank of Nigeria (CBN) and various other players who are working to boost financial inclusion, improve transparency, and fight against counterfeit currency (CBN, 2021). Market women, who are a vital part of Nigeria's informal economy, have long depended on cash for their transactions when selling goods and services. These women not only play a huge role in supporting household incomes and community well-being but are also essential for food security and local economic health (Okeke & Nwosu, 2023). However, the rollout of cashless policies has brought both new opportunities and hurdles for them. On the bright side, moving to electronic payments offers better security, convenience, and access to formal financial services.

On the flip side, making this transition requires digital know-how, access to tech infrastructure, and a certain level of trust in electronic systems—factors that aren't always available to market women, particularly in semi-urban and rural areas (Eze & Chukwu, 2022). Akwa Ibom State, nestled in the oil-rich Niger Delta, has seen significant economic growth (Abaikpa 2025). Uyo, the capital, is home to several bustling markets, including Akpan Andem Market, a key commercial center largely run by women traders. This market showcases the lively spirit of the informal sector but also highlights the hurdles traders face when trying to adapt to new financial policies. The way market women operate at Akpan Andem is heavily rooted in cash transactions, with only a limited use of electronic payment systems (Etim & Udo, 2024). Therefore, it's essential to grasp how cashless policies have influenced this market and what effects they have on the livelihoods and business practices of these women. Around the world, research has shown mixed results regarding the impact of cashless policies on informal traders. For instance, studies in East Africa revealed that adopting mobile money significantly boosted sales and lowered the risks tied to handling cash (Mbiti & Weil, 2021).

On the flip side, other research has pointed out obstacles like digital illiteracy, a lack of trust in banks, and inadequate infrastructure that hinder the full advantages of cashless systems (Kamau & Njoroge, 2023). The situation in Nigeria is just as intricate, with 60% of the population still without bank accounts as of 2023 (World Bank, 2023). The informal sector, where many market women thrive, is a crucial part of Nigeria's economy, yet it often finds itself on the outskirts of formal financial networks (Adebayo & Olufemi, 2023). The COVID-19 pandemic sped up the global shift towards digital financial services, including in Nigeria, as lockdowns and social distancing made cash transactions more challenging (Obi et al., 2022).

However, this swift transition also highlighted the digital gaps, especially for women traders who may not have smartphones or reliable internet access. For the market women at Akpan Andem Market, the pandemic brought to light both the urgent need and the hurdles of adopting cashless payments. This research aims to thoroughly analyze how cashless policies impact the operations of market women in Akpan Andem Market. It will delve into their awareness, levels of adoption, challenges faced, and the overall effects on their income and business activities. By concentrating on this particular group and location, the study hopes to provide valuable insights that can guide the creation of inclusive financial policies and support systems tailored to the realities of informal traders in Nigeria.

## 1.2 Statement of the Problem

Despite the Nigerian government's strong push for cashless policies, the way these initiatives are being adopted and their effects on informal sector workers, especially market women, are still not well understood. In Akpan Andem Market, Uyo, where most transactions are done in cash, market women encounter a range of challenges when trying to switch to cashless financial systems. For starters, the infrastructure in many Nigerian markets often falls short, making it tough to use electronic payment methods smoothly. Issues like inconsistent power supply, spotty internet access, and a lack of reliable digital devices make it hard for these women to conduct transactions electronically (Etim & Udo, 2024). These infrastructural hurdles, along with a general lack of digital skills, create a big gap between what policymakers envision and the reality on the ground (Abaikpa 2025). On top of that, socio-cultural factors play a role in the slow uptake of cashless systems. Many market women are wary of banks and electronic platforms, driven by fears of fraud, failed transactions, or a lack of transparency (Eze & Chukwu, 2022). Cash transactions also help build trust and community ties among traders and customers, which can be lost with the more impersonal nature of electronic payments (Okeke & Nwosu, 2023). Lastly, the economic side of adopting cashless payments is a bit unclear. While these systems can lower transaction costs and enhance security, they might also bring extra expenses like transaction fees, the cost of phone credit, and the time needed to learn new technologies. These factors could eat into profit margins or make small-scale traders hesitant to fully embrace cashless methods (Adebayo & Olufemi, 2023).

Moreover, the rules and regulations surrounding cashless policies often overlook the unique needs of informal markets. Take market women, for instance. They thrive in flexible and sometimes informal trading environments, which makes it tough for them to fit into rigid policy frameworks (Obi et al., 2022). Without proper support—like training, better infrastructure, and building trust—these women could easily be left behind in the cashless economy. When we look at Akpan Andem Market, there's a noticeable lack of solid data on how cashless policies have really impacted the business operations, income, and overall well-being of these market women. Most research on Nigeria's cashless economy tends to focus on formal sectors or urban bank customers, which leaves a significant gap in understanding the experiences of those in the informal sector (CBN, 2021; World Bank, 2023). This gap in knowledge makes it harder to create inclusive policies that actually help market women engage in the changing financial landscape. So, this study aims to tackle a key question: How do cashless policies affect the operations of market women in Akpan Andem Market, Uyo, Akwa Ibom State? It will specifically look into how these policies impact their daily business activities, income generation, and the hurdles they face when trying to adopt electronic payment systems. Addressing this issue is crucial for connecting policy goals with the real-life experiences of informal traders, ensuring that the advantages of financial digitization are shared fairly.

## 1.3 Objectives of the Study

The key aim of this study is to investigate the effects of cashless policies on the operations of market women in Akpan Andem Market, Uyo. Specifically, the study seeks to:

- Assess the level of awareness and understanding of cashless payment systems among market women in Akpan Andem Market.
- Identify the challenges and barriers faced by market women in transitioning from cash-based to cashless transactions.

## 1.4 Research Questions

To guide the investigation, the study will address the following research questions:

- What is the level of awareness and knowledge of cashless payment systems among market women in Akpan Andem Market?
- What challenges do market women encounter in using cashless payment systems?

## 1.5 Hypotheses

Based on the objectives and existing literature, the following hypotheses were tested:

- There is no significant positive relationship between the adoption of cashless payment methods and the operational efficiency of market women in Akpan Andem Market.
- Market women face significant challenges that adversely affect their ability to adopt cashless payment systems.

## 1.6 Significance of the Study

This study is incredibly significant for a variety of stakeholders as it sheds light on how cashless policies impact those working in the informal sector, especially market women. For policymakers, it provides valuable insights that can help shape inclusive financial regulations. Financial institutions can leverage these findings to create better digital products that tackle issues of usability and trust. Market women stand to gain from enhanced digital literacy and the empowerment needed to engage in the cashless economy. Moreover, this research contributes to the academic understanding of financial inclusion in informal markets and supports broader socio-economic development by encouraging safer transactions, integrating formal financial systems, and alleviating poverty in Akwa Ibom State and similar areas.

## 1.7 Scope of the Study

### Unit Scope:

This study focuses specifically on about 400 women (respondents) operating within Akpan Andem Market. These women are the primary subjects because they represent a significant portion of informal traders who engage predominantly in cash-based transactions. The research aims to understand their experiences, perceptions, and adaptations in response to cashless policies, making them the central unit of analysis.

### Content Scope:

The study examines the awareness, adoption, and usage levels of cashless payment systems among market women and the challenges and barriers these women face in transitioning to cashless transactions, as well as their perceptions of the benefits and drawbacks of such policies. The study also seeks to provide actionable recommendations to improve financial inclusion for market women through better policy design and support mechanisms.

### Geographical Scope:

The study is geographically limited to Akpan Andem Market located in Uyo, the capital city of Akwa Ibom State, Nigeria. Akpan Andem Market is chosen due to its prominence as a major commercial center with a high concentration of women traders, making it a representative setting for investigating the localized effects of cashless policies within the informal economy of the region.

## 2 Review of Related Literature

### 2.1 Concept of Cashless Policies in Nigeria

Cashless policies in Nigeria are a strategic move designed to reshape the country's financial landscape by cutting down on the use of physical cash and encouraging electronic payment methods. Launched by the Central Bank of Nigeria (CBN) back in 2012, this initiative aims to make financial transactions more efficient, tackle the issue of counterfeit currency, lower transaction costs, and boost financial inclusion for those who are unbanked or underbanked (CBN, 2021). The main goal of Nigeria's cashless policy is to foster a payment environment that is safer, quicker, and more transparent. This is done by promoting the use of electronic channels like Automated Teller Machines (ATMs), Point of Sale (POS) terminals, mobile money platforms, internet banking, and various other digital financial services (Adebayo & Olufemi, 2023). Moreover, the policy seeks to decrease the amount of physical cash in circulation, which has historically come with high costs related to printing, handling, and security issues. A key focus of Nigeria's cashless policy is financial inclusion. The World Bank (2023) reports that around 40% of Nigerian adults are still unbanked, often due to poverty, lack of documentation, or geographical obstacles. By encouraging cashless transactions, the policy aims to integrate more citizens—especially those in rural and informal sectors—into the formal economy, giving them access to credit, savings, and insurance products.

The cashless policy framework in Nigeria includes various measures like limits on cash withdrawals and deposits, incentives to encourage electronic payments, and the introduction of mobile money agents in areas that lack proper services (Etim & Udo, 2024). However, rolling out these initiatives isn't without its hurdles. Issues like unreliable power supply and poor internet access make it tough for electronic payment systems to be widely used (Eze & Chukwu, 2022). Additionally, social and cultural factors—such as a lack of trust in banks, low digital literacy, and a general resistance to change—hinder broader acceptance, especially among informal traders and market women (Okeke & Nwosu, 2023). The COVID-19 pandemic did speed up the global shift towards cashless payments, including in Nigeria, as contactless transactions became essential for health reasons (Obi et al., 2022). Yet, this swift transition also revealed significant digital gaps and underscored the need for focused efforts to assist vulnerable groups in the informal sector. Nigeria's cashless policies are a vital move towards modernizing its financial landscape and promoting inclusive economic growth. Achieving success will require not just the right technology but also tackling infrastructural, educational, and cultural challenges to ensure that everyone, including market women, can fully engage in the cashless economy.

### Types of Cashless Payments and Their Benefits

Cashless payments are all about using electronic methods to handle financial transactions without needing physical cash. They have really taken off because they are so convenient, secure, and efficient.

#### Types of Cashless Payments

- **Debit and Credit Cards:** These are super popular payment tools that let people shop electronically. Debit cards pull money straight from your bank account, while credit cards give you a line of credit for your purchases. You can use them at tons of point-of-sale (POS) terminals and online, making transactions a breeze (Adebayo & Olufemi, 2023).
- **Mobile Money and Digital Wallets:** Platforms like Paga, Paystack, and Flutterwave in Nigeria let users keep their money digitally and make payments right from their smartphones. These services support everything from peer-to-peer transfers to bill payments and merchant transactions, often without needing a traditional bank account (Etim & Udo, 2024).
- **Contactless Payments:** Thanks to Near Field Communication (NFC) technology, contactless payments let you just tap your card or mobile device on a payment terminal for quick and hygienic transactions. This method really took off during the COVID-19 pandemic as a safer way to handle payments (Obi et al., 2022).
- **USSD and QR Code Payments:** USSD codes allow users to do banking transactions on basic mobile phones without needing internet access, making it accessible for a wide range of people. QR code payments let customers scan merchant codes with their mobile apps to complete transactions quickly, which is especially handy in informal markets (Eze & Chukwu, 2022).
- **Online Bank Transfers and Direct Deposits:** These methods involve moving money electronically between bank accounts, and they're commonly used for things like salary payments, bills, and larger transactions. They offer a secure and traceable alternative to cash payments (CBN, 2021).

#### Benefits of Cashless Payments

- **Convenience and Speed:** Cashless payments allow for instant transactions, so you don't have to worry about carrying or counting cash. This ease of

use really enhances the customer experience and helps cut down on long lines at checkout (Adebayo & Olufemi, 2023).

- **Enhanced Security:** With electronic payments, the risks of theft or losing cash are significantly reduced. These transactions are encrypted and often require some form of authentication, making them safer options for both consumers and merchants (Eze & Chukwu, 2022).
- **Reduced Transaction Costs:** For businesses, going cashless means lower expenses related to handling cash, like counting, storing, and transporting it. Digital payments also make accounting easier and help minimize errors, boosting overall efficiency (Etim & Udo, 2024).
- **Financial Inclusion:** Cashless payment methods, particularly mobile money and USSD, are opening up financial services to unbanked communities by offering accessible and affordable transaction options, which encourages more people to participate in the economy (World Bank, 2023).
- **Improved Transparency and Traceability:** Digital transactions create clear records that help combat fraud, tax evasion, and corruption. This level of transparency is beneficial for governments, financial institutions, and consumers alike (CBN, 2021).
- **Attracting Diverse Customers:** By providing various cashless payment options, businesses can cater to different consumer preferences, which can lead to increased sales and higher customer satisfaction (Okeke & Nwosu, 2023).

The wide range of cashless payment types not only offers flexibility and inclusivity but also contributes to quicker, safer, and more efficient economic transactions. These benefits shed light on the global shift towards cashless societies, even though challenges like digital literacy and infrastructure still need to be tackled for full adoption. Market women in Nigeria play a crucial role in the informal economy, contributing significantly to local trade, food distribution, and household income generation (Okeke & Nwosu, 2023).

### Perceptions of Market Women toward Cashless Policies

Many market women have mixed feelings about cashless policies, influenced by their personal experiences, socio-economic backgrounds, and familiarity with digital technologies. Research shows that while some women see the advantages of cashless systems—like less risk of theft, convenience, and quicker transactions—others are hesitant, worried about fraud, technical issues, and a lack of trust in financial institutions (Eze & Chukwu, 2022; Adebayo & Olufemi, 2023). A notable number of market women are concerned about the security of electronic transactions. The anxiety over losing money due to failed transactions or cyber fraud makes them hesitant to fully embrace cashless payments (Etim & Udo, 2024). Moreover, many women are cautious about transaction fees and hidden charges linked to mobile money and banking platforms, which they feel chip away at their already slim profit margins (Okeke & Nwosu, 2023). Cultural aspects also play a role in shaping these perceptions. The traditional dependence on cash builds interpersonal trust and social bonds that digital transactions struggle to replicate. For some market women, cashless payments come off as impersonal and disrupt the long-standing relationships between buyers and sellers (Eze & Chukwu, 2022).

### Adaptations to Cashless Policies

Despite some initial hesitations, a lot of market women have slowly warmed up to cashless policies. This shift has been fueled by various factors, including encouragement from the government, influence from peers, and the practical perks that come with digital payments. Here are some of the strategies they have been using to adapt:

- **Learning and Training:** Many market women have taken the initiative to enroll in digital literacy programs offered by financial institutions, NGOs, or government initiatives. These training sessions help them get a better grasp of how to use mobile money and other electronic platforms (Obi et al., 2022). Such programs are essential for building the confidence and skills needed to navigate cashless systems.
- **Use of Agents and Intermediaries:** In cases where direct access to technology is a challenge, market women often turn to mobile money agents or trusted intermediaries to handle electronic transactions for them (Etim & Udo, 2024). This approach helps bridge the gap between traditional cash transactions and the new cashless systems.
- **Hybrid Transactions:** A lot of women are opting for a mix of cash and cashless methods. They accept electronic payments when it's convenient but still rely on cash for most transactions. This hybrid strategy allows them to transition gradually while minimizing the risks that come with fully embracing digital payments (Adebayo & Olufemi, 2023).
- **Investment in Technology:** Some market women have made the leap to invest in smartphones or POS devices to make cashless payments easier, especially those in more competitive or urban markets (Okeke & Nwosu, 2023). This investment reflects a growing acceptance and acknowledgment of the potential benefits of cashless systems.

### Challenges in Adaptation

Even with these adaptive efforts, there are still some significant hurdles to overcome. Issues like unreliable electricity and spotty internet connections make it tough for people to consistently use cashless platforms (Eze & Chukwu, 2022). On top of that, digital illiteracy and the high cost of affordable smartphones hit older and less educated market women the hardest (World Bank, 2023). The added burden of transaction fees and mobile data costs can also put a damper on frequent usage. Moreover, gaps in regulations and inconsistent policy enforcement create uncertainties that shake market women's trust in cashless systems (CBN, 2021). In summary, the way market women perceive and adapt to cashless policies in Nigeria is a complex mix of opportunities and challenges. While many see the advantages of electronic payments, doubts and practical obstacles slow down full adoption. To tackle this, effective policy responses need to blend infrastructure improvements, digital literacy initiatives, and trust-building strategies that resonate with the realities of market women in Nigeria's informal economy.

### Operational Efficiency of Market Women

Operational efficiency among market women in Nigeria plays a vital role in ensuring their businesses thrive, remain profitable, and contribute meaningfully to the informal economy. It's all about how well these women manage their daily operations—like buying goods, selling, keeping track of inventory, and handling finances—while making the most of their time, effort, and resources (Okeke & Nwosu, 2023). These market women are the backbone of Nigeria's informal sector, making up a large portion of retail trade and food distribution, especially in urban and semi-urban areas (Adebayo & Olufemi, 2023). Their efficiency not only impacts their income but also affects household well-being and the overall economic health of their communities. When they operate efficiently, market women can turn over their inventory faster, cut down on spoilage of perishable items, and keep their prices competitive, which is crucial in such a tough trading environment (Etim & Udo, 2024). Several factors influence how efficiently market women operate in Nigeria. Access to financial services, like savings and credit options, is essential. Digital financial services, including cashless payment

systems, can boost efficiency by making transactions easier and improving cash flow management (Eze & Chukwu, 2022). However, challenges like inconsistent electricity supply, limited access to technology, and inadequate market facilities often get in the way of their operational effectiveness (Obi et al., 2022).

Skills and knowledge are absolutely crucial in this context. Many market women pick up entrepreneurial and financial management skills informally, learning from their experiences and each other. However, formal training and capacity-building programs can really enhance their efficiency by teaching better record-keeping, pricing strategies, and marketing techniques (Okeke & Nwosu, 2023). The use of technology also plays a significant role in improving operations. Market women who utilize mobile phones for business communication, digital payments, and accessing market information often see better sales and customer service (Etim & Udo, 2024). Unfortunately, the digital divide—characterized by differences in access and literacy—limits these advantages, particularly for older or less educated traders (World Bank, 2023). On top of that, socio-cultural factors and market dynamics also shape how they operate. Building trust with suppliers and customers can lead to smoother transactions and credit arrangements, which helps strengthen their resilience (Adebayo & Olufemi, 2023). Still, market women face challenges like fluctuating prices, competition, and regulatory hurdles that can impact their efficiency. In short, the operational efficiency of market women in Nigeria is influenced by a complex mix of financial access, infrastructure, skills, technology use, and socio-cultural factors. To truly enhance this efficiency, we need comprehensive interventions that tackle these areas, empowering market women and bolstering the informal economy.

## 2.2 Theoretical Review

To really grasp how cashless policies affect the daily operations of market women, we need to dive into some theoretical frameworks that shed light on technology adoption, behavioral shifts, and economic interactions in informal settings. Three key theories stand out in relation to this study:

### Technology Acceptance Model (TAM)

Introduced by Davis in 1989, the Technology Acceptance Model helps us understand how users come to accept and utilize new technology. According to TAM, two primary factors drive technology adoption: Perceived Usefulness (PU) and Perceived Ease of Use (PEOU). These perceptions shape attitudes towards technology, which in turn influence behavioral intentions and actual usage.

Relevance:

For the market women at Akpan Andem Market, TAM offers valuable insights into their acceptance of cashless payment systems. Their readiness to embrace cashless methods largely hinges on whether they see these technologies as advantageous for their business (like quicker transactions and enhanced security) and user-friendly, considering their levels of digital literacy (Eze & Chukwu, 2022). Research in Nigeria's informal sector shows that perceived complexity and a lack of trust can often act as barriers to adoption (Adebayo & Olufemi, 2023). Thus, TAM helps clarify why some market women are on board with cashless payments while others hold back.

Evaluation:

While TAM does a great job of capturing individual acceptance factors, it might not fully account for the wider socio-economic and infrastructural challenges, such as network reliability, financial costs, and the cultural attitudes that are common among market women (Etim & Udo, 2024). Therefore, it's important to pair TAM with theories that consider these external environmental influences.

### Diffusion of Innovations Theory (DOI)

Rogers (2003) introduced the Diffusion of Innovations (DOI) theory, which explains how new ideas, practices, or technologies spread through a social system over time. This theory highlights several key factors that influence whether something gets adopted: relative advantage, compatibility, complexity, trialability, and observability. It also classifies adopters into different groups: innovators, early adopters, the majority, and laggards.

Relevance:

The DOI framework is particularly useful for examining how cashless payment policies are adopted by market women in Akpan Andem Market. It sheds light on the factors that either encourage or hinder adoption, such as whether cashless payments fit with existing trading habits (compatibility), the perceived benefits compared to cash transactions (relative advantage), and how complicated the technology seems (complexity) (Obi et al., 2022). Additionally, we can look into the influence of social networks and opinion leaders among these market women to better understand how these innovations spread.

Evaluation:

One of the strengths of the DOI theory is its thorough perspective on how adoption dynamics play out within communities. However, it tends to assume that social systems are relatively uniform, which might overlook the unique economic challenges or power dynamics that informal traders face. Furthermore, specific infrastructural issues in Nigeria's markets could hinder the spread of cashless payments, even if they are viewed positively (World Bank, 2023).

### Informal Economy Theory

This theory, developed by scholars like Hart (1973) and expanded upon in more recent studies, looks into the traits and dynamics of informal economic activities that often function outside the bounds of formal regulations and institutional frameworks.

Relevance:

In Akpan Andem Market, market women primarily engage in Nigeria's informal economy, which is marked by cash transactions, adaptable business practices, and limited access to formal financial services (Okeke & Nwosu, 2023). Informal Economy Theory sheds light on why cashless policies, typically crafted with formal sectors in mind, might not align with the realities faced by informal traders. It illustrates the strategies that market women use to maneuver around institutional hurdles, including either partially embracing or resisting cashless systems (Adebayo & Olufemi, 2023).

Evaluation:

This theory offers valuable insights into the structural and socio-cultural factors that influence how market women respond to cashless policies. However, it might fall short in explaining the finer details of technology adoption, which are more directly addressed by the Technology Acceptance Model (TAM) and Diffusion of Innovations (DOI). By merging Informal Economy Theory with technology adoption models, we can create a more comprehensive

framework.

### Integration of these Theories

When combined, these three theories provide a solid framework for analyzing the impact of cashless policies on market women:

- TAM emphasizes individual perceptions and acceptance of cashless technology.
- DOI outlines the social and communicative processes that facilitate the spread of cashless policies among market women.
- Informal Economy Theory places these adoption behaviors within the larger socio-economic context and institutional limitations of informal trade.

Bringing these theories together allows for a well-rounded understanding that incorporates psychological, social, and structural factors affecting market women's operations in the context of cashless policies.

## 2.3 Empirical Review

Several studies have highlighted various empirical reviews on how cashless policies impact market women's operations. This review specifically focuses on the objectives of this study:

### i. Level of Awareness and Understanding of Cashless Payment Systems

For market women, being aware of and understanding cashless payment systems is crucial for their adoption. Research conducted in Nigeria and other developing countries shows that while awareness levels are generally moderate, they can be quite uneven. For instance, Okoye and Eze (2021) discovered that market women in urban Nigerian markets had a decent awareness of mobile money and POS systems, thanks in large part to the rise of smartphone usage and government initiatives aimed at promoting financial inclusion. However, there are still significant gaps, particularly among older women and those with lower educational backgrounds, who often struggle to grasp how these systems work (Okoye & Eze, 2021). Similarly, Udo and Erim (2022) noted that in Uyo, awareness campaigns led by banks and fintech companies have certainly boosted knowledge, but they haven't completely closed the understanding gap, especially when it comes to security features and transaction processes.

### ii. Challenges and Barriers in Transitioning to Cashless Transactions

Several studies have highlighted the significant hurdles that market women encounter when trying to shift to cashless transactions. One of the biggest challenges is technological illiteracy; many of these women simply don't have the skills to confidently navigate digital platforms (Joey & Kumar, 2022). On top of that, infrastructure problems like spotty internet connections and frequent power outages in Uyo markets make it tough to consistently use cashless systems (Udo & Erim, 2022). Trust issues also come into play; worries about fraud, transaction mistakes, and a lack of support discourage many from fully embracing this change (Nwankwo et al., 2023). Moreover, the costs associated with transaction fees and acquiring POS devices can be too high for many market women who are already operating on tight budgets (Eze & Akpan, 2022). Lastly, cultural preferences for cash, which is often seen as more tangible and immediate, further slowdown the transition (Okoye & Eze, 2021).

## 2.4 Research Gap

While cashless policies examine both national and sectoral levels, there is a pressing need for targeted, real-world research that dives into how these policies impact market women in Akpan Andem Market, Uyo. This includes looking at their awareness, adoption, challenges, economic effects, and overall perceptions. By filling these gaps, this study can offer valuable insights to policymakers and stakeholders who are working to boost financial inclusion and empower those in informal urban markets.

## 3 Research Methods

### Research Design

The study adopted a descriptive survey research design. This design is appropriate because it allowed for the systematic collection and analysis of data to describe the current status of awareness, adoption, challenges, impacts, and perceptions of cashless policies among market women. It also facilitated the examination of relationships between variables such as adoption levels and business performance indicators.

### The Study Area

This study was conducted in Akpan Andem Market, Uyo, Akwa Ibom State. Akwa Ibom State is in the South-South zone of Nigeria with its capital at Uyo. The State is the largest oil producing State in Nigeria. The population of the State is estimated at about 309, 573 as of 2006 (NPC, 2006 report). It has an area of 95 km<sup>2</sup> (36. 7sq.ml) and a land area of 95km<sup>2</sup> (36. 7sq.ml) (Wikipedia encyclopedia 2007). The people in the State are predominantly Ibibio; others include Annang, Oron, Eket, Obolo, Ibeno and other speaking tribes in Nigeria. Akwa Ibom State is inhabited by people of different walks of life such as teachers, businessmen, students, traders, civil servants and unemployed youths among others. The choice of this study area was driven by the relevance to the research topic.

### Population of the Study

The population consisted of all market women operating in Akpan Andem Market, Uyo estimated at 3000 through market records and local market associations.

### Sample Size

A sample size of about 400 respondents was selected. This is due to the fact that, this sample size balanced representativeness and practical feasibility for survey research.

### Sampling Technique

A stratified random sampling technique was used to ensure that different categories of market women (based on factors such as type of goods sold, business size, or years of operation) were proportionately represented. This reduced sampling bias and improved the generalizability of findings.

### Sources of Data Collection

Data for this research work were collected through two sources – primary and secondary sources. The primary data were obtained by the researcher through questionnaire administration and personal interviews. Secondary data were obtained from published reports, books, journals, newspapers, magazines and internet.

#### Instrument for Data Collection

The primary instrument was a structured questionnaire comprising both closed-ended and Likert-scale questions. It covered awareness and understanding of cashless payment systems (Objective i) and challenges and barriers faced (Objective ii).

#### Validity of Research Instrument

Content validity was ensured by developing the questionnaire based on literature review and expert consultation in financial inclusion and informal market studies. A pilot test was conducted with about 20 market women outside the main sample to refine questions for clarity and relevance.

#### Reliability of the Instrument

The internal consistency of the questionnaire was tested using Cronbach's alpha, aiming for a coefficient of 0.7 or higher to confirm reliability of scales measuring perceptions and challenges. Test-retest reliability was also assessed by administering the questionnaire twice to the pilot group within a two-week interval.

#### Methods of data Analysis

The statistical methods adopted for data analysis of this study were simple percentages and regression. The data were analyzed with the help of a statistical tool using SPSS.

## 4 Data Presentation, Analysis and Discussion of Findings

### 4.1 Presentation of Data

Table 1: Number of questionnaires administered and returned

		Percentage
Copies of Questionnaire Administered	440	
Copies of Questionnaire Retrieved	355	80.7
Copies of Questionnaire not Retrieved	85	19.3
<b>Total</b>		<b>100</b>

Source: Fieldwork, 2024

From the table, out of 440 questionnaires administered, 355 representing 80.7% were successfully returned. 85 copies of questionnaire representing 19.3% were not returned.

Table 2: Percentage analysis of the responses on the assessment of the level of awareness and understanding of cashless payment systems among market women

	SA	A	D	SD	UN	Total
I am aware of the different types of cashless payment systems available.	176 (49.6%)	142 (40.0%)	6 (1.7%)	4 (1.1%)	27 (7.6%)	355 (100%)
I understand how to use cashless payment systems for my business transactions.	132 (37.2%)	185 (52.1%)	25 (7.0%)	6 (1.7%)	7 (2.0%)	355 (100%)
I have received sufficient information about cashless payment methods.	156 (37.2%)	139 (39.2%)	16 (4.5%)	35 (9.9%)	9 (2.5%)	355 (100%)
I feel confident in explaining how cashless payments work to others.	115 (32.4%)	86 (24.2%)	73 (20.6%)	46 (13.0%)	35 (9.9%)	355 (100%)
I keep myself updated on new developments in cashless payment technologies.	107 (30.1%)	135 (38.0%)	23 (6.5%)	73 (20.6%)	17 (4.8%)	355 (100%)

Source: Field survey 2025

Table 2 shows the frequency of responses and their percentages the assessment of the level of awareness and understanding of cashless payment systems among market women. In response to the question one in the table above, whether respondents aware of the different types of cashless payment systems available. Of a proportion of 355 respondents, 176 (49.6%) strongly agreed to questions, 142 (40.0%) agreed, 6 (1.9%) disagreed, 4 (1.1%) strongly disagreed and 27 (7.6%) were undecided. In response to the question two in the table above, whether respondents understand how to use cashless payment systems for my business transactions. Of a proportion of 355 respondents, 132 (37.2%) strongly agreed to questions, 185 (52.1%) agreed, 25 (7.0%) disagreed, 6 (1.6%) strongly disagreed and 7 (2.0%) were undecided.

In response to the question three in the table above, whether received sufficient information about cashless payment methods. Of a proportion of 355 respondents, 156 (37.2%) strongly agreed to questions, 139 (39.2%) agreed, 16 (4.5%) disagreed, 35 (9.9%) strongly disagreed and 9 (2.5%) were undecided. In response to the question four in the table above, whether performance management systems mitigate the effects of infrastructural deficiencies in SMEs in Uyo. Of a proportion of 355 respondents, 115 (32.4%) strongly agreed to questions, 86 (24.2%) agreed, 73 (20.6%) disagreed, 46 (13.0%) strongly disagreed and 35 (9.9%) were undecided. In response to the question five in the table above, whether respondents keep updated on new developments in cashless payment technologies. Of a proportion of 355 respondents, 107 (30.1%) strongly agreed to questions, 135 (38.0%) agreed, 23 (6.5%) disagreed, 73 (20.6%) strongly disagreed and 17 (4.8%) were undecided.

Table 3: Percentage analysis of the responses on Identification of the challenges and barriers faced by market women in transitioning from cash-based to cashless transactions

	SA	A	D	SD	UN	Total
Poor internet connectivity makes it difficult for me to use cashless payment systems.	78 (22.0%)	164 (46.2%)	25 (7.0%)	30 (8.5%)	58 (16.3%)	355 (100%)
Frequent power outages disrupt my ability to complete cashless transactions.	105 (29.6%)	105 (29.6%)	38 (10.7%)	32 (9.0%)	75 (21.1%)	355 (100%)
I find it challenging to navigate the technology required for cashless payments.	125 (35.2%)	90 (25.4%)	58 (16.3%)	16 (4.5%)	66 (18.6%)	355 (100%)
I worry about the security and safety of cashless transactions.	108 (30.4%)	167 (47.0%)	9 (2.5%)	13 (3.5%)	58 (16.3%)	355 (100%)
Transaction fees associated with cashless payments discourage me from using them.	176 (49.6%)	142 (40.0%)	4 (1.1%)	27 (7.6%)	6 (1.7%)	355 (100%)

Source: Field survey 2025

Table 3 shows the frequency of responses and their percentages on the identification of the challenges and barriers faced by market women in transitioning from cash-based to cashless transactions. In response to the question one in the table above, whether poor internet connectivity makes it difficult for me to use cashless payment systems. Of a proportion of 355 respondents, 78 (22.0%) strongly agreed to questions, 167 (47.0%) agreed, 25 (7.0%) disagreed, 30 (8.5%) strongly disagreed and 58 (16.3%) were undecided. In response to the question two in the table above, whether frequent power outages disrupt my ability to complete cashless transactions. Of a proportion of 355 respondents, 105 (29.6%) strongly agreed to questions, 105 (29.6%) agreed, 38 (10.7%) disagreed, 32 (9.0%) strongly disagreed and 75 (21.1%) were undecided.

In response to the question three in the table above, whether respondents find it challenging to navigate the technology required for cashless payments. Of a proportion of 355 respondents, 125 (35.2%) strongly agreed to questions, 90 (25.4%) agreed, 58 (16.3%) disagreed, 16 (4.5%) strongly disagreed and 66 (18.6%) were undecided. In response to the question four in the table above, whether respondents worry about the security and safety of cashless transactions. Of a proportion of 355 respondents, 108 (30.4%) strongly agreed to questions, 167 (47.0%) agreed, 9 (2.5%) disagreed, 13 (3.5%) strongly disagreed and 58 (16.3%) were undecided. In response to the question five in the table above, whether transaction fees associated with cashless payments discourage me from using them. Of a proportion of 355 respondents, 176 (40.0%) strongly agreed to questions, 142 (40.0%) agreed, 4 (1.1%) disagreed, 27 (7.6%) strongly disagreed and 6 (1.7%) were undecided.

## 4.2 Testing of Hypotheses

### Hypothesis One

HO1: There is no significant positive relationship between the adoption of cashless payment methods and the operational efficiency of market women in Akpan Andem Market.

Simple Regression Analysis was used to analysis the data in order to determine the influence between the variables using Statistical Package Social Science (SPSS version 22).

OLS showing the effect of adoption of cashless payment methods on operational efficiency of market women in Akpan Andem Market

Table 4a: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.544 <sup>a</sup>	.296	.290	.46295

a. Predictors: (Constant), adoption of cashless payment methods

Table 4b: ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.500	1	12.500	58.320	.000b
	Residual	29.791	353	.214		
	Total	42.291	354			

a. Dependent Variable: operational efficiency

b. Predictors: (Constant), adoption of cashless payment methods

Table 4c: Regression Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.
		B	Std. Error			
1	(Constant)	1.101	.310		3.555	.001
	adoption of cashless payment methods	.674	.088	.544	7.637	.000

a. Dependent Variable: operational efficiency

The R-squared value of 0.296 indicates that about 29.6% variation in operational efficiency of market women in Akpan Andem Market is accounted for by the independent variable (adoption of cashless payment methods) of this study. In order to test the hypothesis, the researcher relied on the p-value of the F-statistic. The result shows the p-value of 0.0000 which implies that the independent variable has a significant positive effect on the

dependent variable. Therefore, the null hypothesis which states that adoption of cashless payment methods does not significantly affect operational efficiency of market women in Akpan Andem Market, is rejected.

### Hypothesis Two

H02: Market women face significant challenges that adversely affect their ability to adopt cashless payment systems.

Simple regression Analysis was used to analysis the data in order to determine the influence between the variables using Statistical Package Social Science (SPSS version 21).

OLS showing how market women face significant challenges that adversely affect their ability to adopt cashless payment systems.

Table 5a: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	-.531 <sup>a</sup>	.282	.277	.41919

a. Predictors: (Constant), challenges

Table 5b: ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.609	1	9.609	54.685	.000 <sup>b</sup>
	Residual	24.425	353	.176		
	Total	34.034	354			

a. Dependent Variable: cashless payment systems

b. Predictors: (Constant), challenges

Table 5c: Regression Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.032	.280		3.682	.000
	challenges	-.591	.080	-.531	7.395	.000

a. Dependent Variable: cashless payment systems

The R-squared value of 0.282 indicates that about 28.2% variation in cashless payment systems is accounted for by the independent variable (challenges) of this study. In order to test the hypothesis, the researcher relied on the p-value of the F-statistic. The result shows the p-value of 0.0000 which implies that the independent variable has a significant negative effect on the dependent variable. Therefore, the null hypothesis which states that Market women face significant challenges that adversely affect their ability to adopt cashless payment systems is accepted.

## 4.3 Discussion of Findings

The result of the first hypothesis shows that about 29.6% variation in operational efficiency of market women in Akpan Andem Market is accounted for by the independent variable (adoption of cashless payment methods) of this study. In order to test the hypothesis, the researcher relied on the p-value of the F-statistic. The result shows the p-value of 0.0000 which implies that the independent variable has a significant positive effect on the dependent variable. This finding is consistent with the study of Okeke & Nwosu (2023) who believed that by providing various cashless payment options, businesses can cater to different consumer preferences, which can lead to increased sales and higher customer satisfaction. The finding also collaborates with the study and finding of CBN (2021) which revealed that the level of transparency in digital transactions is beneficial for business, governments, financial institutions, and consumers alike as it creates clear records that help combat fraud, tax evasion, and corruption. Furthermore, the finding collaborate with the study and finding of Thomas, Abaikpa, Daniel & Akpan (2024) who posit that there should be development of entrepreneurship and business management training programs tailored for small scale enterprise owners and practitioners, covering essential skills in technology, book-keeping, marketing and customer service.

The result of the second hypothesis shows that about 28.2% variation in cashless payment systems is accounted for by the independent variable (challenges) of this study. In order to test the hypothesis, the researcher relied on the p-value of the F-statistic. The result shows the p-value of 0.0000 which implies that the independent variable has a significant negative effect on the dependent variable. The study collaborates with the study and finding of (Eze & Chukwu, 2022; Adebayo & Olufemi, 2023) which revealed that while some women see the advantages of cashless systems—like less risk of theft, convenience, and quicker transactions—others are hesitant, worried about fraud, technical issues, and a lack of trust in financial institutions. The study also collaborates with that of Etim & Udo (2024) revealed that the anxiety over losing money due to failed transactions or cyber fraud makes some women hesitant to fully embrace cashless payments.

## 5 Summary, Conclusion and Recommendations

### 5.1 Summary of the Findings

The primary aim of this study was to investigate the effects of cashless policies on the operations of market women in Akpan Andem Market, Uyo, Akwa Ibom State. The other two specific objectives of the study include; to assess the level of awareness and understanding of cashless payment systems among market women in Akpan Andem Market, Uyo, Akwa Ibom State and to identify the challenges and barriers faced by market women in transitioning from cash-based to cashless transactions in Uyo, Akwa Ibom State. Two hypotheses were formulated and tested in this study. The researcher employed

the use of survey research design which allowed for the systematic collection and analysis of data to describe the current status of awareness and challenges of cashless policies among market women. Data for this study were obtained from both primary and secondary sources. Primary data were obtained through a structured questionnaire. The questions were closed-ended, and directed to collect relevant data from the respondents. Secondary sources were information from existing literatures such as relevant textbooks, Journals, magazines, newspapers and internet. The regression technique was used to test the hypotheses. The results of the regression analysis presented inconsistent findings which showed positive and significant effect of variables of cashless policies on the operations of market women.

## 5.2 Conclusion

This study set out to explore how cashless policies are affecting the daily lives and businesses of market women at Akpan Andem Market in Uyo, Akwa Ibom State. The researchers wanted to understand not just whether they know about these cashless payment systems, but also how much they use them, the challenges they face, the impact on their businesses, and what they think about these changes. The study found that awareness and understanding of cashless payments vary quite a bit among the market women. Some have warmly welcomed these new technologies and are using them regularly, while others are still unsure or unaware, showing that more education and support are needed to help everyone get comfortable with these systems. When it comes to actually using cashless methods, several factors come into play. Accessibility to devices, how easy the systems are to use, and trust in the technology all influence whether market women adopt these payment methods. While many have started using cashless transactions, a good number still rely mostly on cash because of challenges like poor internet access or not having the right tools. Switching from cash to cashless is not always smooth. The women face real hurdles such as limited access to smartphones or POS devices, unreliable network connections, worries about security, and occasional technical glitches.

These challenges make it harder for some to fully embrace cashless payments and highlight the need for better infrastructure and training. Looking at the bigger picture, the impact of cashless policies on income, sales, and how efficiently the market women run their businesses showed mixed results. This study's analysis found that those who have successfully adopted cashless payments tend to see positive effects on their business performance. However, the overall picture is complex, influenced by factors like market conditions and how quickly individuals adapt to change. Finally, the feelings of the market women about cashless policies are mixed. Many appreciate the convenience, the reduced risk of carrying cash, and faster transactions. At the same time, some remain concerned about how reliable the systems are and how steep the learning curve can be. However, cashless policies hold great promise for improving the business operations of market women in Akpan Andem Market, Uyo, Akwa Ibom State. But to fully unlock these benefits, it is clear that more needs to be done—especially in raising awareness, improving digital infrastructure, and addressing the concerns of users. With the right support and resources, these women can better navigate the shift to cashless transactions and enjoy the advantages that come with it.

## 5.3 Recommendations

From the findings of the study, the following recommendations were made:

- i. **Make Learning about Cashless Payments more Friendly and Accessible:** It would be really helpful to organize welcoming, easy-to-understand workshops and awareness campaigns that speak directly to the needs of market women. This kind of hands-on learning can boost their confidence and make cashless payment systems feel less complicated and more approachable.
- ii. **Help Market Women get the Right Devices and Better Internet Access:** Access to affordable smartphones, POS devices, and reliable internet is essential. By making these tools more available and improving connectivity around Akpan Andem Market, many of the biggest obstacles to using cashless payments can be removed, making it easier for market women to join the digital economy.
- iii. **Provide Ongoing Support and Training:** Learning new technology can be tricky, especially when unexpected problems arise. Offering regular training sessions and having technical support available nearby will help market women quickly solve issues and feel more comfortable and confident using cashless payment methods every day.
- iv. **Build Trust by Making Security Clear and Easy to Understand:** Many market women worry about the safety of digital transactions. Policymakers and service providers should focus on clearly explaining security measures and making them easy to understand, so users feel safe and assured that their money and personal information are protected.
- v. **Keep Exploring What Helps or Hinders Adoption:** There's still a lot to learn about how things like market conditions, personal circumstances, and how quickly someone adapts to change affect the use of cashless payments. Doing more research in these areas will help create solutions that truly fit the unique needs of market women and support their success in a cashless world.

## 5.4 Suggestions for Further Research

This study focused on about 400 women (respondents) operating within Akpan Andem Market in Uyo, Akwa Ibom State. Further study may consider collecting samples covering all markets and small business outlets in Akwa Ibom State so as to generate a wider conclusion in understanding the effects of cashless policies on the operations of market women in Akpan Andem Market and Akwa Ibom State.

### Declaration of Competing Interests

The authors declare that they not aware of any competing financial interests or personal relationships that may have influenced the work described in this document.

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### Ethical considerations

The article followed all ethical standards appropriate for this kind of research.

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