Exploring the Influence of Perceived Risk and Internet Self-efficacy on Consumer Online Shopping Intentions: Perspective of Technology Acceptance Model

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[Abstract] The objective of this study is to investigate the influence of perceived risk and Internet self-efficacy on the consumers' intentions to use online channels for purchases in Jordan. To examine the above perception, a research model is proposed based on an extended version of the Technology Acceptance Model (TAM). A non-probability sampling technique has been used in this study to collect data by means of a self-administered questionnaire that was developed from previously validated measurements. Ten hypotheses were formulated and tested by Partial Least Squares (PLS) path modeling technique. The empirical findings reveal that perceived risk, perceived usefulness, and perceived ease-of-use have direct impact on the consumers' behavioral intention to use online channel for purchase. Furthermore, the current findings display that the Internet self-efficacy has no direct significant impact on consumers' intention to shop online in Jordan. However, the Internet self-efficacy has indirect influence on consumers' intentions toward online shopping through the intermediating factors of perceived usefulness and perceived ease-of-use. It can be concluded that perceived ease-of-use, perceived usefulness, perceived risk, and Internet self-efficacy can be considered important determinants in influencing consumers' intentions toward online shopping behavior in Jordan. Managerial implications are provided.

[Keywords] online shopping; perceived risk; Internet self-efficacy; technology acceptance model; Partial Least Squares

Introduction

Online shopping is a revolutionary change that was brought forth by the innovative Internet technology and has eclipsed traditional shopping channels. Online shopping has become more popular because consumers gain experience and comfort with shopping on the Internet. Also, the increase in online shopping activities is fueled by a steady stream of new online shoppers and new product category sales. Despite the phenomenal growth of Internet users in recent years, the consumers' acceptance of online shopping as a purchasing channel is still rather low. The online shopping is a relatively young discipline, which is attracting a lot of attention in the research territories. There have been intensive studies that tackle the online shopping domains over the last decade and most of them have attempted to clarify, identify, and understand factors contributing to online shopping adoption. Indeed, as a result of carrying out these studies, a lot has been learned about online shopping and its dynamics, irrespective to the fact that most of these studies have approached the online shopping field from varying perspectives and ways.

The current study is triggered by the recognition of the fact that online shopping has established a great presence in today's economy. Also, this study recognizes that there is too much to be done for the new medium of online shopping to expand and prosper in Jordan to a level comparable to that of developed countries and some developing countries. Indeed, online shopping is still in evolutionary stage in Jordan. Definitely, it is highly probable to understand the social behavior of a target population through empirically-based studies, and accordingly develop appropriate interventions and mechanisms to modify positively such behavior towards acceptance and usage of online channels for purchase. However, there are not many research attempts that investigate the factors influencing the Jordanian consumers' behaviors towards the adoption of the online shopping medium. Therefore, the current study is intended to improve the understanding of the dynamics of online shopping domain in Jordan.

Literature Review

There has been a highly prolific stream of theoretical research to integrate the emerging IS/IT products into businesses. The outcome of this research has resulted in establishing many adoption theories and models that can be used to examine and predict the determinant factors that are responsible for making end users psychologically and behaviorally accept and adopt the emerging IS/IT products. Davis (1989) utilized the Theory of Reasoned Action (TRA) Model (Fishbein & Ajzen, 1975) and transformed it to become more compatible with behavior in the domain of technology, which resulted in the TAM. The basic TAM was empirically validated and fully supported across various environmental settings, and has valid and reliable instruments (Luarn & Lin, 2003). Further, the original TAM may be incapable of adequately capturing key beliefs affecting consumers' attitudes toward online shopping. To resolve the issue, it becomes a necessity to incorporate appropriate mediating factors that encapsulate the unique aspects of the online shopping domains.

Perceived risk has been reported in a plethora of empirical studies to have a negative association with online shopping intention (Chang, et al., 2005; Faqih, 2011; Huang, et al., 2004; Park, et al., 2004). Moreover, the perceived risk has the characteristics to generate inhibiting aspects to consumers' eagerness to participate in online shopping because it has been perceived to increase vulnerabilities of online shopping. Indeed, the uncertain context of online shopping environment involves high perceived risk that would reduce consumers' intentions to shop online (Pavlou, 2003).

The concept of self-efficacy has recently emerged in the computing domain to refer to an individual's self-confidence in his/her ability to perform a behavior (Bandura, 1986). Self-efficacy should not be understood as a measure of skill because the concept deals with the extent to which people perceive that they have the capacity to perform a certain behavior by employing their own skills (Eastin & LaRose, 2000). Self-efficacy has been widely introduced as a primary construct into the TAM structure for adoption studies, and computer self-efficacy has been revealed to be strongly associated with the TAM construct of perceived ease-of-use (Ong, et al., 2004). Since the Internet is a platform for conducting online shopping, individuals' Internet self-efficacy affects their behavioral intentions toward online shopping. Therefore, the Internet self-efficacy factor has been introduced in the domain of online shopping behavior (Eastin, 2002).

The popularity of the TAM application in online shopping environment has been heightened by the encouraging results obtained through empirical studies that the TAM has the capacity to explain and predict consumer intention to use online purchasing channels. Many researchers have directly applied the TAM to investigate online shopping behavior (Ahn, et al., 2004; Bruner & Kumar, 2005; Childers, et al., 2001; Faqih, 2011; Lee, 2009; Pavlou, 2003). Thus, the current research study is to be based on the technology acceptance model (TAM). To achieve the objectives of the current work, the TAM model is taken as a reference framework by means of extending its boundary to include both perceived risk factor and Internet self-efficacy factor.

Research Model and Hypotheses

Perceived Risk Hypotheses

Perceived risk is defined as a consumer's perceptions of the uncertainty and the possible undesirable consequences of purchasing a product or service (Littler & Melanthiou, 2006). Certainly, people may experience a certain degree of risk when purchasing a product through web-based shopping channels because perceived risk has the characteristics to increase vulnerabilities and generate inhibiting aspects to consumers' willingness to participate in online shopping activities. Therefore, to many potential consumers, online shopping transactional activities are fraught with uncertainties and uncalculated risks. Moreover, using the Internet technology for shopping is normally affected by additional risks not encountered in classical shopping channels (Noort, et al. 2007). Perceived risk was reported by (Pavlou, 2003) to negatively affect transaction intentions to purchase products using online shopping medium. Furthermore, past empirical studies (Featherman & Pavlou, 2003; Faqih, 2011; Joines, et al., 2003; Qiu & Li, 2008; Yeung & Morris, 2010) have shown that perceived risk is an impeding factor for consumers to

engage in online shopping and that perceived risk negatively influences the behavioral intention to use online shopping channel for purchase. This discussion leads to the following hypotheses:

- **H1**: Perceived risk (PR) negatively influences the behavioral intention (BI) to use online shopping channel for purchase.
- **H2**: Perceived risk negatively influences the perceived ease-of-use (PEOU) to shop online.
- **H3**: Perceived risk negatively influences the perceived usefulness (PU) toward online shopping.

Internet Self-efficacy Hypotheses

Conducting an online shopping transaction is normally a lengthy process that requires a certain level of competency to complete successfully. In the context of online shopping, self-efficacy refers to consumer self-assessments of his/her capabilities to shop online. It has been demonstrated that consumers with low self-efficacy are uncertain and less comfortable with online shopping. Since the Internet is a platform for conducting online shopping, individuals' Internet self-efficacy affects their behavioral intentions toward online shopping. Therefore, the self-efficacy factor has been introduced in the domain of online shopping behavior (Eastin, 2002).

In accordance with the current state of knowledge and perspectives of the influence of Internet self-efficacy on online shopping acceptance and usage, the current study assumes that there is a certain degree of influence posed by the Internet self-efficacy on the adoption process of online shopping medium for purchasing. As a result, the current research extends the TAM model to include Internet self-efficacy as an important external factor. Also, the current work suggests that motivational factors like Internet self-efficacy may have negative effect on perceived risk. This discussion leads to the following set of hypotheses:

- **H4:** Internet self-efficacy negatively influences the perceived risk associated with online shopping channel.
- **H5:** Internet self-efficacy positively influences the behavioral intention to use online shopping channel.
- **H6:** Internet self-efficacy positively influences the perceived ease-of-use of online shopping.
- **H7:** Internet self-efficacy positively influences the perceived usefulness toward online shopping.

Technology Acceptance Model Related Hypotheses

TAM is fundamentally based upon two theoretical constructs: perceived usefulness and perceived ease-of-use, which were theorized to be fundamental determinants that reflected the user's intentions concerning online shopping adoption. Many scholars have reported that two specific dimensions are related to online shopping domain: perceived ease-of-uses and perceived usefulness (Childers, 2001; Faqih, 2011; Huang, 2008; Gefen, et al. 2003). Online shopping is a lengthy complex business process that involves multi transactional tasks to perform. If the online shopping channel setup is clear, understandable, and provides easy methods to navigate and less effort is needed on the part of the users to complete online shopping process, this increases the likelihood of acceptance and adoption of online shopping medium by users. Good quality website design plays a pivotal role in influencing positively the consumers' intentions to use online shopping for purchase (Alam, et al., 2008; Kim, et al., 2008).

Online shopping sites which are able to offer a wide array of useful services to consumers and functions which facilitate making better shopping decisions will be perceived useful by consumers, and consequently leads to the development of positive intention to use online shopping medium for purchase (Childers, 2001; Kim, et al., 2003). Therefore, perceived usefulness and perceived ease-of-use are suggested to be true predictors of behavioral intention to accept and adopt online shopping channel. From these perspectives, it is

reasonable to hypothesize a significant relationship between perceived ease-of-use, perceived usefulness and intention to shop online. This argument leads to the following hypotheses:

H8: Perceived ease-of-use positively influences perceived usefulness of online shopping.

H9: Perceived ease-of-use positively influences the behavioral intention to use online shopping channel.

H10: Perceived usefulness positively influences the behavioral intention to use online channel for shopping.

Figure (1) displays the proposed framework for this study.

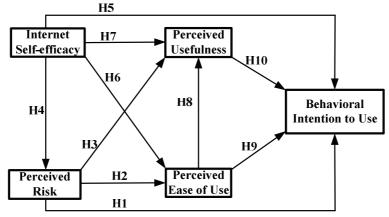


Figure (1). Proposed Research Model

Research Methodology

The current research is intended to explore the influence of both perceived risk and Internet self-efficacy upon consumers' intentions toward online shopping channel in Jordan. To achieve this objective, this study shall pursue the explanatory research method. This type of research is normally implemented by a quantitative approach. Indeed, most academic research studies on online shopping consumer behavior have been largely dominated by quantitative approaches. Methodologically, this simplistic approach manifests itself uniquely in the manner in which numerical data are collected and analyzed. Questionnaire surveys are typically utilized to collect data and then this data are subjected to statistical analysis, one side effect of this type of approaches is biasing. However, to remove the bias, the current approach will utilize a more representative and appropriate sampling spectrum.

The university community and business people have been reported to be frequent users of the Internet technologies and likely to purchase product through online channels. Therefore, a non-probability sampling technique was used in this research that maximizes understanding of the underlying phenomenon. A core characteristic of these sampling techniques is that samples are drawn based on the subjective judgment of the researcher. Non-probability sampling method is fundamental to the quality of data gathered and it allows the researcher to choose the individual subjectively.

Accordingly, data samples for this study were collected from university academic and non-academic staffs, professionals and business people, and graduate students. A self-administered questionnaire is developed to gather the primary data required to achieve the objectives of current study. The measurement scales used for the current research have been adapted from existing scales that were validated and utilized in previous research studies. It is commonly agreeable practice among research communities to utilize the Likert scale instrument in the survey questionnaire for providing quantitative data (Tigre & Dedrick, 2004). Five point measurement scales are used to operationalize each variable in the proposed model with 1 as "strongly disagree" and 5 as "strongly agree".

Analysis and Results

A total of 281 questionnaires have been used in the analysis. To analyze the data collected, the Partial Least Squares (PLS) technique is used. PLS is an efficient statistical technique that is highly suited for Information Systems research because it is characterized by distinctive methodological features such as imposing minimal demand on measurement scales and sample sizes. PLS path modeling methodology has also achieved an increasingly popular role in empirical research domains such as online shopping (Eggert, 2007).

Measurement Model Evaluation

In order to assess the adequacy of the measurement model, the PLS is used to evaluate the measurement model to validate the reliability and validity of the constructs. Construct reliability refers to the internal consistency of the measurement model and measures the degrees to which items are free from random error and generates consistent results (Gefen, et al., 2000). Internal consistency reliability is tested using Cronbach alpha coefficients; the alpha coefficient measures the extent to which the multiple indicators for a construct belong together. Cronbach's alpha scores (see Table 1) have been calculated and found above the widely advocated level of adequacy of 0.70. This provides support of the internal consistency among the measurement items and a clear evidence of acceptable reliability.

The construct validity concept has been conventionally defined as the experimental demonstration that a test is measuring the construct it claims to be measuring. Indeed, construct validation is the most difficult concept to establish (Malhotra, 2010). Most practitioners and researchers attempt to evaluate construct validity through providing an assessment of both convergent validity and discriminant validity. Those two assessments are assumed to be good enough to prove that the measurement instrument is sufficiently valid if they satisfy the theoretical criteria set for such purpose.

Convergent validity measures the extent to which the measurement items truly represent the construct. Convergent validity is assessed by examining each measurement item whether correlates strongly with its intended hypothetical construct (Straub, et al., 2004). Therefore, based on Hair, et al. (2010), the convergent validity test is done through the assessment of the factor loadings, average variance explained as well as composite reliability.

In Table 1, it is apparent that composite reliability scores are much greater than 0.7 and the average variance extracted (AVE) for each construct is above 0.50 (Hair, et al., 2010). Also, all items have a loading above the recommended threshold value of 0.50 (Hair, et al., 2010). The remaining set of 25 items exhibit factor loadings, average variance extracted and composite reliabilities scores that exceed recommended standards. Hence, enough evidence supports convergent validity. Furthermore, to achieve proper construct validity, there is a need to conduct discriminant validity at the item level and at the constructor level.

In relation to discriminant validity at the item level, Chin (1998) suggested a construct should share more variance with its measures than it shares with other constructs in the model. The current study shows that such requirement is firmly satisfied, whereas an examination of indicator cross-loadings reveals that all items are loading more strongly with their corresponding construct than other constructs in the model (results not shown). This implies that indicator discriminant validity is adequate at the item level. Moreover, the current study has tested the construct discriminant validity based on Fornell and Larcker (1981) criterion, it is estimated by comparing a square root of average variance extracted with the correlation of that construct with the rest of the constructs.

It is evident from Table 2 that the off-diagonal elements are smaller than diagonal elements. This is an indication that constructs in the model have sufficient discriminant validity. Therefore, the above results demonstrate clearly that the conceptual model undergoing statistical investigation exhibits adequate reliability and construct validity.

Table 1. Construct Reliability and Convergent Validity

Constructs	Item	Factor	t-values	Cronbach's	Average Variance	Composite
	Code	Loading		Alpha	Extracted (AVE)	Reliability
Perceived Ease-Of-Use (PEOU) PEOU1	PEOU1	0.722	27.517	0.765	0.513	0.838
	PEOU2	0.619	9.411			
	PEOU3	0.568	7.597			
	PEOU4	0.808	31.524			
	PEOU5	0.781	24.411			
	PU1	0713	18.103	0.783	0.539	0.852
	PU2	0.638	12.886			
Perceived Usefulness (PU)	PU3	0.828	33.776			
	PU4	0.819	31.679			
	PU5	0.651	12.916			
	BI1	0.767	23.102	0.843	0.614	0.888
Behavioral Intention (BI)	BI2	0.746	20.049			
	BI3	0.792	25.926			
	BI4	0.802	31.726			
	BI5	0.808	39.206			
	PR1	0.771	8.247	0.826	0.578	0.872
	PR2	0.876	13.112			
Perceived Risk (PR)	PR3	0.743	7.598			
	PR4	0.694	6.397			
	PR5	0.783	6.037			
Internet Self-efficacy (ISE) ISE1	ISE1	0.731	16.412	0.817	0.578	0.872
	ISE2	0.795	23.862			
	ISE3	0.785	25.665			
	ISE4	0.775	24.316			
	ISE5	0.714	17.812			

Structural Model Evaluation

Having assessed the proposed research model in terms of reliability and validity for both measuring items and constructs through the PLS, the PLS model can be used to perform path analysis that yields the causal structure of the proposed research model. Indeed, the PLS is an extremely flexible and powerful tool for the assessment of path models. Admittedly, the PLS does not have the necessary means to establish the overall fitness, however, the PLS can technically compensate for that weakness by effectively utilizing the rich combination of R^2 values, path coefficients, t-values and significance level. These measures are estimated by PLS to evaluate the model's goodness of fit. R^2 value refers to the percentage with which the independent variables explain the variation in the dependent variable; it is used as an indicator of the overall predictive power of the model. (Falk & Miller, 1992) recommended that the value of R^2 for independent variables should preferably be more than 0.10 to be statistically viable. The path coefficients indicate the strengths of the relationships between constructs. The current work accepts t-values greater than or equal to 1.96 with a significance level of 0.05 (Kei, et al., 2000).

Table 2. Discriminant Validity of Constructs

	PEOU	PU	BI	PR	ISE
PEOU	0.716				
PU	0.418	0.734			
B1	0.432	0.557	0.784		
PR	-0.094	-0.154	-0.215	0.760	
ISE	0.527	0.369	0.302	-0.088	0.760

Note: Diagonal elements (in bold) are the square root of average variance extracted (AVE). Off-diagonal elements are the correlations among constructs.

The hypotheses are tested by examining the structural model through PLS. To investigate the specific hypotheses, t-values for the standardized path coefficients are assessed and p-values based on a two-tail test with a significance level of .05 are calculated. Table 3 displays the results of the statistical hypothesis test. The current study estimated the R² value for three dependent variables (PEOU=0.279, PU=0.303, BI=0.373). The R² values in the model exceed the 10% benchmark recommended by (Falk & Miller, 1992). However, the proposed model suggested that the Internet self-efficacy could have a negative influence on perceived risk, nevertheless such relationship was not empirically confirmed and therefore little variation on perceived risk is expected to be caused by the dependent variable of Internet self-efficacy. Consequently, R² value of perceived risk is expected to be low (0.008).

Table 3. Hypothesis Test Result

Research Hypothesis	Path Coefficient (β)	t-value	Result	
H1: PR → BI	-0.125	2.349*	Supported	
H2: PR → PEOU	-0.048	0.758	Rejected	
H3: PR → PU	-0.108	1.628	Rejected	
H4: ISE → PR	-0.088	1.433	Rejected	
H5: ISE → BI	0.007	0.102	Rejected	
H6: ISE → PEOU	0.522	11.140**	Supported	
H7: ISE → PU	0.200	2.915**	Supported	
H8: PEOU → PU	0.303	4.282**	Supported	
H9 : PEOU → BI	0.233	3.827**	Supported	
H10: PU → BI	0.437	8.450**	Supported	

^{*}p<0.05; **p<0.01.

According to the results provided by the current work, perceived risk has been found to negatively influence the intention to use online shopping for purchase since **H1** hypotheses (β =-0.125, t-value=2.349, p<0.05) has been supported. Surprisingly, perceived risk has no influence on both perceived ease-of-use and perceived usefulness because both **H2** hypothesis (β =-0.048, t-value=0.758, p=0.452) and **H3** hypothesis (β =-0.108, t-value=1.628, p=0.0893) are found statistically insignificant. **H4** (β =-0.088, t-value=1.433, p=0.171) hypothesis, which relates Internet self-efficacy to perceived risk, is not supported. **H5** (β =0.007, t-value=0.102, p=0.905) hypothesis, which relates Internet self-efficacy to behavioral intention to use online channel for purchase is strongly rejected. As hypothesized, a positive relationship between Internet self-efficacy and perceived ease-of-use, **H6** (β =0.522, t-value=11.140, p<0.01), is strongly confirmed. A positive relationship between Internet self-efficacy and perceived usefulness, **H7** (β =0.200, t-value=2.915, p<0.01), is found statistically significant at a 99% confidence.

The current results have totally confirmed the applicability of TAM to explain the users' acceptance of online channel for shopping in Jordan. Hypothesis **H8** (β = 0.303, t-value= 4.282, p<0.01), which relates perceived ease-use-to perceived usefulness has been, as normally expected, is strongly supported. Also, hypothesis **H9** (β = 0.233, t-value= 3.827, p<0.01), which links perceived ease-of-use to behavioral intention, is supported. Finally, **H10** (β = 0.437, t-value= 8.450, p<0.01), which relates perceived usefulness to behavioral intention is strongly confirmed.

Discussion and Conclusion

The proliferation of online shopping phenomenon has motivated widespread global research aimed at advancing our understanding of the dynamics of online shopping phenomenon in varying environmental settings. The major contribution of this study is to empirically investigate the influence of both factors on the consumers' acceptance of online shopping channel for purchase in Jordan. A conceptual research model was developed based on TAM model. Quantitative data collection was achieved by means of self-administered survey questionnaire instrument. The proposed research model identified ten hypotheses and investigated them through PLS.

This research has empirically demonstrated that perceived risk negatively influences the behavioral

intention to use online shopping for purchase in Jordan. Indeed, the novelty to the consumers of the new marketing channel of online shopping might result in some problems and involves more uncertainties and risks than traditional shopping formats. In other words, consumers may get concerned about the product's performance they are attempting to purchase, the possible loss of their money or time until they finally confirm the quality of the product, violations of privacy, transmission of inaccurate information, and unauthorized use of credit cards (Gefen, et al., 2003; Gefen, & Straub, 2004). However, contradictory to most empirical studies that this study has empirically revealed that perceived risk has no influence on both perceived ease-of-use to shop online and perceived usefulness toward online shopping. Such results have contradicted most prior empirical studies in this field (Heijden, et al., 2003).

Still though, the results of this study demonstrate that perceived risk plays an imperative role in increasing instability in the online shopping environment and is still a major obstacle in the adoption of online shopping in Jordan. Therefore, reducing perceived risk within the web environment would likely increase the customer trust in online shopping domain and enhance the consumers' intention to shop online. Furthermore, it is suggested that perceived risk is a powerful index for explaining consumer behavior since consumers are more often motivated to avoid mistakes than to maximize utility in purchasing. However, from a managerial perspective, understanding consumer risk perception and how consumers attempt to reduce these risks are of paramount importance. As a result, there is a need to reduce perceived risk through implanting risk-reduction mechanisms within the web-based systems in order to increase the likelihood of consumers utilizing online shopping for purchase in Jordan.

The current study has empirically demonstrated that the Internet self-efficacy has no direct positive influence toward the behavioral intention of online shopping in Jordan. To some extent, these empirical findings can be considered interesting and unexpected from varying perspectives. First, the Internet is regarded as a platform for conducting online purchasing activities and thus the Internet self-efficacy is expected to affect users' behavioral intentions toward online shopping. Second, online shopping process is normally a lengthy transactional process that necessitates a certain level of proficiency to complete successfully and therefore, the Internet self-efficacy is probably influential on users' intentional behavior to use online channel for shopping. Furthermore, online shopping process is not confined to merely perception but it is an essential necessity that users should possess safe and suitable Internet skills to find product and service, evaluate product information and make comparisons in order to develop confidence in such process.

The results of the current study report that the Internet self-efficacy has a positive influence on both perceived ease-of-use and perceived usefulness. This implies that the Internet self-efficacy has an indirect impact on the behavioral intention to use online shopping via the intermediating factors of both perceived ease-of-use and perceived usefulness. Therefore, the current study documents the indirect influence of the Internet self-efficacy on the behavioral intention to use online shopping via perceived ease-of-use and perceived usefulness. However, the influence of the Internet self-efficacy upon the perceived ease-of-use is extremely stronger than the perceived usefulness since the path loading coefficient is measured to be as high as 0.522, the result soundly declares the important influence of the individuals' ability to be able to technically conduct an online shopping transaction because it will build positive consumers' intentions toward getting engaged in online shopping activates.

This implies that individual users perceived the system to be easier to use and useful to adopt when their Internet self-efficacies are high. Also, the current findings have empirically proven that Internet self-efficacy has no impact upon perceived risk, which implies that having higher Internet self-efficacies does not reduce consumers' perceived risk toward online shopping channels. This concludes that Jordanian consumers regard perceived risk associated with online shopping channel is highly critical factor that impedes them from purchasing through online store format.

The current study has fully validated the TAM model. The current findings have shown that perceived ease-of-use has significant and positive influence on perceived usefulness. This indicates that if online shoppers perceive online shopping system effortless, they will find it significantly useful. Moreover, the current study has empirically supported that the positive and significant influence of perceived ease-of-use on behavioral intention to accept online channel for shopping and it is in line with

almost all of the earlier research in this field. Also, the current research has strongly supported that the positive and substantial influence of perceived usefulness (β = 0.437, t-value= 8.450, p<0.01) on behavioral intention to accept online channel for shopping. This is in corroboration with findings of many studies as their studies suggested that consumers would develop positive intention to purchase online if they believe that online channel offers great potentials, significant benefits, favorable attributes and good advantages, therefore this will help in enhancing positively shoppers' perceptions about online shopping and amplifying their shopping effectiveness (Barkhi, et al., 2008; Faqih, 2011; Kim, et al. 2003; McCloskey, 2004). The current findings have empirically demonstrated that the influence of perceived ease-of-use on behavioral intention to use online shopping is somewhat weaker than the influence of perceived usefulness; this conclusion is normally revealed by most TAM-based empirical studies.

Finally, from the hypotheses testing results regarding the TAM variables presented by the current study that Jordanians' willingness to adopt emerging and novel technologies such as the web-based purchasing channels is noticeable. Then, this demands extreme care to design web-based information systems that are characterized by ease of use. However, the complexity of online consumer necessitates that such process must be investigated from varying perspectives and multiple paradigms.

To some extent, the current research has reflected some good philosophical insights and thoughts. It has proved that perceived ease-of-use of the basic TAM model construct is an imperative variable. The challenging issue is that web-based systems must be designed to make an online shopping channel environment easy to perceive, handle and use by consumers. In actuality, such requirements are challenging managerial issues and highly costly to provide web-based online shopping systems free of complexity and highly usable. The desire of most users, however, that the web-based systems they want to interact with should maximize benefits while minimizing risk and stress.

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