

# Effect of Perceived Usefulness, Ease of Use, Price Value, And Risk on Consumer Online Shopping Behavior Among Dangote Business School Students

Adamu Tako Mohammed<sup>1</sup>, Ahmed A. Maiyaki<sup>1\*</sup>, Rabi'u Hassan<sup>1</sup>

<sup>1</sup> Department of Business Administration and Entrepreneurship  
Bayero University Kano, Nigeria.

\*Corresponding Author: [aamaiyaki@yahoo.com](mailto:aamaiyaki@yahoo.com)

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## Abstract

Internet is changing the buying behaviour of people across the globe. With technological advancement around the world, more people are increasingly becoming interested in conducting businesses over the internet. The aim of the study is to examine the determinants of consumer online buying behavior among Dangote Business Schools students. Specifically, the study investigates the effect of perceived usefulness, ease of use, price value, and risk on consumer online shopping behavior. Primary of data were used in conducting the study. The study implements a quantitative research design. Data for the study were extracted through the use of structured questionnaire. A total of 272 questionnaires were distributed to the students of Dangote business school. Valid responses were analyzed with the aid of SPSS version 25 application. The study found a positive and significant relationship between perceived usefulness, perceived ease of use, perceived price value, perceived risk and consumer online buying behaviour among Dangote business school students, Kano State Nigeria. The study recommended that online sellers should provide website that provide seamless shopping experience, the ease of using the online sites, shopping attributes which directly increase the consumer behaviour towards the online shopping. The study also recommends that online vendors should implement strategies that guarantee riskless online payment processing and risk-free online shopping experience. Hence, the less risk perceived by consumers, the more likely they are to shop online.

## 1. Introduction

The Internet is changing the buying behaviour of people across the globe. With technological advancement around the world, more people are increasingly becoming interested in conducting businesses over the internet. thus, online shopping in Nigeria has taken a vast turn in the last decades (Ogbuji & Udom, 2018). According to Li and Zhang (2002) after e-mail usage, instant messaging and web browsing, online shopping is the third most popular internet activity. Nduji and Chris (2020) described e-commerce as the employment of the online world and the Web to transact service. It is an aspect of e-trading that involves the process of getting, selling, transferring, and

sometimes swapping products, companies, and/or information that is relevant to local area networks, featuring the Net.

Many companies have started using the Internet with the aim of cutting marketing costs, thereby reducing the price of their product and service in order to stay ahead in highly competitive markets (Han et al., 2018). These vital factors exert a significant role for the buying behavior of online customers; hence they must be heeded to by all online firms so that online consumers are lured into online shopping which will also aid the firms in retaining their customers and fulfilling their organizational goal.

In the last twenty years, online shopping has played a significantly important role. By the end of 2024, the ecommerce industry is set to generate a whopping \$6.967 trillion globally (Statista, 2024). According to Center for Retail Research (2022) online sales in UK was £106.010 billion which accounted for approximately 26.5% of its total retail sale (+7% over 2019). In Germany, online sales were \$97.337 billion or 19.6% of Germany retail trade (Oberlo, 2023). In France, a country which is one of the fastest growing online shopping in Europe, in 2023 online sales were \$79.697 billion (+14.9% over 2022) (Oberlo, 2023). Special mention should be made of the Netherlands, whose online market share rose from 15.3% in 2019 to 19.2% in 2022 (Center for Retail Research, 2022).

In Africa, awareness on online purchase behaviours is on the rise. Online sales generated via this medium is still very low (Rehman, Bhatti, Mohamed, & Ayoup, 2019). For example, Varrella (2020) stated that, between 2017 and 2019, the average e-commerce spending per online shopper in Africa experienced an increase up to 53 Euros as of 2019. In 2024, the average spending per digital buyer in Africa might be 64 Euros (Statista, 2022). Varrella (2020) further reported that, in 2020, 3% of all purchases in Egypt were made online. This was the highest of e-commerce retail among the five African countries taken into account. South Africa followed with 2% while e-commerce in Kenya, Nigeria and Morocco accounted for 1% of the total retail, respectively. Considering that the use of Internet technology in Africa is on the rise (Mpinganjira, 2017). The challenge remains that online shopping in developed worlds advanced in contrast to developing countries such as Nigeria and much of the African continent (KPMG, 2017).

Some studies have also revealed that even with Nigeria's populace of over 210 million people along with a GDP of ₦17.29 Trillion as at 2022, just \$12 bn is gotten from e-commerce (Adeyonu et al., 2022). Despite these perks, a cultivating nation like Nigeria seems to be lacking in areas of fostering e-commerce through consumers of various classes such as employees, younger, grown-up, aged, as well as trainees among others. This can be a result of some problems as pinpointed in the literary works like the expense of purchase, discretion, ease of access as well as personal privacy problems, security concerns, network integrity, credit card risks, originality, and many more (Yusuf et al., 2024).

In Nigeria with evidence of a high rate of internet fraud, it is expected that people will be skeptical about patronizing online vendors (Olusoji, et al., 2015). Studies have revealed that many consumers who search different online shops abandon their purchase intentions, that is, may not proceed to actual purchase (Al-Maghrabiet al 2011). Some users may also abandon continuous use of online shops after the first use. There is therefore the need to investigate the factors that influence online shopping behavior of consumers, that is, the factors that make buyers or consumers to make purchases on online shops (Eshiett, 2021).

The fear of losing one's hard-earned money to fraudsters is a major obstacle to online shopping in Nigeria (Esekomunu, 2020). Part of the efforts to grow online shopping in the country requires more comprehensive studies of satisfaction with online shopping among customers. Several questions are perceived as critical to be studied. For instance, to what extent are customers satisfied with, and what is their attitude towards online shopping? What are the factors that encourage the use of online shopping in Nigeria? Finding answers to these questions is very critical to improve online shopping in Nigeria.

Many studies directed online shopping behavior but it is still a big challenge and needs to study and focus on online shopping behavior in developing countries like Nigeria (Oloveze et al., 2022; Yahaya et al., 2021; Kofoworola et al., 2022). Since online shopping becomes the new medium for shopping, customer demands also increases. Majority of the customers have their own specialized desires and innovative product demands, so it becomes very crucial for online retailers to identify and know their online consumers. Therefore it is necessary to study the factors influencing consumer's online buying behaviour. In this regard, the present study aims to assess the determinants of online consumer buying behavioural by adopting the Unified Theory of Acceptance and Use of Technology UTAUT (Venkatesh et al., 2008).

## 2. Literature review

### 2.1 The Concept of Consumer Online Buying Behavior

The course of online purchasing of goods or services through e-commerce platforms can be referred to online shopping behavior. This is a five-step process and is analogous to shopping characteristics in conventional approaches (Liang & Lai, 2000). A study conducted by Shranck, Huang, and Dubinsky (2004) indicates that people who shop online are less technically at risk compared to those who shop directly. The reliability of online resources relies on the receipt of orders, timely response and delivery on time; as well as the security of customer personal information (Janda, Trocchia, & Gwinner, 2002; Kim, Lee, Han, & Lee, 2002; Parasuraman, Zeithaml, & Berry, 1988). Online shopping involves users online to search, select, purchase, use and process goods and services to meet his or her needs. Individuals encounter a lot of risks when visit and performing online purchases. As a matter of fact, consumers experience high risks when shopping through the Internet compared to traditional retail transactions (Lee & Tan 2003).

### 2.2 Determinants of Consumers' Online Buying Behavior

The online consumer buying of goods and services is as a results of tremendous growth in information and communication technology over the years, Technology Acceptance Model (TAM) will be extended with the addition of perceived price value and perceived risk to the original TAM model based on recommendation from prior studies (Srivasta & Thaichon 2023; Tyrvainen & Karjaluo 2022; Pillai et al., 2022). Thus this study will evaluate perceived usefulness, perceived ease of use, perceived price value and perceived risk and it influence on consumer to shop or not shop online.

#### 2.2.1 Perceived usefulness

Davis (1989) defined perceived usefulness as "the degree to which a person believes that using a particular system would enhance his or her job performance"; Perceived usefulness becomes the determiners of a system, adoption, and behavior of the users. Technology can be said to be successful if it has the value of usefulness needed by the customer. System users will use it if the system is useful; whether the system is easy to use or not easy to use (Davis, 1989). Hartono (2008) stated that perceived usefulness is how far someone believes that using a particular system will improve its performance.

#### 2.2.2 Perceived Ease of Use

Davis (1989) defined perceived ease of use as "the degree to which a person believes that using a particular system would be free of effort"; his result also suggested PEOU have a significant influence on PU and attitude towards the use of technology. According to Davis (1989), perceived ease of use is a belief in ease of use, namely the level in which the user believes that the technology/system can be used easily and without problems. The frequency of use and interaction between the users with the system is also able to show the ease of use. The more commonly used system shows that the system is better known, easier to be operated, and easier to be used by its users.

#### 2.2.3 Perceived price value

Price is what is sacrificed or given up to obtain a product or a service. Perceived price is a consumer's perceptions of price, and it includes sacrificed money, time cost, search cost, effort and psychic costs (Wang & chen 2016). In the simplest form, prices can be defined as the nominal value charged to the customer to acquire products and to be benefited from the ownership or use of products (Kotler and Armstrong, 1996). Beside accepted as face value, price is also used for comparative reference price, which amount depending on social class and background of the customer (Dodds et al., 1991). This form of perceived price is defined as the subjective customers' perception towards the objective price of the product (Dodds et al., 1991).

#### 2.2.4 Perceived risk

Perceived risk is defined as a customer's perceptions about uncertainty and unintended consequences in carrying out an activity that is private (confidential personal identity) Sulastini & Warmika (2013). Risks perceived by consumers are documented as an important factor for consumers in every financial transaction. The classical decision theory considers perceived risk as a function of the distribution of possible results of a conduct, its probabilities, and subjective values (Pratt 1964; Arrow 1965). Similarly, the earliest studies on risk perceived by consumers define this variable as a combination of two factors: the probability of incurring in a loss as

consequence of a conduct and the importance attributed to the loss (Kogan & Wallach 1964; Cox 1967, Cunningham 1967).

### 2.3 Unified Theory of Acceptance and Use of Technology (UTAUT) Model

Unified Theory of Acceptance and Use of Technology (UTAUT) Model in e-commerce adoption which was modified by Venkatesh et al., (2012) from the original UTAUT model is used for this research. The concept of the unified theory of acceptance and use of technology (UTAUT, Venkatesh et al., (2003) serves as a basic model and has been applied to various studies that use basic technology in both organizational and non-organizational settings. As a connection of eight previous theories, namely Theory of Reasoned Action (TRA), Theory of Planned Behavior (TPB), Technology Acceptance Model (TAM), Motivational Model (MM), Combined TAM-TPB (C-TAM-TPB), Model of Personal Computer Utilization (MPCU), Innovation Diffusion Theory (IDT), and Social Cognitive Theory (SCT). The UTAUT model was developed with four types of core constructs, namely expectations for performance (expectancy performance), expectations for effort (social expectancy), social influence (social expectancy), and conditions support (facilitating expectancy).

UTAUT in its turn, explain the technology adoption driven variables in this study, which are perceived Usefulness PU and perceived ease of use PEOU and it influence on online consumer buying behavior. the model refers that actual usage is determined by user’s behavioral intention to use (BIU) which in turn is influenced by their attitude (A) and the belief of perceived usefulness (PU). User’s attitudes, which reflects favourable or unfavorable feelings towards using the IS system, is determined jointly by perceived usefulness (PU) and perceived ease of use (PEOU). The logical understanding of the Unified Theory of Acceptance and Use of Technology (UTAUT) is that the easier exploitation of certain technology the more useful it is perceived to be. PU and PEOU reflect the beliefs about the task value and user-friendliness of new information systems respectively. The relationship of the model is further explain in the diagram below.

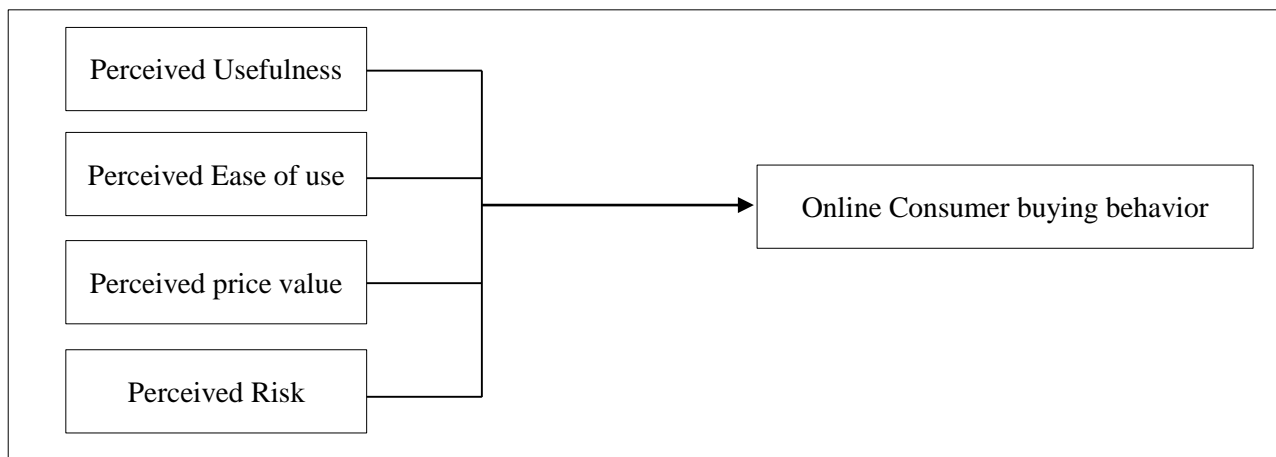


Fig. 1 Conceptual Framework

### 2.4 Empirical Review and Hypothesis development

#### 2.4.1 Perceived usefulness and consumer online buying behavior

Sahai et al., (2024), aims to examine the influence of perceived usefulness and consumer purchase decision in the context of digital marketing. Survey respondents are identified through the snowball sampling method, and data is collected through an online survey. SEM is used to analyze the relationship among the study variables. Finally, the data is analyzed using Smart PLS 3.0. The results indicate that perceived usefulness influence consumer trust, which influences consumer buying decisions.

Chidambaram et al., (2024) examine the consumers' online apparel purchasing behavior using the constructs from the technology acceptance model (UTAUT). Most importantly, using a structured survey instrument, the data was collected from 288 millennial respondents and has been analyzed using Hayes's PROCESS macros. The results reveal that attitude towards VTO mediated the relationship between perceived usefulness and behavioral intention of customers to engage in online shopping.

Lin et al. (2023) examines the driving factors that influencing the live-stream shopping behaviour among Malaysian consumers. There were 200 users from Facebook Live-stream Channel chosen in the study by applying the method of simple random sampling. Data were collected through self-administered questionnaires and five-

point Likert scale were adopted. Perceived usefulness is the most significant factor that contributed to the live-stream shopping behaviour among Malaysian consumers in this study.

**H1: There is significant relationship between Perceived usefulness and consumer online buying behavior**

#### 2.4.2 Perceived Ease of Use and consumer buying behavior

Baidoun and Salem (2024) explore the factors that caused the transformation in consumers' behavioral attitude (AT) and intention toward online shopping (BITOS). A survey was conducted to collect a sample of 402 consumers in Aligarh city. The data were analysed to establish the measurement model and test the hypothesized structural model with the Smart-PLS software. The study's findings confirmed that PB, subjective social norms, perceived ease of use, and perceived usefulness positively affect AT and BITOS, whereas PR does not influence AT and BITOS.

Wong et al., (2024) examine the variables that influence customers' online shopping behaviour in Shopee. A survey questionnaire is conducted to collect data from 150 Shopee's users in Malaysia. The findings depicted that perceived trust, security and perceived ease of use had influenced the customers' online shopping behaviour towards Shopee in Malaysia. Perceived usefulness and perceived convenience did not greatly impact the customers' online buying intention on Shopee in Malaysia.

Yen (2023) explored the variables of personal innovativeness, trust, perceived ease of use, perceived usefulness, and intention to use such applications by testing the extended technology acceptance model (ETAM). A total of 296 responses were used to test the hypotheses. The findings revealed that personal innovativeness had a positive effect on perceived ease of use. Trust was found to positively affect perceived usefulness and perceived ease of use.

**H2: There is significant relationship between Perceived Ease of Use and consumer online buying behavior**

#### 2.4.3 Perceived Price Value and Consumer Buying Behavior

Senali et al., (2024) investigates the determinants of trust in sellers and products and purchase intention in the social commerce (s-commerce) context by considering the moderating effects of trust disposition and perceived price fairness. The data were collected from 416 individuals who have followed at least one seller on Instagram and analysed using the Partial Least Squares (PLS) approach. The findings revealed that perceived price fairness positively moderates the influence of trust in sellers and products on purchase intention.

Yi et al., (2024) explore the factors that influence, live streaming shopping in China. Based on the expectation confirmation theory, this study uses structural equation modeling (SEM) to explore the repurchase intention of live streaming shopping (LSS) users. The results show that perceived interactivity, perceived quality and perceived price value have a direct and significant effect on confirmation and customer satisfaction.

Egbe et al., (2024) examines the relationship between online marketing and the purchasing patterns of Jumia consumers in Calabar. Using 130 Calabar-based Jumia consumers, a sample of 97 was drawn using the Krejcie and Morgan Table (1970). Pearson's product moment correlation was utilized to analyse the collected data. Findings confirm a significant correlation exists between customers' trust and purchasing behaviour, and between perceived value and customer reviews and the purchasing behaviour of customers.

**H3: There is significant relationship between Perceived Price Value and consumer online buying behavior**

#### 2.4.4 Perceived risk and consumer buying behavior

Rizomyliotis, (2024) seeks to understand the determinants of consumer trust in relation to sustainable products that are sold online. The research model is empirically tested through the data of 278 participants. The research findings indicate that perceived risk, perceived security, and perceived privacy predict trust on e-commerce which, in turn, predicts online purchase intention for sustainable products.

Restianto et al., (2024) analyze the influence of perceived price, product uniqueness, perceived ease of use, and information quality on the online purchasing intention of microfloriculture souvenirs with perceived risk as a moderating variable. This research is quasi-experimental using an online questionnaire with 170 respondents. The variable measurement uses five Likert scales. To test the causal relationship, structural equation modeling (SEM) with smart PLS was used. Based on the results of the analysis, it was concluded that perceived price, product uniqueness, perceived ease of use, and information quality had a positive effect on online buying intention for micro floriculture souvenir products, but perceived risk did not moderate the relationship between perceived price, and did not moderate the relationship between product uniqueness and online buying intention for micro floriculture products, souvenirs.

Sharma et al., (2023) aim to understand the correlation between psychological risk, financial risk and time and convenience risk with online shopping in Karnal (India). Data is collected with the 5- point likert scale questionnaire from 100 respondents. Data collected was analysed with the help of regression and Anova. The study is quantitative research. Results indicate a relationship between financial risk, physiological risk, and online

shopping consumer behaviour, as well as a connection with time and convenience risk with online purchasing consumer behaviour.

**H4: There is significant relationship between Perceived Price Value and consumer online buying behavior**

**3. Methodology**

A survey research design was adopted for the study to examine the relationship that exists between online shopping and consumer buying behavior among students of Dangote Business School Kano State Nigeria. The data were collected with the use of a structured questionnaire. It will involve the assessment of the student’s opinion on how they perceived usefulness, ease of use, risk and price value on their online buying behavior.

The population or sample frame for this study is made of the entire Dangote Business School students. From the students statistic collected from the I.T officer Dangote Business, the total number of Dangote Business School students is three hundred and ninety three (393) as at November, 2023. The required sample size for the research study is determine scientifically using the Krejcie and Morgan (1970) sampling table, thus the sample size two hundred and seventy two (272) is enough for a population of three hundred and ninety three (393) according to the table.

The sample technique used was judgmental sampling techniques. Although the approach is a non-probability sampling technique, which hinders the generalization of findings, the researcher opted for it for two main reasons. Firstly, the sampling frame was not accessible by the researcher. Secondly not all respondents have online shopping experience. Only those with ability to respond to the items of the instrument were selected for the study.

**Table 1 Descriptive Statistics**

Variables	N	No. of Items	Minimum	Maximum	Mean	Standard Deviation
Consumer Buying Behavior	255	5	1.00	5.00	3.5176	0.79099
Perceived Usefulness	255	5	1.00	5.00	3.6784	1.02819
Perceived Ease of Use	255	5	1.00	5.00	3.7090	0.75953
Perceived Price Value	255	5	1.00	5.00	3.4235	0.93823
Perceived Risk	255	5	1.00	5.00	3.4925	0.77960

Consumer online buying behaviour as the dependent variable of the study has the mean of 3.5176 and the standard deviation SD of 0.79099, implying that the variable has adequate mean and SD values, since the mean value is above the rule of thumb cutoff point of 2.5 as suggested by Kerlinger (1986). This signifies that the respondents agree that consumer buying behavior.

Considering the mean and the standard deviation of PU3.6784 and the SD of 1.02819, PEOU 3.7090 and SD of 0.75953, PPV 3.4235 and SD of 0.93823 and PR 3.4925 and SD of 0.77960 described the influence of independent variables on dependent variable indicating the effect of PU, PEOU, PPV and PR on CBB. Thus, the mean is above the average of 3.00 and the standard deviation is far from the value of 1.

**Table 2 Model Summary**

R	R Square	Adjusted R Square	R	Std. Error	Change in adjusted R Square	F Change	Sig.	Durbin-Watson
.883 <sup>a</sup>	.779	.775		.37491	.779	220.163	.000	1.829

a. Predictors: (Constant), PR, PU, PPV, PEOU. .b. Dependent Variable: CBB

The essence of the Anova is to determine the fitness of the model. Thus, the table above shows F=39.908, P<0.000 signifying the overall fitness of the model at p=0.000 indicating that the model is fit at 99.9%.

**Table 3** Summary of Hypothesis

	Hypothesis	T-Value	P-Value	Decision
<b>H<sub>01</sub></b>	There is no significant relationship between Perceived Usefulness and consumer online Buying behaviour	5.285	0.000	Rejected
<b>H<sub>02</sub></b>	There is no significant relationship between Perceived Ease of Use and consumer online Buying behaviour	19.791	0.000	Rejected
<b>H<sub>03</sub></b>	There is no significant relationship between Perceived Price Value and consumer online Buying behaviour	3.040	0.003	Rejected
<b>H<sub>04</sub></b>	There is no significant relationship between Perceived Risk and consumer online Buying behaviour	-10.296	0.000	Rejected

## 4. Discussions of Findings

This section discusses in detail the findings of the study taken into cognizance relevant theories and findings from previous study.

### 4.1 The Effect of Perceived Usefulness on Consumer Buying Behaviour

The first objective of this research is to examine the effect of perceived usefulness on consumer buying behavior. The findings of this study show positive and significant relationship between perceived usefulness and consumer buying behaviour at a statistically significant of ( $P < 0.000$ ). It implies that a technology is said to be successful if it has the value of usefulness needed by the customer. Hence, technology users will always use it if they found the technology useful; whether the technology is easy to use or not easy to use. In other words, the higher a consumer perceived online shopping to be useful, the more likely he or she will shop online. The finding was found to be consistent with previous studies (Shafiullah & Sivakumar 2022; Phetnoi et. al, 2020).

### 4.2 The Effect of Perceived Ease of Use on Consumer Buying Behaviour

The second objective of this research is to examine the effect of perceived ease of use on consumer buying behavior. The findings of this study show positive and significant relationship between perceived ease of use and consumer buying behaviour at a statistically significant of ( $P < 0.000$ ). This implies that if consumer perceived ease of use of technology there is likelihood that the consumers will engage the use that technology will enhance the chance of consumers buying from that particular technology. Hence, perceived ease of use is a belief in ease of use, namely the level in which the user believes that the technology/system can be used easily and without problems. Base on the findings of this study, perceived ease of use has a significant influence on consumer online buying behaviour. This was found to be congruent with the findings of Wahyuningtyas & Widiastuti (2015), who has found that the higher perception on ease of use leads to consumer online buying behaviour.

### 4.3 The Effect of Perceived Price Value on Consumer Buying Behaviour

The third objective of this study is to examine the effect of perceived price value on consumer buying behavior. The findings of this study show positive and significant relationship between perceived price value and consumer buying behaviour at a statistically significant of ( $P < 0.000$ ). This implies consumer's perceptions of price which includes sacrificed money, time cost, search cost, effort and psychic costs can influence consumers buying behavior. In essence, the more consumers perceived fair price, the more likely they are to shop online. Interestingly, this was found to be consistent with the findings of Bernarto& Purwanto, (2022).

### 4.4 The Effect of Perceived Risk on Consumer Buying Behaviour

The fourth objective of this research is to examine the effect of perceived risk on consumer buying behavior. The findings of this study show positive and significant relationship between perceived risk and consumer buying behaviour at a statistically significant of ( $P < 0.000$ ). This implies that perceived risk is based on customer's perceptions about uncertainty and unintended consequences in carrying out an activity that is private (confidential personal identity), Risks perceived by consumers are documented as an important factor for consumers in every financial transaction which influence their buying behavior. In other words, the more risk

perceived by consumers the less likely they are to shop online. The findings vindicated the findings of Sharma et al. (2023); Bayai, (2022).

## 5. Conclusion

In conclusion, the current study has provided additional evidence to the growing body of knowledge concerning consumer online buying behaviour. The study also added to the understanding of whether perceived ease of use, usefulness, price value and risk matters in terms of consumer online buying behaviour among Dangote business school students. Based on the quantitative findings from this study, perceived usefulness, ease of use, price value, and risk are positively related to consumer online buying behaviour among Dangote business school students, Kano State Nigeria. In conclusion the current study adds valuable theoretical, practical, and methodological ramifications to growing body of knowledge in the field of management, particularly marketing.

Online vendors should make sure buying process is simple and intuitive, with minimal steps required for customers to complete their purchase. They should also ensure that all product details, including specifications, pricing, and availability, are clearly displayed on the website to help customer make informed decision. Customers should also be provided with multiple payment option to choose from, such as credit card, PayPal, and mobile payment options, to accommodate different preference. Online vendors should offer competitive pricing and promotions to demonstrate value for money compared to other online retailers. They should also clearly communicate shipping cost, delivery times, and return policies to build trust and reduce uncertainty, thereby increasing perceived value.

Online vendors should implement strategies that guarantee riskless online payment processing and risk-free online shopping experience. In addition to order fulfilment, e-commerce retailers should also devise a mechanism for secure transactions by employing safe and reliable security systems and educate consumers about different evolving payment technologies like mobile wallets, unified payment interface (UPI), SSL protocols in payment systems, multi-tier authentication, real-time PIN generation and security approval symbols on websites so that consumers are encouraged to shop again in future. In addition, safety and privacy of the consumer's personal and financial information have to be ensured so that these issues are the least of consumers' worries.

Despite the various contributions offered by this study concerning theoretical, practical as well as methodological contributions, a number of limitations must be taken into cognizance. However, such limitation may provide avenue for future research in the subject matter considered for the study. Firstly, the present study adopted a cross-sectional survey approach, which captures only a snapshot of the responses of the diverse individuals at one particular time (Sekaran & Bougie, 2013). Hence, future studies should consider a longitudinal design approach in other to test the proposed model at varying points in time to validate the study findings. Secondly, future studies should consider other potential variables such as convenience, Customers personality, psychological needs, motivation, role of family member, society, cultural backgrounds and religion which could explain consumer online shopping behaviour. Also, future studies should consider using web atmosphere as mediating variables to straighten the relationship between the independent variables and dependent variable.

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## Conflict of Interest

Authors declare that there is no conflict of interests regarding the publication of the paper.

## Author Contribution

*The authors confirm contribution to the paper as follows: **study conception and design:** Adamu Tako Mohammed, Ahmad A. Maiyaki; **data collection:** Adamu Tako Mohammed; **analysis and interpretation of results:** Rabiul Hassan Ahmad A. Maiyaki, ; **draft manuscript preparation:** Adamu Tako Mohammed, Ahmad A. Maiyaki, Rabiul Hassan. All authors reviewed the results and approved the final version of the manuscript.*

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