ONLINE SHOPPING: AN ANALYSIS OF TECHNOLOGY
ACCEPTANCE MODEL OF JORDANIAN CUSTOMERS

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ABSTRACT

Previous studies have attempted to determine the various factors which affect online shopping behavior based on different theories. The issue is the difficulty of identifying significant factors that influence customer behavior. Existing studies concentrated on online shopping in developed countries. For instance, in Jordan, online shopping remains in the early stage of development. Little is known about the acceptance of online shopping and the factors which influence this behavior throughout this country. The results indicate that perceived usefulness and perceived ease of use have a direct effect on customers’ attitudes towards online shopping and attitude determine the behavioral intentions of online shopping. Limitations, implications and future research are discussed.

Keywords: Online Shopping Behaviour, TAM, Attitude, Jordan.
INTRODUCTION:

According to Chen and Chang (2003), the commercial trade has been revolutionized by the development of online trading model in the global economy since 1990. Sorescu, Alina., Frambach, T.R., Singh, J., Rangaswamy, A., and Bridges, C., (2011) mentioned that the market has been changed by the dynamic players with the new business model of online retailing. In a study conducted by Delafrooz et al. (2010), there is an insight about the usage of internet as no longer a social networking platform rather than which it is a means of transaction for consumers in the global market. As per the survey results conducted by Accenture (2016), 48% of all shoppers said they found it easier to shop online. As per the survey results of A.T. Kearney (2015), the market size of retail e-commerce grown to nearly 840 Billion USD in the year 2014 and it was estimated to get increased up to 1506 Billion USD by 2018.

To mention about the prediction by Abramovich (2015), it is have a steady growth by 2017 upto 370 Billion USD to $231 billion in 2012. According to Statista (2016), the user penetration is at 41.4 % in 2016 and is expected to hit 57.6 % in 2021 for the online shopping trend. The top countries that are listed among the online shoppers are China, United States, United Kingdom, Japan, Germany, and other global countries. Further Abramovich, (2015) added that it is important to consider that around 84 per cent of the users shop using their mobile phones either at the trip or after the shopping trip. Consumers spend higher i.e., 22 percent when they use digital modes for purchasing. Further, 25 per cent of the shoppers spend a little higher than intended. He also added that around 75 per cent of the respondents choose a product after reading the reviews and influence on social media there is higher on the enhanced loyalty (I). In the paper by Accenture (2016), about 34% of the people feel it comfortable when they purchase a product which is rated good in social media and Google and Facebook are the heavy influencers of their lifestyle, the respondents added.

In 2000, Pastor mentioned that internet is less preferred by those who finally purchased the product though there is an increasing behaviour among the consumers for online shopping. In 2006, King and He mentioned that people are made to accept and implement some technology which is developed by others. This remains as one of the issues found in managing the information technology. Nazir. S., Tayyab. A. Sajid. A., Rashid. H., and Javed. I., (2012) mentioned that though online shopping is something new and attractive, consumers are reluctant to shop online due to various reasons such as insecurity of credit or debit cards, the passwords, the process of hacking information, less time to devote, unreliable, untrustworthy, a breach of privacy and social risks.

On the contrary, traditional retailers tend to change their mode of sales to online due to the increasing demand and assured ROI. For instance, as per the US Department of Commerce reports, the digital growth of Walmart is well below the economy-wide rate of 15.1% in the first quarter of 2016 whereas its E-commerce sales is about 3% compared to 7.8% across all the retail (Wahba, 2016)

Rigby (2011) noted an very important connection that though traditional retailers have started digitizing their sales channels through mobile shopping and call centers, they are integrating these technologies seamlessly in their most important channel i.e., physical stores.

Based on the studies available, it can be inferred that the online shopping-related research surveys were conducted only in the developed countries. Delafrooz et al., (2010) mentioned that these studies stress the importance of specified examination of online shopping intention in specific countries. Dajani and Yaseen (2016) mentioned that the Arab business settings lack studies in technology models that explain determinants of technology acceptance. For a decade spanning 1990-1999, only one percent of the 236 articles focused on arab countries’ users in the idle east area, according to a prestigious international journal. (Dedoussis, 2004; Robertson et al., 2001).

However, the studies available in the context of Arab organizations in Jordan are very limited such as (Al-Sukkar and Hasan, 2005; Akour et al., 2006; Dajani, 2011). Based on the above studies, it is clear that online shopping behaviour is still in its nascent stage in Jordan and the customer behaviour towards new shopping channel is unexplored. The factors that attribute to the consumer behaviour towards online shopping is yet to be identified in the context of Jordan, while it can be clearly predicted in developed countries such as United States. According a study conducted by Rahaman (2014), men tend to spend more time online than their counterparts. The amount spent by men is comparatively higher. The male gender perception of online shopping was approximately the same as or even more favorable than those of the female consumers. While different models or factors have been explained the change of gender pattern in online shopping such as shopping orientation, information technology acceptance and resistance for product involvement, product properties, and perceived risks. But there is no such information available for the developing countries.

The predominant reason behind understanding the consumer behaviour towards online shopping is to
understand the predictor variables of a customer so that the online companies can shift their marketing and business strategy towards increasing the customer base, sales and customer retention through customer loyalty. According to a study conducted in 2012 by Al- Jabari, Othman and Nik Mat, acceptance or rejection of online shopping mode by customers is challenging to be understood, especially in case of Jordanian customers. In order to fill this research gap, the current study attempts to examine how perceived ease of use and perceived usefulness form customers’ attitudes and make online shopping intentions using TAM as the underpinning theory since a valid basis for explaining and predicting customers’ intention towards online shopping behaviour is explained by this theory.

From the empirical findings of this study, the online shopping and the technology acceptance of Jordanian customers are easily understood and the online-based retail entrepreneurs are given strategic directions and implications for the development of online shopping in Jordan. Due to the high usage of internet in Middle Eastern companies, there are lot of opportunities available to sell their products and services online. Today, the business transactions are mostly done through internet and retailers get the best out of it in online sales and the multiplicative effect across other distribution channels. According to Arab Advisor (2011), there is only 8.2% of the Online shoppers found in Jordan in spite of high internet usage. According to Khalid Sheh (2016), Global online retail sales is growing and estimated to reach 8.8% of total retail spending in 2018 as compared to 7.4% in 2016. In terms of country, UK has the highest retail E-commerce sales as %age of total retail sales (15.6%), followed by China (13.8%), Norway (11.5%), Finland (10.8%) and South Korea (10.5%). So, it becomes important to study the online shopping particularly in the improvement of online shopping behaviour (Wang, Chen and Chang, 2007).

LITERATURE REVIEW:

The Theory of Reasoned Action (TRA) developed by Fishbein and Ajzen (1975) discusses about the consumer behaviour in the perspective of psychology which is adopted by Davis et al (1989) for modelling user acceptance of information technology. In 1989, Davis proposed the Technology Acceptance Model (TAM) in order to explain the consumer behaviour intention towards adopting a technological innovation. There are two primary predictors involved in TAM –such as Perceived Ease Of Use (PEOU) and Perceived Usefulness (PU) that has high impact rate towards technology acceptance behaviours. However, TAM has become of the highly used models in IT specifically due to its applicability, simplicity and understandability (King & He, 2006). The study of Davis (1989) is cited by more than 1000 articles (Venkatesh et al., 2011). As a result, TAM has been used as a leading model or as an extended applied model in various business contexts (Koufaris, 2003; Hong et al., 2006; Martins et al., 2014).

Various researchers such as (Agarwal and Prasad, 1999; Venkatesh and Davis, 2000) chose TAM to analyze the consumer behaviour. According to the TAM model, when a technology is easy to use and adaptable, it is highly loved by users and utilized prominently. PEOU is usually correlated with the IT’s intrinsic characteristics (ease of use and ease of learning the technology) while the PU to the user is related to the other extrinsic factors like efficiency and effectiveness. In 1997, Agarwal and Prasad mentioned that the TAM was adopted in the early studies due to its parsimony and the empirical support wealth.

TAM model hypothesizes that it is a series of perceptions towards system use which are determined by behavioural intentions followed by users’ attitudes toward using the system and further by perceived usefulness and ease of use the system. Though David has envisioned this model for the information systems adopted in the workplace, researchers implemented this model in the area of customers' behaviour and more specifically under two specific dimensions relevant to online shopping such as perceived ease of use and perceived usefulness (Gefen, et al., 2003; Huang, 2008). In TAM, PEOU has been defined as the extent of easiness felt by the user in utilizing a certain technology without any strains (Davis, 1989). According to Selamat et al. (2009), the technology which is found to be easier for the users is easily adopted by the users whereas the technology which has complex handling mode is adopted in a slow manner. The same insight has been accepted by Teo (2001) who concluded that those systems which doesn’t strain a user is easily adopted and liked by the users on a higher rate. According to the literature (Childers et al. 2001; Yuliharsi & Daud, 2011), there is a positive influence expressed by perceived ease of use towards the customers’ attitude in shopping online. In the studies conducted earlier, there has been an impact created on PU by PEOU either in a direct or indirect manner. Studies such as (Seddon, 1997) linked the success and quality of IS with PEOU, while some other studies (Wang et al., 2001) have linked customer satisfaction as well. According to Childers et al. (2001), the online retailers who provide website with accessibility, easiness in shopping, less effort and clear pathway towards shopping, and allowing customers to shop by their own preference will end up in ease of use perceptions in
consumer minds with favorable attitudinal attachment to online retailers which are able to do so. Therefore, this study anticipates that:

**H1:** Perceived ease of use of online shopping positively influence attitude towards online shopping among Jordanian customers.

Perceived Usefulness, defined as the degree to which the user feels that the technology will ease the process and results in performance enhancement, is one of the major determinants of attitude toward utilizing TAM model (Davis, 1989). In 2004, McCloskey (2004) specified that the success determinants of a consumers’ shopping activity are accomplishing shopping goals, ability to improve shopping performance and shopping productivity. In a study conducted by Barkhi’s *et al.* in 2008, there was a suggestion to retailers that customers tend to develop favorable attitudes over the products and/or services which they trust to provide sufficient benefits or attributes when they need a solution. They also develop a negative attitude toward those which are insufficient. In the studies conducted earlier, the significant effect of Perceived Usefulness on adaptation intention was approved (Venkatesh, 2000; Eriksson *et al.*, 2005; Guriting and Ndubisi, 2006; Chen and Barnes, 2007). In 2000, Tan and Teo noted that when it comes to determination of adaptation of innovations, PU remains an important factor. In 2003, Kim *et al.* argued that online retail websites which comes packed with guidelines that doesn’t complicate their shopping experience is preferred and aid customers in making better shopping decisions which leads to the development of favourable attitudes toward online shopping.

In a study conducted by Childers’s *et al.*, there was an indication that those customers who favor online shopping found to perceive online retailers as useful and therefore, they were able to enhance their shopping productivity, effectiveness and ability. In 2002, Bhattacherjee noted that PU is nothing but a person’s willingness to transact with a particular system. In 2007, Bisdee mentioned those online shopping sites which rewards customer with additional offers and services when compared to the traditional shopping are perceived as useful by the customers which results in the development of favorable attitudes toward online shopping. So it is expected that when users find the online shopping would help them attain the desired performance outcomes, they adopt it. PU and ‘likely being adopted’ are directly proportionate in the case of online shopping. Generally, ease of use and usefulness were both significant factors which have an impact towards technology usage (Wu & Wang, 2005). In 2010, Suki and Ramayah mentioned that intention is caused by the attitude which is identified long back. Therefore, this study anticipates that:

**H2:** Perceived usefulness of online shopping positively influences attitude towards online shopping among Jordanian customers.

From the previous studies conducted (King & He, 2006), Perceived ease of use has been verified through empirical evidence that it can predict the perceived usefulness. In 2005, Bruner & Kumar noted that when users perceive a technology as easy-to-use, they find it useful, when all other factors are equal. However there are contradictory findings available in the previous studies with regards to the relationship between these variables (Aladwani, 2002). In 1997, Gefen and Straub concluded that no significant relation is found towards the prediction of e-mail acceptance as a technology, but there is a significant relationship found by other authors as well (Jantan, *et al.*, 2001; Shyu & Huang, 2011). Ramayah and Ignatius (2005) argued that customers who perceive that online shopping is effortless should in turn develop a tendency to perceive it as useful. In 2000, a study by Heijden concluded that more the comfortable and easier for a customer to shop online, more it is perceived by customers for online shopping. Therefore, this study anticipates that:

**H3:** Perceived ease of use of online shopping of Jordanian customers has a positive influence on their perceived usefulness towards online shopping.

According to Suki & Ramayah (2010), the attitude toward usage of TAM model is defined as the mediating affective response that exists between the usefulness and ease of use beliefs and intentions to use a system and identified as a cause of intention. In 1975, Fishbein and Ajzen have segregated the attitudes into two different types of constructs such as the one that refers to the attitude toward the object which otherwise referred as a personal evaluation of a specific object. The second construct is the one which refers to the attitude toward the behaviour that refers to a person’s evaluation of a specified behaviour. In 1989, Davis mentioned that a prospect’s overall attitude toward using a given system is an antecedent to intentions to adopt. According to Erevelles (1998), the attitude is the construct which mostly attended and widely used to predict the customers' likelihood for the adoption of a new technology. There are contradictory results found in earlier studies in identifying attitude as the most significant construct in influencing behavioural intention (Al-Rafee and Cronan, 2006 found positive while it was negative in Nik Mat and Sentosa (2008) and Taylor & Todd (1995) studies. If a consumer possess positive attitude towards online shopping, Ahn *et al.* (2004) felt that their intention in engaging into online shopping is higher. The researchers further added that in the perception of online shopping,
the website for an online retailer is the main contact point through which they sell a product or service in the online shopping process. According to the studies conducted earlier, there has been an emphasis over the understanding of user expectations and how their experience in about when they use a website (Chen et al., 2002; Suh & Han, 2002). Al-Rafee and Cronan (2006) found attitude to be the most significant construct in influencing behavioural intention. Therefore, this study anticipates that:

**H4:** customers’ attitude of Jordanian customers towards online shopping positively influence intention to engage in online shopping.

**RESEARCH METHODOLOGY:**

According to Saunders et al., (2009), there are two types of data such as primary data and secondary data. The primary data indicates the collection of required data by the researcher specifically for their own purpose and research. The secondary data indicate that the data has been collected by other researchers for some other purposes. According to Hair, J.F., Celsi, M. W., Money, A. H., Samouel, P. & Page, M. J., (2011) “when the research objectives cannot be achieved with secondary data, primary data must be collected”. In the current study, a survey research is employed in order to understand ‘how customers form their attitudes and make online shopping intentions’. The elements of TAM such as ‘perceived usefulness’ and ‘ease of use’ as well as ‘attitude and intention’ were measured as the perceptual characteristics. These questions were adapted from previous studies (Al-Jabari et al., (2012), Nik Mat and Sentosa (2008) and Davis (1989). The first part of the questionnaire contains questions that are concerned with demographic, socioeconomic and situational characteristics of the respondents. The questionnaire was originally prepared in English which was then translated into Arabic (evaluated by two lecturers from Ajloun National University, Jordan). In terms of data collection, self-administered questionnaires using a 7-point Likert scale measuring the research constructs and demographic information were administered to 600 responders in shopping malls at Amman, capital of Jordan, as it is the only place in Jordan that consists of residents who are from all the regions in Jordan (north, south and east) and thus enhances the generalization of results to all Jordanians.

A list of shopping malls in Amman was generated and a simple random sample method was used to select shopping malls as sites of this study. A letter of permission was submitted to the selected shopping malls and all malls granted permission to carry out the process of administering of questionnaires at the respective shopping malls. Upon selection of locations, systematic sampling was employed in the distribution of questionnaire to respondents. Five researchers intercepted the respondents politely in the selected Malls and it took one and half months to complete the data collection. The structure of the questionnaire is clear, easy to understand, and straightforward to ensure that the respondents could answer the questions with ease.

**DATA ANALYSIS AND FINDINGS:**

In this study, SPSS software was used to conduct an analysis on the collected data. Descriptive statistics, Cronbach’s Alpha, Pearson’s correlation, Factor analysis, missing data, treatment of outer, normality, homoscedasticity, and multicollinearity and multiple regressions were the statistical tools that were conducted. Table 1 shows the results of frequency analysis of the participants. The participants of this study consisted of 288 male (47.2%) and 322 females (52.8%). With respect to age, almost half of the participants belonged to the age group of 36-40 (42.8%). In addition, the majority of the participants (270) were married, while 193 were single. The results indicated that 448 (73.4%) of the participants had a bachelor degree, while 106 (17.4%) had a master’s degree and 56 (9.2%) had a Ph.D degree. The results further indicated that almost half of the participants 168 (27.5%) had only one credit card, followed by 157 25.7%) who reported to have three credit cards.

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency</th>
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<th>Category</th>
<th>Frequency</th>
<th>%</th>
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</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td><strong>Credit card</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>288</td>
<td>47.2</td>
<td>0</td>
<td>132</td>
<td>21.6</td>
</tr>
<tr>
<td>Female</td>
<td>322</td>
<td>52.8</td>
<td>1</td>
<td>168</td>
<td>27.5</td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
<td></td>
<td></td>
<td>2</td>
<td>115</td>
<td>18.9</td>
</tr>
<tr>
<td>Married</td>
<td>270</td>
<td>44.3</td>
<td>3</td>
<td>157</td>
<td>25.7</td>
</tr>
<tr>
<td>Single</td>
<td>193</td>
<td>31.6</td>
<td>4</td>
<td>38</td>
<td>6.2</td>
</tr>
<tr>
<td>Other</td>
<td>147</td>
<td>24.1</td>
<td></td>
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</tbody>
</table>

Table 1: Respondents’ Profile
Factor analysis and reliability testing were performed to ensure that all research constructs are reliable. Not to mention, we utilized coding reliability. There are three types of reliability pertinent to content coding: stability, reproducibility, and accuracy. Stability refers to the extent to which the results of content classification are invariant over time. The second component, which is reproducibility, also called intercoder reliability, explains the extent to which content classification produces the same result when the same content is coded by more than one coder. Accuracy is the classification of the context which responds to a standard or norm. Although accuracy is the strongest form of reliability, it is only used when a standard coding for some text has been established. It was determined that researchers seldom use accuracy in reliability assessment (Chen & Holsapple, 2013). According to Hair et al. (2006) and Tabachnick & Fidell, (2001), factor analysis is often performed when a researcher wants to understand the underlying structures or factors of the study variables. Hence, it can be a useful exploratory tool to test theories involved in one particular research and help determine the construct adequacy of a measuring device (Tabachnick & Fidell, 2001; Pallant, 2010). According to Nunally (1978) Cronbach’s alpha more than 0.9 represents very good reliability, 0.7< α <0.9 means high reliability, All Cronbach alpha coefficients were above 0.70 indicating the constructs utilized were reliable.

Person (Isn’t it Pearson? Please confirm) correlation was used to describe the strength and direction of the relationship between two variables (Pallant, 2001). Correlation analysis was performed to examine the relationship between perceived ease of use, perceived usefulness, attitude toward online shopping, and intend to shop online. The results support the non-existence of multicollinearity as all correlation values are below 0.7.

The factor analysis conducted on variables showed the Kaiser – Meyer – Okin value of .90, which exceeded the recommended value of .5 (Hair et al., 1998) or above .6 (Pallant, 2001) and the Barlett’s test of sphericity was highly significant (p = .00), supporting the factorability of the correlation matrix. These indicate that the assumptions of factor analysis were met. Principal Component Analysis revealed the presence of three components with an eigenvalue exceeding one. These factors captured 78.05 percent of the total variance in the items. In fact, if the KMO measure is greater than 0.60 and the Bartlett’s test of Sphericity is large and significant, and then factorability is assumed (Pallant, 2001; Tabachnick & Fidell, 2001).

To test the relationship between the independent (ease of use, usefulness and attitude) and dependent variable (online shopping intention), multiple regression analysis was conducted. The multiple regression analysis indicates that the tested variables are significant at p, 0.01. The β-values (standardized coefficients) for each of the variables are as follows: PEOU (β = 0.484), PU (β = 0.410) and attitude (β = 0.748) indicating that the independent variables were all positively related to the behavioural intention of online shopping. Figure 1 shows the direction and strength of each independent variable to the dependable variable and it shows that perceived ease of use, perceived usefulness and attitude towards online shopping are all positively related at p<0.01. Regression analysis indicated that all the hypotheses tested were supported. H1 (PEOU is positively related to attitude), H2 (PU is positively related to attitude), H3 (PEOU is positively related to PU) and H4 (attitude is positively related to intention) were supported.

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency</th>
<th>%</th>
<th>Category</th>
<th>Frequency</th>
<th>%</th>
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</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td><strong>Income (JD)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-25</td>
<td>69</td>
<td>11.3</td>
<td>300-500</td>
<td>71</td>
<td>11.6</td>
</tr>
<tr>
<td>26-30</td>
<td>90</td>
<td>14.8</td>
<td>501-700</td>
<td>125</td>
<td>20.4</td>
</tr>
<tr>
<td>31-35</td>
<td>21</td>
<td>3.4</td>
<td>701-900</td>
<td>185</td>
<td>30.3</td>
</tr>
<tr>
<td>36-40</td>
<td>261</td>
<td>42.8</td>
<td>901-1500</td>
<td>93</td>
<td>15.2</td>
</tr>
<tr>
<td>41-45</td>
<td>87</td>
<td>14.3</td>
<td>1501-2000</td>
<td>82</td>
<td>13.4</td>
</tr>
<tr>
<td>46-50</td>
<td>35</td>
<td>5.7</td>
<td>More than 2000</td>
<td>54</td>
<td>08.8</td>
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<tr>
<td>51-60</td>
<td>10</td>
<td>1.6</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>More than 60</td>
<td>29</td>
<td>4.8</td>
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<td><strong>Education level</strong></td>
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<tr>
<td>Ph.D</td>
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<td>9.2</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Master</td>
<td>106</td>
<td>17.4</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor</td>
<td>448</td>
<td>73.4</td>
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</tbody>
</table>

*(1 USD = 0.71 JD)*
HYPOTHESIS TESTING:

Hypothesis testing is performed to determine whether hypotheses proposed based upon a review of existing literature are supported or not based on the results of the regression analysis, all proposed hypotheses are supported as shown in table 2.

Table 2: Summary of hypothesis testing

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Supported/ Not Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1 Perceived ease of use of online shopping positively influence attitude towards online shopping.</td>
<td>Supported</td>
</tr>
<tr>
<td>H2 The perceived usefulness of online shopping positively influences attitude towards online shopping</td>
<td>Supported</td>
</tr>
<tr>
<td>H3 Perceived ease of use of online shopping has a positive influence on their perceived usefulness towards online shopping.</td>
<td>Supported</td>
</tr>
<tr>
<td>H4 Attitude towards online shopping positively influences intention to engage in online shopping.</td>
<td>Supported</td>
</tr>
</tbody>
</table>

IMPLICATIONS AND RECOMMENDATIONS:

Results revealed that PEOU have a positive effect on attitude towards online shopping ($\beta = 0.484; p = 0.000$). Thus, H1 is supported. This suggests that the ease of use of technological interfaces and tools of online shopping sites is imperative in predicting the online shopper’s attitude towards online shopping. This result is consistent with previous studies Almajali (2010), Celik (2008), Childers et al. (2001), Davis (1989), Selamat et al. (2009), Teo (2001), and Yuslihasri and Daud (2011), this results confirm that PEOU is a major determinant of attitude towards behavior. Based on this finding, online retailers are recommended to make their websites simple and easy to learn for customers to become skillful of using the technological interfaces and tools on the site. The web pages should also be designed in a way that makes potential customers choose and buy what they want, easily. The second proposed hypothesis on whether there is a significant relationship between PU and attitude towards online shopping. Findings confirmed that PU ($\beta = 0.324; p = 0.000$) is significantly related to attitude towards online shopping. Hence, H2 is supported. The positive attitude towards online shopping is due to reason that consumers perceive that online shopping improves their shopping performance and productivity. The degree to which the online shopping site is perceived to be useful strongly influences customers’ attitude. Customers can form positive attitude as they perceive a useful online shopping site. This results are consistent with previous studies, Almajali (2010), Celik (2008), Barkhi et al. (2008), Bisdee (2007), Childers et al. (2001), Davis (1989), , Kim et al. (2003) and Lim & Ting (2012). Based on these findings, online retailers' sites should provide facilities that help customers to keep track of their shopping goals. Saving money and time should be considered in this manner. The third hypothesis exhibited a significant relationship between PEOU and PU ($\beta = 0.914; p = 0.000$). Its p-value is < 0.05, posited that H3 is supported. This suggests that the ease of use of technological interfaces and tools of online shopping sites has a significant influence on the consumers’ perceived usefulness of online shopping. This means, the degree to which the online shopping site is perceived to be easy to use strongly influences the customers' perceived usefulness of online shopping. In this situation, customers form a usefulness perception as they find an online shopping site to be effortless. This result consistent with previous studies, Bruner and Kumar (2005), Heijden (2000), King and He (2006), Lim and Ting (2012), Ramayah and Ignatius (2005). Based on this finding, online retailers are recommended to focus on establishing and enhancing the ease of using their websites. The fourth hypothesis proposed that attitude towards online shopping have a positive effect on intention to shop online. As shown in figure 1, attitude towards online shopping, exhibited a significant relationship with the intention to shop online ($\beta = 0.748; p = 0.000$). Its p-value is < 0.05, posited that H4 is supported. This finding is consistent with previous studies (Celik, 2008; Lin, 2007; Shih and Fang, 2006).
LIMITATIONS AND FUTURE RESEARCH:

Future research is encouraged to further extend the TAM to encompass other theoretical constructs. The influence of demographics was not investigated in this research. Previous studies indicated the influence of demographic variables on attitude and behavior. Further examination of PEOU and PU can be done in light of type of products and services that are intended to be purchased by the customer through the Internet. While the findings of the significant relationships between the TAM constructs may be applied in the online shopping setting, TAM constructs required to be examined in another setting. The future researches can also investigate whether customer perceived online service quality can influence customer satisfaction and in turn customer adaptation and loyalty. Future research can also examine whether promotional and communication as issues or the system characteristics, such as screen design and feedback, have any influence on the acceptance of online shopping.

CONCLUSION:

This research has investigated the relationship of TAM constructs in online shopping area in one of the developing Arab countries i.e. Jordan. The finding of this study showed that customers’ intention to shop online is determined by their attitude towards online shopping. Further, it showed the importance of PEOU and PU of online shopping sites to form customers’ attitude towards online shopping. The results suggest customers need to be provided with effortless and useful web interfaces and online shopping technologies to attract them. The findings of this study have implications for developing usable online shopping sites. Companies need to develop the beliefs of the customers regarding the usefulness and ease of use of online shopping. From the managerial perspective, companies and decision makers can use these findings as a tool to determine the success of online shopping in Jordan. The findings of this study also suggest that the importance of developing the belief of usefulness of the system as well as ease of use. More research is required in different area of technology and more constructs should examine with TAM.

REFERENCES:


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