

# Brand Loyalty through Consumer Protection of Selected E-Commerce Firms

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*Abstract:* - Ensuring consumer rights and addressing their various concerns has been identified as a crucial step in securing customer loyalty. However, the e-commerce sector in Nigeria has struggled to retain its customers due to its failure to adequately protect consumer rights. This lack of consumer rights protection has resulted in poor customer loyalty, with users frequently abandoning e-commerce platforms. This study examines the effect of consumer protection on brand loyalty within selected e-commerce firms. The research surveyed 497 active users of these e-commerce platforms with a 90.3% return rate and employed multiple regression analysis to assess the results. The findings revealed that consumer protection has a significant effect on purchase decisions ( $Adj.R^2 = 0.660$ ,  $F(3, 445) = 290.639$ ,  $p < 0.05$ ), customer trust ( $Adj.R^2 = 0.580$ ,  $F(3, 445) = 207.126$ ,  $p < 0.05$ ) and customer satisfaction ( $Adj.R^2 = 0.590$ ,  $F(3, 445) = 215.819$ ,  $p < 0.05$ ) of listed e-commerce firms in Lagos State, Nigeria. Consequently, the study concludes that consumer brand protection significantly influences the brand loyalty of selected e-commerce firms, recommending that e-commerce management prioritize the recognition and protection of consumer rights to enhance brand loyalty.

*Key-Words:* - Brand awareness, Brand loyalty, Consumer protection, Customer advocacy, E-commerce, Privacy,.

Received: April 21, 2024. Revised: September 9, 2024. Accepted: October 13, 2024. Published: November 8, 2024.

## 1 Introduction

In today's digital era, people's presence is heavily concentrated on online social network (OSN) sites like Facebook, Twitter, and Instagram. OSN sites serve as online platforms where users interact with others with similar personal or professional interests, activities, or backgrounds, [1]. Brand loyalty is a crucial factor in achieving commercial success. Regardless of the industry, it is among the most vital aspects for an organization's long-term profitability and success. Despite the development and popularity of e-commerce, firms still need help to gain customer loyalty and trust due to various challenges within the industry. Concerns about product quality, data

privacy, and a lack of awareness about existing product brands have been raised.

According to [2], in 2017, the e-commerce industry generated revenues of \$1,414 billion, contributing 1.9% to the gross domestic product (GDP) and experiencing an annual growth rate of 4.4%. Developing regions such as Asia-Pacific and Africa accounted for approximately 30% of the global e-commerce value sector, making developing countries dominant players in retail sales. According to [3], Internet sales in the United States reached \$370 billion in 2016. Early transactions often involve promotional expenditures and costs associated with attracting new customers, making these relationships initially unprofitable. Therefore, retaining customers

is crucial for the ongoing profitability of the company. Repeat customers are significant for a company's financial health because they are the most profitable. They make more purchases, require less service, refer other clients, readily adopt brand extensions or new products, and are more forgiving when problems arise. Many organizations continually strive to identify the variables that increase loyalty to enhance their profits, [4].

In Nigeria, e-commerce has transformed the exchange of goods and services from physical to virtual through distributed computing methods and telecommunications services. Even though telecommunications services have greatly improved and e-commerce has been widely adopted in Nigeria, there are still a number of technological, administrative, and business-related factors that make data security and privacy uncertain, [5]. Currently, in Nigeria, the security and privacy of e-commerce transactions have become significant areas of research and high-profile concerns, [6]. This is due to the increasing number of merchants seeking to stimulate online commerce and unforeseen events such as the recent epidemic outbreak of the COVID-19 pandemic. The COVID-19 outbreak, among others, has heightened consumers' dependence on e-commerce, prompting a closer examination of ensuring the trust and privacy of users' data on e-commerce platforms.

Additionally, there has been an undeniable surge in e-commerce-related cyber incidents reported annually, leading to fear and trust issues expressed by e-commerce stakeholders. E-commerce is widely acknowledged as a significant driver of economic development, and Nigeria's economic environment is no exception. With a sizable internet population and a growing consumer class, Nigeria presents a beautiful market for e-commerce, [7]. According to [8], Nigeria has the largest population of internet users in Africa, mainly due to smartphone usage, which is facilitated by easy access and low mobile data costs. With the rapid growth of cell phones and internet usage, Nigeria has entered the digital era. The potential of using the internet and associated technologies for e-commerce has been well-documented, emphasizing the convenience of accessing global markets. Despite the significant benefits of e-commerce, including its rapid growth in Nigeria, challenges such as high costs, privacy, and the complexity of transitioning from offline to online businesses persist. Although there is a growing interest in e-commerce in Nigeria, data shows that

many Nigerians, especially professionals, still prefer traditional shopping methods, [9].

## 2 Literature Review and Hypotheses

Consumer protection encompasses the measures taken to safeguard the interests of consumers in the realm of goods and services. Numerous studies have highlighted the positive impact of consumer awareness on their intentions [10], [11], [12] and [13]. In Nigeria, the need for more awareness and understanding regarding the potential benefits of online purchases poses a significant barrier to their acceptance and use. As a result, internet shopping remains a relatively novel concept for many users in Nigeria, potentially hindering customer adoption [10] and [12]. The consumer decision-making process can be illustrated through five interconnected steps, as depicted in the simplified model of consumer decision-making. For instance, purchasing an automobile is often complex and involves high social and psychological involvement, [14]. A study by [15] identified usefulness, ease of use, data privacy, and price as the primary factors influencing purchase decisions in Internet shopping among Malaysian students. The literature review as depicted in Figure 1, leads to the hypothesis that:

*H<sub>01</sub>: Consumer protection has no significant effect on the purchase decision of selected e-commerce firms in Lagos State, Nigeria.*

A report by [2] confirmed that 31% of customers were concerned about the privacy of their details saved in their online profiles. This indicates that web security and privacy are critical factors influencing consumers' intention to shop online, as evidenced by previous researchers [16], [17] and [18]. Although several researchers have combined web security and online privacy to study online shopping, it is essential to note that web security differs in meaning from online privacy. [19], signify consumer trust as members' perceived trustworthiness and benevolence of the brand in the online brand community. [20], refer to trust as identification trust that represents members' emotional undertakings in trusting a relationship. The issue of consumers' privacy concerns has gained significant attention, particularly following the Facebook–Cambridge Analytica data scandal in early 2018. In this scandal, Cambridge Analytica harvested the personal data of 87 million Facebook profiles without

their consent, using it for political purposes. Furthermore, Facebook disclosed other data breaches, including a software bug that potentially exposed the posts of up to 14 million users and a security breach that allowed an unknown party to gain control of 50 million accounts, [7]. The literature review as reflected in Figure 1, leads to the hypothesis that:

**H<sub>02</sub>:** *Consumer protection has no significant effect on customer trust of selected e-commerce firms in Lagos State, Nigeria.*

Quality has been characterized as the extent to which a product meets the needs and expectations of consumers. It is a critical factor in determining the shopping behavior of clients in the context of online shopping, [21]. A comparative study conducted by [22] between Taiwan and Japan identified perceived product quality as one of the key factors influencing buying intentions among customers of the two nations. Product quality has been reported to play a significant role in providing consumer belief in the website, [23]. According to [14], product quality is the ability of an item to provide results or performance that is in line even more than what the customer wants. Brand loyalty results from brand trust or promises that build high-value relationships [24], while brand loyalty is one of the dimensions of brand equity and is influenced by brand reputation, [25]. [24], argue that brand loyalty is a firm commitment to buy back or replace products/services consistently in the future, causing the same brand to repeat or purchase the same brand despite the situational influence and efforts in marketing that has the potential to cause switching behavior. Previous studies showed that trust positively influences consumers' intention to shop online and is influenced by other

factors like perceived risk, web security, online privacy, and user experience, [26]. The hypothesis emerging from the literature as depicted in Figure 1, is that:

**H<sub>03</sub>:** *Consumer protection has no significant effect on customer satisfaction of selected e-commerce firms in Lagos State, Nigeria.*

This study is anchored on Theory of Planned Behavior (TPB), proposed by [27], posits that an individual's intention by way of assumption to perform a behaviour is influenced by three main factors: attitude toward the behaviour, subjective norms, and perceived behavioural control, [28]. The term "attitude towards the behaviour" describes how someone feels about the behaviour—whether positively or negatively. thought behavioural control relates to how easy or difficult behaviour is thought to be performed, whereas subjective norms deal with perceived social pressure to perform or not execute the behaviour. The TPB can offer important insights in the context of the study on brand loyalty and consumer protection of particular e-commerce companies in Lagos State, Nigeria. The desire to stick with a certain e-commerce brand impacts on customers' attitudes towards the consumer protection mechanisms established by e-commerce companies, their perception of having control over their purchasing decisions, and subjective standards around brand loyalty all impact. Studies have shown that comprehending these variables as reflected in the study may aid e-commerce enterprises in Lagos State to formulate a productive techniques to augment consumer safeguard protocols and cultivate customer loyalty towards their brand.

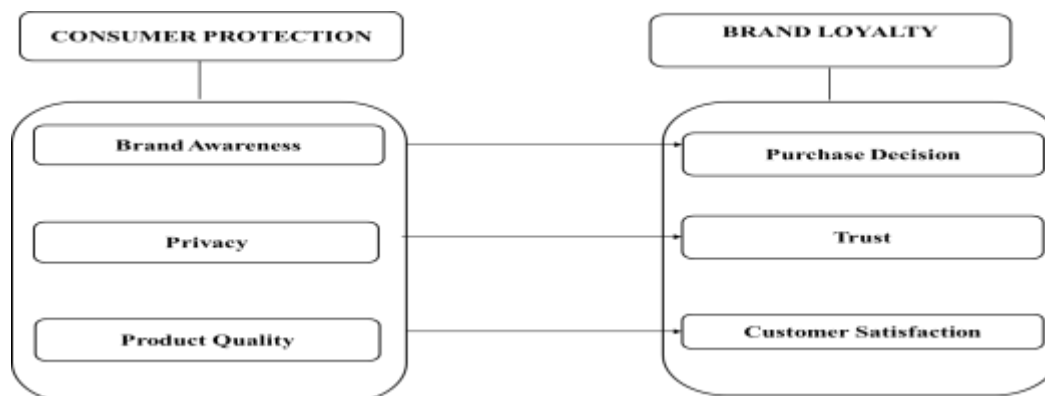


Fig. 1: Conceptual Model  
Source: Authors' conceptual model, 2024

### 3 Methodology

In gathering the data from customers of the selected e-commerce firms in Lagos State, Nigeria, the study adopted a survey research design to gather information. The population of this study comprised the customers of the selected e-commerce firms in Lagos State, Nigeria. Table 1 shows the population as obtained from their human resource department in Lagos State. These firms were selected based on their popularity, performance, and accomplishment within

the sector over the past years. The sample size of 497 was obtained based on the Raosoft sample size calculator's determination with a 95% confidence level and a 5% alpha level and was proportionately distributed as presented in Table 1.

All variables were subjected to validation and reliability tests with a threshold above 0.7. Table 2 and Table 3 show the result of the validity and reliability of the construct.

Table 1. Proportionate Sample Size

S/N	E-commerce Stores	Population	Sampled population	Proportionate sample
1	Konga plc	13,240	Customers	123
2	Jumia	18,900	Customers	176
3	PayPorte	4,360	Customers	41
4	Slot	3,303	Customers	31
5	Kara,	3,560	Customers	33
6	Jiji Nigeria	7,910	Customers	73
7	Ajebo market	2,165	Customers	20
<b>Total</b>		<b>53,438</b>		<b>497</b>

Source: Authors' computation, 2024

Table 2. Result of validity Test

S/N	Variables	No. of Items	KMO	Bartlett's Test of Sphericity	Sig.	Average Variance Extracted	Remark
1	Brand awareness	5	0.600	118.111	0.000	0.570	Confirmed
2	Privacy concern	5	0.551	148.680	0.000	0.899	Confirmed
3	Product Quality	5	0.672	101.627	0.000	0.694	Confirmed
4	Purchase decision	5	0.708	133.643	0.000	0.713	Confirmed
5	Trust	5	0.672	93.051	0.000	0.521	Confirmed
6	Customer Satisfaction	5	0.791	155.000	0.000	0.585	Confirmed

Source: Authors' computation, 2024

Table 3. Reliability Statistics Result

S/N	Variables	No. of Items	Cronbach alpha Coefficient	Composite Reliability	Remark
1	Brand awareness	5	0.790	0.860	Confirmed
2	Privacy concern	5	0.793	0.881	Confirmed
3	Product Quality	5	0.798	0.823	Confirmed
4	Purchase decision	5	0.820	0.765	Confirmed
5	Consumer Trust	5	0.793	0.759	Confirmed
6	Customer Satisfaction	5	0.850	0.858	Confirmed

Source: Authors' computation, 2024

Internal consistency and reliability were assessed using the Cronbach alpha coefficient. The questionnaire and its variables passed the internal consistency test (Cronbach's  $> 0.7$ ). As a result, the questionnaire was used for further investigation. This study adopted a purposive sampling technique. The purposive sampling technique was adopted since the customers of this e-commerce have been obtained by the firms to fit the specific interest of the study. The study collected primary data from selected firms by administering structured questionnaires with a return rate of 90.3%. The data for this study was analyzed with the use of both descriptive and inferential analysis (multiple linear regression) to establish the effect of brand loyalty through consumer protection. This method effectively analyses the relationship between a dependent variable (DV) and multiple independent variables (IVs).

The core premise of multiple linear regression is a linear relationship between the dependent (brand loyalty) variable and the independent variable (Consumer protection), which is based on the assumption of multiple linear regression, which provided a comprehensive understanding of the relationship between consumer protection and brand loyalty. The study further evaluated the model's overall fit and the significance of individual predictors as indicated in the study, providing a thorough and reliable analysis of how consumer protection as an independent variable drives brand loyalty.

### Multiple Linear Regression Model Specification

This study variables are operationalized as:  
 $Y = f(X)$  where  $Y$  = the dependent variable and  $X$  = the independent variable.  
 Further, we have  $Y =$  Brand Loyalty and  $X =$  Consumer Protection  
 $Y = (y_1, y_2, y_3)$  where  $y_1 =$  purchase decision,  $y_2 =$  consumer trust, and  $y_3 =$  customer satisfaction.  
 $X = (x_1, x_2, x_3)$  where  $x_1 =$  brand awareness, and  $x_2 =$  privacy concerns and  $x_3 =$  product quality.

The model formulated for each of the hypotheses is written as:

#### Hypothesis One

$$PI_1 = f(BA, PC, PQ)$$

$$PI = \alpha_0 + \beta_1 BA + \beta_2 PC + \beta_3 PQ + \mu_i \quad (1)$$

#### Hypothesis Two

$$TR = f(BA, PC, PQ)$$

$$TR = \alpha_0 + \beta_1 BA + \beta_2 PC + \beta_3 PQ + \mu_i \quad (2)$$

#### Hypothesis Three

$$CS = f(BA, PC, PQ)$$

$$CS = \alpha_0 + \beta_1 BA + \beta_2 PC + \beta_3 PQ + \mu_i \quad (3)$$

## 4 Results

The analysis as presented in Table 4, which looked into the relationship between brand awareness, privacy concern, product quality, and purchase decision in the context of online shopping, found that all three predictor variables—brand awareness, privacy concern, and product quality—positively and significantly influence purchase decisions.

Specifically, the regression coefficients indicate that brand awareness ( $\beta = 0.178, p < 0.05$ ), privacy concern ( $\beta = 0.447, p < 0.05$ ), and product quality ( $\beta = 0.266, p < 0.05$ ) each have a statistically significant positive relationship with the purchase decision. This means that increases in these variables are associated with higher consumer purchase decisions. The overall model explains 66% of the variance in purchase decisions, as indicated by the adjusted R-squared value (Adj.  $R^2 = 0.660$ ). The F-statistic for the model is 290.639 with 3 and 445 degrees of freedom ( $F(3,445) = 290.639, p < 0.05$ ), suggesting that the model is statistically significant and provides a good fit for the data.

Additionally, the regression model predicts that if brand awareness, privacy concerns, and product quality were all held constant at zero, the baseline purchase decision would be 3.438. The coefficients further reveal that for each one-unit increase in brand awareness, the purchase decision increases by 0.178 units. Similarly, a one-unit increase in privacy concerns results in a 0.447 unit increase in purchase decisions, and a one-unit increase in product quality leads to a 0.266 unit increase in purchase decisions. In terms of hypothesis testing, it is crucial for the regression coefficients to be significant ( $\beta \neq 0$ ) to support the hypothesis. Since all the regression coefficients are statistically significant and different from zero, as indicated by their respective t-values and p-values (brand awareness:  $t = 4.045, p < 0.05$ ; privacy concern:  $t = 9.792, p < 0.05$ ; product quality:  $t = 5.668, p < 0.05$ ), the null hypothesis ( $H_{01}$ ), which posited that consumer protection factors have no significant effect on the purchase decisions of selected e-commerce firms in Lagos State, Nigeria, was rejected. This conclusion is based on the

significant impact of all predictor variables on purchase decisions, affirming that consumer protection aspects significantly influence consumer choices in the context studied.

The analysis in Table 5 reveals the result of multiple regression analyses, a statistical method used to examine the relationship between a dependent variable and multiple independent variables, conducted to investigate the effect of consumer protection dimensions (brand awareness, privacy concern and product quality) on customer trust. The regression findings revealed that all predictors had a strong positive correlation with trust ( $R = 0.763$ ).

The regression model shows that brand awareness ( $\beta = 0.357, p < 0.05$ ), privacy ( $\beta = 0.319, p < 0.05$ ) and product quality ( $\beta = 0.239, p < 0.05$ ) have a positive and significant effect on customer trust. The analysis showed that for the coefficient results, customer trust increases when brand awareness, privacy concerns, and product quality are improved by one unit. The adjusted R-squared value shows the precise effect of

consumer protection variables on customer trust after considering each variable and making adjustments to eliminate discrepancies. The value is given as 0.580, which implies that consumer protection variables had an adjusted combined effect of 58% on customer trust. This indicates a statistically significant effect of customer protection dimensions on customer trust ( $Adj.R^2 = 0.580, p < 0.05$ , where  $p < 0.05$  indicates a 95% confidence level) in the listed e-commerce firms in Lagos state, Nigeria. The conclusion underscores the effect that consumer protection factors play in enhancing customer trust within the context of the study.

Table 6 presents the compelling results of multiple regression analysis, a significant step towards understanding the impact of customer protection factors—specifically brand awareness, privacy concern, and product quality—on customer satisfaction. The findings are enlightening, demonstrating that all three predictors have substantial positive effects on customer satisfaction.

Table 4. Multiple Regression Results of the Effect of Customer on Purchase Decision

Model	$\beta$	<i>T</i>	Sig.	Adj. $R^2$	<i>R</i>	<i>F</i> (3,445)	<i>F</i> (Sig.)
(Constant)	3.438	4.613	0.000	0.660	0.814	290.639	0.000
Brand awareness	0.178	4.045	0.000				
Privacy concern	0.447	9.792	0.000				
Product Quality	0.266	5.668	0.000				

a. Dependent Variable: Purchase decision

b. Predictors: (Constants), brand awareness, privacy concerns and product quality

Source; Authors' computation, 2024

Table 5. Multiple Regression Results of the Effect of Customer Protection on Customer Trust

Model	$\beta$	<i>t</i>	Sig.	Adj. $R^2$	<i>R</i>	<i>F</i> (3,445)	<i>F</i> (Sig.)
(Constant)	1.894	2.103	0.036	0.580	0.763	207.126	0.000
Brand awareness	0.357	6.694	0.000				
Privacy concern	0.319	5.795	0.000				
Product Quality	0.239	4.202	0.000				

a. Dependent Variable: Customer trust

b. Predictors: (Constants), brand awareness, privacy and product quality

Source; Authors' computation, 2024

Table 6. Multiple Regression Analysis of Customer Protection's Effect on Customer Satisfaction

Model	$\beta$	<i>t</i>	Sig.	Adj. $R^2$	<i>R</i>	<i>F</i> (3,445)	<i>F</i> (Sig.)
(Constant)	2.323	2.688	0.007	0.590	0.770	215.819	0.000
Brand awareness	0.232	4.544	0.000				
Privacy concern	0.283	5.347	0.000				
Product Quality	0.368	6.756	0.000				

a. Dependent Variable: Customer satisfaction

b. Predictors: (Constants), brand awareness, privacy and product quality

Source; Authors' computation, 2024

The regression analysis shows that brand awareness ( $\beta = 0.232$ ,  $p < 0.05$ ), privacy concern ( $\beta = 0.283$ ,  $p < 0.05$ ), and product quality ( $\beta = 0.368$ ,  $p < 0.05$ ) each contribute positively and significantly to customer satisfaction. This suggests that as brand awareness, privacy concerns, and product quality increase, so does customer satisfaction. The model, with an adjusted R-squared value of 0.590, accounts for 59% of the variance in customer satisfaction. The F-statistic for the model is 215.819, with 3 and 445 degrees of freedom ( $F(3, 445) = 215.819$ ,  $p < 0.05$ ), confirming the model's statistical significance and robustness.

Additionally, the regression model estimates that if brand awareness, privacy concerns, and product quality were all held constant at zero, the baseline level of customer satisfaction would be 2.323. The coefficients reveal that for each one-unit increase in brand awareness, customer satisfaction increases by 0.232 units. Likewise, a one-unit increase in privacy concerns results in a 0.283 unit increase in customer satisfaction, and a one-unit increase in product quality leads to a 0.368 unit increase in customer satisfaction.

In hypothesis testing, the significance of the regression coefficients ( $\beta \neq 0$ ) is crucial to support the hypothesis. Since all the regression coefficients are statistically significant and different from zero, as evidenced by their respective t-values and p-values (brand awareness:  $t = 2.688$ ,  $p < 0.05$ ; privacy concern:  $t = 4.544$ ,  $p < 0.05$ ; product quality:  $t = 6.756$ ,  $p < 0.05$ ), the null hypothesis ( $H_{03}$ ), which suggested that consumer protection does not significantly affect customer satisfaction in the listed e-commerce firms in Lagos State, Nigeria, was convincingly rejected. This conclusion underscores the significant role that consumer protection factors play in enhancing customer satisfaction within the context of the studied e-commerce firms.

## 5 Discussion of Findings

The rejection of hypothesis one (H01) suggests that consumer protection significantly affects consumers' purchase decisions utilizing e-commerce platforms in Lagos State, Nigeria. This study's findings agree with several recent studies in the field. For instance, [29] study demonstrated that corporate social responsibility positively influences purchase decisions, whereas sales promotion has a negative impact. Additionally, it revealed that the store

environment significantly enhances consumers' purchase decisions. Surprisingly, social media marketing was found to have an insignificant effect on purchase decisions, contrary to expectations. Finally, the study found that perceived value significantly contributes to purchase decisions.

Similarly, [30] findings showed that consumer protection laws significantly affect purchase intention. Also, the relationship between consumer protection laws and consumer buying intention was mediated by consumer attitude. The findings of this study underscore the critical importance of consumer protection measures in influencing purchase decisions within e-commerce platforms. By implementing effective consumer protection strategies, e-commerce firms can enhance consumer trust and loyalty and, ultimately, increase their market share and profitability.

The rejection of hypothesis two (H02), which asserts that consumer protection does not significantly affect customer trust in selected e-commerce firms in Lagos State, Nigeria, highlights the pivotal role of consumer protection measures in building trust among consumers. This result aligns with findings from previous studies, such as [21]. Nevertheless, [31] found that while repurchase intention is influenced by customer trust, consumer trust and the e-service quality variable only had a limited impact on each other. Repurchase intention is simultaneously influenced by customer trust and the quality of the e-service. However, through consumer trust, variable e-service quality has an indirect effect on customers' inclination to repurchase the reliable product. The findings of this study further as noted by [31] highlight how important consumer protection laws are to fostering confidence among consumers of e-commerce platforms. It can be inferred from the study that e-commerce businesses can increase customer loyalty and trust as well as their competitiveness in the market by using efficient consumer protection methods.

The rejection of hypothesis three (H03) in this study, which posited that consumer protection (brand awareness, privacy concern and product quality) has no significant effect on customer satisfaction among listed e-commerce firms in Lagos State, Nigeria, underscores the considerable impact of consumer protection measures on enhancing customer satisfaction. The characteristics of consumer protection stress the importance of consumers in both economics and marketing services. In other words,

without the consumer, there will be no basis for production and hence no market. That is why the consumer is seen as the pivotal point of not only marketing but of all business activities [32] and whose interest must be protected. In consonance with the result of this study, [33] revealed in their findings that online consumer reviews positively influence consumers' trust in the sellers and, therefore, influence online shopping intention. Negative reviews lead to lower sales ratio whereas positive reviews lead to higher sales. By implementing effective consumer protection strategies in any e-commerce firm, can improve customer satisfaction and build trust and loyalty, thereby strengthening their competitive advantage in the marketplace.

## 6 Conclusion

The study investigated the effect of consumer protection on brand loyalty in selected e-commerce firms in Lagos state, Nigeria. The study concluded that consumer protection plays an important role in improving the brand loyalty of selected e-commerce firms in Lagos state, Nigeria. Notably, this research is pioneering in its comprehensive examination of these factors within the context of e-commerce platforms in Lagos State, Nigeria, making it the first to delve deeply into this phenomenon.

The findings show that consumer protection (brand awareness, privacy concerns, and product quality) have significant effect on purchase decision of selected e-commerce firms in Lagos State, Nigeria, as evidenced by the rejection of the null hypothesis (H01), which posited no effect. Furthermore, the finding also reveals that consumer protection measures have significant effect on consumer trust of selected e-commerce firms in Lagos State, Nigeria. The rejection of the null hypothesis (H02) affirms that these factors significantly enhance trust in online shopping environment, which further supports the notion that a well-protected customer is more likely to develop trust in e-commerce platforms. Additionally, the result reveals that consumer protection dimensions have significant effect on customer satisfaction of selected e-commerce firms in Lagos State, Nigeria, leading to the rejection of the null hypothesis (H03). The results show that brand awareness, privacy concerns, and product quality improvements are crucial in enhancing customer satisfaction.

In conclusion, this study being the first study to examine these linkages in the particular context of Lagos State, Nigeria, this research provides fresh insights into the relationship between consumer protection and e-commerce performance. The results underline the necessity for e-commerce businesses to give these elements top priority in order to improve purchase decisions, customer trust, and satisfaction as well as the significance of consumer protection laws in enhancing these areas. This groundbreaking study establishes a new standard for comprehending and putting consumer protection tactics into practice in developing e-commerce sectors.

## 7 Recommendation

Based on the findings of this pioneering study, this study offers a variety of recommendations to be implemented by the various parties concerned with the improvement of brand loyalty in e-commerce firms in Lagos state as well as in Nigeria as a whole

Firms ensuring positive impact on purchase decisions of their products and services should prioritize enhancing brand awareness. The study found that brand awareness significantly affects purchase decisions as reflected in the result ( $\beta = 0.178$ ,  $p < 0.05$ ). To leverage this, firms should invest in marketing strategies that increase brand visibility and recognition. Organizations need to ensure that the system is built in such a way that the rights of consumers are recognized and protected and are treated as kings that they are if brand loyalty is to be achieved.

Regarding building customer trust, the study revealed that privacy concerns are crucial ( $\beta = 0.447$ ,  $p < 0.05$ ). The study recommends that management team of the selected e-commerce firms should ensure that consumer's data are kept private and are not used for other selfish reasons as against the consumer's wish, as well as implement and communicate robust privacy protection measures. This involves establishing strong data security protocols, ensuring compliance with privacy regulations, and actively addressing customer concerns about data protection. Consumers should be informed of various laws that guides and protects their rights while showing loyalty to worthy brands

To enhance customer satisfaction, which was positively influenced by product quality ( $\beta = 0.368$ ,  $p < 0.05$ ), Firms by ensuring that they maintain high standards of product quality. Production of fake or



substandard products causes disloyalty and customer dissatisfaction. Regular updates to product offerings, rigorous quality control, and responsive customer support can lead to higher satisfaction. Managers of e-commerce firms should ensure that employees are properly trained to respect the rights of consumers in order to boost trust and ensure continuous patronage. By integrating these recommendations, e-commerce firms can effectively harness the impact of consumer protection measures, thereby strengthening their competitive position, improving customer satisfaction, and driving overall performance in the online shopping market.

## 8 Implications of Findings

The overall implications and by way of understanding of this study serves as a useful tool to management, practitioners, executives, corporate managers especially to the e-commerce companies, which helps to understand how consumer protection dimensions such as brand awareness, privacy and product quality affects brand loyalty of consumers in the companies and the industry as a whole. It also added to the existing rising popularity of consumer protection and brand loyalty. It also shows how to proactively respond to changes within the business environment more effectively as well as enable them implement better business strategy that assures consumer of safety. Therefore, it should be noted that scholars and management practitioners can include the findings of this study in their teachings and decision making.

## 9 Suggestions for Further Studies

Further research in e-commerce industry and consumer protection in relations to customer loyalty could explore several avenues. The research was cross-sectional in nature. The adoption of cross-sectional survey research method permits for collection of data at a single point in time, making it difficult to examine issues of causality. Therefore, the study might not be able to establish a long run relationship between consumer protection and brand loyalty in the selected e-commerce companies, hence further study.

## Declaration of Generative AI and AI-assisted Technologies in the Writing Process

During the preparation of this work the authors used QuillBot in order to improve some sentences that needed improvement to make room for readability and easy understanding. After using this tool/service, the authors reviewed and edited the content as needed and take full responsibility for the content of the publication.

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#### **Contribution of Individual Authors to the Creation of a Scientific Article (Ghostwriting Policy)**

Each author contributed equally to the conceptualization and preparation of this paper.

#### **Sources of Funding for Research Presented in a Scientific Article or Scientific Article Itself**

This paper is self-sponsored as no funding was received from any source.

#### **Conflict of Interest**

The authors have no conflicts of interest to declare

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