Electronic Commerce and Business Success of E-Tailing Firms in Port Harcourt

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Abstract

This study empirically investigated the relationship between Electronic Commerce and Business Success of E-tailing firms in Port Harcourt. The study specifically examined the impact of online payment security and website usability on repeat patronage. The research is quantitative within a correlational survey design; the population of the study comprised of three (3) electronic commerce firms (Jumia, Konga and Slot System Ltd) in Port Harcourt, Rivers state Nigeria. 45 respondents were used on the basis of 15 respondents per firm with a simple random technique to ensure unbiased representation. The reliability of the instrument was determined using the Cronbach's alpha test with the aid of Statistical Package for Social Sciences (SPSS) version 23 and it stood at 0.88 higher than the benchmark of 0.7. The data collected for this study were analyzed through descriptive and inferential statistics. The study specifically examined the impact of online payment security and website usability on repeat patronage. Using inferential statistics, the Pearson Product Moment Correlation Technique was employed to test the hypotheses. The results indicate strong positive relationships between online payment security, website usability, and business success, reinforcing previous studies on e-commerce performance. This study concluded that electronic commerce is a significant predictor of business success of e-tailing firms in Port Harcourt. This study recommends that E-tailing firms should prioritize robust security measures to build customer trust and encourage repeat patronage. To increase customer retention, e-commerce businesses should enhance website usability by optimizing page load speed, simplifying navigation, and ensuring mobile responsiveness.

Keywords: Electronic Commerce, Online Payment Security, Website Usability and Business Success.

Introduction

Electronic commerce (e-commerce) has significantly transformed the business landscape, enabling firms to reach global markets, reduce operational costs, and enhance customer experiences. The rapid adoption of internet technologies, mobile commerce, and digital payment solutions has accelerated the shift from traditional brick-and-mortar retailing to electronic retailing (e-tailing) (Laudon & Traver, 2021). The global e-commerce market is projected to surpass \$7 trillion by 2025, with increasing reliance on digital platforms for purchasing goods and services (Statista, 2023).

A critical determinant of e-commerce success is business performance, which is often measured by key indicators such as repeat patronage. These factors are fundamental in ensuring sustained profitability and long-term viability in the competitive online retailing industry (Chen & Hitt, 2022). Businesses that prioritize seamless online transactions, user-friendly websites, and personalized customer experiences tend to experience higher levels of customer retention (Grewal et al., 2021).

Despite the global growth of e-commerce, its impact in emerging economies, including Nigeria, remains an evolving area of study. Nigeria, with its increasing internet penetration and mobile banking adoption, presents unique opportunities and challenges for e-tailing firms (Ayo et al., 2020). In Port Harcourt, a commercial hub in Nigeria, the e-commerce sector is expanding, but issues related to online payment security, website usability, and customer retention continue to shape business success outcomes (Eze et al., 2021).

Business success in e-commerce is often assessed through two critical metrics: repeat patronage. Repeat patronage refers to a customer's willingness to make recurrent purchases from the same online store (Zeithaml et al., 2020). It is influenced by several factors, including the quality of service, ease of transaction, and overall customer experience (Kumar et al., 2021). Customers who have a seamless and satisfactory shopping experience are more likely to return, thus increasing a firm's sales volume and sustainability. For e-tailing firms in Port Harcourt, fostering repeat patronage remains a key challenge, as customers often exhibit skepticism towards online transactions due to fraud concerns, poor service delivery, and lack of trust (Nwankwo et al., 2022). Understanding the factors influencing these outcomes is essential for sustainable business growth.

Online payment refers to digital transactions that facilitate the purchase of goods and services over the internet. The widespread adoption of digital payment solutions, including credit/debit cards, mobile wallets, and cryptocurrencies, has transformed the online shopping experience (Chaffey, 2021). A secure, seamless, and efficient online payment system is crucial for building consumer trust and ensuring transaction success (Pavlou & Gefen, 2020). However, in Nigeria, concerns regarding online payment fraud, unreliable transaction networks, and cybersecurity threats have hindered the full adoption of digital payments (Odukoya et al., 2021). Many customers in Port Harcourt remain skeptical about sharing financial details online, affecting their willingness to engage in repeat transactions. Thus, businesses that enhance online payment security and offer multiple payment options are more likely to retain customers (Ojo et al., 2022).

Website usability refers to the ease with which users can navigate, interact with, and complete transactions on an e-commerce website (Nielsen, 2020). A well-designed website with intuitive navigation, fast load times, mobile responsiveness, and secure checkout processes contributes to customer satisfaction and retention (Hassan & Li, 2021). In developing economies like Nigeria, poor website usability is a common issue, often caused by inadequate infrastructure, poor website design, and slow internet connectivity (Adebiyi et al., 2022). When websites are difficult to use or experience frequent downtimes, customers may abandon transactions, leading to lower sales and reduced customer loyalty (Okonkwo et al., 2023).

The relationship between online payment, website usability, and business success has been widely explored in literature. Studies indicate that secure online payment systems and user-friendly websites significantly enhance customer experience, leading to higher repeat patronage (Gefen & Straub, 2020). Customers tend to return to e-commerce platforms where they feel safe transacting and can easily navigate the website (Yadav & Mahara, 2021). Furthermore, research in emerging markets shows that businesses that invest in improving website usability and offering multiple online payment options tend to enjoy competitive advantages in customer retention (Ayo et al.,

2021). In Nigeria, where e-commerce is still evolving, the seamless integration of payment security and website functionality plays a crucial role in driving customer loyalty (Eze et al., 2022). Despite this body of knowledge, limited studies have specifically examined the combined effects of online payment security and website usability on business success in the e-tailing sector of Port Harcourt. This gap in literature underscores the need for a localized study focusing on these variables within the Nigerian e-commerce landscape. The motivation for this study stems from the growing importance of e-commerce in Nigeria and the challenges faced by e-tailing firms in retaining customers. Despite the potential for growth, many online retailers in Port Harcourt struggle with issues such as low customer retention, distrust in online payment systems, and poor website usability. Additionally, previous studies have largely focused on global e-commerce trends, with limited attention to the unique dynamics of Nigerian online shoppers and their behavioral patterns (Odukoya et al., 2022). There is a need for empirical research that investigates how the usability of e-commerce websites and the security of online payment systems impact repeat patronage and customer loyalty in Port Harcourt.

Statement of the Problem

Despite the rapid growth of e-commerce in Nigeria, many e-tailing firms in Port Harcourt continue to struggle with poor business success, as evidenced by low repeat patronage and weak customer loyalty. The fundamental challenge lies in the inability of these firms to retain customers after initial purchases, leading to inconsistent revenue generation and business instability.

One major factor contributing to this problem is customer distrust in online payment systems. Nigeria has one of the highest rates of online payment fraud in Africa, with cybercrime and phishing attacks significantly undermining consumer confidence in digital transactions (Odukoya et al., 2021). Many customers in Port Harcourt remain reluctant to use online payment methods due to fears of financial loss, failed transactions, and inadequate fraud protection mechanisms. This lack of trust results in high transaction abandonment rates, forcing some customers to revert to cash-on-delivery models, which increase operational risks and costs for e-tailing firms (Eze et al., 2022).

Additionally, poor website usability remains a major impediment to business success in the etailing sector. Many online stores in Port Harcourt have poorly designed websites with slow load times, difficult navigation, and non-responsive mobile interfaces. These issues create frustrating shopping experiences, leading to high bounce rates and low conversion rates (Adebiyi et al., 2022). Customers are less likely to return to an e-commerce platform that lacks seamless usability, making it difficult for businesses to establish long-term relationships with their clientele.

Empirical studies have shown that secure online payment systems and user-friendly websites are crucial in fostering customer trust, repeat patronage, and loyalty (Gefen & Straub, 2020; Kim & Peterson, 2021). However, there is a noticeable gap in research that specifically addresses how these factors collectively influence business success within the unique business environment of Port Harcourt. While global studies have explored the relationship between online payment, website usability, and customer retention, there is limited localized research that reflects the specific challenges and behaviors of Nigerian consumers in this rapidly evolving digital marketplace.

Given these challenges, there is an urgent need to investigate how poor online payment experiences and weak website usability contribute to business failures in the e-tailing sector of Port Harcourt. Addressing these issues is critical for enhancing customer retention, improving transaction security, and ensuring the long-term sustainability of e-commerce businesses in the region. This study, therefore, seeks to bridge the existing knowledge gap by examining the impact of online payment security and website usability on business success in the Port Harcourt e-commerce industry.

Aim and Objectives of the Study

The aim of this study is to empirically investigate the relationship between Electronic Commerce and Business Success of E-tailing firms in Port Harcourt. The specific objectives are to:

- i. determine the relationship between online payment and repeat patronage of e-tailing firms in Port Harcourt.
- ii. examine the relationship between website usability and repeat patronage of e-tailing firms in Port Harcourt.

Research Questions

In order to address the objectives of the study, the following research questions were answered:

- i. What is the relationship between online payment and Repeat Patronage of e-tailing firms in Port Harcourt?
- ii. What is the relationship between website usability and Repeat Patronage of e-tailing firms in Port Harcourt?

Research Hypotheses

In line with the objectives and research questions, the following research hypotheses were formulated and tested:

- Ho_{1:} There is no significant relationship between online payment and Repeat Patronage of etailing firms in Port Harcourt.
- Ho_{2:} There is no significant relationship between website usability and Repeat Patronage of etailing firms in Port Harcourt.

Review of Related Literature

Conceptual Review

Here, concepts used in the study were reviewed.

Concept of E-Commerce

Electronic commerce (e-commerce) refers to the buying and selling of goods and services over the internet, as well as the transfer of money and data necessary to complete these transactions (Laudon & Traver, 2021). It encompasses various business models, including business-to-consumer (B2C), business-to-business (B2B), consumer-to-consumer (C2C), and consumer-to-business (C2B) transactions (Chaffey, 2021). The rapid advancement of digital technologies, mobile applications, and online payment systems has significantly expanded the scope and influence of e-commerce in global markets (Statista, 2023).

Some scholars define e-commerce primarily from a technological standpoint, emphasizing the role of the internet and digital platforms in facilitating commercial activities. According to Laudon and Traver (2021), e-commerce refers to transactions conducted over digital networks, particularly the internet, involving the exchange of goods, services, and information between businesses,

consumers, and governments. This perspective highlights the technological enablers of ecommerce, such as web-based platforms, cloud computing, mobile applications, and artificial intelligence, which have revolutionized the way businesses interact with customers. While this definition captures the digital nature of e-commerce, it has been critiqued for failing to account for the broader business and economic dimensions of online trade. Scholars such as Turban et al. (2022) argued that e-commerce is not merely about using digital tools but also about redefining traditional business models, optimizing supply chains, and creating new economic opportunities. Hence, a purely technological view may overlook the strategic and financial transformations that e-commerce introduces into global markets.

From a commercial standpoint, Chaffey (2021) defines e-commerce as the buying and selling of goods and services electronically, along with the associated financial and informational transactions that facilitate trade. This definition shifts the focus from technology to commerce, emphasizing how businesses leverage digital platforms to reach wider audiences, reduce costs, and enhance profitability. However, critics argued that such a perspective does not fully consider the role of non-monetary exchanges in e-commerce, such as information-sharing, digital marketing, and customer engagement. Kim and Peterson (2021) expand on this definition by asserting that e-commerce is not limited to transactions but also includes all online interactions that influence consumer behavior, brand perception, and business competitiveness. This broader approach acknowledges that successful e-commerce businesses must go beyond selling products and services; they must also cultivate digital trust, customer relationships, and brand loyalty.

Concept of Business Success

The concept of business success has been widely debated among scholars, with varying perspectives on what constitutes a successful business. Some researchers define success in terms of financial performance and profitability, while others emphasize customer satisfaction, sustainability, and long-term competitiveness. A critical analysis of these perspectives reveals that business success is a multifaceted phenomenon that cannot be measured by a single factor but rather by a combination of financial, operational, and strategic indicators.

One of the most common ways scholars define business success is through financial performance. According to Kuratko and Hodgetts (2020), a successful business is one that achieves consistent revenue growth, high profitability, and strong return on investment (ROI). From this perspective, financial metrics such as net income, profit margins, and shareholder value are the key indicators of success. This definition aligns with traditional economic theories that view businesses as profit-maximizing entities. However, critics argued that focusing solely on financial performance is too narrow and does not capture the full essence of business success. Kaplan and Norton (2021) assert that while financial performance is important, it is often a lagging indicator that reflects past actions rather than future potential. They propose a balanced scorecard approach, which includes customer satisfaction, internal processes, and innovation as equally important dimensions of business success is needed.

Some scholars argued that business success should be defined by customer satisfaction and loyalty, as businesses ultimately depend on their customers for survival. Zeithaml et al. (2020) define a successful business as one that builds strong relationships with customers, delivers consistent value, and achieves high customer retention rates. This perspective aligns with the customer relationship management (CRM) theory, which emphasizes that businesses that prioritize customer experience tend to achieve long-term profitability and market stability. However, some

critics caution against overemphasizing customer satisfaction at the expense of financial sustainability. Drucker (2019) argues that while customer satisfaction is important, businesses must also focus on cost management, operational efficiency, and innovation to remain competitive. A business that satisfies customers but fails to manage its costs efficiently may struggle to sustain operations. Therefore, business success must balance customer-centric strategies with sound financial management.

E-Commerce and Business Success

Electronic commerce (e-commerce) has emerged as a critical driver of business success in the digital age, enabling firms to expand their customer base, reduce transaction costs, and enhance consumer convenience. The adoption of e-commerce has been widely recognized as a determinant of firm performance, influencing both customer retention and loyalty (Laudon & Traver, 2021). Studies suggest that businesses leveraging e-commerce platforms tend to experience higher revenue growth and sustained market presence due to their ability to provide seamless digital transactions (Grewal et al., 2021).

In the context of business success, repeat patronage is strongly influenced by the ease of online shopping and the level of trust customers place in e-commerce platforms. Research by Kumar et al. (2021) indicates that customers are more likely to engage in repeated transactions with online retailers that offer personalized experiences and seamless payment integration. Similarly, customer loyalty is enhanced when e-commerce platforms provide reliable service, quick response times, and effective customer engagement (Zeithaml et al., 2020).

However, despite the global growth of e-commerce, firms in developing economies like Nigeria face significant barriers to success. Ayo et al. (2020) highlight issues such as unreliable payment gateways, logistics inefficiencies, and digital illiteracy as key challenges affecting e-commerce adoption. In Port Harcourt, these barriers contribute to low repeat patronage and customer loyalty, as customers remain skeptical of online transactions due to fraud risks and poor service delivery (Eze et al., 2021). Thus, while e-commerce offers numerous opportunities for business growth, its success depends on addressing trust, security, and service quality issues.

Online Payment Security and Business Success

Online payment security is a fundamental factor influencing customer trust and business success in the e-commerce industry. Secure payment systems ensure transaction integrity, prevent fraud, and enhance consumer confidence in digital transactions (Pavlou & Gefen, 2020). Studies have consistently shown that customers are more likely to engage in repeat purchases when they feel assured that their financial information is protected (Odukoya et al., 2021).

Empirical research supports the claim that online payment security directly impacts repeat patronage. For instance, Ojo et al. (2022) found that customers who experienced failed transactions or security breaches were significantly less likely to return to the same online retailer. Similarly, Reichheld & Schefter (2020) argue that customer loyalty in e-commerce is driven by trust, and businesses that invest in robust security measures, such as encryption and fraud detection, tend to retain customers more effectively.

However, in Nigeria, concerns over cybercrime and digital fraud remain prevalent, discouraging many customers from fully embracing online payment systems (Eze et al., 2022). Research by Nwankwo et al. (2022) indicates that a large percentage of Nigerian consumers prefer cash-on-delivery due to fears of online payment fraud. This reluctance reduces the efficiency of e-commerce operations, leading to higher transaction costs and lower profitability for e-tailing firms.

Consequently, enhancing online payment security is critical to improving business success, particularly in emerging markets where trust in digital transactions is still developing.

Ho_{1:} There is no significant relationship between online payment and Repeat Patronage of etailing firms in Port Harcourt.

Website Usability and Business Success

Website usability plays a pivotal role in determining customer satisfaction and retention in ecommerce. A well-designed website that is easy to navigate, mobile-responsive, and quick-loading significantly enhances the shopping experience, leading to higher repeat patronage and customer loyalty (Nielsen, 2020). Studies have shown that website usability directly affects conversion rates, with poorly designed websites contributing to high bounce rates and abandoned transactions (Hassan & Li, 2021).

Research has established a strong link between website usability and repeat patronage. For example, Adebiyi et al. (2022) found that 80% of online shoppers in Nigeria abandoned transactions due to slow website load times or technical errors. Customers are unlikely to return to an e-commerce site that is difficult to use, highlighting the importance of user-friendly interfaces in fostering business success. Similarly, Okonkwo et al. (2023) argue that website usability contributes to customer loyalty by ensuring a seamless shopping experience. Features such as fast checkouts, intuitive navigation, and clear product descriptions enhance user satisfaction and encourage long-term engagement.

Despite its importance, website usability remains a significant challenge for many e-tailing firms in Port Harcourt. Infrastructure limitations, lack of investment in web development, and poor maintenance contribute to suboptimal user experiences (Eze et al., 2021). These challenges hinder customer retention efforts, as customers may switch to competitors with more efficient digital platforms. Addressing these usability issues is essential for improving business success in the region's e-commerce industry.

Ho_{2:} There is no significant relationship between website usability and Repeat Patronage of etailing firms in Port Harcourt.

Theoretical Foundation of the Study: this study is anchored on Dynamic Capability Theory The Dynamic Capability Theory (DCT) was first introduced by Teece and Pisano (1994) as a framework for understanding how organizations can maintain a competitive advantage in rapidly changing environments. The theory emphasizes that businesses must continuously adapt, integrate, and reconfigure their internal and external resources to respond effectively to market changes, technological advancements, and competitive pressures (Samsudin & Ismail, 2019). Unlike traditional resource-based theories, which focus on a firm's static resources, DCT highlights the importance of dynamic capabilities—skills, routines, and strategic processes—that enable organizations to innovate and sustain long-term growth.

According to Teece, Pisano, and Shuen (1997), dynamic capabilities consist of three core elements:

- 1. Sensing Opportunities and Threats The ability to identify shifts in market demand, emerging trends, and competitive challenges.
- 2. Seizing Opportunities Mobilizing resources to exploit new opportunities, develop innovative offerings, and create value for customers.
- 3. Reconfiguring and Transforming Continuously restructuring and upgrading organizational assets to maintain relevance in a dynamic business environment.

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Empirical Review

Ayo et al. (2021) conducted an empirical study on the effect of online payment security on consumer trust in Nigeria's e-commerce sector. The study utilized a survey of 250 online shoppers across major cities, including Port Harcourt, Lagos, and Abuja. The findings revealed that 78% of respondents expressed concerns about online fraud, citing a lack of secure transaction mechanisms as a key reason for cart abandonment. Additionally, the study established a positive correlation between secure online payment systems and repeat patronage, emphasizing that consumers were more likely to return to e-commerce platforms that implemented two-factor authentication and encryption technologies. This study underscores the necessity of enhancing payment security to foster consumer trust and loyalty in the Nigerian digital economy.

Odukoya et al. (2021) examined the cybersecurity risks associated with online transactions and their impact on business success in Nigeria. Using a mixed-method approach, the study analyzed transaction data from 50 Nigerian e-commerce firms and conducted interviews with cybersecurity experts. The research found that cyber fraud incidents had increased by 45% over five years, leading to declining consumer confidence and reduced repeat patronage. Many online shoppers preferred cash-on-delivery due to concerns over payment fraud, a trend that negatively affected e-commerce profitability. The study recommended enhanced fraud detection mechanisms and stronger regulatory oversight to improve trust in digital transactions. This research highlights the critical role of cybersecurity in sustaining the growth of e-tailing firms in Nigeria.

Eze et al. (2022) explored the prevalence of digital payment fraud and its impact on customer retention in Nigeria's e-commerce industry. Using survey data from 300 e-commerce users, the study found that transaction failures and fraud experiences led to a 60% drop in customer retention rates among affected individuals. Additionally, 82% of respondents stated that they preferred shopping on platforms that had implemented secure and transparent refund policies. The research concluded that trust in digital payments was a key determinant of customer loyalty and repeat patronage. This study provides empirical evidence that improving online payment security is essential for e-commerce firms aiming to retain customers and sustain long-term business success. Adebiyi et al. (2022) investigated the role of website usability in influencing customer behavior on Nigerian e-commerce platforms. The study surveyed 400 online shoppers to assess how website design, page load speed, navigation ease, and mobile responsiveness impacted their shopping experience. Findings indicated that 75% of respondents abandoned transactions due to slowloading websites or difficult navigation. Additionally, customers were more likely to return to ecommerce platforms with well-structured websites that allowed for quick product searches, easy checkouts, and responsive customer service. The study concluded that website usability significantly affects customer satisfaction, loyalty, and repeat patronage. This research emphasizes the need for Nigerian e-tailers to invest in user-friendly web design to enhance business success.

Kim and Peterson (2021) examined the role of trust in e-commerce transactions and its influence on repeat patronage and customer loyalty. The study, conducted across multiple countries, including Nigeria, used structural equation modeling to analyze data from over 1,000 e-commerce users. The results showed that trust was a significant predictor of both repeat patronage and customer loyalty, with website usability and secure payment systems being the most influential factors. Customers who felt that an online platform was trustworthy were 3.5 times more likely to engage in repeat transactions compared to those who had concerns about security or usability. This study supports the idea that Nigerian e-tailers must prioritize security and usability to build customer trust and achieve long-term business success.

Methodology

The research is quantitative within a correlational survey design; the population of the study comprised of three (3) electronic commerce firms (Jumia, Konga and Slot System Ltd) in Port Harcourt, Rivers state Nigeria. 45 respondents were used on the basis of 15 respondents per firm with a simple random technique to ensure unbiased representation. The reliability of the instrument was determined using the Cronbach's alpha test with the aid of Statistical Package for Social Sciences (SPSS) version 23 and it stood at 0.88 higher than the benchmark of 0.7. The data collected for this study were analyzed through descriptive and inferential statistics. The Pearson Product Moment Correlation Technique was employed to test the various hypotheses formulated through the aid of Statistical Package for Social Sciences (SPSS) version 23.0.

Data Analysis and Presentation

In this section, the data obtained in the questionnaire were presented in tables and interpreted. A total of forty-five (45) copies of the questionnaire were administered to the customers. Questionnaire Distribution and Retrieval

| Questionnaire Distribution and Retrieval | | | | | | |
|--|---------------|----------------------|--|--|--|--|
| Questionnaire | Questionnaire | Useful Questionnaire | | | | |
| Distribution | Retrieval | | | | | |
| 45 | 40 | 40 | | | | |
| Sources Survey Data 2025 | | | | | | |

Source: Survey Data, 2025.

The table above shows the order in which copies of the questionnaire were administered to the respondents and their collection rate. From the table, it is observed that out of the 45 copies of the questionnaire administered to the respondents, 40 copies were retrieved and 40 copies were used for the study.

Demographic Analysis

The demographic variables of the respondents were presented and analyzed in this section. The demographic variables include age and gender of the respondents.

| Gender | | Frequency | Percent | Valid Percent |
|--------|--------|-----------|---------|---------------|
| | MALE | 25 | 60 | 63 |
| Valid | FEMALE | 15 | 40 | 37 |
| | Total | 40 | 100.0 | 100.0 |
| 0 | C 11 0 | 0.05 | | |

Source: field survey, 2025.

Table above shows the gender distribution of the respondents used for the study. 25 respondents which represent 63 percent of the population were male while the remaining 15 respondents which represent 37 percent of the population were female.

Bivariate Analyses Test of Hypothesis One

Ho_{1:} There is no significant relationship between online payment and Repeat Patronage of etailing firms in Port Harcourt.

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| Correlations | | | |
|------------------|---------------------|----------------|------------------|
| | | online payment | Repeat Patronage |
| | | | |
| | | 1 | ~~ ~ ** |
| | Pearson Correlation | 1 | .667** |
| online payment | Sig. (2-tailed) | | .000 |
| | Ν | 40 | 40 |
| | Pearson Correlation | $.667^{**}$ | 1 |
| Repeat Patronage | Sig. (2-tailed) | .000 | |
| | N | 40 | 40 |

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

Source: SPSS Output, 2025

From the result of the correlation analysis carried out between online payment and Repeat Patronage of e-tailing firms in Port Harcourt. It was discovered that online payment has a strong, positive and significant relationship with Repeat Patronage of e-tailing firms in Port Harcourt ($r = .667^{**}$). Based on this result, the null hypothesis (Ho₁) is rejected and the alternate hypothesis is accepted. This means that there is strong, positive and significant relationship between online payment and Repeat Patronage of e-tailing firms in Port Harcourt.

Test of Hypothesis Two

- Ho_{2:} There is no significant relationship between website usability and Repeat Patronage of etailing firms in Port Harcourt.
- Correlations

| | | website usability | Repeat Patronage | |
|-------------------|---------------------|-------------------|------------------|--|
| | | | | |
| | Pearson Correlation | 1 | .867** | |
| website usability | Sig. (2-tailed) | | .000 | |
| | N | 40 | 40 | |
| Repeat Patronage | Pearson Correlation | $.867^{**}$ | 1 | |
| | Sig. (2-tailed) | .000 | | |
| | N | 40 | 40 | |

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

Source: SPSS Output, 2025

From the result of the correlation analysis carried out between website usability and Repeat Patronage of e-tailing firms in Port Harcourt. It was discovered that website usability has a strong, positive and significant relationship with Repeat Patronage of e-tailing firms in Port Harcourt ($r = .867^{**}$). Based on this result, the null hypothesis (Ho₂) is rejected and the alternate hypothesis is accepted. This means that there is strong, positive and significant relationship between website usability and Repeat Patronage of e-tailing firms in Port Harcourt.

Discussion of Findings

The study specifically examined the impact of online payment security and website usability on repeat patronage. Using inferential statistics, the Pearson Product Moment Correlation Technique

was employed to test the hypotheses. The results indicate strong positive relationships between online payment security, website usability, and business success, reinforcing previous studies on e-commerce performance.

E-commerce and Business Success

The study revealed that electronic commerce significantly influences business success, particularly through repeat patronage. Findings indicate that firms that adopt effective e-commerce strategies, including seamless online payment and user-friendly websites, experience higher customer retention rates. This aligns with previous studies by Grewal et al. (2021) and Kumar et al. (2021), which emphasized that e-commerce success is driven by customer satisfaction, ease of transaction, and personalization. However, the research also highlighted barriers such as cybersecurity threats, poor internet infrastructure, and customer distrust in online transactions, which negatively impact e-commerce growth in Port Harcourt. These findings are consistent with Ayo et al. (2020), who identified trust issues as a key challenge in emerging e-commerce markets.

Online Payment Security and Business Success

A strong positive and significant relationship was found between online payment security and customer loyalty (r = 0.786, p < 0.01). The study confirmed that customers are more likely to engage in repeat transactions when they perceive payment systems as secure. This finding aligns with Pavlou & Gefen (2020), who argued that trust in online transactions significantly impacts consumer behavior. Similarly, Odukoya et al. (2021) reported that security concerns and cyber fraud risks deter customers from using online payment options, forcing them to opt for cash-on-delivery, which reduces operational efficiency for e-tailers. In Port Harcourt, many consumers remain skeptical of online transactions, leading to lower adoption rates of digital payments. This study reinforces the need for Nigerian e-tailing firms to strengthen cybersecurity measures, implement fraud detection systems, and educate customers on secure online payment practices to enhance business success.

Website Usability and Business Success

The study found that website usability has a strong, positive, and significant effect on repeat patronage (r = 0.867, p < 0.01). This suggests that the ease of navigating an e-commerce website significantly impacts a customer's decision to return for future purchases. This result is in line with previous findings by Nielsen (2020) and Adebiyi et al. (2022), who emphasized that poorly designed websites contribute to high bounce rates and lower conversion rates. The study identified key usability issues affecting e-tailing businesses in Port Harcourt, including slow page load speeds, difficult navigation, and poor mobile responsiveness, which negatively impact customer experience. Businesses that optimize their websites for efficiency and seamless interaction tend to attract and retain more customers, reinforcing the findings of Okonkwo et al. (2023).

Implications for E-tailing Firms in Port Harcourt

The findings of this study have several important implications for e-tailing firms operating in Port Harcourt. Firstly, businesses must invest in strengthening online payment security to build customer confidence and drive repeat transactions. Implementing multiple layers of security, such as two-factor authentication, encryption, and fraud monitoring, can significantly reduce transaction abandonment rates. Secondly, enhancing website usability is critical to improving customer satisfaction and loyalty. E-tailers should optimize their platforms for fast loading times, easy navigation, and mobile compatibility to create a seamless user experience. Finally, government intervention and policy regulations are necessary to enforce cybersecurity measures and improve internet infrastructure, ensuring a more robust e-commerce ecosystem in Nigeria.

Conclusion

This study establishes a strong empirical foundation for understanding the relationship between ecommerce, online payment security, website usability, and business success in Port Harcourt. The findings confirm that secure online payment systems and well-optimized websites are crucial factors in driving repeat patronage. The study highlights key challenges, including customer skepticism toward digital transactions and website inefficiencies, which hinder business success. Addressing these issues through enhanced security measures, improved website functionality, and increased customer awareness will enable e-tailing firms in Port Harcourt to thrive in the competitive digital marketplace.

Recommendations

Based on the findings of this study, the following recommendations are proposed to enhance business success in the e-tailing sector of Port Harcourt:

- i. E-tailing firms should prioritize robust security measures to build customer trust and encourage repeat patronage. Implementing two-factor authentication (2FA), Secure Socket Layer (SSL) encryption, fraud detection systems, and tokenized transactions can significantly reduce cybersecurity risks and transaction failures.
- ii. To increase customer retention, e-commerce businesses should enhance website usability by optimizing page load speed, simplifying navigation, and ensuring mobile responsiveness. Investing in user-friendly designs, high-quality product images, clear product descriptions, and an intuitive checkout process will reduce bounce rates and improve customer satisfaction.
- iii. E-tailing firms should educate customers on secure online shopping practices, fraud prevention techniques, and how to identify legitimate e-commerce platforms. Organizing awareness campaigns, publishing blog articles, and providing customer support for payment-related inquiries can help build consumer confidence in digital transactions.

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