



A STUDY ON ONLINE PURCHASING INTENTION AMONG COLLEGE STUDENTS BY USING THEORY OF PLANED BEHAVIOUR (TPB)

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Abstract

Online shopping has become new type of retail shopping. When you buy a product or a service over the internet, instead of going to a traditional brick-and-mortar store, it is called online shopping. It has now been adopted all over the world including India. This shopping method is still not as well known or accepted as in many other countries. As the knowledge of online shopping in India is increasing rapidly the scope of online shopping is wider now. The study is extension of the well-established factors of Theory of Planed Behaviour (TPB) includes, Attitude (AT), Awareness (AW), Perceived behaviour control (PB), Perceived reliability (PR) and Trust and faithfulness (TF). The impact of TPB variables on the Online Purchasing intention (OPI) college students was studied. These factors are identified through previous research and each one measured based on 5-point interval scale. Using primary data collection method, 60 questionnaires were distributed to respondents who have done online purchasing. The study made use of 18 measures and these measures were factor analysed into 6 constructs such as AT, AW, PB, PR, TF and OPI to use online shopping. A Regression model was formed by taking OPI as dependent variable and AT, AW, PB, PR and TF as independent variables. It is found from the analysis that three of TPB construct ie, AT, AW and TF have significant positive effect on OPI to online shopping while PB and PR have insignificantly relationship on OPI. AW is the strongest predictor of OPI to online shopping followed by AT and TF. The theoretical contribution of the study is the validation of Theory of Planed Behaviour (TPB) by empirically testing the influence of TBP variables Online Purchase Intent to online shopping.

Key words: Theory of Planed Behaviour, Online Purchasing intention, Attitude, Awareness, Perceived behaviour control, Perceived reliability, Trust and faithfulness

Introduction

Online shopping is more accessible than it has ever been in the digital era with the introduction of tablets, smartphones, easy checkout systems and more secure systems. As a result, the e-commerce industry is generating higher sales volume. With more and more players jump into the market and grabbing the shares, the behavior of online shoppers is something every internet retailer is trying to figure out. The fact showed that, the online transaction is growing rapidly and more studies are needed to give a better understanding of the influencing factors. According to the survey of online Purchasing habit and what their motivation of e- Commerce Consumer Monitor 2010 that was performed to 3156 people from six areas namely, China, India, Malaysia, Taiwan and Thailand, and Indonesian people spend 24% expenditures for online Purchasing . This portion indicates that online Purchasing intention has transpired to social life style for most of the people in the world. Online purchasing with its unique features obviously is different from the traditional purchasing process, particularly in regard to social context (Weisberg et al, 2011). In general, a user which is using online transaction is to purchase goods, services and information. Therefore this study grounded to understanding a model of online purchasing intention , which determines influencing factors such as Attitude (AT), Awareness (AW), Perceived behaviour control (PB), Perceived reliability (PR) and Trust and faithfulness (TF). Therefore, the aim of this study is to develop and test model, which can assist in the comprehensive understanding of online purchasing intention from theoretical perspective. Although it is evident that many studies have investigated multiple direct links among incentive or wavering factors but there has limited or noreported investigation carried out on these variables' level of influence on online purchasing intention and its effects of all five constructs. Thus, this study proposes to ascertain if the five alternative constructs could address their true relationships in selecting the best model for online purchasing intention model.

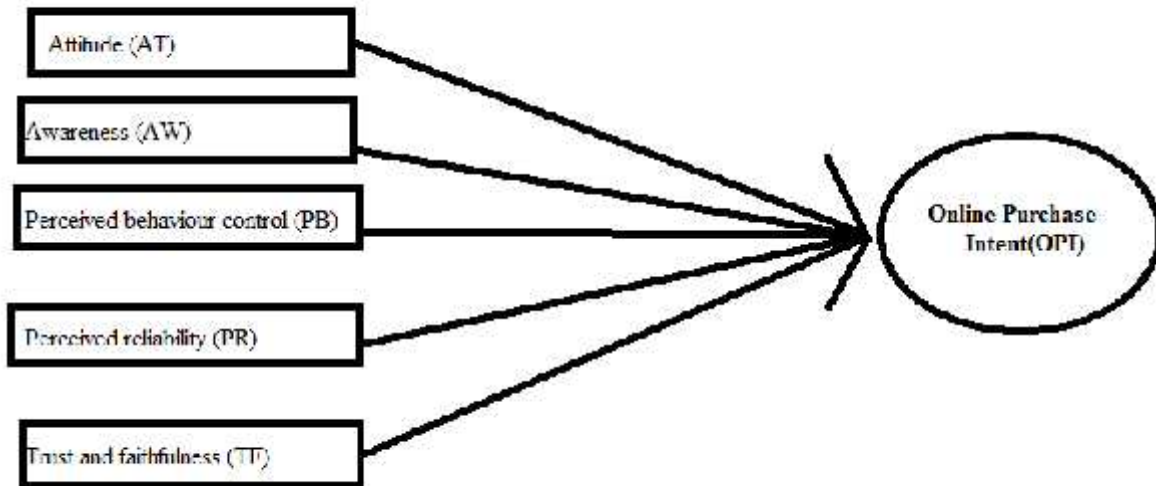
Review of Literature and Research Gap

This section reviews related research on online purchasing intention that will examine Management and IT students as academic members with required knowledge about IT and telecommunication skills. To support the background for this topic, related literature is very important for gaining insight into the real situation of online purchasing intention among literate members. Online Purchasing Intention and theory of planned behavior (TPB) theory of reasoned action (TRA), an individual's performance of a certain behavior is determined by his or her intent to perform that behavior, followed by theory of planned behavior (TPB) (Ajzen, 1991) which is an extension of the theory of reasoned action (TRA) (Ajzen and Fishbein, 1980). Recently, TRA and TPB have also been the basis for several studies of Internet purchasing behavior (George, 2002; Khalifa and Limayem, 2003). Internet purchasing behavior is the process of purchasing products, services and information



via the Internet. Goerge (2004) stated that many consumers resist making purchases via the Internet because of their concerns about the privacy of the personal information. In related study, (Susskind & Stefanone, 2010) found that the transaction on internet is negatively related to consumers' on-line purchasing of goods and services. This result is opposite with previous study which is declared that online purchasing intention is a part of internet's transaction. In these cases, there is still a gap of researchers finding about this particular area. The review of literature reveal that TPB is the most widely used models for explaining Adoption of technologies. Though there are many studies in the domain of online shopping intent using TPB, studies conducted are rarely found in the literature. The present study is an attempt to bridge the void in the literature.

Conceptual Model Of Online Shopping



Objectives

1. To understand the intent of customers for online shopping.
2. To measure the impact of Attitude, Awareness, Perceived behaviour control, perceived reliability and Trust and faithfulness on the Online Purchasing intention.

Hypotheses

H₀1: Attitude has no significant effect on Online Purchasing intention

H₀2: Awareness has no significant effect on Online Purchasing intention.

H₀3: Perceived behaviour control has no significant effect on Online Purchasing intention.

H₀4: Perceived reliability has no significant effect on Online Purchasing intention.

H₀5: Trust and faithfulness has no significant effect on Online Purchasing intention.

Methodology

Both secondary and primary data sources were used for the study. The secondary data were accessed from the books and journals, official reports and websites. Primary data collected from 60 college students who do online shopping. The students were selected conveniently from two colleges Marian College, Kuttikkanam and St. Dominics College Kanjirapally. The data was collected using a structured questionnaire. Responses on the various measures used in the study were obtained on a five point scale as strongly agree (5), agree (4), neither agree nor disagree (3), disagree (2) and strongly disagree (1). The collected data was analysed using statistical tools like arithmetic mean, factor analysis and regression analysis.

Results and Discussions

The general profile of the total 60 respondents, 50% is males and 50% are females. Majority of the respondents (53.3%) are from UG and the rest 46.7% are from PG. When respondents were asked to rate their level of computer knowledge, 63.3% of the respondents rate their level of computer knowledge as average and the remaining 36.7% rate their level of computer knowledge as advanced. Constructs and Measures Used in the Study



Online Purchasing intention

Online Purchasing intention (OPI) is defined as a person's perceived likelihood or "subjective probability that he or she will engage in online shopping" (Armitage&Conner, 2001).

Table 1: Measures of Online Purchasing intention

Measures	Item Acronym	Mean	Mode	SD
I often use online shopping	OPI 1	4.14	4	0.90
I believe it is easy way to do shopping.	OPI 2	3.89	4	.88
I predict that I will use online shopping in future.	OPI 3	4.22	4	0.62

Source: Primary data

The mean, mode and SD for OPI 1, OPI 2 and OPI 3 are given in Table 1. Mean for OPI 3 is the highest (4.22) and OPI 2 has the lowest mean (3.89) and OPI 1 has the mean, 4.14. Mode for all the three is 4 and from this we can conclude that most of the respondents intend and very likely to use online shopping in the future.

Attitude

Generally, it is difficult to find the comprehensive definition of the attitude but most of the researchers agree that attitude is considered to be a property of an individual personality. Attitude is reinforced by beliefs or perceptions and these feelings will lead to particular type of behaviour that forms the action

Table 2: Measures of Attitude

Measures	Item Acronym	Mean	Mode	SD
Online shopping is good to use	AT 1	3.89	4	0.85
Online purchase goods are best in use	AT 2	4.01	4	1.06
Online shopping sites are reliable	AT 3	4.11	4	0.85

Source: Primary data

Mean for AT 3 is the highest (4.11) and AT 1 has the lowest mean (3.89) and AT 2 has the mean, 4.01. Mode for all the three is 4 and which means there exist high and positive attitude to the use of online shopping.

Awareness

Awareness is the state or ability to perceive, to feel, or to be conscious of events, objects, or sensory patterns. In this level of consciousness, sense data can be confirmed by an observer without necessarily implying understanding. Wikipedia

Table 3: Measures of Awareness

Measures	Item Acronym	Mean	Mode	SD
I am aware of online shopping	AW 1	4.27	4	0.98
I am aware that online shopping of easy way to do shopping.	AW 2	4.20	4	0.97
I am aware of the payment system used in it.	AW 3	4.17	4	0.99

Source: Primary data

Mean for AW 1 is the highest (4.27) and AW 3 has the lowest mean (4.17) and AW 2 has the mean, 4.20. Mode for all the three is 4 and from this we can conclude that most of the respondents are aware about online shopping.

Perceived behaviour control

Based on theory of planned behaviour (TPB), perceived behaviour control is defined as an individual's confidence that he or she is capable of performing the behaviour (Ajzen, 1991). It has two aspects of perceived behavioural control; first, how much a person has control over behaviour and the second, how confident a person feels about being able to perform or not perform the behaviour.



Table 4: Measures of perceived behaviour control

Measures	Item Acronym	Mean	Mode	SD
online shopping helps in find needed goods	PB 1	3.18	3	1.13
Online shopping helps in comparison and selection.	PB 2	3.00	3	1.12
Helps in budgeted purchases	PB 3	3.60	4	1.20

Source: Primary data

Mean is highest for PB 3 (3.60) and lowest for PB 2 (3.00). Mode is 4 for PB 3 whereas PB 1 and PB 2 has the same mode of 3, which means most of the respondents neither agree nor disagree that they have perceived behaviour control. SD is highest for PB 3 (1.20) and PB 1 has 1.13 followed by PB 2 which has 1.12.

Perceived reliability

Perceived reliability is a part of consumer's privacy concern to get the personal information (Stewart and Segars, 2002). Van Slyke et al (2006) mention that Perceived reliability is an individual's concerns about whether data collected for one purpose may be used for another purpose. Goerge (2004) stated that Perceived reliability have insignificant relationship with online purchasing intention.

Table 5: Measures of Perceived reliability

Measures	Item Acronym	Mean	Mode	SD
I find online shopping reliable all time	PR 1	3.22	3	1.02
I believe that it fits to the life style.	PR 2	3.01	3	.95
I believe that it fit all the aspects of shopping.	PR 3	2.93	3	1.24

Source: Primary data

Mean is highest for PR 1 (3.22) and lowest for PR 3 (2.93). Mode is 3 for all measures which mean most of the respondents neither agree nor disagree that they have perceived reliability over online shopping.

Trust and faithfulness

The definition of trust proposed by Mayer et al. (1995, p. 712) is the most widely accepted. It runs as "the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trust or, irrespective of the ability to monitor or control that other party."

Table 6: Measures of Trust and faithfulness

Measures	Item Acronym	Mean	Mode	SD
I feel online shopping dependable	TF 1	3.87	4	0.99
Payment system is trustworthy	TF 2	3.58	4	1.09
Online shopping sites are good and trustworthy.	TF 3	3.82	4	1.11

Source: Primary data

Mean for TF 1 is the highest (3.87) and TF 2 has the lowest mean (3.58) and TF 2 has the mean, 3.82. Mode for all the three is 4 and from this we can conclude that most of the respondents have trust in use online shopping.

A Reliability Test was carried out using Cronbach's Alpha, which measures the internal consistency of research constructs and the result is exhibited in Table 7. The Alpha values for all the five factors are above 0.70, the threshold suggested by Nunnally (1978). Thus it can be concluded that the scale has internal consistency and reliability.

Table 7: Cronbach's Co-efficient Alpha –OPI, AT, AW, PB, PR and TF

Factors (Constructs)	Number of Items	Cronbach's Alpha
OPI	3	0.734
AT	3	0.821
AW	3	0.733
PB	3	0.823
PR	3	0.711
TF	3	0.721

Source: Authors' calculation



Regression Analysis and Hypotheses Testing

Regression analysis was conducted to measure the influence of AT, AW, PB, PR and TF on OPI. The independent variables are AT, AW, PB, PR and TF and the dependent variable is OPI. The main objective of regression analysis is to explain the variation in one variable (called the dependent variable) based on the variation in one or more other variables (called independent variables). If multiple independent variables are used to explain the variation in a dependent variable, it is called a multiple regression model. The output of multiple regression analysis was used to test the hypotheses.

Table 8:Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.510a	.360	.334	.45518

Predictors: (Constant), AT,AW and TF

R square is the percent of the variance in the dependent explained uniquely or jointly by the independents. The R square and adjusted R square will be same when used for the case of few independents. The R square and adjusted R square shown in Table 8 is almost the same.

Gujarati (2006) recommends that it is a good practice to find the adjusted R square value because it explicitly takes into account the number of variables included in the model. Hence adjusted R square value is used for interpreting the results. Table 8 shows that 45 percent of the variation in OPI is explained by AW, AT, TF.

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	88.599	2	44.300	47.793	.000**
Residual	52.834	57	.927		
Total	141.433	59			

**denotes significant at 1% level.

ANOVA table showing the regression model fit presented in Table 9 shows that the model is statistically significant at 1 percent significance level.

Model	Unstandardized Coefficients		Standardized Coefficients	T Value	Sig.
	B	Std. Error	Beta		
(Constant)	4.284	.594		7.215	.000**
AT	.673	.072	.313	9.326	.000**
AW	.139	.299	.291	4.133	.009**
TF	.025	.701	.029	2.856	0.006**

**denotes significant at 1% level.

Table 10 presents the beta values, t values and significant values of independent variable AT, AW and TF. The independent variables AT (t = 9.326, p = 0.000), AW (t = 4.133, p = 0.009) and TF (t = 2.856, p = 0.006) are statistically significant at 1 percent significance level. It means that these three independent variables have significant positive effect on OPI. Hence **H₀₁, H₀₂ and H₀₅ are rejected**. The beta coefficients give a measure of the contribution of each variable to the model. Higher the beta value, the greater is the effect of independent variable on the dependent variable. Among the independent variables AT



has greater effect followed by AW and TF. It is also inferred that the independent variable PB is statistically not significant at 1 percent significance level. It means that PB and PR have no significant effect of OPI. Hence **H₀₃ and H₀₄ are accepted.**

So it can be concluded that attitude, Awareness and trust and faithfulness have significant influence in online purchasing intent and Perceived behaviour control and Perceived reliability have no effect on online purchase intent

The major findings of the study are summarised here under.

1. There exist high and positive attitude to the use of online shopping
2. Study reveals that most of the respondents are aware about online shopping.
3. Regression analysis was conducted to measure the influence of AT, AW, PB, PR and TF on OPI. The independent variables are AT, AW, PB, PR and TF and the dependent variable is OPI. It is found from the analysis that AT, AW and TF have significant positive effect on OPI and AT is the strongest predictor of OPI followed by AW and TF. But PB and PR were found to have no significant effect on OPI.

Theoretical Contribution of the Study

This study is one of the first studies in Kerala which attempts to explain behavioral intention to use online shopping. This study contributes to the validation of Theory of Planned Behaviour model by empirically testing the influence of TPB variables on online purchase intent.

Concluding Remark

The present study was to understand the intent of customers for online shopping. The study is extension of the well-established factors of Theory of Planned Behaviour (TPB) includes, Attitude (AT), Awareness (AW), Perceived behaviour control (PB), Perceived reliability (PR) and Trust and faithfulness (TF). The impact of TPB variables on the Online Purchasing intention (OPI) college students was studied. It was found that that attitude, Awareness and trust and faithfulness have significant influence in online purchasing intent and perceived behaviour control and perceived reliability have no effect on online purchase intent.

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