



**IJMRBS**

ISSN 2319-345X  
Vol. 3, No. 4, October 2014

# International Journal of Management Research and Business Strategy

[www.ijmrbs.com](http://www.ijmrbs.com)



**MEGHANA PUBLICATIONS**  
[www.meghanapublications.com](http://www.meghanapublications.com)

# THE EFFECTS OF RISK AND ATTITUDE ON ONLINE SHOPPING INTENTION

Jumana S A Musleh<sup>1\*</sup> and Govindan Marthandan<sup>1</sup>

\*Corresponding Author: Jumana S A Musleh ✉ [jumana-musleh@hotmail.com](mailto:jumana-musleh@hotmail.com)

This study investigates the extension of the Unified Theory of Acceptance and Use of Technology (UTAUT) in online shopping. This is done through the use of risk in the channel, social risk and risk in the transaction as independent variables influencing the attitude and intention to shop online. The results show that performance expectancy has a significant positive impact on the intention to shop online. A significant positive impact of effort expectancy on the intention to shop online has been also observed. Social influence has a significant positive impact on the intention to shop online. However, facilitating condition has no significant influence on the intention to shop online. The results also show that the attitude toward using online shopping is salient in determining the intention to shop online. Risk in the channel, social risk and risk in the transaction have a significant negative impact on the attitude toward using online shopping.

**Keywords:** UTAUT, E-commerce, Risk in the channel, Social risk, Risk in transaction

## INTRODUCTION

The Internet has spearheaded the e-commerce revolution over the past decade and has been the result of an open network environment (Patton and Josang, 2004). It has changed the way retailers advertise and communicate with consumers, and also offers a global marketplace (Ahmad *et al.*, 2010). Besides, e-commerce adoption has enabled lower distribution cost through direct delivery of products and services to the end customer (Zhu, 2001).

A great change has happened in today's business environment because of the arrival of

the Internet and World Wide Web technologies. Besides, consumers are turning to other alternative channel which is the e-commerce for shopping, that could offer them more choices of products and services, and they could compare prices once using online shopping (Sulaiman *et al.*, 2007). Because of the accelerated rise of e-commerce over the previous decade, the Internet has become increasingly attractive as a distribution channel. The Internet is used for carrying out channel functions such as financial payment and ordering online, and the more the users use it to perform such channel functions, the more likely the Internet will be regarded as a

<sup>1</sup> Graduate School of Management, Multimedia University, 63100 Cyberjaya, Malaysia.

modern marketing channel, encouraging the further advancement of e-commerce (Cheng *et al.*, 2006).

A report by 'Arabic World Internet' Magazine showed that 48.8% of Internet users in the Arab world encountered difficulties in using Internet services whereby 94.1% of them found security as a major concern and 83.7% agreed with usage of Internet for shopping (Arabic World Internet Magazine, 1999). The Palestinian consumers have sufficient knowledge and ability in using the computer and Internet, according to the speedy development in Information Technology in Palestine, and its use as a new marketing tool. Palestinian consumers, however, continue facing many challenges in conducting online shopping, unless they use Internet as an information, entertainment and communication tool. In fact only 4% of the Palestinian Internet users engage in shopping online. In other words, the majority of these Internet users were unused to this type of transaction. They expressed deep doubts regarding security of electronic payments (Al-Husane, 2009). A study conducted by Sedam (2009) on the IT sector in Palestine indicated that the population of Internet users increased from 1% in 1999 to 20% in 2009. The real extent of e-commerce in Palestine is hard to gauge, since there are no valid and accurate statistics in this field.

Venkatesh *et al.* (2003) have examined the influence of performance expectancy, social influence, effort expectancy and facilitating condition on intention behavior utilizing Unified Theory of Acceptance and Use of Technology (UTAUT). In addition, Gutiérrez *et al.* (2010) have studied three dimensions of perceived risk which

are risk in the channel, risk in the transaction and social risk. In their study they investigated the effects of these risks as dimensions of perceived risk on involvement regarding the consumer behaviour viewpoint. Besides, Lee and Lin (2005) has investigated the effect of perceived risk on attitude. Many researchers have made use of the UTAUT theory. However, no study has been carried out on the extension of this theory to online shopping by investigating the effect of the dimensions of perceived risk (risk in the channel, social risk, and risk in the transaction) on attitude and intention to shop for products and services through online shopping. Online shopping is considered an important part of today's life particularly with Internet technology internationally transcending the geographical restrictions between nations. In Palestine, however, little research, if any, has been done to investigate this subject in particular and the intention to use information technology in general. Consumers' intention to shop online in Palestine is very low compared with other developed countries such as USA, Canada and Europe in general. Besides, it might be that the independent variables of UTAUT do not completely explain the intention to shop online. Therefore, this might be a convincing reason to include not only the core determinants of UTAUT but also other antecedents that might influence the attitude and intention to shop online. It might be that extending of the UTAUT model by other variables specific to online shopping in a more comprehensive manner will help in creating understanding of the intention to shop online. By extending the UTAUT with additional relevant variables, it may be possible to gain a rich understanding of why consumers accept or reject online shopping in Palestine.

## BACKGROUND LITERATURE

### Unified Theory of Acceptance and Use of Technology

UTAUT claims to deliver better explanatory power in predicting behavioral intention toward information system in general than the previous models as reported by Venkatesh *et al.* (2003). It is the most recent work explaining end user usage and acceptance of IT, and combines eight models into one integrated model more accurate in predicting than any single model separately (Bandyopadhyay and Fraccastoro, 2007). AbuShanab *et al.* (2010) mentioned that unified theory by Venkatesh *et al.* (2003) combined the main theories and technology acceptance models into an integrated theory.

UTAUT was proposed and advanced, besides being empirically validated by Venkatesh *et al.* (2003); it incorporates four key variables of intention to utilize a technology, which are social influence, effort expectancy, performance expectancy and facilitating condition. The theory integrates eight user acceptances of IT theories, namely the Theory of Reasoned Action (TRA), Technology Acceptance Model (TAM), Motivational Model (MM), Theory of Planned Behaviour (TPB), a model that combined Technology Acceptance Model and Theory of Planned Behavior, Model of Personal Computer Utilization (MPCU), Innovation Diffusion Theory (IDT) and Social Cognitive Theory (SCT) (Fillion *et al.*, 2010). UTAUT was tested and shown to exceed the eight separate models with variance of 70% in the users' intention behaviour towards technology adoption (Venkatesh *et al.*, 2003).

### Attitude in Online Shopping

Customer's intention refers to the willingness of

an individual to buy or perform certain behaviors online (Cheng *et al.*, 2006); their beliefs with respect to adopting or using online shopping (Belanger *et al.*, 2002). Customer's intention to shop online was found to be significantly influenced by attitudes toward online shopping (Ajzen, 1991). However, Attitude refers to customer feeling toward using online shopping (Stoel and Lee, 2003). In other words, positive or negative emotions that consumer has toward shopping for products and services through the Internet. Customer's attitude as the major factor that has the potential to influence customer's intention to purchase online.

### Perceived Risk

Perceived risk is defined as uncertainty faced by consumers when they are unable to predict the results of their online transaction activities (Lu *et al.*, 2011). Consumers encounter higher uncertainty in online systems than in face to face transactions since vendors may be geographically dispersed or completely unknown (Taylor and Strutton, 2010). Perceived risk affects the purchasing decision when circumstances of the decision generate doubt (Shin, 2007). Perceived risk has also been defined as the possible loss when going for a desired result (Featherman and Pavlou, 2003). Consequently, perceived risk might be regarded as the expectation of loss along with the use of online shopping. Smith and Sivakumar (2004) have mentioned that perceived risk has been discussed from many dimensions including social risk, psychological risk, financial risk and other dimensions of risk. Online risk has multidimensional structure which are risk in the channel, social risk, risk in the transaction (Martin *et al.*, 2011). A wide range of risks have been connected with use of online shopping. Therefore,



this study considers multidimensional of risk variable which they are risk in the channel, social risk and risk in the transaction, and it is believed that each of them might be studied separately, which is similar to Gutiérrez *et al.* (2010) who have studied the influence of the above dimensions of risk on involvement in online shopping. It can be concluded that perceived risk has a strong negative influence on the attitude to virtual shopping. It might be explained that once consumers perceived online shopping to be risky they will have negative feeling toward buying goods and services online

## **HYPOTHESES DEVELOPMENT**

The research model in this study (Figure 1) is constructed based on the five significant determinants of intention to use online shopping drawn from the UTAUT model (i.e. performance expectancy, effort expectancy, social influence, facilitating conditions and attitude to shop online). The UTAUT model with core critical determinants (i.e., performance expectancy, effort expectancy, social influence, and facilitating conditions) of intention to use new technology services are employed to determine consumers' intention behavior to use online shopping services.

Performance expectancy performance expectancy is defined as ease associated with the use of the system (Venkatesh *et al.*, 2003). In the context of online environment performance expectancy is regarded as the extent of perception that virtual shopping enables them to achieve their objectives. Nakagawa and Gouvêa (2010) have found that performance expectancy is a factor relevant to intention to adopt Internet shopping. Although, AbuShanab *et al.* (2010), Chang (2013), Rodriguez and Trujillo (2014) have

studied the role of performance expectancy in promoting intention behavior and showed that performance expectancy exerts a strong influence over intention. Therefore:

*H1: Performance expectancy has a direct positive effect on the intention to shop for products and services via online shopping.*

Effort expectancy is defined as the degree of ease associated with the use of the system (Venkatesh *et al.*, 2003). In online shopping context once consumers perceived online shopping to be free of effort, the consumers' might have higher intention toward using online shopping. However, many researchers highlighted that effort expectancy is positively related to intention behaviour (Alleyne and Lavine, 2013; Bandyopadhyay and Fraccastoro, 2007; Chang, 2013; Rodriguez and Trujillo, 2014, Wang *et al.*, 2006; Wong, Russo and McDowall, 2013). Thus:

*H2: Effort expectancy has a direct positive impact on the intention to shop for products and services via online shopping.*

Social influence is defined as the degree to which a person perceives that important others believe he or she should use the new system (Venkatesh *et al.*, 2003). In online shopping context, social influence might be defined as social pressure felt by the customer to use online shopping and the social pressure generated from those individuals that the customer perceives as important influencers of the decision to shop online. Many studies found that social influence effect positively on intention behavior (Bandyopadhyay and Fraccastoro, 2007; Chang, 2013; Kesharwani and Bisht, 2012; Rodriguez and Trujillo, 2014; Wang *et al.*, 2006; Wu *et al.*, 2008). Therefore:

*H3: Social influence has a direct positive influence on intention to shop for products and services via online shopping.*

Facilitating Condition is defined as the extent to which the person believes that organizational and technical infrastructure support exists when using the system (Venkatesh *et al.*, 2003). It relates to the perception of resource availability, opportunities, and ability for using online shopping. Wu *et al.* (2008) have found that facilitating condition has significant positive effect on intention behavior. Therefore:

*H4: Facilitating condition has a direct positive influence on intention to shop for products and services via online shopping.*

Attitude is a person's positive or negative feelings toward behavior (Fishbein and Ajzen, 1975). Behavioral intention is a measure of the strength of one's intention to act on behavior (Fishbein and Ajzen, 1975). Attitudinal research and technology acceptance research (Ajzen, 1991; Davis *et al.*, 1989) have indicated that attitude is a significant and positive predictor of behavioral intention. In this study, attitude is employed to predict consumer behavioral intention to shopping online services. Therefore:

*H5: The attitude toward shopping for products and services via online shopping has a significant positive influence on the intention to shop for products and services via online shopping.*

Perceived risk has been studied for a lengthy period in consumer behavior research where results prove that perceived risk more influential in describing consumers' behavior given that buyers have greater motivation in bypassing mistakes than in achieving maximum utility when buying (Andrews and Boyle, 2008). Many

researchers examined the influence of perceived risk on attitude and showed that perceived risk has a significant negative influence on attitude (Katos, 2012; Lee, 2009; Lin *et al.*, 2010; Lu *et al.*, 2005; Teo and Liu, 2007; Yang *et al.*, 2007). It can be concluded that perceived risk has a strong negative influence on the attitude to virtual shopping. It might be explained that once consumers perceived online shopping to be risky they will have negative feeling toward buying goods and services online. Thus, it is hypothesized that:

*H6: Risk in the channel has a direct negative impact on the attitude towards online shopping.*

*H7: Social risk has a direct negative effect on the attitude towards online shopping.*

*H8: Risk in the transaction has a direct negative effect on the attitude towards online shopping.*

## MEASURES

All of the measurement items used in the study were adapted from previous research, including Attitude, Effort Expectancy, Facilitating Conditions, Intention to Shop Online, Performance Expectancy, Risk in the Channel, Risk in the Transaction, Social Influence, and Social Risk. A five-point Likert-type scale (ranging from 1 = strongly disagree to 5 = strongly agree) was used for all measures.

## SAMPLE AND PROCEDURE

The sample used in this research consisted of the students and professional employees in two main universities in Palestine. The number of the students and professional employees in these two universities was around 30 thousand. This research used the random sampling method. A

total of 287 respondents were surveyed eventually. The process of distribution and collection of questionnaires was carried out over a period of 3 months. Table 1 present the participants characteristics.

## DATA ANALYSIS TECHNIQUE

The research model in Figure 1 was tested with Partial Least Squares (PLS), and the data analyzed using a two-stage analytical procedure (Gerbing and Anderson, 1988). The first procedure involves assessing and establishing the reliability and validity of the measurement model. Based on factor loading, Cronbach alpha and average variance value, the convergent and discriminant validity of the research instrument was evaluated. The second stage involved assessing the structural model itself, and the significance of path coefficients in the research model was calculated using a bootstrap re-sampling method.

## RESULTS

In this segment statistical analyses include examining the descriptive analysis and appraising the validity and accuracy of the measurements in this study, followed by talking about the structural model to test the supposed connections between the constructs.

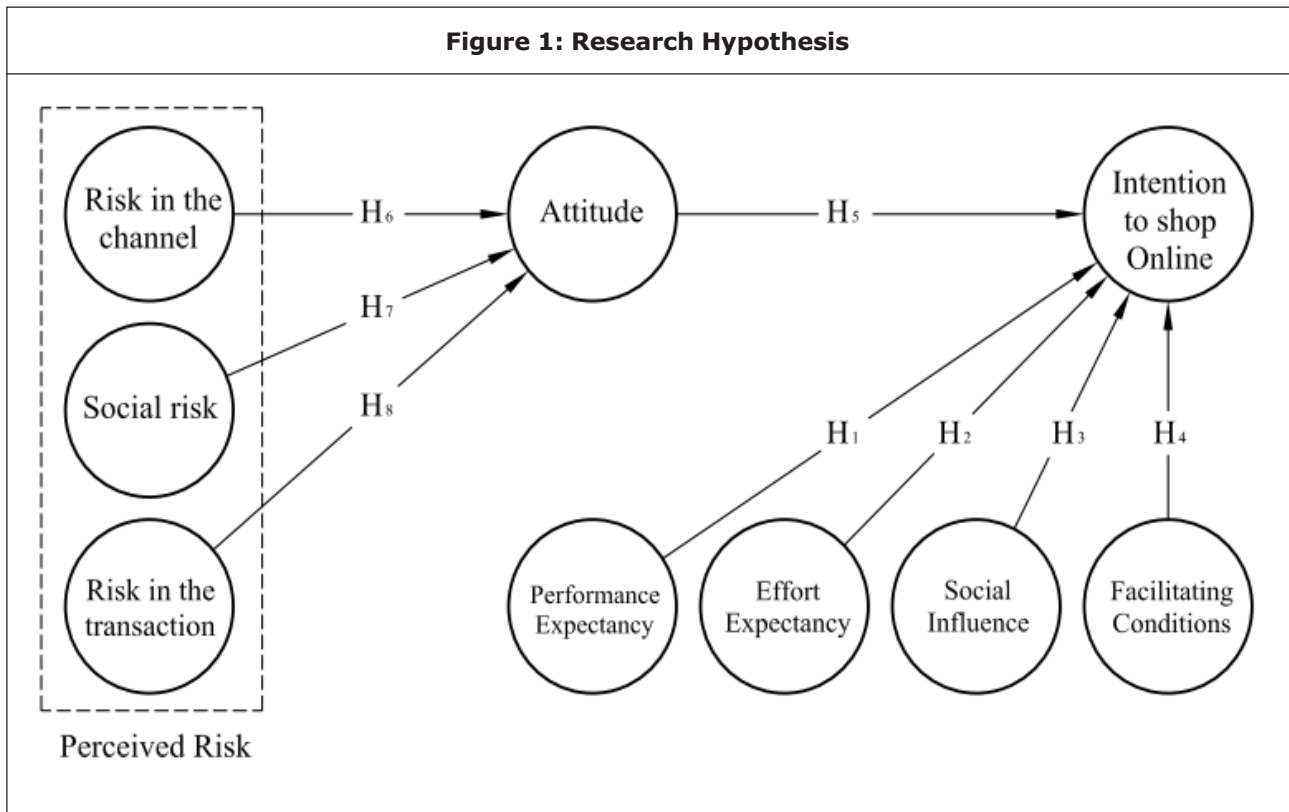
### Descriptive Statistics

The constructs descriptive statistics are shown in Table 2. Other than for CSE, all means are above the 3.00 mid point. The common divergences show a marginal spread around the mean, and skewness and kurtosis indices indicate an acceptable level of normalcy for structural equation modelling (Kline, 2005).

### Analysis of the Measurement Model

To assess the measurement model the Confirmatory Factor Analysis (CFA) was used,

Characteristics	Classification	N.	Percentage%
Gender	Male	139	48.4
	Female	148	51.6
Age	Below 21 years old	182	63.4
	21-25 years old	46	16
	26-30 years old	20	7
	31-35 years old	12	4.2
	36- 40 years old	17	5.9
	More than 40 years old	10	3.5
Education level	Ph.D.	12	4.2
	Master Degree	53	18.5
	Bachelor Degree	219	76.3
	Diploma	3	1



**Table 2: Descriptive Statistics**

Construct	Item	Mean	Standard deviation	Skewness	Kurtosis
Intention to Shop Online	5	4.085	0.641	-1.196	2.214
Attitude	5	4.120	0.616	-1.583	2.437
Effort Expectancy	5	3.726	0.662	-1.275	2.790
Facilitating Conditions	5	3.827	0.613	-1.426	2.821
Performance Expectancy	5	3.938	0.608	-1.204	2.141
Social Influence	5	3.706	0.659	-.751	.230
Risk in the Channel	5	3.935	.7692	1.470	2.560
Risk in the Transaction	4	3.810	0.745	1.089	2.206
Social risk	5	4.060	0.715	1.651	2.770

while convergent validity and discriminant validity were applied when evaluating the amusement model. The data for testing instrument reliability and validity was obtained from the results of the partial PLS regression analysis using Smart PLS.

Testing was done by studying the dependability of singular units and the convergent validity of the measures linked to individual constructs. Summations of the measurement model results are shown in Table 3.



**Table 3: Results Summary for the Measurement Model**

	Item	Main loading	AVE	Composite Reliability	Cronbachs Alpha
Attitude	Attitude1	0.814	0.674	0.912	0.879
	Attitude2	0.808			
	Attitude3	0.835			
	Attitude4	0.828			
	Attitude5	0.819			
Effort Expectancy	EE1	0.796	0.638	0.898	0.858
	EE2	0.791			
	EE3	0.804			
	EE4	0.793			
	EE5	0.810			
Facilitating Conditions	FC1	0.739	0.591	0.878	0.829
	FC2	0.815			
	FC3	0.778			
	FC4	0.774			
	FC5	0.737			
Intention to Shop Online	ISO1	0.806	0.675	0.912	0.880
	ISO2	0.815			
	ISO3	0.821			
	ISO4	0.839			
	ISO5	0.825			
Performance Expectancy	PE1	0.762	0.595	0.880	0.830
	PE2	0.776			
	PE3	0.797			
	PE4	0.778			
	PE5	0.742			
Risk in the Channel	RC1	0.764	0.604	0.884	0.836
	RC2	0.802			
	RC3	0.764			
	RC4	0.785			
	RC5	0.770			

Table 3 (Cont.)					
	Item	Main loading	AVE	Composite Reliability	Cronbachs Alpha
Risk in the Transaction	RT1	0.797	0.629	0.894	0.856
	RT2	0.735			
	RT3	0.845			
	RT4	0.769			
	RT5	0.815			
Social Influence	SI1	0.810	0.618	0.890	0.846
	SI2	0.745			
	SI3	0.811			
	SI4	0.791			
	SI5	0.773			
Social Risk	SR1	0.800	0.630	0.895	0.853
	SR2	0.789			
	SR3	0.798			
	SR4	0.776			
	SR5	0.806			

### Convergent Validity

Fornell and Larcker (1981) suggested three yardsticks for testing the convergent validity of the scales. These stipulated that:

1. All indicator loadings should be substantial and be larger than 0.7;
2. CR (composite reliability) should be above 0.7; and
3. Average Variance Extracted (AVE) for each construct should be above 0.5.

As presented in Table 3, the factor loadings for all components surpassed the suggested level of 0.7. Composite Reliability of (CR) values of the constructs (ranging from 0.757 to 0.798) bettered the commonly accepted value of 0.70. Furthermore, the AVE values (ranging from 0.550

to 0.577) exceeded the generally acceptable value of 0.5. Thus all three conditions for convergent validity were satisfied, and we can conclude that the model has a satisfactory convergent validity.

### Discriminant Validity

The criterion advised by Fornell and Larcker (1981) was used to measure the discriminant validity of the scales—which means the square root of the AVE values from the construct should be greater than the variation any of the inter-construct correlations. Table 4, with the square root of the AVE on the diagonal, shows the correlations between the constructs. The results indicate that the AVE values for each construct exceeds the correlation coefficient of that construct with all the other constructs in the

**Table 4: Correlations and the Square Root of AVE<sup>a</sup> (N = 287)**

	Attitude	EE	FC	ISO	PE	RS	RT	SI	SR
Attitude	<b>0.821</b>								
EE	0.447	<b>0.799</b>							
FC	0.240	0.191	<b>0.769</b>						
ISO	0.580	0.567	0.220	<b>0.821</b>					
PE	0.334	0.423	0.180	0.565	<b>0.771</b>				
RS	-0.470	-0.155	-0.144	-0.393	-0.186	<b>0.777</b>			
RT	-0.433	-0.191	-0.069	-0.355	-0.066	0.452	<b>0.793</b>		
SI	0.421	0.450	0.200	0.505	0.429	-0.134	-0.137	<b>0.786</b>	
SR	-0.478	-0.175	-0.147	-0.395	-0.149	0.523	0.395	-0.143	<b>0.794</b>

Note: <sup>a</sup> Square root of the AVE on the diagonal in bold type.

model, suggesting that, in this study, all the indicants showed an acceptable convergent and discriminant validity.

**Analysis of the Structural Model**

The next step in the appraisal of the measurement model is assessing the structural model to analyze the research hypotheses to determine if the paths are statistically important. As advocated by Chin (1998), the bootstrap procedure was applied to 500 sub-samples to calculate the

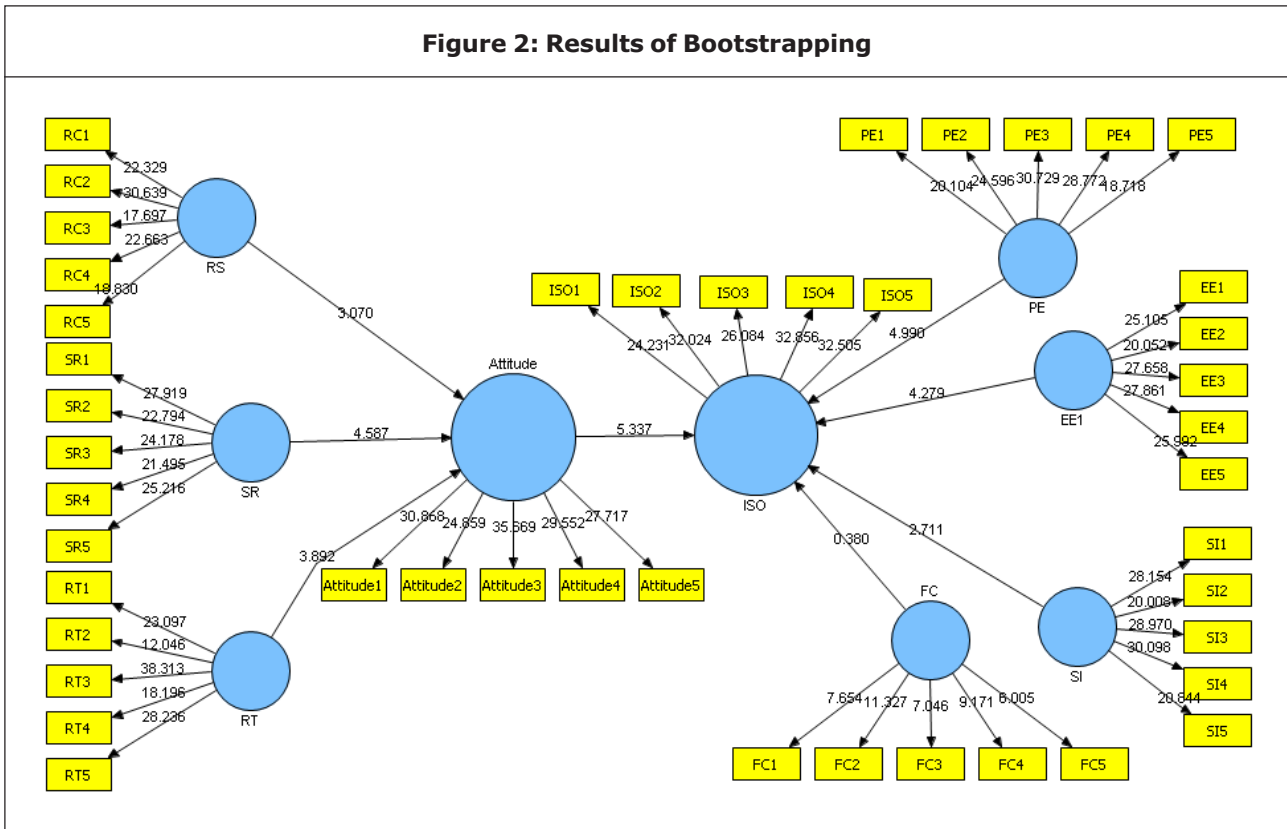
significance of each path coefficients (t-value). Figure 2 shows the results of this analysis. 30.3% of the variability in intent to shop online and 20% of variance in Attitude was explained by the research model. As shown in 5 all theorized relationships are corroborated, except for the hypothesis of a correlation between FC -> and ISO (H4: path coefficient = 0.019, p > 0.05), which had a very weak positive affect on attitude. See Table 5 and Figure 2.

**Table 5: Path Coefficients and t-Values**

Hypothesis	Path Coefficient	Standard Error	t value	Decision	
H <sub>5</sub>	Attitude -> ISO	0.313	0.059	5.337	Support
H <sub>2</sub>	EE -> ISO	0.236	0.055	4.279	Support
H <sub>4</sub>	FC -> ISO	0.019	0.051	0.380	Not Support
H <sub>1</sub>	PE -> ISO	0.300	0.060	4.990	Support
H <sub>6</sub>	RS -> Attitude	-0.227	0.074	3.070	Support
H <sub>8</sub>	RT -> Attitude	-0.223	0.057	3.892	Support
H <sub>3</sub>	SI -> ISO	0.135	0.050	2.711	Support
H <sub>7</sub>	SR -> Attitude	-0.271	0.059	4.587	Support

Significant at level of p<0.01

Figure 2: Results of Bootstrapping



## DISCUSSION

### Performance Expectancy and Intention to Shop Online

In support of hypothesis *H1*, performance expectancy has a substantial positive effect on online shopping, which agrees with previous studies (AbuShanab *et al.*, 2010; Bandyopadhyay and Fraccastoro, 2007; Martins, Oliveira and Popovic, 2014; Nakagawa and Gouvêa, 2010). This finding therefore holds up the UTAUT model which forecasts the link between performance expectancy and online shopping intent. It may be concluded that consumers' percept that online shopping as a marketing distribution channel heightens the offshoot of their shopping experience would impact positively their decision to shop online. That is, this observation has reinforced the positive link between Internet users'

perception of online shopping benefits and their intent to shop online in Palestine.

### Effort Expectancy and Intention to Shop Online

This study has shown that effort expectancy has a measurable positive influence on online shopping, which reinforces earlier studies (Bandyopadhyay and Fraccastoro, 2007; Martins *et al.*, 2014; Wang *et al.*, 2006) Hence, this finding buttresses the UTAUT model that forecasts the relationship between effort expectancy and online shopping intent. The rational conclusion might be that when Internet users in Palestine see online shopping as easy, they will lean more towards online shopping, as their perception of the easy of online shopping may significantly affect their intention to shop online for products and services.

### **Social Influence and Intention to Shop Online**

It has been clearly shown through this study that social influence has a powerful positive impact on online shopping intent. This supports previous studies (AbuShanab *et al.*, 2010; Martins, Oliveira and Popovic, 2014; Wu *et al.*, 2008). Hence, the UTAUT model that predicts the relationship between social influence and intention to shop online has been confirmed. It may be rationally concluded that the consumers' family and friends strongly influence their bent towards online shopping in Palestine.

### **Facilitating Condition and Intention to Shop Online**

This study has found that easing the process has no real influence on the intent to shop online in Palestine. This seems to belie the finding of Wu *et al.* (2008). Meanwhile, Nakagawa and Gouvêa (2010) studied the benefits of facilitating conditions for Internet shopping, and found that this has no discernible impact on the decision to use Internet shopping. Thus it may be concluded that making online shopping easier has no significant positive effect on encouraging online shopping. The may be explained by the fact that the lower of the objective environmental factors in Palestine that makes online shopping complicated might have weaker impact on the consumers' intent to shop online. In other words, it might be that businesses in Palestine do not offer enough technical support for the online shopping, which makes facilitating conditions not important in influencing consumers' intention to shop online.

### **Attitude Towards Online Shopping and Intention to Shop for Products and Services via Online Shopping**

According to the TRA (Fishbein and Ajzen, 1975),

TAM (Davis *et al.*, 1989) and TPB (Ajzen, 1991), attitude has a powerful influence on behaviour. It has been speculated that the attitude toward online shopping directly impacts the intention to shop online for products and services, as proven by this study. This is also consistent with earlier studies (Ahn *et al.*, 2005; Cheong and Park, 2005; Hsu and Lu, 2004; Lee and Lin, 2005; Robinson *et al.*, 2005; Wu and Chen, 2005; Yu *et al.*, 2005). Which also indicated that the attitude has significant positive impact on online shopping intent, highlighting attitude's vital role in the intention to use online shopping. The explanation is obvious. When the attitude (positive feelings) toward online shopping is positive, Internet users are more inclined toward online shopping. Thus, consumers can be understood through their attitudes, which are determined by their perceptions. Thus, attitude does offer a base for studies concerning consumers' behavior, and reaffirms the role of the attitude in predicting the intention hence, supporting the contention that this construct should continue to be used in the following studies on consumer behaviour.

### **Risk in the Channel and Attitude towards Online Shopping**

Research on channels has shown that their inherent risk has a significant negative impact on the attitude toward using online shopping. This strengthens previous studies done by Lu *et al.* (2005) and Teo and Liu (2007) who examined the impact of perceived risk on attitude, and showed that perceived risk negatively influences attitude toward using online shopping. Thus the stronger the perception of channel risk and tension on using online shopping, the more negative the consumer's attitude toward online shopping.



## **Social Risk and Attitude Towards Online Shopping**

Social risk has a significant negative impact on the attitude toward using online shopping, which is in line with previous studies done by Yang *et al.* (2007) who investigated how perceived risk affects attitude, and reached a similar conclusion. Lee (2009) researched the impact of perceived risk on attitude toward online trading, and also found that perceived risk negatively impacts attitude. Lin *et al.*'s (2010) study on effects of perceived risk on attitude reinforced its negative influence on attitude. Social risk therefore has a significant negative effect on attitude toward online shopping. This conclusion is based on the fact that the more the consumer feels that using online shopping is a social risk, the more negative the inclination toward using online shopping.

## **Risk in the Transaction and Attitude Towards Online Shopping**

It has been clearly shown that risks in transactions have a significant negative impact on the attitude toward using online shopping. This concurs with previous studies (Lu *et al.*, 2005; Teo and Liu, 2007) who found that perceived risk has a significant negative effect on attitude. Therefore, it can be reasoned that transaction risks have a similar negative impact on attitude toward online shopping. We can reason that the greater the perception that the product is overpriced and of sub-standard quality, the more negative the consumers attitude toward online shopping.

## **LIMITATIONS AND SUGGESTIONS FOR FUTURE STUDY**

Some limitations to this research need to be

noted. First, only students and professional employees from two universities in Palestine were recruited for testing; therefore, it may be misleading to apply the findings to the whole population. Future research involving respondents from different countries may be necessary, and cross-culture comparisons carried out. Second, actual usage behavior is not integrated with the proposed model. However, this is not a serious problem, as strong empirical support exists for the causal link between intention and behavior such as TRA (Fishbein and Ajzen, 1975), TAM (Davis *et al.*, 1989) and TPB (Ajzen, 1991) theories.

It may be of import for future research to replicate this study by substituting intention to shop online with actual buying behavior. Third, although some included variables may explain the intention to shop for products and services via online shopping, there are other variables that may also shape the intent to shop online that have been excluded. Future research needs to include additional variables that will improve our ability to predict usage intentions more accurately.

## **CONCLUSION**

In this study, UTAUT has been used as theoretical background. The purpose of this study was to extend the UTAUT theory to include the online shopping context. This is done by using the dimensions of perceived risk (channel risk, social risk and transactional risk) as independent variables affecting the attitude and intention to shop for products and services through online shopping.

The strengths of the current research are based on an extended UTAUT, to include the variables of perceived risk (channel risk, social

risk and transactional risk) associated with online shopping. It also provides insights into the dimensions variables of perceived risk related to online shopping, and also distinguishes between risk and risk dimension which were lacking in most current studies on risk research. By modifying UTAUT for the consumer technology acceptance and use context, it might extend the generalizability of the UTAUT from an organizational to the consumer context.

Overall, the results of this study have contributed to the existing literature by highlighting that different perceptions influence the attitude and intention to shop for products and services via online shopping. These results have also confirmed the generalization of previous studies carried out in different countries.

## REFERENCES

1. AbuShanab E, Pearson J M and Setterstrom A J (2010), "Internet Banking and Customers' Acceptance in Jordan: The Unified Model's Perspective", *Communications of the Association for Information Systems*, Vol. 26, Article 23.
2. Ahmad N, Omar A, and Ramayah T (2010), "Consumer lifestyles and online shopping continuance intention", *Business Strategy Series*, Vol. 11, No. 4, pp. 227-243.
3. Ahn T, Ryu S, and Han I (2005), "The impact of the online and offline features on the user acceptance of Internet shopping malls", *Electronic Commerce Research and Applications*, Vol. 3, No. 4, pp. 405-420.
4. Ajzen I (1991), "The theory of planned behavior", *Organizational behavior and human decision processes*, Vol. 50, No. 2, pp. 179-211.
5. Alleyne P and Lavine M (2013), "Factors influencing accountants' behavioural intentions to use and actual usage of enterprise resource planning systems in a global development agency", *Journal of Financial Reporting and Accounting*, Vol. 11, No. 2, pp. 179-200.
6. Al-Husane A (2009), "Consumers' Perception and Behavior Toward On Line Shopping In Palestine", *E. Commerce Magazine*, Ramallah.
7. Bandyopadhyay K, and Fraccastoro K A (2007), "The Effect of Culture on User Acceptance of Information Technology ", *Communications of the Association for Information Systems*, Vol. 19, Article 23.
8. Belanger F, Hiller J S, and Smith W J (2002), "Trustworthiness in electronic commerce: the role of privacy, security, and site attributes", *The Journal of Strategic Information Systems*, Vol. 11, No. 3, pp. 245-270.
9. Chang C C (2013), "Library mobile applications in university libraries", *Library Hi Tech*, Vol. 31, No. 3, pp. 478-492.
10. Cheng, J M-S, Sheen G-J and Lou G-C (2006), "Consumer acceptance of the internet as a channel of distribution in Taiwan—a channel function perspective", *Technovation*, Vol. 26, No. 7, pp. 856-864.
11. Cheong J H, and Park M-C (2005), "Mobile internet acceptance in Korea", *Internet research*, Vol. 15, No. 2, pp. 125-140.
12. Chin W W (1998), "The partial least squares approach to structural equation modeling", *Modern methods for business research*, Vol. 295, No. 2, pp. 295-336.

13. Davis F D, Bagozzi R P, and Warshaw P R (1989), "User acceptance of computer technology: a comparison of two theoretical models", *Management science*, Vol. 35, No. 8, pp. 982-1003.
14. Featherman M S, and Pavlou P A (2003), "Predicting e-services adoption: a perceived risk facets perspective", *International journal of human-computer studies*, Vol. 59, No. 4, pp. 451-474.
15. Fishbein M, and Ajzen I (1975), *Belief, attitude, intention and behavior: An introduction to theory and research*.
16. Fornell C, and Larcker D F (1981), "Structural equation models with unobservable variables and measurement error: Algebra and statistics", *Journal of marketing research*, Vol. 18, No. 3, pp. 382-388.
17. Gerbing D W and Anderson J C (1988), "An updated paradigm for scale development incorporating unidimensionality and its assessment", *Journal of Marketing Research*, Vol. 25, No. 2, pp. 186-192.
18. Gutiérrez S S M, Izquierdo C C and Cabezudo R S J (2010), "Product and channel-related risk and involvement in online contexts", *Electronic commerce research and applications*, Vol. 9, No. 3, pp. 263-273.
19. Hsu C-L, and Lu H-P (2004), "Why do people play on-line games? An extended TAM with social influences and flow experience", *Information and Management*, Vol. 41, No. 7, pp. 853-868.
20. Katos V (2012), "An integrated model for online transactions: illuminating the black box", *Information Management and Computer Security*, Vol. 20, No. 3, pp. 184-206.
21. Kesharwani A, and Bisht, S S (2011), "The impact of trust and perceived risk on internet banking adoption in India", *International Journal of Bank Marketing*, Vol. 30, No. 4, pp. 303-322.
22. Kline, R B (2005), *Principles and Practice of Structural Equation Modeling*, Guilford press.
23. Lee, G-G, and Lin, H-F (2005), "Customer perceptions of e-service quality in online shopping", *International Journal of Retail and Distribution Management*, Vol. 33 No. 2, pp. 161-176.
24. Lee M-C (2009), "Factors influencing the adoption of internet banking: An integration of TAM and TPB with perceived risk and perceived benefit", *Electronic Commerce Research and Applications*, Vol. 8 No. 3, pp. 130-141.
25. Lin W-B, Wang M-K, and Hwang K P (2010), "The combined model of influencing on-line consumer behavior", *Expert Systems with Applications*, Vol. 37 No. 4, pp. 3236-3247.
26. Lu Y, Cao Y, Wang B and Yang S (2011), "A Study on Factors that Affect Users' Behavior Intention to Transfer Usage from the Offline to the Online Channel", *Computers in Human Behavior*, Vol. 27, No. 1, pp. 355-364.
27. Lu H-P, Hsu, C-L, and Hsu, H-Y (2005), "An empirical study of the effect of perceived risk upon intention to use online applications",

- Information Management and Computer Security*, Vol. 13, No. 2, No. 106-120.
28. Martin S S, Camerero C, and Jose R S (2011), "Dual effect of perceived risk on cross-national e-commerce", *Internet Research*, Vol. 21 No. 1, pp. 46-66.
29. Mrtins C, Oliveira T, and Popovic A (2014), "Understanding the Internet banking adoption: A unified theory of acceptance and use of technology and perceived risk application", *International Journal of Information Management*, Vol. 34 No. 1, pp. 1-13.
30. Nakagawa S S Y, and Gouvêa M A (2010), "Identification of influent factors on products purchase through internet", POMS 21<sup>st</sup> Annual Conference, Vancouver, Canada.
31. Patton, M A, and Josang, A (2004), "Technologies for trust in electronic commerce", *Electronic Commerce Research*, Vol. 4, No. (1-2), pp. 9-21.
32. Robinson Jr, L, Marshall G W, and Stamps M B (2005), "An empirical investigation of technology acceptance in a field sales force setting", *Industrial Marketing Management*, Vol. 34, No. 4, pp. 407-415.
33. Rodriguez T E and Trujillo E C (2014), "Online purchasing tickets for low cost carriers: An application of the unified theory of acceptance and use of technology (UTAUT) model", *Tourism Management*, Vol. 43, pp. 70-88.
34. Shin D-H (2007), "User acceptance of mobile Internet: Implication for convergence technologies", *Interacting with Computers*, Vol. 19, No. 4, pp. 472-483.
35. Smith D N, and Sivakumar K (2004), "Flow and internet shopping behavior: a conceptual model and research propositions", *Journal of Business Research*, Vol. 57, No. 10, pp. 1199-1208.
36. Stoel L, and Lee K H (2003), "Modeling the effect of experience on student acceptance of Web-based courseware", *Internet Research*, Vol. 13, No. 5, pp. 364-374.
37. Sulaiman A, Mohezar S, and Rasheed A (2007), "A Trust Model for E-Commerce in Pakistan: An Empirical Research", *Asian Journal of Information Technology*, Vol. 6, No. 2, pp. 192-199.
38. Taylor D G, and Strutton D (2010), "Has e-marketing come of age? Modeling historical influences on post-adoption era Internet consumer behaviors", *Journal of Business Research*, Vol. 63, No. 9, pp. 950-956.
39. Teo, T S, and Liu J (2007), "Consumer trust in e-commerce in the United States, Singapore and China", *Omega*, Vol. 35, No. 1, pp. 22-38.
40. Venkatesh V, Morris M G, Davis G B, and Davis F D (2003), "User acceptance of information technology: Toward a unified view", *MIS Quarterly*, Vol. 27, No. 3, pp. 425-478.
41. Wang Y, Hung Y-H, and Chou S (2006), "Acceptance of E-government service: a validation of the UTAUT", Proceedings of the 5<sup>th</sup> WSEAS International Conference on E-ACTIVITIES, Venice, Italy.
42. Wong K T, Russo S and McDowall J (2013), "Understanding early childhood student teachers' acceptance and use of interactive

- whiteboard", *Campus Wide Information Systems*, Vol. 40, No. 1, pp. 4-16.
43. Wu I-L, and Chen J-L (2005), "An extension of trust and TAM model with TPB in the initial adoption of on-line tax: an empirical study", *International Journal of Human-Computer Studies*, Vol. 62, No. 6, pp. 784-808.
44. Wu Y-L, Tao Y-H, and Yang P-C (2008), "The use of unified theory of acceptance and use of technology to confer the behavioral model of 3G mobile telecommunication users", *Journal of Statistics and Management System*, Vol. 11, No. 5, pp. 919-949.
45. Yang S, Park J, and Park J (2007), "Consumers' channel choice for university-licensed products: exploring factors of consumer acceptance with social identification", *Journal of Retailing and Consumer Services*, Vol. 14, No. 3, pp. 165-174.
46. Yu J, Ha I, Choi M, and Rho J (2005), "Extending the TAM for a t-commerce", *Information and Management*, Vol. 42, No. 7), pp. 965-976.
47. Zhu K (2001), "Internet-based distribution of digital videos: the economic impacts of digitization on the motion picture industry", *Electronic Markets*, Vol. 11, No. 4, pp. 273-280.





**International Journal of Management Research and Business Strategy**

**Hyderabad, INDIA. Ph: +91-09441351700, 09059645577**

**E-mail: editorijmrbs@gmail.com or editor@ijmrbs.com**

**Website: www.ijmrbs.com**

