

## DETERMINANTS OF E-TAILING CONSUMER BEHAVIOUR – A STRUCTURAL EQUATION MODELLING APPROACH

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### Abstract

The purpose of this paper is to examine an integrated model of factors affecting intention to purchase online with special reference to selective urban districts of Odisha. This paper introduces an integrated model of the roles of Perceived usefulness, Perceived ease of use, Trust, Shopping enjoyment, Impulse purchase directly influence Intention to purchase. A structured and self-administered online survey was employed targeting online shoppers of selective urban districts of Odisha. A sample of 318 of online shoppers was involved in the online survey. A series of exploratory and confirmatory factor analyses were used to assess the research constructs, unidimensionality, validity, and composite reliability (CR). Structural Model for Factors Influencing Online Shopping with Mediating Variable Subjective Norms was used to test the proposed research model. This paper is one of the early empirical endeavours that examined factors affecting online shopping behaviour in Odisha at the time of current pandemic COVID-19. This study provides evidence on the factors that determine online shoppers' intention to purchase is an antecedent to consumers' purchase decisions. From a theoretical perspective, this study contributes to the existing body of knowledge by revealing the sort of cause and effect relationships among perceived usefulness, perceived ease of use, trust, shopping enjoyment, impulse purchase, subjective norms and their effects on intention to purchase. From e-marketing perspective, online retailers planning to expand their operations to include Odisha, have now valuable empirical evidence concerning the predictors of online purchasing intentions and online shoppers' behaviour upon which e-marketing strategies are formulated and implemented.

**Keywords:** e-tailing, online shopping behaviour, intention to purchase, mediating effect, bootstrapping, CFA

### 1. Introduction

Online retail (e-tailing) in the country that is growing at a faster pace, is expected to be \$170 billion by FY30, growing at a CAGR of 23 per cent, according to Jefferies report. Currently, the total e-tailing in the country is reached at \$18 billion ([www.business-standard.com](http://www.business-standard.com)). It may increase to around 37 per cent of the total organised retail market now as per the above said report. At present, India is the world's fifth-largest global destination in the retail space (<https://www.ibef.org/>). The country's per-capita income is calculated to have increased by 10 per cent to Rs.10,534 a month during the financial year 2019 which indicates a bright future of the country (<https://timesofindia.indiatimes.com>). India's Tier 2-3 cities are now driving the growth of e-tailing industry, according to Redseer. It also said that the e-tailing industry saw a rapid increase in the number of shoppers in Tier 2 plus cities in 2017, contributing nearly 41 per cent of the overall online shoppers in 2017. This is going to be a significant lever for the growth of e-tailers in the Indian markets in 2018 as well the selected Tier2 cities of Odisha which is the study area (<https://www.moneycontrol.com>).

### Relevance of the research and its contribution

In this paper, we attempt to examine the studies contribute to the existing body of knowledge by revealing the sort of cause and effect relationships among perceived usefulness, perceived ease of use, trust, shopping enjoyment, impulse purchase, subjective norms and their effects on intention to purchase in the Indian context. The studies also reveal the mediating role of subjective norms on the intention to purchase aspect of an online shopper. Thus, objectives of our study are:

1. To empirically test the role of perceived usefulness, perceived ease of use, trust, shopping enjoyment, impulse purchase on the customer online purchase intention among Indians; and
2. To empirically test the mediating role of subjective norms on the intention to purchase among Indians.

## 2.Literature Review

There are factors which have influence on intention to purchase are Perceived usefulness, Perceived ease of use, Online trust, Shopping enjoyment and Impulse purchase. Also the mediation effect of subjective norms on the relationship between the variables is described.

*Perceived usefulness* is defined as the extent to which consumers feel the online website could add value and efficacy to them when performing online shopping (Hu et al., 2009; Lai & Wang, 2012). The perceived usefulness of the website usually depends on the efficiency of technological characteristics such as advanced search engines and the personal service provided by the service provider to consumers (Kim & Song, 2010). *Perceived ease of use* is defined as the individual's perception that using the new technology will be free of effort (Davis, 1989, 1993). Applying this context to that of online shopping, ease of use refers to consumers' perceptions that shopping on the Internet will involve a minimum of effort (Davis, 1989, 1993). In *online trust*, merchant integrity is a major positive determinant of consumer trust in internet shopping, and that its effect is moderated by the individual consumer's trust propensity (Lee and Turban, 2001). Merchandising was the most important attribute to enhancing both trust and satisfaction, followed by security/privacy and order fulfilment (Jin and Park, 2006).

*Shopping enjoyment* is defined as the extent to which online shopping is perceived to be personally enjoyable and fun. Shopping enjoyment is a consistent and strong predictor of attitude toward interactive shopping (Childers et al., 2001). Davis et al. (1989) suggested that perceived enjoyment has a direct influence on behavioural intention. *Impulse purchase* according to Piron (1991), defined as an unplanned action that result from a specific stimulus. Rook (1987) argues that impulse purchase takes place whenever customers experience a sudden urge to purchase something immediately. Given the ongoing development of the digital economy and the shopping convenience being delivered through digitalized exchanges, one might reason that more impulse individuals may be more prone to online shopping. *Intention to purchase* according to Ajzen (1991) who suggested that intentions are presumed to be an indicator of to what extent people willing to approach certain behavior and how many attempts they are trying in order to perform certain behavior.

Jamil and Mat (2011) proposed that purchase intention may have a positive influence on actual online purchasing and recommended to further investigate on the relationship between these two variables in future studies. *Subjective norms* according to Ajzen (1991) and Orapin (2009) advocated that external elements such as perceived social pressure may actually influence one's behavior. Most of the studies on subjective norm are mediated by purchase intentions before performing actual buying (Choo, Chung & Pysarchik, 2004; Limayem et al., 2000; Jamil & Mat, 2011; Zhou, 2011). The results implied that families, friends and the media only have a minor influence on the actual internet purchasing.

Thus we propose:

H<sub>01</sub>: Perceived usefulness is not significant positively influence intention to purchase.

H<sub>02</sub>: Perceived usefulness is not significant positively influence subjective norms..

H<sub>03</sub>: Perceived ease of use is not significant positively influence intention to purchase.

H<sub>04</sub>: Perceived ease of use is not significant positively influence subjective norms.

H<sub>05</sub>: Trust is not significant positively influence intention to purchase.

H<sub>06</sub>: Trust is not significant positively influence subjective norms.

H<sub>07</sub>: Shopping enjoyment is not significant positively influence intention to purchase.

H<sub>08</sub>: Shopping enjoyment is not significant positively influence subjective norms.

H<sub>09</sub>: Impulse purchase is not significant positively influence intention to purchase.

H<sub>10</sub>: Impulse purchase is not significant positively influence subjective norms.

H<sub>11</sub>: Subjective norms have no significant mediation effect on Perceived usefulness and Intention to Purchase relationship

H<sub>12</sub>: Subjective norms have no significant mediation effect on Perceived ease of use and Intention to Purchase relationship.

H<sub>13</sub>: Subjective norms have no significant mediation effect on Trust and Intention to Purchase relationship.

H<sub>14</sub>: Subjective norms have no significant mediation effect on shopping enjoyment and Intention to Purchase relationship.

H<sub>15</sub>: Subjective norms have no significant mediation effect on impulse purchase and Intention to Purchase relationship.

### 3 Research methodology

Owing to the existence of a body of knowledge in this area and the identification of hypotheses, descriptive research design was chosen for the study. The development of questionnaire design and the selection of the sample are explained in the following paragraphs.

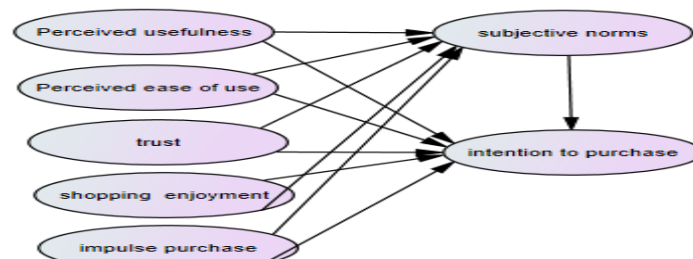
#### 4.1 Questionnaire design

The questionnaire developed had four parts. The first part of the questionnaire had questions on demographic details of the potential respondents including Gender, Marital status, Profession, Highest Qualification, Annual income, Age and Household size. The second part of the questionnaire had 5 statements which included the details about the Online behavior of consumers. It includes items as- Do you shop through online shopping, Number of times you have bought products through online, The billing amount in online shopping In the past 6 months, Number of months/years you have been using internet for shopping and District in Odisha you belong to. The third part basically deals with role of subjective norms on online shopping habits of respondents. A 7 point scale was used to find the degree of agreement/disagreement to the items. Questions were asked as “I like to shop with my family members or friends”, “When I make a purchase my friend’s opinion is important to me” and many others. The fourth part basically deals with the factors influencing online shopping behavior of the respondents. The sections are categorized into Perceived Usefulness, Perceived ease of use, Online trust, Shopping enjoyment, Impulse purchase and Intention to purchase. A 7 point scale was used to find the degree of agreement/disagreement to the items. Questions were asked as “E-tailing helps me shopping easier.”, “My effectiveness in shopping is enhanced through E-tailing.” and many others. A pilot survey has been conducted before finalizing the instruments and reliability of the scale has been checked by calculating Cronbach Alpha value which are found to be 0.725 and 0.901 for the three sections of the questionnaire like Subjective norms and Factors influencing online shopping behavior respectively.

#### 4.2 Sampling

The data presented in this study are collected from the online survey of e-customers of major urban cities in Odisha through the Google forms. The responses are collected from a total of 318 respondents during the period 1<sup>st</sup> June, 2019 to 31<sup>st</sup> October, 2019. Prior to questionnaire administered in full scale, a pilot test for pre-testing purpose has been conducted online for 30 undergraduate students from the College of Engineering and Technology (CET), Bhubaneswar, Odisha. From the pilot study, all the seven constructs comprising perceived usefulness, perceived ease- of- use , online trust, shopping enjoyment, impulse purchase, intention to purchase and subjective norms are considered to be valid as Cronbach’s Alpha value is more than 0.60 as per the study conducted by Malhotra (2019).

The theoretical framework is developed as shown in Figure 1 below.



**Figure 1:** Structural Model for Factors Influencing on Online Shopping with Mediating Variable Subjective Norms

**5. Data analysis and results**

This section deals with the presentation of survey findings, data analysis reports and discussion of the findings. At first, the demographic profile of respondents are presented. Then an Empirical Testing of Hypothesized Model was done by applying structural equation modelling techniques.

**5.1 Descriptive Analysis**

The analytical framework of the data analysis begins with the detailed description of the demographic profile of the respondents which consists of gender, marital status, profession, highest qualification, annual income, age and household size. The demographic profile of the respondents is shown in Table 1.1.

**Table 1.1:** Respondents Demographics of Online Shoppers

<b>Demographic Profile</b>	<b>Category</b>	<b>Sample Size; n (318)</b>	<b>Percentage (%)</b>
<i>Gender</i>	Female	92	28.9
	Male	226	71.1
<i>Marital Status</i>	Married	4	1.3
	Single	314	98.7
<i>Profession</i>	Other(Please specify)	2	0.6
	Salaried	3	0.9
	Self-employed	1	0.3
	Student	312	98.1
<i>Highest Qualification</i>	Doctorate	2	0.6
	Graduate	87	27.4
	Less than graduate	216	67.9
	Post graduate	6	1.9
	Professional degree	7	2.2
<i>Annual Income</i>	30000-1029999	292	91.82
	1030000-2029999	20	6.29
	2030000-3029999	3	0.94
	3030000-4029999	1	0.31
	4030000-5029999	1	0.31
	5030000-6029999	1	0.31
<i>Age</i>	18-20	160	50.31
	21-23	148	41.24
	24-26	5	1.57
	27-29	2	0.63
	30-32	1	0.31
	42-44	2	0.63
<i>Household Size</i>	02-04	204	64.15
	05-07	96	30.19
	08-10	15	4.72
	11-13	3	0.94
<i>Do you shop through Online Shopping?</i>	No	23	7.2
	Yes	295	92.8
<i>Frequency of Online Purchase</i>	1-10	285	89.62
	11-20	26	8.18
	21-30	6	1.89
	41-50	1	0.31

Demographic Profile	Category	Sample Size; n (318)	Percentage (%)
<i>Billing Amount</i>	400-10399	270	84.91
	10400-20399	34	10.69
	20400-30399	3	0.94
	30400-40399	4	1.26
	40400-50399	6	1.89
	50400-60399	1	0.31
<i>Internet Usage (Years)</i>	0-2	119	37.42
	3-5	167	52.52
	6-9	32	10.06

**5.2 Empirical Testing of Hypothesized Model**

To run a structural model as presented in figure 1, a database comprising data fields on all of the manifest/ indicator variables is constructed with the help of a random empirical survey where the sample size is n = 318. The first step is to check the reliability of the latent constructs using Cronbach’s Alpha value as an indicator. This coefficient varies from 0 to 1, and a value of 0.6 or less generally indicates unsatisfactory internal consistency reliability. Composite Reliability (CR) is also calculated for the reliability test of the model. As general guidelines, composite reliabilities of 0.7 or higher are considered good. Estimates between 0.6 and 0.7 may be considered acceptable if the estimates of the model validity are good. The Cronbach’s alpha and CR values are given in Table 1.2.

**Table 1.2:**

Cronbach’s Alpha & Composite Reliability (CR) Values of the Model for Reliability Test

Sl. No.	Unobserved/Latent Variable/Constructs	Associated Manifest Variable	Cronbach’s Alpha Value	CR Value
1.	Perceived usefulness	V1,V2,V3	.873	.795
2.	Perceived ease of use	V4,V5,V6	.772	.553
3.	Online trust	V7,V8,V9	.625	.606
4.	Shopping enjoyment	V10,V11,V12	.556	.469*
5.	Impulse purchase	V11,V12,V13	.701	.427*
6.	Intention to purchase	V14,V15,V16	.837	.686
7.	Subjective norms	V17,V18,V19	.725	.463*

*Note: For variable information see Annexure; \* non-reliable (CR value < .60)*

From the Table 1.2 it is seen that since the Cronbach’s Alpha values are > 0.6, the unobserved variables may be used in running the structural model. It is apparent that though shopping enjoyment, impulse purchase and subjective norms are non-reliable according to composite reliability test; these can be retained in the model on the basis of Cronbach’s Alpha reliability test as these are reliable. The validity of the latent variables is checked by using average variance extracted (AVE) for convergent validity and the discriminant validity is checked by using maximum squared variance (MSV) which is the squared correlation value. For convergent validity test, a construct can be valid if its AVE value is 0.5 or more. The AVE value of the constructs is given in Table 1.3. For discriminant validity test, discriminant validity between constructs exists if MSV<AVE which is shown in Table 1.4.

**Table 1.3:** Convergent Validity Test Using AVE

Sl. No.	Constructs	AVE value
1	Perceived usefulness	.832
2	Perceived ease of use	.479
3	Online trust	.739
4	Shopping enjoyment	.580
5	Impulse purchase	.590
6	Intention to purchase	.659
7	Subjective norms	.5

**Table 1.4:** Discriminant Validity Test Using MSV

Constructs	AVE	MSV		Condition for discriminant validity (MSV<AVE)
		Correlation	Squared Correlation (MSVvalue)	
Perceived usefulness	.832	1↔2	.970	MSV>AVE
		1↔3	.015*	MSV<AVE
		1↔4	.565*	MSV<AVE
Perceived ease of use	.479	2↔3	.010*	MSV<AVE
		2↔4	.616	MSV>AVE
		2↔5	.306*	MSV<AVE
Online trust	.739	3↔1	.018*	MSV<AVE
		3↔2	.010*	MSV<AVE
		3↔4	.032*	MSV<AVE
Shopping enjoyment	.580	4↔1	.565*	MSV<AVE
		4↔2	.616	MSV>AVE
		4↔3	.032*	MSV<AVE
Impulse purchase	.590	5↔1	.299*	MSV<AVE
		5↔2	.306*	MSV<AVE
		5↔3	.069*	MSV<AVE
		5↔4	.614	MSV>AVE

*\*discriminant validity between respective constructs*

In Table 1.3 it shows that AVE values are 0.5 or more than 0.5. So, all the constructs are valid. It is inferred from the Table 1.4 that, there are discriminant validity for correlations 1↔3, 1↔4, 2↔3, 2↔5, 3↔1, 3↔2,3↔4, 4↔1,4↔3, 5↔1,5↔2 and 5↔3. But there is no discriminant validity for correlations 1↔2, 2↔4, 4↔2 and 5↔4 respectively.

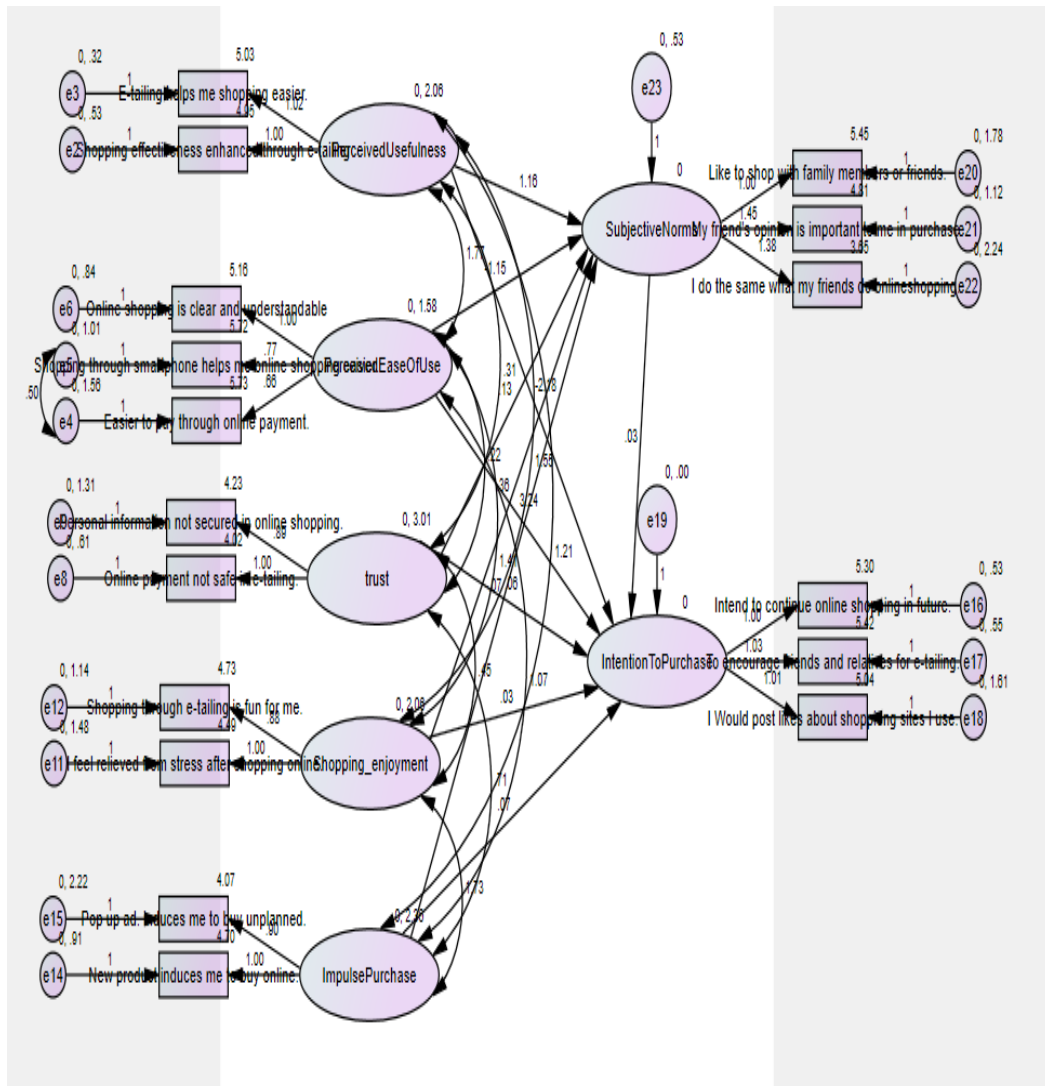
Results after running structural equation modelling using AMOS version 20 are shown in Table 1.5 to Table 1.7. Since for the original model, some of the indices are not satisfied the criteria of goodness of fit, a revised model is regenerated and some items have been deleted to improve the result based on the modification indices (MI) (Barbara M. Byrne, 2016). The revised model is subsequently displayed in Table 1.5.

**Table 1.5:** Improvement of the Model

Model	Items	GFI	RMSEA	CFI	χ <sup>2</sup> /DF	TLI
Original Model	18	0.908	0.073	0.946	2.672	0.925
Revised Model	17	0.907	0.072	0.946	2.645	0.926

*\*Note: GFI: The Goodness-of-Fit index; RMSEA: Root Mean Square Error of Approximation; CFI: Comparative Fit Index; DF: Degrees of Freedom; TLI: Tucker Lewis Index*

Based on Table 1.5, the total of 18 items has been reduced to 17 items to improve the overall fit. Subsequently, the model indicated all of the requirements of goodness-of fit indices are achieved whereby the GFI is improved from 0.908 to 0.907 (> 0.90) as suggested by Hu & Bentler (1999), RMSEA from 0.073 to 0.072 (≥0.05) (Kock, 2011), CFI remaining same as 0.946 (>0.95) (Kock, 2011), CMIN/DF from 2.672 to 2.645 (≥ 2 ≤ 5) (Marsh & Hocevar, 1985) and TLI from 0.925 to 0.926 (≥ 0.9) (Vandenberg & Scarpello, 1994). Figure 2 shows the revised hypothesized model of various factors of online shopping like Perceived usefulness, Perceived ease of use, Trust, Shopping enjoyment, Impulse purchase and dependent variable Intention to purchase with mediating factor i.e. subjective norms.



**Figure 2:** Revised Hypothesized Model

The mediation effect of subjective norms on various relationships is analysed through bootstrapping in AMOS and result is given in Table 1.6. In this case, it is chosen to obtain 2000 bootstrap sample. The standardized indirect effect is obtained together with its significance level and also the standardized direct effect together with its significance level. (It is to be remembered: The significance of indirect effect indicates the mediation exists, and the significance or insignificance of direct effects indicates the type of mediation). Now, let us perform the bootstrapping procedure to test the mediation effect of subjective norms on the relationship between various factors of online shopping and intention to purchase (see Figure 2). The summary of mediation effect result is given in Table 1.6.

**Table 1.6:** Mediation Effect

Hypothesis	Direct Effect(X→Y)	Indirect effect	Result
PU→SN→ITP	-2.538 (.007)*	.038 (.951)	No mediation
PEOU→SN→ITP	3.301 (.009)*	-.033 (.868)	No mediation
T→SN→ITP	.081 (.552)	.005 (.749)	No mediation
SE→SN→ITP	.031 (.973)	.012 (.858)	No mediation
IP→SN→ITP	.082 (.804)	-.003 (.998)	No mediation

\*Significant (p< .05)

The summary of the mediation effects are discussed below:

PU→SN→ITP: The direct effect from PU to ITP is significant (p-value is .007 which is less than 0.05) and the estimate value is -2.538. The indirect effect from PU to ITP is not significant (p-value is .951 more than 0.05) and the estimate value is .038. Here because the direct effect is significant, it is found that SN has mediation effect on PU and ITP relationship.

PEOU→SN→ITP: The direct effect from PEOU to ITP is significant (p-value is 0.009 less than 0.05) and the estimate value is 3.301. The indirect effect from PEOU to ITP is not significant (p-value is 0.868 is more than 0.05) and the estimate value is -.033. Here because the direct effect is significant, it is found that SN has mediation effect on PEOU and ITP relationship.

T→SN→ITP: The direct effect from Trust to ITP is not significant (p-value is more than 0.05) and the estimate value is .081. The indirect effect from Trust to ITP is not significant (p-value is more than 0.05) and the estimate value is .005. Here because the direct and indirect effects are not significant, it is found that SN has no mediation effect on Trust and ITP relationship.

SE→SN→ITP: The direct effect from SE to ITP is not significant (p-value is more than 0.05) and the estimate value is .031. The indirect effect from SE to ITP is not significant (p-value is more than 0.05) and the estimate value is .012. Here because the direct and indirect effects are not significant, it is found that SN has no mediation effect on SE and ITP relationship.

IP→SN→ITP: The direct effect from IP to ITP is not significant (p-value is more than 0.05) and the estimate value is .082. The indirect effect from IP to ITP is not significant (p-value is more than 0.05) and the estimate value is -.003. Here because the direct and indirect effects are not significant, it is found that SN has no mediation effect on IP and ITP relationship.

Thus, it may be concluded that the model fit is good and SN has no mediation effect on constructs. It may now be looked at the estimates and their levels of significance. The regression weights and their significance levels are shown in Table 1.7.

**Table 1.7:** Regression Weights of the SEM Model

Variables	←	Variables	Estimates	S.E.	C.R.	p
Subjective Norms	←	Perceived Usefulness	1.155	1.117	1.034	.301
Subjective Norms	←	Perceived Ease of Use	-1.153	1.413	-.816	.414
<b>Subjective Norms</b>	←	<b>Trust</b>	<b>.133</b>	<b>.060</b>	<b>2.230</b>	<b>.026**</b>
Subjective Norms	←	Shopping Enjoyment	.356	.301	1.184	.237
Subjective Norms	←	Impulse Purchase	-.071	.158	-.449	.654
<b>Intention To Purchase</b>	←	<b>Perceived Usefulness</b>	<b>-2.181</b>	<b>.979</b>	<b>-2.228</b>	<b>.026**</b>
<b>Intention To Purchase</b>	←	<b>Perceived Ease of Use</b>	<b>3.242</b>	<b>1.215</b>	<b>2.668</b>	<b>.008**</b>
Intention To Purchase	←	Trust	.057	.105	.545	.586
Intention To Purchase	←	Shopping enjoyment	.027	.465	.057	.954
Intention To Purchase	←	Impulse Purchase	.066	.270	.244	.807
Intention To Purchase	←	Subjective Norms	.028	.279	.102	.919

\*Note: S.E.: Standard Error; C.R.: Critical Ratio; p: p-value; \*\*Significant at 5% level of significance

The results of Table 1.7 are discussed below:

Thus, the model concludes that perceived usefulness positively influencing intention to purchase, as the p-value is .026 < 0.05. Perceived ease of use positively influencing intention to purchase as the p-value is .008 < 0.05 . and also trust positively influencing subjective norms as p-value is .026 < 0.05. However there is no such conclusion regarding trust leads to intention to purchase as the p-value is 0.586 > 0.05 .

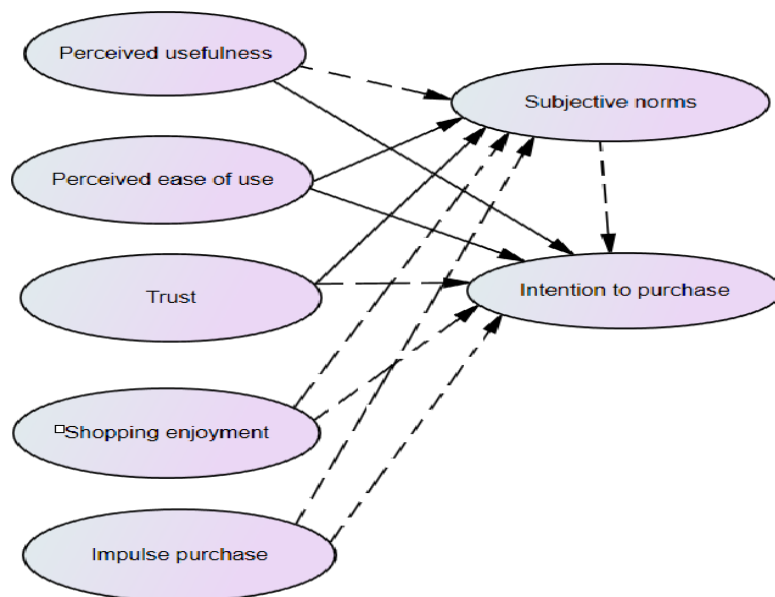


Likewise, the results show that Shopping enjoyment has no impact on intention to purchase as the p-value is  $0.954 > 0.05$ . And impulse purchase has no impact on intention to purchase as p-value is  $0.807 > 0.05$ .

The results of mediation effect of subjective norms on the relationship between various factors of online shopping and intention to purchase point out that subjective norms has no impact on intention to purchase as p-value is  $0.919 > 0.05$ . Perceived usefulness has no impact on subjective norms as p-value is  $.301 > 0.05$ . When it comes to Perceived ease of use, it has no impact on subjective norms as p-value is  $.414 > 0.05$ . The result also shows that shopping enjoyment does not influence subjective norms as p-value is  $.237 > 0.05$  and impulse purchase has no impact on subjective norms as p-value is  $.654 > 0.05$ .

In other words, it may be concluded that perceived usefulness and Perceived ease of use positively influencing intention to purchase.

When subjective norms is concerned, trust positively influencing subjective norms. When intention to purchase is concerned, Perceived usefulness, Perceived ease of use, shopping enjoyment and impulse purchase has no impact on subjective norms. Final structural model showing significant (solid line) and insignificant relationship (dotted line) between constructs is presented in Figure 3.



**Figure 3:** Final Structural Model Showing Significant (Solid Line) and Non-Significant Relationship (Dotted Line) between Constructs

The Confirmatory Factor Analysis (CFA) of the data collected results interesting insights in the context of the study. The first section of this structural equation modelling identified six latent constructs which are considered the factors influencing on online shopping behavior. These are perceived usefulness (const.-1), perceived ease of use (const.-2), trust (const.-3), shopping enjoyment (const.-4), impulse purchase (const.-5), intention to purchase (const.-6) and subjective norms (const.-7). Each construct has three observed/manifest variables. When analyzing the data through AMOS 20 package, the model fit is observed. The reliability of the constructs is verified and tested the existence of reliability as Cronbach’s Alpha value is more than 0.60 and composite reliability (CR) value is greater than 0.60 respectively. The condition for convergent validity is achieved since AVE value is more than 0.5. There is no discriminant validity exists between correlations  $1 \leftrightarrow 2$ ,  $2 \leftrightarrow 4$ ,  $4 \leftrightarrow 2$  and  $5 \leftrightarrow 4$  and discriminant validity exists for other correlations also. The mediation effect of subjective norms on various relationships is analysed through bootstrapping in AMOS 20 package and the result shows that subjective norms has no mediation effect on constructs. For subjective norm, the result is similar to the findings reported in Tseng et al. (2011). In particular, while online shopping in this study is placing at the initial adoption stage in Odisha, there are lack of enough references from prior adopters such as friends, peers and superiors (perceived social pressure).

Accordingly, it is reasonable to expect that the mediation effect of subjective norm on the relationship between antecedents of online shopping behavior and intention to purchase through on-line shopping should indicate insignificance.

## **6. Discussion and Conclusion**

### **Managerial implication**

Policy makers, managers, and other practitioners can benefit from the findings of this study in designing their e-marketing strategies and programs to achieve long term objectives. For instance and according to the findings of this study, the influencing factors of online shopping behaviour like perceived usefulness and Perceived ease of use have significant effect on intention to purchase as conformed by the data. This implies that online shopping retailers' management should focus on these dimensions as major drivers of consumers' intention to purchase through online shopping. It further underlines the importance of insignificant mediation effect of subjective norm on the relationship between antecedents of online shopping behaviour and intention to purchase through on-line shopping.

### **Practical implication**

Online retailers' executives and managers can benefit from the findings when they go for future e-marketing strategies specially designed for Odisha and retaining customers to achieve long-term performance objectives taking E-Tailing consumer behaviour trends during COVID-19 pandemic COVID-19 into account.

### **Major Findings**

The empirical findings of this study indicate that perceived usefulness and perceived ease of use lead to intention to purchase. There is no such conclusion regarding trust, shopping enjoyment, impulse purchase and subjective norms lead to intention to purchase. Perceived usefulness, Perceived ease of use, Shopping enjoyment and impulse purchase do not lead to subjective norms. Also trust leads to subjective norms.

From the test of hypothesis, it is statistically investigated that there is the existence of the relationship between constructs under study. The findings indicate that perceived usefulness and Perceived ease of use have significant effect on intention to purchase as conformed by the data analysis. This is an indication of perceived usefulness due to shopping efficiency arises due to efficiency of technological characteristics of online mode of shopping which drives online shopping intention. Also it signifies, perceived ease of use, the extent to which a person believes that using a technology will be free of effort, drives intention to purchase.

The findings and contributions of this study which is widely conducted among different respondents in Odisha context are to some extent constrained by certain **limitations**, some of which provide opportunities for future research with a foundation to the understanding of the factors influencing online shopping along with impact of mediating and moderating variables on it. Although this research has aimed to explain the various determinants of consumer behavior in e-tailing, there are various limitations inherent to this study. First, there are some drawbacks in this research such as the sample includes a significant number of the emerging Generation Y group of young people (18-24 years). The sample does not include a significant number of all age group of people those who are adopting online shopping.

Thus, future study is suggested to select working adults and other demographic variables that related to online shopping can be included. Second, another area in need of additional research concerns the influence of potential moderating variables for online shopping behavior.

In addition to demographic variables other potential moderators include product type, situational context and culture should attract future research to find valuable insights. Third, the use of an online survey may result in some problems regarding the generalizability of the results. Generalizability of the findings is a limitation in this study due to small sample size from urban set up and it covers only a greater geographic reach in Odisha and it may not help to understand cross-cultural differences which are important to global e-retailers. Hence large sample size, selected from geographically dispersed pan India presence having both rural and urban set up can be taken in future research. Fourth, the study may be limited in that no differentiation is made between the types of goods that e-consumers purchased. **Future research** should explore the e-tailing consumer behavior for types of products. Fifth, a comparative study between online and offline shopping behavior is a current day research requirement as a hybrid model is required for bricks-and-clicks shoppers, e.g., people who shop for specific items in both the online and offline settings. Sixth, the design of the study is quantitative using an online survey to measure online consumer behavior in e-tailing.

Future research is encouraged to use qualitative research design and methodology to provide a deeper understanding of online consumer behavior in e-tailing in Odisha and elsewhere. Seventh, this study is carried out in Odisha only; it will be interesting to see the result for the entire country. A comparison among different parts of the country will add on to the literature as there is cultural difference between South India, North India, Western part of the country and the Eastern part of the country.

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