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FACTORS INFLUENCING ONLINE SHOPPING BEHAVIOUR AMONG RESIDENTS OF ANAMBRA STATE, NIGERIA

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Abstract

Purpose: *This paper studied the factors influencing the adoption and usage of online shopping websites among residents of Anambra State, Nigeria. The study used the unified theory of acceptance and use of technology (UTAUT), trust, and perceived risk as its theoretical framework.*

Methodology: *We used the online survey to collect data from 338 residents. Data analysis was conducted using SPSS and Smart PLS computer-based statistical software.*
Findings: *The study found that trust and perceived risk were the strongest predictors of behavioural intentions, with coefficient values of 0.403 ($p < 0.000$) and -0.249 ($p < 0.002$). The study did not establish that effort expectancy and facilitating conditions -0.18 ($p > 0.057$) and -0.063 ($p > 0.551$), respectively, had influences on behavioural intentions.*

Implication*: Trust and perceived risk exerted the largest impact on behavioural intentions to use online shopping websites usage; facilitating conditions had the highest effect on online shopping usage. As businesses continue to explore business opportunities in the digital space, it is imperative that care must be taken to ensure that customers trust their platforms and not disappointed owing to poor service delivery.*

Originality/Value: *The results of this study partially supported the original UTAUT theory, which suggests that performance expectancy and social influence significantly predict behavioural intentions. We discuss both the practical and theoretical implications of the study.*

Keywords: *Online Shopping; Perceived Risk; Trust; Nigeria; UTAUT*

Introduction

Rapid advancements in communications and IT have revolutionized business contracting, transforming the internet into a vital global marketplace for goods and services, available 24/7 (Jadil et al., 2022; Javadi et al., 2012). Online shopping, a key part of e-commerce, involves purchasing via the internet and has become an indispensable B2C sales channel (Shua & Zhang, 2023; Bubanj & Vidas-Bubanja, 2022). Online shopping offers significant consumer advantages: facilitating cross-border purchases once limited to large

firms (Huang & Chang, 2017), providing convenient access to a vast product range from home (Usman & Kumar, 2020), and offering competitive pricing (Sivakumar & Gunasekaran, 2017).

Consequently, global online retail has grown substantially: from $319B (2008) to $632B (2012) (MarketLine, 2013), reaching ~$840B (2014) and projected at $1.5T (2018) (A.T. Kearney, 2015 in Lim et al., 2015). Estimates now exceed $5-7T, with continued growth expected (Statistica.com, 2023). Africa also shows burgeoning e-commerce; Nigeria, South Africa, and Kenya accounted for nearly half of the continent's 21M online shoppers and $5.7B market (2017) (UNCTAD, 2017), with Mauritius, Nigeria, and South Africa leading regional rankings (digestafrica.com, 2018).

This sustained growth highlights e-commerce's vast potential, driving researcher, marketer, and policymaker interest in online consumer behaviour (Celik, 2016). However, understanding remains nascent in developing nations like Nigeria, requiring further study to identify key influencing factors (Rahman et al., 2018; Auf et al., 2018; Ibrahim et al., 2018). This knowledge helps retailers predict intentions and business development (Nwankwo et al., 2019). Subsequent sections cover online shopping in Nigeria, literature review, hypotheses, methodology, findings, and conclusions.

Online Shopping in Nigeria

Nigeria's mobile telephony market is among Africa's fastest-growing (Ogbanje et al., 2023; Ayo et al., 2007). Internet users reached approximately 84 million by December 2022 (Statistica.com, 2022), significantly increasing from 92 million (47.9% penetration) in 2016 (NCC via IWS, 2017). This mobile-driven growth positions Nigeria as a potential online shopping hub (Ibrahim et al., 2018a), with substantial economic implications (Usman & Kumar, 2020).

Major platforms like Jumia, Konga, and Jiji have emerged (Olasanmi, 2019), driving increased online activity. Traders entice customers to search, compare prices, and purchase goods (Ayo et al., 2007; Gabriel et al., 2016; Omotayo & Omotope, 2018), generating over ₦1 billion monthly in deals. Customer loyalty depends on consistent quality, value, and satisfaction (Philips Consulting cited in Olasanmi, 2019).

Despite progress, challenges persist. Cultural mismatches include the inability to use installment payments ("buy-today, pay-tomorrow") or haggle for "jara" (extra goods) common in offline transactions (Gabriel et al., 2018). Infrastructure limitations involve historically poor internet access (Folorunso et al., 2006; Adeyeye, 2008), underdeveloped e-payment systems (Ajayi et al., 2008; Ayo,

2008), and past shortages of credible local vendors (Adeyeye, 2008). Additional barriers include fraud, security concerns, weak regulation, and poverty (Aminu, 2013). Nevertheless, online shopping continues to grow as stakeholders address these barriers and consumer attitudes evolve (Adunchezor & Akinade, 2021).

Literature Review and Hypotheses Development

The UTAUT model was adopted since it (among the adoption theories) is presented as one of the most significant and widely accepted models available for studying user acceptance and use of technology (Harris et al., 2019; Karsen et al., 2019). UTAUT is a synthesis of eight prior technology acceptance models, namely, the theory of reasoned theory (TRA), technology acceptance model (TAM) and Technology acceptance model 2 (TAM2), theory of planned behaviour (TPB) and decomposed theory of planned behaviour (DTPB), combined TAM and TPB (C-TAM-TPB), innovation diffusion theory (IDT), motivational model (MM), model of PC utilisation (MPCU), and social cognitive theory (SCT). Moreover, it outperforms the eight individual models with an adjusted R^2 of 70% (Venkatesh et al., 2003).

Though Magsamen-Conrad et al. (2020) observe that most of UTAUT's early research focused exclusively on organisational contexts, latter studies have adhered to Venkatesh's suggestion to extend the model in different ways: indifferent (countries, age groups and technologies); in identifying other relevant constructs to serve as exogenous variables or endogenous theoretical mechanisms. In adherence to this, this present study combines original UTAUT model with trust and perceived risk to investigate the factors influencing the adoption and use of online shopping websites. Given that UTAUT has been empirically verified and confirmed better than other existing competing models (Venkatesh et al. 2003; Venkatesh & Zhang 2010), this study adopts UTAUT as a theoretical framework to develop the hypotheses. Moreover, previous studies have used UTAUT to ascertain the factors influencing online shopping (Eneizan et al., 2022; Erjavee & Manfreda, 2022; Soh et al., 2020; Lian & Yen, 2014).

Performance expectancy

In UTAUT, performance expectancy (PE) is derived from perceived usefulness (TAM/TAM2), relative advantage (IDT), extrinsic motivates (MM), job-fit (MPCU), and outcome expectations (SCT). PE is

defined as "the degree to which an individual believes that using the system will help him or her to attain gains in job performance" (Venkatesh, et al., 2003, p. 447). Numerous studies have explored the association between PE and behavioural intention with regard to online shopping. PE was found to be a key predictor of behavioural intention to shop online (Hassan, Rashid & Li, 2015; An, Hun & Tong, 2016; Eneizan et al., 2022; Odusanya, Aluko & Lal, 2019; Erjavee & Manfreda, 2022; Soh et al., 2020). In the light of these studies, we hypothesize that:

H1 PE positively affects behavioural intention to shop online

Effort Expectance

Generated from the perceived ease of use, complexity and ease of use constructs found in the TAM (Davis, 1989), MPCU (Thompson, Higgins & Howell, 1991) and IDT (Moore & Benbasat, 1991) models respectively, effort expectance is defined as the measure of ease related to technology use. It is a main predictor of behavioural intention at the initial stage of using the system. EE becomes less important with improved use of the system as the users will be better conversant with using the system. Dulle and Majanja (2011) established that effort expectancy had significant effect on behavioural intention. Within the area of online shopping, several studies confirm that EE significantly predict behavioural intention to shop online (Odusanya, Aluko & Lal., 2019; Hassan, Rashid & Li, 2015; An, Hun & Tong, 2016). Hence, we hypothesise thus:

H2 EE positively affects behavioural intention to shop online.

Social Influence

Venkatesh et al. (2003) utilised social influence to denote subjective norm in TRA, TAM2, TPB/DTPB, and C-TAM-TPB, social factors in MPCU, and image in IDT. They defined social influence as the extent to which an individual perceives that important others believe he/she should use the technology. From all the derived theories, SI was confirmed to be a direct predictor of behavioural intentions. Previous studies on online shopping demonstrate that SI is a significant predictor of behavioural intention to shop online (Eneizan et al., 2022; Odusanya, Aluko & Lal, 2019; Hassan, Rashid & Li., 2015; Lian & Yen, 2014; Soh et al., 2020). Therefore, we advance this hypothesize that:

H3 SI positively affects people's behavioural intention to shop online.

Facilitating Conditions

Facilitating conditions was generated from TPB and C-TAM-TPB as perceived behavioural control, IDT as compatibility and MPCU as facilitating conditions. Venkatesh et al. (2003) define facilitating conditions as the degree to which an individual believes that an organizational and technical infrastructure exists to support technology use. Venkatesh et al. (2003) found that effort expectancy moderated the effect of FC on behavioural intentions. To this end, FC will not have a direct effect on behavioural intentions while EE is present in the model. Ajzen (1991) indicated that perceived behavioural control (FC) predicted actual usage. Facilitating condition has been found to be a key predictor of behavioural intention in a number of studies (Hassan, Rashid & Li, 2015; Eneizan et al., 2022; Odusanya, Aluko & Lal, 2019; Erjavee & Manfreda, 2022; Soh et al., 2020). Based on the above, we make the following postulations:

H4 FC positively affects people's behavioural intention to shop online

H5 FC positively affects people's actual online shopping

Behavioural Intention

Behavioural intention is defined as "the person's subjective probability that he or she will perform the behaviour in question" (Venkatesh et al., 2003, p. 451). Several studies (Ajzen, 1991; Chau & Hu, 2002; Venkatesh & Davis, 2000; Venkatesh et al., 2003) have shown that behavioural intention is a significant and valid predictor of actual use behaviour of technology. BI is the most significant determinant of actual behaviour and prior studies have established that BI had major impact on actual usage (Eze & Nwabunze, 2022; Yakubu & Dasuki, 2018; Tarhini, et al., 2013). Thus, we hypothesize that:

H6 Behavioural intention to shop online positively affects actual online shopping

Extending UTAUT with Trust and Risk in Online Shopping Websites

Trust reflects consumers' confidence that online transactions will meet expectations (McKnight et al., 2002), while risk is their perceived potential for negative outcomes (Garbarino & Strahilevitz, 2004). E-commerce literature debates the risk-trust relationship's role in service acceptance (Gefen et al., 2008). Some view risk as a trust precursor, arguing risk concerns hinder trust development (Chandra et al., 2010). Conversely, others see trust as reducing perceived risk (Pavlou & Gefen, 2005; Mou et al., 2017). Despite established theories, few studies integrate

this relationship into the UTAUT model (Schaupp et al., 2009).

This study examines trust (in websites) and perceived risk (of online shopping), factors particularly inhibiting e-service adoption in Africa (Ayo et al., 2011). In Nigeria, high cybercrime fuels user suspicion (Ipsos, 2015), and spamming heightens identity theft fears (Osei & Gbadamosi, 2011). This perceived risk deters platform use, suggesting low trust increases risk perception. Ultimately, trust and risk strongly influence e-commerce purchase decisions (Kim et al., 2008). Hence, in the context of online shopping websites we hypothesize as follows:

H7 Consumers' trust in online shopping website positively affects their behavioural intention to shop online

H8 Consumers' trust in online shopping website negatively affects consumers' perceived risk of shopping online

H9 Perceived risk of shopping online negatively affects consumers' behavioural intention to shop online.

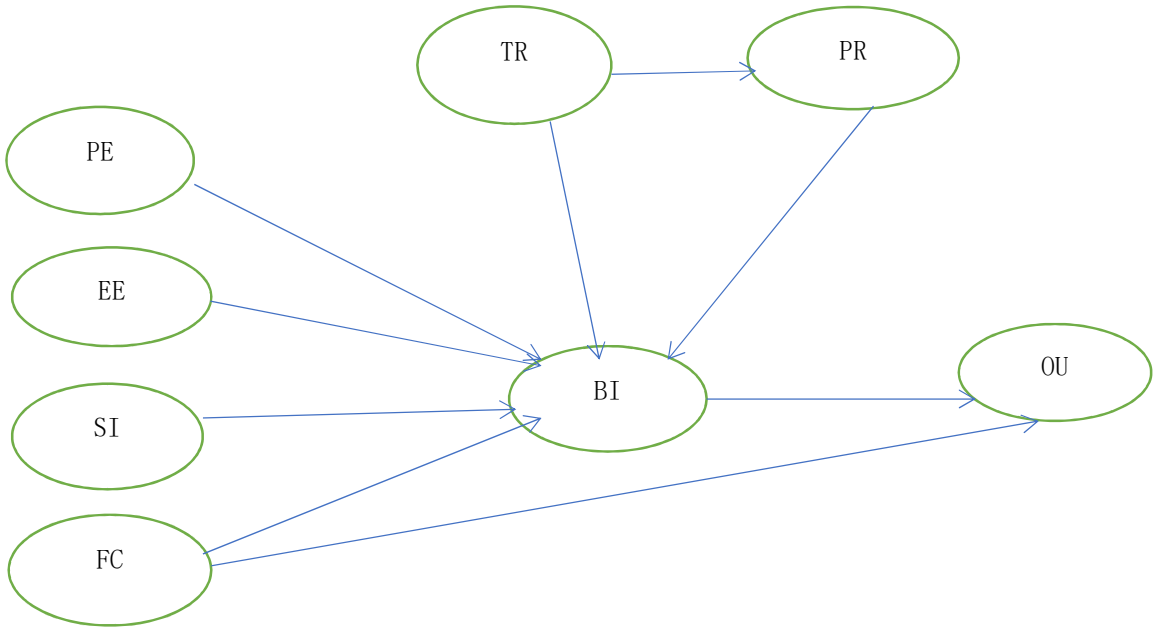

Fig. 1 Proposed theoretical model

Methodology

Correlational survey research design was adopted in studying the factors that affect behavioural intentions and online shopping websites usage among residents of Anambra state. The questionnaire was distributed electronically. The participants were assured that no harm would result from any information given to the researchers. The following inclusion criteria were used: (1) participant must be 18 years and above, (2) resident in Anambra state (3) and is aware of online shopping websites. The consent of the researcher was sought by sending introductory information detailing purpose of the study and

soliciting participation from the residents. By clicking 'accept', it is deemed that participant has elected to be part of the study and is subsequently redirected to the questionnaire. A total of 384 residents of Anambra state completed the questionnaire successfully.

Data analysis

Data analysis used SPSS and Smart PLS 4.0. Descriptive statistics for sample variables employed frequencies and percentages. Partial Least Squares Structural Equation Modeling (PLS-SEM) was performed using Smart PLS (Ringle et al., 2015), chosen for its ability to model both formative and reflective constructs and its fewer distributional assumptions compared to covariance-based SEM (Hair et al., 2016).

The PLS-SEM analysis followed the two-stage approach (Hair et al., 2016):

1. Measurement Model Assessment: Evaluated reliability and validity. Convergent validity was assessed via item loadings, composite reliability (>0.7), and average variance extracted (AVE >0.5) (Hair et al., 2010). Discriminant validity was established using the square root of AVE (Fornell-Larcker criterion).

2. Structural Model Assessment: Examined path relationships. Significance of path coefficients (β) was tested ($\alpha<0.05$). Model predictive relevance was assessed via Stone-Geisser's Q^2. Effect sizes (f^2) determined the strength of exogenous variables' influence on endogenous variables. Adjusted R^2 measured the variance explained in endogenous constructs.

Results

Demographic profile of the respondents

Most respondents in our sample were males (60.1%) compared to females (39.9%) and were between the ages of 40 and 49 years. Participants varied with respect to their level of education as 45.0% reported having attended and obtained a bachelor's degree, while 22.6% had completed a master's programme. In addition, most of the respondents were married (66.9%).

The results from data analysis are presented below.

The hypothesized model (Fig. 2) involves both observed and latent (unobserved) variables. The latent variables are multidimensional, thus, a single stage Partial Least Square – Structural Equation Modelling (PLS-SEM) causal model was hypothetically developed for this study. After the development of the model, the indicators of the variables in the model were assessed for convergent and discriminant validities. Based on the recommended threshold for the validities, modifications were made to the hypothesised model in order to achieve the most parsimonious causal model that explains factors that influence online shopping behaviour among residents of Anambra state, Nigeria. The results are presented below.

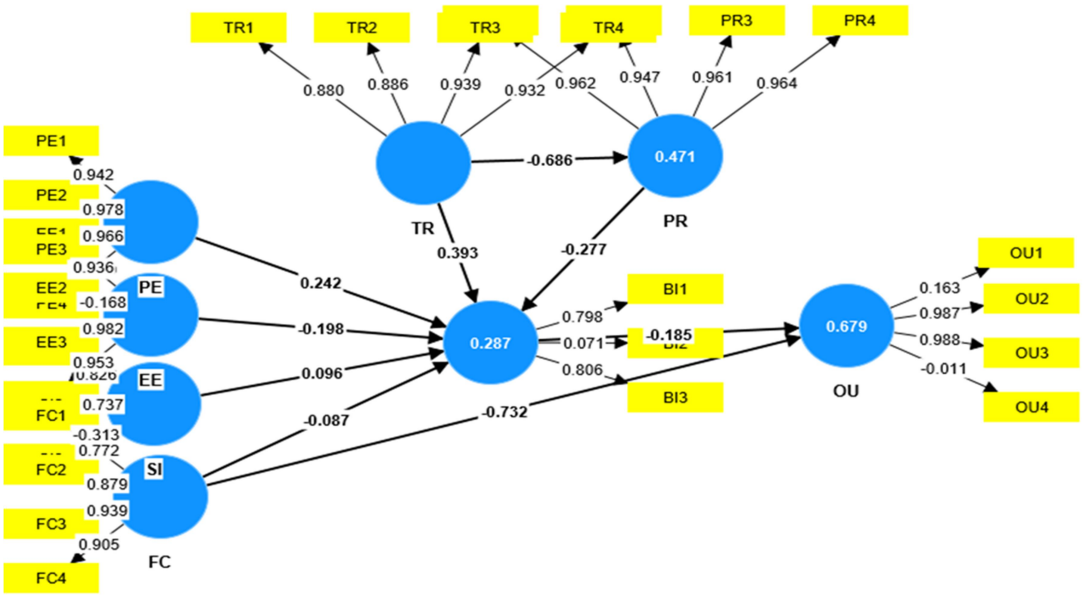

Fig. 2 The Hypothesized (Estimated) PLS-SEM causal model

Figure 2 presents the hypothesized PLS-SEM causal model with estimates that describe the influence of Anambra residents' performance expectancy (PE), effort expectancy (EE), social influence (S1), facilitating conditions (FC), trust in online shop website (TR) and perceived risk (PR) on their behavioural intention (BI), and their indirect effect of the variables through behavioural intention on actual online shopping usage (OU) as well as the direct effect of facilitating conditions (FC) on actual online shopping usage.

The convergent and discriminant validity were estimated to assess the construct validity of the measurement model. The convergent validity was measured by factor loadings (> 0.7), composite reliability (> 0.7), and average variance extracted (AVE) (> 0.5) (Hair et al., 2010). The results of the convergent validity and reliability (Cronbach's Alpha > 0.7) are as presented in Table 2.

Table 1 Convergent validity of the variables in the model

	Outer loa	Cronbach's alpha	Composite reliability (rho_c)	Average variance extracted (AVE)
BI1 <- BI	0.798	0.231	0.622	0.431
BI2 <- BI	0.071			
BI3 <- BI	0.806			
EE1 <- EE	0.936	0.711	0.857	0.694
EE2 <- EE	-0.168			
EE3 <- EE	0.982			
EE4 <- EE	0.953			
FC1 <- FC	0.772	0.897	0.929	0.767
FC2 <- FC	0.879			
FC3 <- FC	0.939			
FC4 <- FC	0.905			
OU1 <- OU	0.163	0.509	0.691	0.494
OU2 <- OU	0.987			
OU3 <- OU	0.988			
OU4 <- OU	-0.011			
PE1 <- PE	0.942	0.717	0.87	0.694
PE2 <- PE	0.978			
PE3 <- PE	0.966			
PE4 <- PE	-0.02			
PR1 <- PR	0.962	0.97	0.978	0.918
PR2 <- PR	0.947			
PR3 <- PR	0.961			
PR4 <- PR	0.964			
SI1 <- SI	0.826	0.251	0.483	0.442
SI2 <- SI	0.737			
SI3 <- SI	-0.313			
TR1 <- TR	0.88	0.93	0.95	0.827
TR2 <- TR	0.886			
TR3 <- TR	0.939			
TR4 <- TR	0.932			

Table 1 above shows the convergent validity of the variables in the model. The result shows that some indicators (items) of the variables in the model have loading less that the threshold value of 0.50 (indicator loading < 0.50) for a reliable indicator. For instance, the loading for BI2 as indicators of Behavioural Intention was less than 0.50, which implies that the indicator was not reliable in measuring variable. Similarly, the loadings for EE2, PE4, OU1, OU4 and SI3 were less than 0.50 which means that the indicators were not reliable in measuring these variables. The result further shows that the composite reliability coefficients for all the variables were greater than the threshold of 0.60 (index < 0.60) except social influence which was 0.483. This means that the majority of the indicators associated with the variables are reliable. The Average Variance Extracted (AVE) for the latent variables; BI, OU and SI were less than the threshold value of 0.50 (AVE < 50). In addition, the composite and Cronbach alpha reliability coefficients obtained for some of the variables (BI, OU and SI) were also below the threshold value of > 0.70, which shows that some of the variables still lack convergent validity. Thus, generally, the result does not meet the minimum threshold values of > 0.70 as recommended in literature (Hair et al., 2010; Kock, 2020) for acceptable indicator

(item) loading and AVE respectively. The cause of the low AVEs could have been due to the low loadings of some of the indicators that were assumed to reflect the corresponding variable they measured. Hence, indicators with loading less than 0.50 were trimmed off from the model. The result of the trimmed model is presented in Fig. 3.

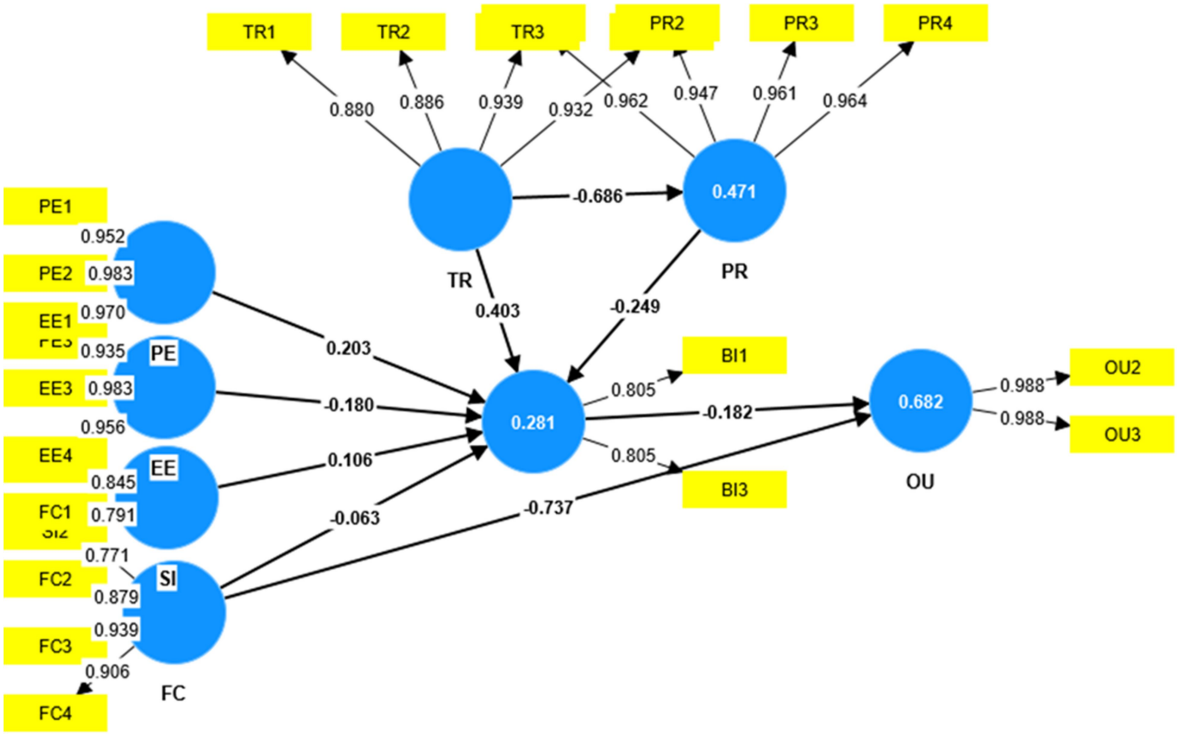

Fig. 3 The Trimmed PLS-SEM Causal Model

Figure 3 shows the analysis of the fitness of the trimmed hypothetical model to the empirical data. The model shows the strength of each of the variables and their indicators, which describe the amount of causation in the model. The result of the convergent validity of the trimmed model is presented in Table 2.

Table 2 Convergent validity of the variables in the trimmed model

	Outer loa	Cronbach's alpha	Composite reliability (rho_c)	Average variance extracted (AVE)
BI1 <- BI	0.805	0.457	0.786	0.648
BI3 <- BI	0.805			
EE1 <- EE	0.935	0.956	0.971	0.918
EE3 <- EE	0.983			
EE4 <- EE	0.956			
FC1 <- FC	0.748	0.897	0.929	0.767
FC2 <- FC	0.865			
FC3 <- FC	0.952			
FC4 <- FC	0.923			
OU2 <- OU	0.988	0.976	0.988	0.976
OU3 <- OU	0.988			
PE1 <- PE	0.952	0.967	0.978	0.938
PE2 <- PE	0.983			
PE3 <- PE	0.97			
PR1 <- PR	0.962	0.97	0.978	0.918
PR2 <- PR	0.947			
PR3 <- PR	0.961			
PR4 <- PR	0.964			
SI1 <- SI	0.845	0.509	0.802	0.67
SI2 <- SI	0.791			
TR1 <- TR	0.88	0.93	0.95	0.827
TR2 <- TR	0.886			
TR3 <- TR	0.939			
TR4 <- TR	0.932			

Results in Table 2 shows that the indicators (items) of the various variables in the model are now reliable since all item loadings were ≥ 0.50, while the composite and Cronbach alpha reliability indices for the variables were generally ≥ 0.60 except for BI and SI. This implies that the variables in the model have convergent validity after the unreliable indicators were trimmed off. In addition, the variables also demonstrate satisfactory convergent validity since the values of AVE for all the variables were ≥ 0.50.

To assess whether discriminant validity between the constructs in our model had been established, we used two approaches: the Heterotrait–Monotrait (HTMT) ratio of correlations (Henseler et al, 2015) and the Fornell–Larcker criterion (Fornell and Larcker, 1981). The Heterotrait-monotrait ratio (HTMT) – which computes the ratio between the average correlations across constructs measuring different phenomena relative to the average correlations of indicators measuring the same construct. In the guidance provided on how to handle discriminant validity issues in co-variance-based SEM, Henseler et al. (2015) have suggested that an HTMT threshold value of 0.9 is adequate for the UTAUT model. As can be observed in table 3, all values were within Henseler et al's recommended threshold value. With regards to the Fornell-Larcker criterion, the square root of the AVE was computed for each construct. For adequate discriminant, validity, the diagonal elements should be significantly greater than the off-diagonal elements in the corresponding rows and columns (Fornell and Larcker, 1981). As can be seen in table 4, all reflective constructs satisfy this condition; therefore, the Fornell-Larcker criterion was met. Therefore, we can conclude that

discriminant validity was established for our study based on the Fornell-Larcker and HTMT criteria.

Table 3 Discriminant validity Heterotrait-monotrait ratio (HTMT)

	BI	EE	FC	OU	PE	PR	SI	TR
BI								
EE	0.605							
FC	0.61	0.9						
OU	0.708	0.633	0.862					
PE	0.477	0.73	0.813	0.537				
PR	0.637	0.778	0.832	0.837	0.431			
SI	0.216	0.104	0.121	0.057	0.109	0.05		
TR	0.751	0.817	0.716	0.671	0.501	0.721	0.047	

Table 4 Discriminant validity - Fornell-Larcker criterion

	BI	EE	FC	OU	PE	PR	SI	TR
BI	**0.805**							
EE	0.407	**0.958**						
FC	0.398	0.846	**0.876**					
OU	-0.473	-0.617	-0.803	**0.988**				
PE	0.319	0.694	0.769	-0.522	**0.968**			
PR	-0.424	-0.755	-0.779	0.814	-0.417	**0.958**		
SI	0.104	-0.033	-0.074	-0.003	-0.075	0.007	**0.819**	
TR	0.49	0.78	0.665	-0.64	0.477	-0.686	0.012	**0.91**

Note: Square roots of average variances extracted (AVEs) shown on diagonal

Structural model

To assess the structural model, we used two main criteria: the level of significance of the path coefficients and the variance explained (R^2) (Hair et al. 2016). T-values were computed based on a bootstrapping procedure using 5000 resamples and the statistical significance of the path coefficients were determined using a two-tailed distribution (Ringle et al. 2015).

Table 5 Significance of the hypothesised Paths in the model

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values	Decision	Remark
BI -> OU	-0.182	-0.181	0.032	5.652	0	S	Retain
EE ->BI	-0.18	-0.177	0.094	1.904	0.057	NS	Delete
FC ->BI	-0.063	-0.063	0.106	0.596	0.551	NS	Delete
FC ->OU	-0.737	-0.738	0.022	34.197	0	S	Retain
PE ->BI	0.203	0.206	0.076	2.682	0.007	S	Retain
PR -> BI	-0.249	-0.246	0.081	3.071	0.002	S	Retain
SI -> BI	0.106	0.11	0.051	2.069	0.039	S	Retain
TR >BI	0.403	0.4	0.057	7.051	0	S	Retain
TR ->PR	-0.686	-0.687	0.028	24.776	0	S	Retain

Result in table 5 shows that seven out of the nine direct paths (1-9) that form the structural part of the model as presented in figure 3 were statistically significant. This is because the p-values associated with the t-values were less than 0.05 level of significance ($p < 0.05$). This implies that the paths importantly explain their direction of influence in the model, thus, the paths are retained in the model. Consequently, the insignificant paths (FC β = -0.063; p = 0.551and EE β = -0.18; p= 0.057) were deleted given that they are not important in explaining the direction of influence in the model. The model was, therefore, modified, re-specified and re-estimated to achieve the most meaningful (Parsimonious) PLS- SEM causal model as presented in figure 4.

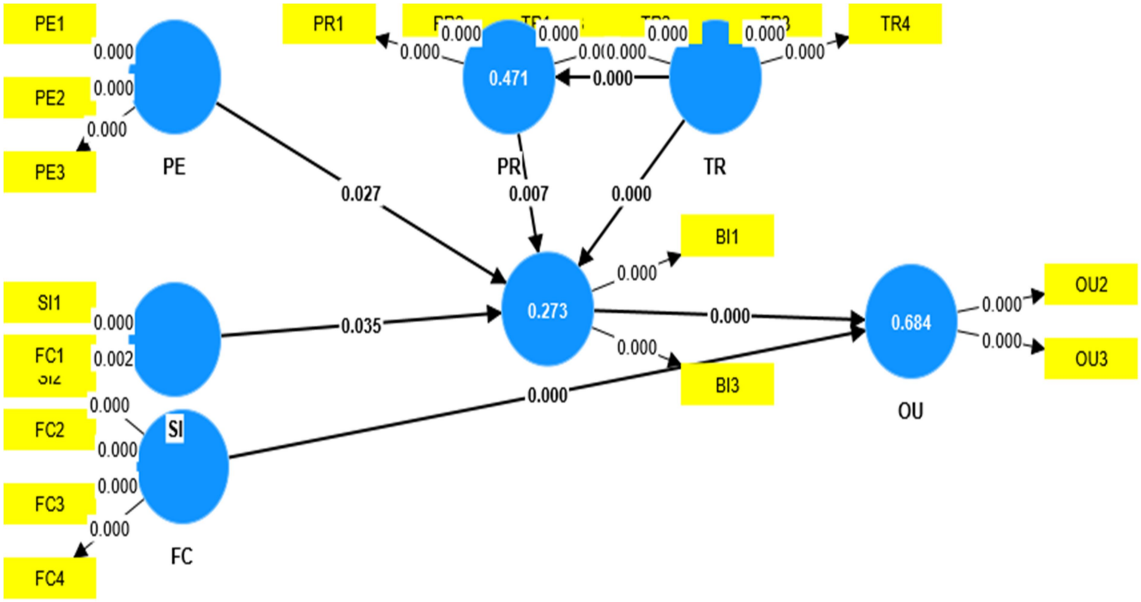

Fig. 4 The Empirically validated (Parsimonious) PLS-SEM causal model

Figure 4 shows the most meaningful (parsimonious) PLS-SEM causal model that explains the influence of Anambra residents' behavioural intention to shop online on their actual usage of online shopping websites. This is because all the paths in the model are statistically significant ($p < 0.05$). The model explains approximately 47% of the variance in perceived risk, 28% of the variance in behavioural intentions and 68% of the variance in actual usage of online shopping websites (Table 6)

Table 6 Standardized Effects for the Model

Factor	Variable	Direct Effect	Indirect Effect	Total Effect
Perceived Risk R^2 = 0.471	TR	**0.89**		0.89
Behavioural intention R^2 = 0.281	PE	0.021		0.021
	EE	0.008		0.008
	SI	0.015		0.015
	FC	0.081		0.081

	TR	0.083	0.029	0.112
	PR	**0.208**		
Online Usage	BI	**0.88**		0.88
$R^2 = 0.682$	FC	**1.443**		1.443
	EE		0.001	0.001
	FC		0	0
	PE		0.001	0.001
	PR		0.002	0.002
	SI		0	0
	TR		0.011	0.011

Table 6 presents the standardized direct, indirect, and total effect implied by the model. The major determinant of intention to use online shopping website was facilitating condition (FC) with a total effect of 0.208. With regards to perceived risk of using online shopping websites, consumers' trust in online shopping websites had a total effect size of 0.89. The two main determinants of online shopping website usage were facilitating conditions (FC) and behavioural intentions (BI) with direct effects of 1.443 and 0.88, respectively. The third, fourth, fifth and sixth determinants were effort expectancy, performance expectancy, trust and perceived risk with indirect effects of 0.001, 0.001, 0.011 and 0.002 respectively. Guided by Cohen's (1988) recommendations regarding the interpretation of effect size, residents of Anambra state's behavioural intentions and facilitating conditions to use online shopping websites had an extensive total effect (greater than 0.1) on Anambra residents' online shopping behaviour.

Discussion of findings

This study examined the factors that influence user's behavioural intention and usage of online shopping websites in Anambra state. The study utilised an integrated model which combined the UTAUT model with risk and trust factors to assess the adoption and use of online shopping websites. The model accounted for 47.1% variance of perceived risk, 28.1% variance of behavioural intention and 68.2% variance of the usage of online shopping websites behaviour. With regards to predicting behavioural intention, performance expectancy, social influence, trust and perceived risk were all significant. However, effort expectancy and facilitating conditions did not wield any influence on behavioural intentions. The results also indicated that trust had a significant effect on perceived risk. In terms of online shopping websites usage, our results showed that behavioural intention and facilitating conditions significantly predicted online shopping websites usage.

With regards to significant predictors, trust had the greatest impact on user's behavioural intentions to use online shopping websites with a coefficient value of 0.403 ($p < 0.000$). This is indicative of the fact that users' behavioural intentions concerning the use of online shopping websites is, to a large extent, determined

by the extent to which users trust the online shopping websites. This result is in consonance with Kim et al.'s (2008) study that found that trust in e-commerce platforms had the strongest influence on their purchase intentions. Similarly, Odusanya, Aluko and Lal (2019) found that trust was a significant predictor of behavioural intentions to use e-tail websites in Nigeria. The second most important predictor of behavioural intentions was perceived risk with a coefficient value of -0.249 ($p < 0.002$). This finding shows that the extent to which users perceive the online shopping websites to be unsafe, goes a long way to affecting their behavioural intentions to use such platform. This result is consistent with previous studies (Martins et al., 2014; Slade et al., 2015) which showed that perceived risk had a significantly negative effect on behavioural intentions. However, our result is at variance with that of Odusanya, Aluko and Lal (2019) which showed that perceived risk did not have negative influence on behavioural intention to use e-tail websites. One likely reason to account for this variation in results is that the current study's respondents are predominantly older adults than that of Odusanya, Aluko and Lal's (2019) study. Younger adults are said to exhibit high risk-tolerant behaviours with respect to technology adoption (Martins et al., 2014). Performance expectancy was an important predictor of behavioural intentions with a coefficient of 0.203 ($p < 0.007$). When users are confident in utilising a technology, their expectations on the performance of the technology will rise (Zhou, Lu & Wang, 2010). This implies that the higher the performance expectancy, the higher the behavioural intentions to use online shopping websites. This finding is in agreement with extant literature (Hassan, Rashid & Li, 2015; An, Hun & Tong, 2016; Eneizan et al., 2022; Erjavee & Manfreda, 2022; Soh et al., 2020) which showed that performance expectancy had a positive effect on behavioural intentions. Consistent with previous studies (Soh et al., 2020; Eneizan et al., 2022; Odusanya, Aluko & Lal, 2019), the current study found that social influence with a coefficient value of 0.106 had a significant influence ($p < 0.039$) on behavioural intention to use online shopping websites. This suggests that the opinions of significant others matter in the decision to use online shopping websites given that Nigeria is a collectivist-oriented environment (Hofstede Insights, 2018).

Concerning the risk-trust nexus to the adoption and use of online shopping websites, the result showed that trust had a significant effect on perceived risk with a coefficient value of – 0.686 ($p < 0.000$). This means that the more users trust online shopping websites, the less risky they will perceive transactions contracted on such platforms. This result finds expression in the study by Odusanya, Aluko and Lal (2019) which showed that trust had a significantly negative effect on perceived risk.

In terms of the impact of facilitating conditions and behavioural intentions on usage of online shopping website, the study revealed that both had significantly negative effects on online shopping websites usage with coefficient values of -0.737 and -0.182 ($p < 0.000$; $p < 0.000$) respectively. The results suggest that decreased behavioural intentions to use online shopping websites will result to

reduced usage of online shopping websites. Similarly, the poorer the facilitating conditions are, the lesser the possibility of actual usage of online shopping websites. While this result runs contrary to that by Odusanya, Aluko and Lal (2019) which did not establish significant effect of facilitating conditions on actual usage, there was agreement between both studies on effect of behavioural intentions on actual usage.

Theoretical implications

The present study justifies the idea of integrating other constructs in the original UTAUT model. As seen from our study only two of the original predictor variables (PE and SI) were significant towards behavioural intentions. We argue that these are insufficient in guiding our understanding of the factors that determine behavioural intentions and actual usage of online shopping websites. The integration of trust and risk has made for a more holistic appreciation of the factors affecting behavioural intentions and use of online shopping websites. Thus, the call by Venkatesh for the extension of UTAUT model in different ways: indifferent (countries, age groups and technologies); in identifying other relevant constructs to serve as exogenous variables or endogenous theoretical mechanisms is justified.

Practical implications

The findings of this study hold a few practical implications. First, the future of online shopping rests heavily on trust. Customers will continue to use online shopping websites for their purchases if they trust that sensitive information disclosed during transactions is treated with utmost discretion. This is important in that experiences of other customers have impact on the decision to use or not to use online shopping websites as our findings demonstrates that social influence is a key determinant of behavioural intention and actual usage of online shopping websites. Given the pervasive internet crime in Nigeria, it is imperative that online shopping websites inform users, in an increasing measure what steps they are taking to secure online transactions on their platform. This will, no doubt, inspire confidence and encourage those yet to adopt online shopping to do so. Particular attention should be paid to ensure that the online shopping websites deliver on what it is intended for. If there is doubt as to the usefulness of the online shopping websites, the customers will not continue to use them.

Conclusion

Online shopping has continued to grow around the world. Scholars have interrogated the factors that enable this transaction globally but there seems to be paucity of such inquiry particularly, Nigeria. Hence, the purpose of this study was to understand the factors that affect the adoption and use of online shopping websites in Anambra state, Nigeria. To identify the factors that impact online shopping websites adoption and usage, the study employed UTAUT model as the theoretical framework. Using Smart PLS 4.0, the conceptual model was empirically validated. Two of the nine hypotheses proposed were rejected. Trust and perceived risk exerted the largest impact on behavioural intentions to use online shopping websites usage; facilitating conditions had the highest effect on online

shopping usage. As businesses continue to explore business opportunities in the digital space, it is imperative that care must be taken to ensure that customers trust their platforms and not disappointed owing to poor service delivery. With these, it is expected that online shopping transactions in Nigeria will maintain its upward trajectory.

The present study is not without its limitations. First, the study made use of online respondents. Hence, the result of this study should be understood that it was conducted among respondents with internet access. Hence, the result may not be generalised to entire Anambra state. Again, this study was conducted in a single state which does not make for generalisation of results. It is expected that future studies should examine factors that affect online shopping adoption and usage in multiple state or across ethnic nationalities to check the effect of ethnicity on online shopping websites adoption and usage

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