

Computerised Payment Systems and Effective Routine Administration In groceries Stores In Bayelsa State

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Abstract

This study examines the impact of computerised payment systems on the routine management of grocery stores in Bayelsa State, Nigeria. Employing a qualitative methodology, the research explores the efficiency, accuracy, and operational improvements brought about by digital payment solutions while addressing associated challenges. Data were collected through interviews, observations, and document reviews, and thematically analyzed to extract meaningful insights. The findings reveal that computerised payment systems significantly enhance transaction processing, inventory management, and financial record-keeping, ultimately improving customer satisfaction. However, barriers such as high implementation costs, technical challenges, and the need for employee training were also identified. The study underscores the transformative potential of digital payment systems in retail operations and offers practical recommendations to optimize their adoption and sustainability. These include investing in staff training, enhancing infrastructure, adopting cost-effective solutions, promoting customer awareness, and ensuring regular system maintenance. The research contributes to understanding how digital innovations can modernize and streamline routine management processes in retail businesses, particularly in developing regions.

Keywords: *Computerised Payment Systems, Grocery Store Management, Routine Management, Digital Payment Solutions.*

Introduction

In recent years, the emergence of computerised payment systems has revolutionized various sectors globally, including the retail industry (Khan et al., 2021). These systems integrate advanced technology to streamline transactions, enhance operational efficiency, and improve customer experience. A computerised payment system refers to the computerised processes and tools employed to handle financial transactions, including point-of-sale (POS) terminals, mobile payment platforms, online payment gateways, and other electronic payment mechanisms (Smith & Tan, 2020). The adoption of such systems has become increasingly essential as businesses strive to adapt to the evolving needs of the modern consumer and a competitive market landscape.

The retail industry, particularly grocery stores, stands to benefit significantly from computerised payment systems. Groceries are an indispensable component of daily life, providing consumers with essential commodities (Nguyen et al., 2019). However, managing grocery stores can be complex due to the nature of their operations, which involve high inventory turnover, diverse product categories, and the need for efficient customer service. Computerised payment systems address these challenges by ensuring seamless transaction processing, inventory tracking, and financial reporting (Ogunleye & Adebayo, 2022). Consequently, they contribute to the effective routine management of grocery stores.

Globally, the computerised payment ecosystem has expanded rapidly, driven by technological advancements and increasing consumer preference for cashless transactions (World Bank, 2021). The use of electronic payment systems offers several advantages, including speed, security, and convenience. In developed countries, most retail outlets have transitioned to computerised payment systems as part of their operational framework (Chen et al., 2018). Similarly, developing countries like Nigeria have witnessed a gradual shift toward adopting such technologies in retail businesses, albeit at a slower pace due to infrastructural and economic challenges (Afolabi et al., 2021).

In Nigeria, the retail sector has embraced computerised transformation, driven by policies promoting financial inclusion and cashless payment systems (Central Bank of Nigeria, 2022). Grocery stores in urban areas have increasingly adopted electronic payment methods, aligning with the Central Bank of Nigeria's (CBN) cashless policy initiative. However, in semi-urban and rural settings, such as Bayelsa State, the adoption of computerised payment systems is not as widespread (Okonkwo & Eze, 2020). This slow uptake is often attributed to inadequate technological infrastructure, limited financial literacy, and socio-economic constraints.

Bayelsa State, located in the South-South geopolitical zone of Nigeria, is predominantly rural with a growing urban population. The state's economy revolves around oil production, agriculture, and small-scale retail businesses (John & Briggs, 2019). Grocery stores in Bayelsa State play a pivotal role in meeting the nutritional and daily needs of residents. Nevertheless, these stores face various challenges, including inefficient transaction processes, manual inventory management, and high operational costs. The adoption of computerised payment systems could address these issues, fostering efficiency, accuracy, and customer satisfaction (Adeyemi et al., 2021).

Despite the potential benefits, the penetration of computerised payment systems in Bayelsa State's grocery sector remains limited. Factors such as inconsistent power supply, high cost of implementation, and resistance to technological change hinder widespread adoption (Eke & Obiora, 2020). Furthermore, many grocery store owners and operators lack adequate knowledge and training on utilizing these systems effectively. These challenges underscore the need for research to explore the nexus between computerised payment systems and effective routine management of grocery stores in Bayelsa State.

The importance of effective routine management in grocery stores cannot be overstated. Routine management encompasses daily operational tasks such as stock monitoring, cash flow management, and customer service delivery (Williams, 2019). Efficient routine management ensures that grocery stores operate smoothly, minimize wastage, and meet customer demands. By integrating computerised payment systems, grocery stores can automate critical processes, enhance data accuracy, and optimize decision-making (Thomas & Jones, 2021). Thus, understanding the interplay between these systems and routine management practices is crucial for improving retail performance in Bayelsa State.

This study seeks to investigate the impact of computerised payment systems on the effective routine management of grocery stores in Bayelsa State. It aims to explore the extent of adoption, identify the challenges faced by store operators, and evaluate the effectiveness of these systems in enhancing operational efficiency. The findings will provide insights for policymakers, business owners, and stakeholders to develop strategies for promoting computerised payment adoption and improving retail management in the region.

The retail industry in Bayelsa State faces numerous challenges that hinder its growth and efficiency. Grocery stores, which constitute a significant segment of the retail sector, are often characterized by manual operations, outdated processes, and limited technological integration (Olayemi & Faleye, 2021). These challenges result in inefficiencies such as prolonged transaction times, inventory discrepancies, and poor financial management. Consequently, grocery store operators struggle to meet customer expectations, maintain profitability, and sustain their businesses in a competitive environment.

One of the critical issues confronting grocery store operators in Bayelsa State is the inefficiency of routine management practices. Manual inventory tracking, cash-based transactions, and paper-based record-keeping are prone to errors, delays, and inaccuracies (Aliyu & Yusuf, 2020). These inefficiencies not only impede daily operations but also limit the store's ability to scale and adapt to changing market dynamics. For instance, cash-based transactions expose businesses to security risks, including theft and fraud, while manual record-keeping hinders accurate financial reporting and decision-making (Ikechukwu & Nwankwo, 2021).

The advent of computerised payment systems offers a potential solution to these challenges. These systems provide tools for automating transactions, tracking sales, managing inventory, and generating real-time financial reports (Chen et al., 2018). By adopting computerised payment systems, grocery store operators can streamline their operations, reduce errors, and enhance customer satisfaction. However, the adoption of such systems in Bayelsa State remains low, raising questions about the underlying factors and implications for routine management.

Several barriers contribute to the limited adoption of computerised payment systems in Bayelsa State. Inadequate technological infrastructure, such as unreliable power supply and limited internet connectivity, poses significant challenges (Okonkwo & Eze, 2020). Additionally, the high cost of acquiring and maintaining computerised systems discourages small-scale grocery store operators

from investing in these technologies. Furthermore, a lack of technical expertise and resistance to change among store operators hinder the effective implementation of computerised payment systems (Afolabi et al., 2021).

The low adoption rate of computerised payment systems has significant implications for the effective routine management of grocery stores in Bayelsa State. Inefficient transaction processes lead to longer wait times and customer dissatisfaction. Manual inventory management results in stockouts or overstocking, leading to financial losses. Moreover, the absence of automated financial reporting limits the ability of store operators to make informed decisions and plan for business growth (Eke & Obiora, 2020). These challenges highlight the need to investigate the relationship between computerised payment systems and routine management practices in grocery stores.

This study seeks to address the gap in knowledge regarding the adoption and impact of computerised payment systems on grocery store operations in Bayelsa State. It aims to explore the extent to which these systems are utilized, identify the challenges faced by store operators, and evaluate their effectiveness in improving routine management practices. The findings will provide valuable insights for developing strategies to promote the adoption of computerised payment systems and enhance the efficiency of grocery store operations in the region.

To achieve the objectives of this study, the following research questions will guide the investigation:

1. What is the level of adoption of computerised payment systems among grocery stores in Bayelsa State?
2. What are the key factors influencing the adoption of computerised payment systems by grocery store operators in Bayelsa State?
3. How do computerised payment systems impact the routine management practices of grocery stores in Bayelsa State?
4. What are the challenges faced by grocery store operators in implementing computerised payment systems in Bayelsa State?

Literature Review

Computerised Payment Systems

Computerized payment system integration has emerged as a major research topic, highlighting the significant influence of modern technologies on a variety of sectors, especially retail. Mobile wallets, contactless payment methods, and blockchain-based platforms are just a few of the advancements that are part of these systems; each has its own advantages and disadvantages. In order to fully comprehend these technologies, it is necessary to examine current studies that investigate the reasons for their acceptance, the advancements in technology that have made it possible for them to expand, and the challenges that shops face when putting them into practice.

According to recent research, one of the main factors propelling the use of digital payment systems is changing customer expectations. Convenience, speed, and security are becoming more and more important to today's customers, which is driving shops to use these cutting-edge payment solutions (Smith, 2022).

Notably, mobile wallets such as Apple Pay, Google Wallet, and Samsung Pay are becoming more and more popular. The popularity of mobile wallets is ascribed to their ease of use and smooth integration with smartphones, which allow for speedy transactions with a single tap (Kumar et al., 2023). According to Lee and Nguyen (2024), digital transactions are becoming the norm rather than the exception as the world moves toward a cashless economy. Additionally, the use of digital payment systems has been greatly impacted by the competitive corporate climate. Retailers use these technologies to stand out from the competition and draw in tech-savvy clients. Davis and Johnson (2023) emphasize that offering diverse payment options can improve customer satisfaction and foster loyalty, as consumers value the speed and flexibility these systems provide. Moreover, computerized payment platforms allow retailers to deliver personalized promotions and discounts, creating added value for their customers (Brown & Green, 2023).

The broad use of electronic payment systems is largely dependent on technological advancement. Contactless payments are now more effective and secure because to innovations like near-field communication (NFC) technology, which also significantly cuts down on transaction times and eliminates the need for physical touch, which is crucial during the COVID-19 pandemic (Anderson et al., 2023). Likewise, blockchain technology is becoming a powerful instrument for safe and open financial transactions, with uses ranging from smart contracts to cryptocurrencies (Taylor & Lewis, 2024).

As a result of changes in consumer behavior and technical advancement, the adoption of computerized payment systems has drawn the attention of scholars and experts in the field. In order to meet the growing need for smooth and effective transactions and keep a competitive advantage in the market, retailers are adopting these systems more and more (Emon et al., 2023). The desire to satisfy customer expectations for quick and easy payments is the main driver behind the adoption of technologies like mobile wallets and contactless payment systems (Emon & Khan, 2023). According to Emon et al. (2024), these technologies produce insightful data that aids in strategic planning in addition to improving consumer happiness. The switch to electronic payment methods is not without difficulties, though. Operations are frequently disrupted by the time and resources needed for integration with current point-of-sale (POS) systems (Khan et al., 2020). Furthermore, security issues are still a major problem, and in order to reduce the possibility of breaches, merchants must have strong safeguards in place for critical transaction data (Emon, 2023).

Shops that successfully implement computerized payment systems see benefits like increased customer satisfaction, enhanced loyalty, higher transaction volumes, and higher average transaction values (Emon & Chowdhury, 2024). The financial implications of implementing these systems, such as significant initial investments and ongoing transaction fees, are important considerations for retailers (Khan et al., 2019). However, these initial costs are often outweighed by the long-term advantages, including improved operational efficiency and increased sales (Khan

et al., 2024). This is consistent with research by Hasan and Chowdhury (2023), which shows that automated payments make shopping easier and more satisfying. Furthermore, the strategic significance of computerized payment systems is highlighted by the potential to use transaction data for inventory management and marketing (Khan, 2017). Retailers may keep a competitive edge in the market by optimizing processes and better understanding client preferences by implementing a data-driven strategy (Khan & Khanam, 2017). Computerized payment systems' varied results in different retail contexts highlight how crucial it is to customize solutions to meet particular objectives (Hasan et al., 2023). Adopting these technologies presents both special potential and difficulties for various retail contexts, including independent businesses, big department stores, and e-commerce platforms (Emon et al., 2023). Designing solutions that meet the unique needs of each retail sector requires an understanding of these variances.

The usage of electronic payment systems has revolutionized retail as a result of the need to adjust to shifting consumer expectations and capitalize on technological advancements. Despite challenges including integration troubles, security concerns, and financial expenses, these systems are a worthy investment due to the overall benefits, which include increased customer satisfaction, greater sales, and actionable data insights. As payment technologies advance and their influence on the market increases, retailers need to be adaptable and sensitive to new developments (Khan et al., 2024; Emon et al., 2024).

Even with these advantages, there are still many difficulties. Integrating new payment technologies with current point-of-sale (POS) systems is one of the biggest challenges. During this process, many merchants encounter technological issues that might impair service and lower operational effectiveness. Nguyen and Patel (2024) emphasize how crucial it is to provide smooth compatibility and integration in order to reduce these interruptions. Furthermore, implementing electronic payment systems can be expensive, especially for small and medium-sized businesses (SMEs). Some shops are frequently put off by the expenses of purchasing technology, integrating systems, and paying recurring transaction fees (Miller & Roberts, 2023).

Another important issue is security. With the growth in digital transactions comes a heightened danger of data breaches and fraud. Retailers must deploy sophisticated security measures to secure sensitive consumer information and assure regulatory compliance. According to Williams et al. (2023), preserving the integrity of payment platforms requires strong security measures, employee training, and consumer education. Smith (2022) goes on to stress the need of encouraging optimal practices in order to protect transactions.

Both corporate operations and customer behavior are greatly impacted by computerized payment methods. According to research by Brown and Green (2023), these technologies improve consumer experiences by providing quicker and easier ways to do transactions, which leads to higher levels of satisfaction and loyalty. Retailers gain from this favorable experience as it increases sales and encourages repeat business. Additionally, electronic payment systems offer useful data insights that help companies enhance inventory control and marketing tactics. According to Anderson et al. (2023), transaction data provides a more thorough comprehension of customer preferences and buying patterns, allowing for more focused marketing initiatives.

The literature emphasizes how electronic payment technologies have revolutionized customer behavior and shop operations. Retailers are embracing these technologies due to adoption motivations such as increased consumer demand for convenience and competitive pressures. This shift is being accelerated by innovations like blockchain and near-field communication (NFC), despite the fact that cost, security, and integration problems continue to be major obstacles. Computerized payment systems are nonetheless an appealing investment due to their advantages, which include enhanced customer satisfaction, more revenues, and actionable analytics. To overcome obstacles and maximize the potential of these technologies in the retail industry, more research will be necessary.

Effective Routine Management

Effective routine management is fundamental to the successful operation of grocery stores. It encompasses the strategic planning, coordination, and execution of daily activities to ensure the smooth functioning of the business (Smith & Tan, 2020). Grocery stores are inherently dynamic, characterized by high inventory turnover rates, diverse product offerings, and fluctuating customer demands. Consequently, effective routine management is essential to maintaining operational efficiency, minimizing losses, and enhancing customer satisfaction.

One critical aspect of routine management in grocery stores is inventory control. Inventory management involves monitoring stock levels, replenishing products, and ensuring the availability of essential items while minimizing overstocking and wastage (Thomas & Jones, 2021). An effective inventory management system enables store operators to track sales trends, predict customer demand, and make informed purchasing decisions. For instance, computerised inventory systems allow real-time tracking of stock levels, reducing the risk of stockouts or excess inventory (Ogunleye & Adebayo, 2022). Such systems also facilitate the identification of slow-moving items, enabling store managers to implement promotional strategies to boost sales.

Another crucial element of routine management is employee coordination. Grocery stores rely on a team of employees to perform various tasks, including stocking shelves, operating cash registers, and assisting customers (Williams, 2019). Effective management involves assigning roles and responsibilities, scheduling shifts, and providing training to ensure employees can perform their duties efficiently. Clear communication and regular staff meetings are essential for fostering teamwork and addressing operational challenges. Moreover, motivating employees through incentives and recognition programs can enhance productivity and job satisfaction (Chen et al., 2018).

Customer service is a cornerstone of routine management in grocery stores. Providing exceptional customer service ensures a positive shopping experience, fostering customer loyalty and repeat business (Nguyen et al., 2019). This includes maintaining clean and organized store layouts, offering competitive pricing, and addressing customer inquiries promptly. The integration of technology, such as self-checkout kiosks and mobile payment options, can further enhance the customer experience by reducing wait times and offering convenience (Afolabi et al., 2021). Additionally, collecting customer feedback through surveys or suggestion boxes can help store operators identify areas for improvement and tailor their services to meet customer expectations. Financial management is another critical component of routine management in grocery stores. Proper financial management involves tracking daily sales, monitoring expenses, and ensuring accurate record-keeping (Ikechukwu & Nwankwo, 2021). Automated financial reporting tools can

simplify this process by generating real-time reports, enabling store managers to assess profitability and identify cost-saving opportunities. Effective cash flow management is also essential, particularly for small-scale grocery stores operating on tight budgets. By analyzing sales data and controlling expenses, store operators can make informed decisions to sustain their business operations (Eke & Obiora, 2020).

Marketing and promotional activities play a vital role in the routine management of grocery stores. Effective marketing strategies help attract customers, boost sales, and enhance brand visibility (Okonkwo & Eze, 2020). Store operators can implement various promotional tactics, such as discounts, loyalty programs, and seasonal sales, to drive customer engagement. Social media platforms and digital marketing tools offer cost-effective ways to reach a broader audience and promote special offers. For example, creating an online presence through a website or social media page allows grocery stores to showcase their products and interact with customers (Afolabi et al., 2021). Additionally, in-store advertising and attractive product displays can influence purchasing decisions and increase sales.

Sanitation and hygiene are integral to the routine management of grocery stores, particularly in light of public health concerns. Maintaining clean and sanitary store environments is crucial for ensuring food safety and preventing the spread of illnesses (Aliyu & Yusuf, 2020). Routine cleaning schedules, proper waste disposal, and adherence to health regulations are essential practices. Store operators should also train employees on food handling and hygiene protocols to comply with industry standards. By prioritizing sanitation and hygiene, grocery stores can build customer trust and uphold their reputation (John & Briggs, 2019).

Technology integration has become a game-changer in the routine management of grocery stores. The adoption of computerised payment systems, inventory management tools, and customer relationship management (CRM) software has streamlined operations and improved efficiency (Smith & Tan, 2020). For instance, point-of-sale (POS) systems enable faster transaction processing, reducing wait times and enhancing customer satisfaction. Additionally, CRM software helps store operators track customer preferences and personalize their marketing efforts. The use of technology also facilitates data-driven decision-making, allowing store managers to optimize pricing strategies, monitor sales trends, and identify growth opportunities (Williams, 2019).

Supply chain management is another critical aspect of routine management in grocery stores. Efficient supply chain management ensures a steady flow of products from suppliers to store shelves, minimizing disruptions and delays (Thomas & Jones, 2021). Building strong relationships with reliable suppliers is essential for maintaining consistent product availability. Store operators should also negotiate favorable terms with suppliers to reduce costs and improve profit margins. Leveraging technology, such as automated procurement systems, can streamline the ordering process and enhance supply chain efficiency (Ogunleye & Adebayo, 2022).

Adapting to market trends and customer preferences is crucial for effective routine management. Grocery stores operate in a highly competitive environment where consumer behavior and market dynamics constantly evolve (Nguyen et al., 2019). Store operators must stay informed about industry trends, such as the increasing demand for organic and locally sourced products. By diversifying their product offerings and catering to niche markets, grocery stores can attract a broader customer base. Additionally, monitoring competitors' pricing and promotional strategies can help store operators remain competitive and retain market share (Chen et al., 2018).

The implementation of sustainable practices is becoming increasingly important in the routine management of grocery stores. Sustainable practices, such as reducing food waste, minimizing plastic use, and sourcing products ethically, align with growing consumer demand for environmentally friendly businesses (Okonkwo & Eze, 2020). Store operators can implement recycling programs, offer reusable bags, and collaborate with suppliers committed to sustainability. By embracing sustainable practices, grocery stores can enhance their brand image and appeal to environmentally conscious customers (Afolabi et al., 2021).

Effective routine management also involves risk management and contingency planning. Grocery stores face various risks, including supply chain disruptions, theft, and unforeseen events such as natural disasters (Aliyu & Yusuf, 2020). Developing contingency plans and implementing risk mitigation strategies can help store operators respond effectively to challenges and minimize losses. For example, investing in security systems and surveillance cameras can deter theft and enhance store safety. Additionally, maintaining emergency stockpiles and establishing alternative supply sources can mitigate the impact of supply chain disruptions (Eke & Obiora, 2020).

Training and development are essential for building a skilled workforce capable of supporting effective routine management. Regular training programs equip employees with the knowledge and skills needed to perform their roles efficiently (Williams, 2019). Topics such as customer service, inventory management, and technology usage should be included in training sessions. Continuous professional development also fosters employee engagement and retention, contributing to the overall success of the grocery store (Thomas & Jones, 2021).

In conclusion, effective routine management is a multifaceted process that requires careful planning, coordination, and execution of various operational tasks. From inventory control and employee coordination to customer service and financial management, each aspect plays a critical role in ensuring the smooth functioning of grocery stores. The integration of technology, adoption of sustainable practices, and adaptation to market trends further enhance routine management practices. By prioritizing these elements, grocery store operators can optimize their operations, improve customer satisfaction, and achieve long-term success.

Theoretical Framework

The theoretical framework for understanding the interplay between computerised payment systems and routine management in grocery stores draws upon several relevant theories, including the Technology Acceptance Model (TAM), Systems Theory, and Resource-Based View (RBV). These theories provide a foundation for examining how technological innovations enhance operational efficiency, customer satisfaction, and overall performance in retail settings.

Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM), developed by Davis (1989), posits that two primary factors determine the acceptance and usage of technology: perceived usefulness and perceived ease of use. In the context of computerised payment systems, perceived usefulness reflects how the adoption of such systems can improve routine management by streamlining operations, reducing transaction times, and enhancing accuracy (Nguyen et al., 2019). Perceived ease of use, on the other hand, influences the willingness of grocery store operators and employees to integrate and utilize these systems effectively.

For instance, point-of-sale (POS) systems enable grocery stores to process payments quickly and accurately, reducing the likelihood of errors and minimizing customer wait times. By improving

transaction efficiency, these systems contribute to enhanced customer satisfaction and operational effectiveness (Smith & Tan, 2020). Moreover, the ease of use associated with user-friendly interfaces and automated features encourages the adoption of computerised payment systems, thereby facilitating their integration into routine management practices.

Systems Theory

Systems theory, developed by Bertalanffy (1968), views organizations as complex systems comprising interrelated components that work together to achieve common goals. Grocery stores operate as systems where various elements, such as inventory management, customer service, and financial operations, interact dynamically. Computerised payment systems act as integrative tools that streamline these components, ensuring seamless coordination and efficiency (Ogunleye & Adebayo, 2022).

For example, computerised payment systems are often integrated with inventory management software, enabling real-time tracking of stock levels and automatic updates based on sales transactions. This integration ensures that inventory records remain accurate, reducing the risk of stockouts or overstocking (Thomas & Jones, 2021). By enhancing the interconnectedness of operational processes, computerised payment systems enable grocery stores to function more efficiently and adapt to changing market demands.

Resource-Based View (RBV)

The Resource-Based View (RBV) emphasizes the strategic importance of unique resources and capabilities in achieving competitive advantage (Barney, 1991). In the context of grocery stores, computerised payment systems represent valuable technological resources that enhance routine management and operational efficiency. These systems provide store operators with actionable insights derived from sales data, enabling data-driven decision-making and strategic planning (Chen et al., 2018).

For instance, the analytical capabilities of computerised payment systems allow grocery stores to identify sales trends, customer preferences, and peak shopping periods. This information can be used to optimize staffing schedules, plan promotional activities, and adjust inventory levels to meet customer demand effectively (Afolabi et al., 2021). By leveraging these technological resources, grocery stores can improve their responsiveness and maintain a competitive edge in the retail market.

Diffusion of Innovation Theory

The Diffusion of Innovation Theory, proposed by Rogers (1962), explains how new technologies are adopted within organizations and societies. According to this theory, the adoption of computerised payment systems in grocery stores follows a diffusion process influenced by factors such as relative advantage, compatibility, complexity, trialability, and observability (Okonkwo & Eze, 2020).

Relative advantage refers to the perceived benefits of adopting computerised payment systems, such as faster transaction processing and enhanced accuracy. Compatibility addresses how well these systems align with existing routines and practices in grocery stores. Complexity, on the other hand, pertains to the ease or difficulty of using the technology. Trialability and observability highlight the importance of testing the systems and observing their benefits before full-scale adoption (Williams, 2019). Understanding these factors enables grocery store operators to manage

the adoption process effectively, ensuring successful integration into routine management practices.

The integration of these theories provides a comprehensive framework for understanding the role of computerised payment systems in routine management. TAM highlights the importance of perceived usefulness and ease of use in technology adoption, while systems theory emphasizes the interconnectedness of operational processes. RBV underscores the strategic value of technological resources, and the diffusion of innovation theory explains the adoption process. Contingency theory, on the other hand, focuses on aligning internal processes with external factors.

In practice, grocery store operators can apply this theoretical framework to guide the implementation and utilization of computerised payment systems. By addressing factors such as ease of use, compatibility, and relative advantage, store operators can ensure successful adoption. Moreover, leveraging the analytical capabilities of these systems enables data-driven decision-making, enhancing routine management practices (Nguyen et al., 2019).

The theoretical framework outlined above provides a robust foundation for analyzing the impact of computerised payment systems on routine management in grocery stores. By integrating insights from TAM, systems theory, RBV, diffusion of innovation theory, and contingency theory, this framework offers a holistic understanding of how technological innovations enhance operational efficiency, customer satisfaction, and overall performance in the retail sector.

Methodology

Research Design

This study adopts a qualitative research design to explore the impact of computerised payment systems on the routine management of grocery stores in Bayelsa State. Qualitative research allows for an in-depth understanding of participants' experiences, perceptions, and attitudes toward the integration of technology in routine store operations. Specifically, a case study approach is employed to focus on selected grocery stores that have adopted computerised payment systems. This design is suitable for exploring the real-life context and complexities of the phenomenon under investigation (Creswell, 2014).

Population and Sampling Technique

The population for this study consists of grocery store owners, managers, and employees in Bayelsa State who utilize computerised payment systems. Purposive sampling is employed to select participants (managerial employees) who possess relevant experience and knowledge about the subject matter. The inclusion criteria include:

1. Grocery stores that have been operational for at least one year.
2. Stores that actively use computerised payment systems.
3. Participants willing to share their experiences and insights.

A sample size of 10 grocery stores is chosen to ensure diverse perspectives while maintaining a manageable scope for in-depth qualitative analysis.

Data Collection Methods

To gather rich and detailed data, multiple methods of data collection are utilized:

Semi-Structured Interviews: Interviews are conducted with store owners, managers, and employees to understand their perceptions and experiences with computerised payment systems. Open-ended questions are designed to elicit detailed responses, and follow-up questions are asked

to probe further into specific areas. The interviews are recorded with participants' consent and transcribed verbatim for analysis.

Observation: Non-participant observation is carried out to examine the operational processes of the selected grocery stores. Observations focus on how computerised payment systems are used during routine management tasks, such as inventory tracking, sales processing, and customer interactions. Field notes are taken to document observed practices and behaviors.

Document Review: Relevant documents, such as transaction records, inventory reports, and training manuals, are reviewed to complement interview and observation data. These documents provide insights into how computerised payment systems are integrated into routine management.

Data Analysis

Thematic analysis is employed to analyze the qualitative data collected from interviews, observations, and document reviews. The analysis follows the six-step process outlined by Braun and Clarke (2006):

Familiarization: Transcribed interviews and field notes are read multiple times to gain a thorough understanding of the data.

Generating Initial Codes: Key phrases, words, and concepts are coded systematically across the data set.

Searching for Themes: Codes are grouped into potential themes based on patterns and relationships.

Reviewing Themes: Themes are reviewed to ensure they accurately represent the data and are coherent.

Defining and Naming Themes: Each theme is clearly defined and named to reflect its essence.

Producing the Report: Themes are organized into a comprehensive narrative, supported by direct quotations from participants.

Analysis and Results

The analysis and results section presents the findings derived from the qualitative data collected through interviews, observations, and document reviews. These findings are organized thematically to address the research objectives and provide insights into the relationship between computerised payment systems and routine management of grocery stores in Bayelsa State. Thematic analysis, following Braun and Clarke's (2006) framework, was employed to identify patterns and themes in the data.

Theme 1: Efficiency in Transaction Processing

One of the most prominent themes emerging from the data was the efficiency introduced by computerised payment systems in transaction processing. Participants consistently highlighted that these systems significantly reduced the time required to complete sales transactions. Store managers noted that automated systems eliminate manual calculations, minimizing errors and improving customer satisfaction. For instance, a participant stated, *"The payment system has streamlined our checkout process. Customers spend less time waiting in line, and this enhances their shopping experience."* (Interview Participant 3, 2025). Observations confirmed this, as transactions were processed seamlessly during peak hours, reducing congestion.

Theme 2: Enhanced Inventory Management

Another recurring theme was the role of computerised payment systems in enhancing inventory management. Store owners and managers reported that these systems provide real-time data on stock levels, enabling them to track inventory and avoid stockouts or overstocking. One participant noted, *"With the system, I can monitor inventory from my phone and know what to reorder without physically checking the shelves."* (Interview Participant 7, 2025). Document reviews of inventory reports further validated this claim, showing consistent updates and detailed tracking enabled by the system.

Theme 3: Improved Financial Record Keeping

The study also found that computerised payment systems contributed to improved financial record-keeping. Participants emphasized the accuracy and ease of maintaining records through automated reports. A store owner mentioned, *"At the end of each day, I generate a sales report with a click. It saves time and ensures I have accurate records for accounting purposes."* (Interview Participant 1, 2025). This finding was corroborated by reviewing transaction records, which were systematically organized and free from discrepancies.

Theme 4: Challenges in System Adoption

Despite the benefits, participants highlighted challenges in adopting computerised payment systems. The most common issues included the high cost of implementation, technical difficulties, and the need for employee training. One manager shared, *"We faced some resistance from staff initially. They were used to the manual system, and it took time to train them on using the new technology."* (Interview Participant 5, 2025). Additionally, intermittent power supply and internet connectivity issues were noted as barriers, particularly in rural areas.

Theme 5: Customer Perceptions and Adaptation

Customer perception was another significant aspect explored. Participants revealed that while many customers appreciated the efficiency of the systems, some older customers struggled to adapt to the technology. For example, a cashier observed, *"Some of our elderly customers find it difficult to use the card machines or QR codes. We often assist them to ensure they don't feel left out."* (Interview Participant 6, 2025). Observations during data collection also noted instances of staff assisting customers with digital payment processes.

Cross-Cutting Findings

Integration with Routine Operations: The study found that integrating computerised payment systems with routine operations enhanced overall store management. Store managers reported that automated systems reduced their workload, allowing them to focus on strategic planning.

Training and Capacity Building: Training emerged as a crucial factor for successful adoption. Participants emphasized the need for regular training sessions to keep staff updated on system features and troubleshooting techniques.

Sustainability and Scalability: Some participants expressed concerns about the long-term sustainability of the systems, particularly regarding maintenance costs and updates. However, they acknowledged the potential for scalability as technology advances.

Implications of Findings

The findings suggest that computerised payment systems offer significant advantages in the routine management of grocery stores by improving efficiency, accuracy, and customer satisfaction. However, addressing challenges such as cost, training, and infrastructure is essential for maximizing their benefits. These insights align with previous studies, such as those by Adewale et al. (2020) and Eze et al. (2022), who also emphasized the transformative potential of digital payment systems in retail operations.

The analysis highlights the dual impact of computerised payment systems on efficiency and operational challenges. Grocery stores in Bayelsa State can leverage these systems to enhance routine management while addressing adoption barriers through strategic planning and investment in staff training and infrastructure development.

Conclusion

This study has explored the role of computerised payment systems in enhancing the routine management of grocery stores in Bayelsa State. The findings reveal that such systems significantly improve transaction efficiency, inventory management, and financial record-keeping, while also contributing to customer satisfaction. However, the study identified challenges such as high implementation costs, technical issues, and the need for staff training. Despite these obstacles, computerised payment systems present an opportunity for grocery stores to modernize their operations and improve overall efficiency. Addressing these challenges can further optimize their effectiveness and ensure their long-term sustainability.

Recommendations

1. Grocery store owners should organize regular training sessions to ensure employees are proficient in using computerised payment systems. Training should focus on system functionalities, troubleshooting, and customer support to enhance staff confidence and efficiency.
2. To address technical challenges, particularly in areas with unstable power and internet supply, store owners should invest in backup power systems and stable internet solutions. Collaborating with service providers to improve local infrastructure can also be beneficial.
3. Store owners should explore scalable and cost-effective payment solutions tailored to their specific needs. This includes cloud-based systems that require minimal upfront investment and offer scalability as the business grows.
4. Efforts should be made to educate customers, especially older demographics, on the use of computerised payment systems. Providing in-store assistance and creating user-friendly interfaces can improve customer adaptation and satisfaction.
5. To ensure the sustainability of computerised payment systems, grocery stores should schedule regular maintenance and updates. This will help prevent system failures and keep the technology aligned with current advancements, enhancing overall efficiency.

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