



# ONLINE BUYING AND CUSTOMER SATISFACTION

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*Abstract* : A number of studies have been conducted concerning how online buying affects customer satisfaction based on predictor variables such as ease of use, service reliability, assurance and security. A review of extant literature indicated the need for more studies relating to how online advertising messages and quality of delivered products affect customer satisfaction. It is on this basis that this study investigated the impact of product-advertisement messages and quality of delivered products on customer satisfaction. This became necessary in order to establish whether online advertisement messages reflected quality and other features of received products and whether the quality of delivered products met buyers' expectations.

A survey research design was the basis for conducting the study. Data were collect on a scale ranging from Strongly Agree, 4, to Strongly Disagree, 1. Descriptive statistics produced mean values and standard deviations from responses to statements relating to online buying and customer satisfaction. Inferential statistics based on multiple regression analysis was also used for data analysis.

The findings of the study revealed that online buying had positive impact on customer satisfaction; product advertisement messages had positive impact on customer satisfaction as well as quality of delivered products. However, the impact of quality of delivered products on customer satisfaction was less compared to the impact of product advertisement messages. These findings revealed the need for online vendors to put in more effort that would increase the potential of receiving products of the right quality by online buyers in order to increase the probability of bought items meeting their expectations.

*IndexTerms* - Online buying, online advertisement messages, quality of delivered product, customer satisfaction.

## INTRODUCTION

The emergence of the internet has brought about increased interest in making online purchases. Online advertising creates product awareness, provides information relating to product design and features, and an avenue for price comparisons. Advertisement information can lead to liking a product and making purchase decision. Customers that make online purchases may, however, experience dissonance due to lack of perfect agreement between specifications of advertised products and delivered products. Discrepancies in product design and quality or other features may also be observed by online customers. Therefore, despite many studies that have investigated the effect of online buying on customers' satisfaction, a review of extant literature suggested the need to investigate the impact of product-advertisement messages and quality of delivered products on customer satisfaction.

The motivation to make purchases online stems from benefits online shopping provides to customers. Some of these benefits are price comparisons, positive product-review information, exposure to multiple product variety, convenience, and ability to track goods online (Javapoint, 2022). Given these benefits, it is expected that online buyers should derive satisfaction from the process of placing and receiving orders. The literature contains studies that investigated the relationship between various independent variables such as ease of use, service reliability, assurance, security (Merugu & Mohan, 2020), post-purchase convenience (Benjamin et al., 2021), and customer satisfaction. However, most of these studies did not include advertising messages and product quality as independent variables. For this reason, this study filled a gap in literature by investigating the impact of online advertisement messages and quality of delivered product on customer satisfaction.

## OBJECTIVES OF THE STUDY

The broad objective of this study was to determine the impact of online buying on customer satisfaction. The specific objectives were to: assess the impact of product advertisement messages on customer satisfaction; examine the impact of quality of delivered products on customer satisfaction.

## HYPOTHESES OF THE STUDY

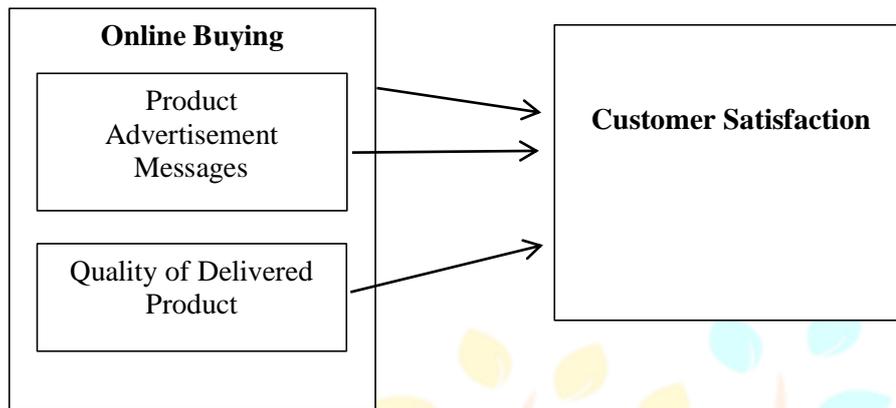
The hypotheses of this study are:

H<sub>01</sub>: Online buying has no significant impact on customer satisfaction

H<sub>02</sub>: Product advertisement messages have no significant impact on customer satisfaction

H<sub>03</sub>: Quality of delivered product has no significant impact on customer satisfaction

**Figure 1:** Conceptual framework of online buying and customer satisfaction



Source: Researcher, 2023

## MODEL OF THE STUDY

$$CS = \alpha + \beta_1 PM + \beta_2 QP + \varepsilon \quad \dots\dots\dots (1)$$

Where CS = Customer satisfaction

$\alpha$  = Y-intercept

PM = Product advertisement messages

QP = Quality of delivered product

$\beta_1$  and  $\beta_2$  = Coefficients

$\varepsilon$  = Standard error of the estimate

## LITERATURE REVIEW

### Online Buying

Online buying has been severally referred to in the literature as online shopping, e-commerce, internet shopping, web-based shopping, web transaction and so on. Ozuru et al. (2015) defined online buying as the act of buying goods and services over the internet. Nwokah and Gladson-Nwokah (2016) defined online buying as the process of directly purchasing goods from vendors with no regard to physical location. These definitions indicate that online buying involves a web-based transaction between a buyer and a seller. Components of online buying consist of aspects and characteristics of online buying. They include advertisement messages and product quality.

### Advertisement Messages

The channels available to marketers for advertising their products and services has increased due to the presence of the internet. Advertisement placements on vendors' websites have become means of creating product awareness and motivating purchase intention. Online buyers that have been motivated by advertisement placements to make purchases can assess the level of their satisfaction based on their experience. Customers' experiences from advertisement placements would yield various levels of satisfaction depending on the level of agreement between contents of messages and specifications of delivered products. Product advertisement and product design are among the factors for assessing customer satisfaction indicated by Nunan et al. (2018). Relating product advertisement and product design to customer satisfaction also indicate the relationship between these variables and business performance.

### Product Quality

Product quality refers to product fitness for the the intended purpose. Handoko (2016) defined quality as the features of a product or service that indicate its ability to meet actual or implied customer needs. A consumer that places order for a product has a need to satisfy. The ability of the product to fulfill that need determines the quality of the product to the consumer. Quality is a mix of properties and characteristics that determine the extent to which products meet the needs of consumers (Sitanggang et al., 2019). Quality reflects the value a customer receives from a product or service.

### Customer Satisfaction

Customer satisfaction is among the factors that determine whether customers would want to make repeat purchases or not. Li et al. (2015) described satisfaction as the single most important determinant of loyalty in both online and offline transactions. Customer satisfaction is the result of comparing what is expected and what is experienced (Kaurin, 2019). It indicates the level of customers' pleasure with delivered products. It increases when delivered products meet or exceed expectations (Khristianto et al., 2012). Nunan et al. (2018) stated that satisfaction is the accumulated attitude of customers that is based on their experiences and is directly related to profitability. Variables that affect customer satisfaction in relation to web transactions include advertisement messages and product quality. Customer satisfaction refers not only to the perceived fairness of a deal to a customer but also to the response of the customer

following an evaluation of the actual performance of a product with expected performance. Satisfaction can be conceptualised as a function of the ability of an online retailer to meet the expectations of a customer. Maditinos and Theodoridis (2010) indicated that expectation is the direct determinant of satisfaction. With respect to e-commerce, customer satisfaction refers to an affective state of the consumer's emotional reaction to the entire transaction experience with an online retailer (Pandey & Chawla, 2018).

### Theoretical Framework

The theoretical framework for this study is the cognitive dissonance theory. Cognitive dissonance refers to a situation where an individual's cognition such as beliefs, attitudes, and behaviour are in conflict (Festinger, 1957). Cognitive dissonance theory suggests that dissonance occurs when an individual has conflicting thoughts about a belief or an object. The theory, applied to buying and selling, describes a situation characterized by inconsistency or mismatch between prior expectation and present reality; a situation also referred to as post-purchase dissonance. When dissonance occurs, the individual displays behaviour that attempts to reduce the dissonance in order to achieve a balance in cognition. Behavioural change as a result of post-purchase incongruous feelings, in relation to online buying, include searching for more information on the product in order to update knowledge and making moves to return the product. This is the main hypothesis of the cognitive dissonance theory. The hypothesis states that the existence of dissonance will cause mental discomfort that motivates an individual to reduce or eliminate the dissonance in order to restore consonance (Tueanrat & Alamanos, 2022). An approach to restoring consonance would, therefore, be to replace the item for an online buyer since the source of dissonance is failure of the item to meet expectation.

### Empirical Review

Empirical literature contains studies that indicate variables that predict customer satisfaction in online transactions. These variables include information quality and product quality. A study that determined the impact of online shopping on customer satisfaction in Malaysia found that information quality and product quality, among other variables, had positive impact on customer satisfaction (Alam et al., 2020). Yuan et al. (2020) also reported that product quality was significantly related to customer satisfaction in a study conducted in Perlis, Malaysia. Kaur and Wei (2013) investigated the effect of online shopping on customer satisfaction and reported that product attributes and information quality, among other variables, did not predict customer satisfaction. Based on a sample of 150 online customers, Deyalage and Kulathunga (2019) studied factors that affected customer satisfaction within the context of online shopping in Sri Lanka and stated that product information quality had positive effect on customer satisfaction. Nwokah and Njirika (2018), in a study on the impact of online advertising on customer satisfaction, based on a sample of 285 online users in Nigeria, found strong positive relationship between online advertising and customer satisfaction. However, the study by Salameh et al. (2022) found that online advertising did not have significant impact on customer satisfaction. It was stated in the conclusion that online advertising had impact on customer satisfaction with brand knowledge as intermediary.

### RESEARCH METHODOLOGY

This study was carried out based on a survey design. Questionnaire was the instrument for data collection. A purposive sampling technique was adopted to guarantee that the sampled participants had online-buying experience. The sample size was 521 employees of a food and beverage manufacturing company in Lagos, Nigeria. The sample size consisted of 30 percent of a population of 1,727 employees of the company. The response rate was 70 percent. Data were analysed based on descriptive and inferential statistics. Descriptive statistics involved obtaining mean and standard deviation values for statements relating to online buying; specifically online advertisement messages and quality of delivered products as they relate to customer satisfaction. The responses measured extent of agreement to the statements on a four-point scale ranging from strongly agree, 5, to strongly disagree, 1. Inferential statistics was based on multiple regression analysis that determined the impact of advertising messages and quality of delivered products on satisfaction.

### RESULTS AND DISCUSSION

#### Results of Descriptive Statistics of the Study

The results of descriptive analysis are shown in tables 1 and 2 below:

**Table 1:** Advertisement Messages and Quality of Delivered Product

#### Descriptive Statistics

Statement	N	Minimum	Maximum	Mean	Std. Deviation
Online advertisement of the product was easy to comprehend	365	1.00	4.00	2.7589	.96189
Online advertisement messages reflected the features of received product	365	1.00	4.00	2.8767	.97981
Advertisement messages contained important features of received product	365	1.00	4.00	2.6575	.99751
There was perfect agreement between content of messages and features of received product	365	1.00	4.00	2.5890	1.08481
Advertisement messages portrayed product variety and their prices	365	1.00	4.00	2.4658	1.04936
Quality of delivered product met my expectation	365	1.00	4.00	2.7397	1.02211
Design of received product met my expectation	365	1.00	4.00	2.8493	1.01731
Product gained my acceptance for performing intended function	365	1.00	4.00	2.7534	.97751
Product had no errors that were always fixed	365	1.00	4.00	2.7945	.95156
Product conformed to safety standards	365	1.00	4.00	2.9452	.96491

Valid N (listwise)

365

Source: Researcher, 2023

The mean values of statements contained in table 1 show how contents of online advertisement messages reflected quality of received products and how quality of delivered products agreed with customer expectation. Higher mean values indicate high potential of message contents to reflect quality of received product and high potential of quality of delivered product to meet customer expectation.

**Table 2: Customer Satisfaction  
Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
Comprehending online advertisement of the product with ease gave me satisfaction	365	1.00	4.00	2.7260	1.02523
Online advertisement messages reflecting features of received product gave me satisfaction	365	1.00	4.00	2.9452	.95057
Online advertisement messages gave me satisfaction by emphasizing important features of received product	365	1.00	4.00	2.9178	.96296
Perfect agreement between content of messages and features of received product gave me satisfaction	365	1.00	4.00	2.7260	1.10270
Advertisement messages gave me satisfaction by portraying product variety and their prices	365	1.00	4.00	2.2877	1.10542
Quality of delivered product gave me satisfaction	365	1.00	4.00	2.5205	1.02321
Design of received product gave me satisfaction	365	1.00	4.00	2.9178	.96296
Product performance gave me satisfaction	365	1.00	4.00	2.3425	1.05115
Product having no errors that were always fixed gave me satisfaction	365	1.00	4.00	2.7260	1.06467
Product conformance to safety standards gave me satisfaction	365	1.00	4.00	2.8082	.96159
Valid N (listwise)	365				

Source: Researcher, 2023

The mean values of statements contained in table 2 show how contents of online advertisement messages and quality of delivered product relate with customer satisfaction based on the extent of meeting expectations. Higher mean values indicate high potential of message contents and quality of delivered product to satisfy customers based on ability of the product to meet their expectations.

### Results of Inferential Statistics

**Table 3: ANOVA**

ANOVA <sup>a</sup>						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	347.232	2	173.616	10319.522	.000 <sup>b</sup>
	Residual	6.090	362	.017		
	Total	353.322	364			

a. Dependent Variable: Customer Satisfaction

b. Predictors: (Constant), Quality of Product Delivery, Quality of Product Advertisement Messages

Source: Researcher, 2023

The results in table 3 indicate statistical significance of the test [F(2,362)df = 10319.522, p < 0.05]. Therefore, the null hypothesis, online buying has no significant impact on customer satisfaction, is rejected at 5 percent level of significance.

**Table 4: Coefficients  
Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.032	.021		-1.511	.132

Product Advertisement Messages	.692	.037	.691	18.754	.000
Quality of Delivered Product	.310	.038	.304	8.249	.000

a. Dependent Variable: Customer Satisfaction

Source: Researcher, 2023

Table 4 indicates that product advertisement messages has positive impact on customer satisfaction ( $\beta = 0.692$ ,  $p < 0.05$ ) while quality of delivered product also has positive impact on customer satisfaction ( $\beta = 0.310$ ,  $p < 0.05$ ). Therefore, the rejected null hypotheses at 5 percent level of significance are: online advertisement messages has no significant impact on customer satisfaction; and quality of delivered product has no significant impact on customer satisfaction.

**Table: 5** Model Summary of Predictors of Customer Satisfaction

### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	Change Statistics			Sig. F Change
						F Change	df1	df2	
1	.991 <sup>a</sup>	.983	.983	.12971	.983	10319.522	2	362	.000

a. Predictors: (Constant), Quality of Delivered Product , Product Advertisement Messages

Source: Researcher, 2023

It is indicated in table 5 that 98.3 percent variance in customer satisfaction is explained by online advertisement messages and quality of delivered product. The value of the coefficient of determination, 0.983, indicates that online advertisement messages and quality of delivered product are good predictors of customer satisfaction. It does not indicate impact of predictor variables on customer satisfaction. These results indicate that online buying had positive impact on customer satisfaction [ $F(2,362)_{df} = 10319.522$ ,  $p < 0.05$ ]; online advertisement messages had positive impact of customer satisfaction ( $\beta_1 = 0.692$ ,  $p < 0.05$ ); and quality of delivered product also had positive impact on customer satisfaction ( $\beta_2 = 0.310$ ,  $p < 0.05$ ). The following null hypotheses were, therefore, rejected:

$H_01$ : online buying has no significant impact on customer satisfaction,

$H_02$ : product advertisement messages has no significant impact on customer satisfaction, and

$H_03$ : quality of delivered product has no significant impact on customer satisfaction.

A comparison of the impact of the independent variables on customer satisfaction indicates less impact of quality of delivered product on customer satisfaction. However, quality of delivered produced less impact on customer satisfaction. Based on these results, equation (1) is rewritten as:

$$CS = -0.32 + 0.692PM + 0.310QP \quad \dots \dots \dots (2)$$

Studies that produced results that are similar to the results of this study include Nwokah and Njirika (2018) and Yuan et al. (2020). Nwokah and Njirika (2018), found strong positive relationship between online advertising and customer satisfaction in a study that involved 384 online users in Nigeria while Yuan et al. (2020) reported that product quality was significantly related to customer satisfaction in a study conducted in Perlis, Malaysia.

## CONCLUSION

Among the variables that impact on customer satisfaction within the context of online shopping are product advertisement messages and quality of received product following the placement of an order. The tendency for enhanced customer satisfaction increases when product advertisement message reflect quality and other features of received product and when quality of received product meet the expectations of customers. It is the ability of delivered products to meet the expectation of customers that reduces post-purchase dissonance to the level that makes the buyer to be satisfied with bought items. The results of this study gave indication of online buyers' satisfaction with bought items. Product advertisement messages represented a source of customer satisfaction, an indication that the messages reflected quality and other features of received product. The results of this study also revealed customer satisfaction with quality of delivered product; implying reduction in post-purchase dissonance. However, online vendors need to put in more effort to ensure that the quality of products received by customers meet their expectations to a higher level since it explained less variation in satisfaction implying more potential for improvement.

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