THE IMPACT OF RISKS IN LIMITING E-COMMERCE

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Abstract

Most E-commerce transactions nowadays are electronically executed via well-known internet websites (Amazon, Alibaba, eBay, and others). Online sales in the Middle East, including Jordan, are estimated to count 2% of the overall retail sales, that is too much lower than the 15% in developed markets (Mehta & Bhandari, n.d.); and online sales in Jordan are still limited (Statista, 2020). Therefore, this study comes to determine the threats limiting E-commerce in Jordan. The services sector accounts for about two-thirds of the Jordanian economy and the insurance sector is considered an important component of it (Ghazal, 2015). The problem is to what extent threats from risks accompanied with E-commerce limit it from the viewpoint of Jordanian insurance companies' employees. Five (5) insurance companies out of twenty-five (25) are randomly selected for analysis and a questionnaire is conducted according to a psychometric method for data collection. The results show that perceived ease of use, perceived usefulness, and perceived risk with products/services are the main effective factors for predicting transaction loss, while delay time is significantly affected by perceived ease of use and perceived risk with product/service. Policymakers can rely on the results of this study to avoid the risks facing online shopping in Jordan and enhancing it. This study contributes to the literature by reducing the dearth of previous research regarding the determinants of threats and risks limiting online shopping and E-commerce in emerging markets.

Keywords: E-commerce, Insurance Companies, Perceived Risk, Transaction Loss, Perceived Usefulness, Jordan

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1. INTRODUCTION

Buying and selling are known from ancient times; the Silk Road from China to Middle East countries is an example of ancient trading. Many ruins all over the world also indicate this issue. Ancient manufactured countries attacked other countries outside their borders to enlarge their trading and to protect the trading roads. Nowadays, the world has become like a small town where some issues in far countries get an echo in other countries in few seconds. E-commerce is one of the issues affected by globalization and the revolution of information technology (IT) in communication in the trading between producers of goods and services and their customers through local, national, and international countries. Trading or commerce nowadays has been developed in its size independently on roads, but on

the way of communication between producers and customers. E-commerce can be defined as the "buying and selling of products and services by businesses and consumers through an electronic medium, without using any paper documents" (Sagir, 2016, p. 1).

The speed of spreading of E-commerce all over the world has hugely changed the global retail market. But this megatrend, which has transformed the dynamics of consumer's behavior and business models in retail remains untapped in the Middle East and offers huge potential for industry players. Globally, E-commerce is a strongly growing domain with no signs of popular choice for investments and new businesses and further growth will promote the development of experiences, technology, and rising competition (Dobreva, 2018).

In the US, online spending represents 21.3% of the total retail sales in 2020. Amazon accounted for nearly a third of all E-commerce in the US. COVID-19-related boosts in online shopping resulted in an additional $174.87 billion in E-commerce revenue in 2020 (Ali, 2021). While in the Middle East online sales are estimated to account for only 2% of the overall retail sales which are too much lower than the 15% in developed markets, the untapped potential for E-commerce players is huge (Ali, 2021). Currently, only 15% of businesses in the Middle East have an online presence and almost 90% of the online purchases in the region are shipped from abroad (Ali, 2021).

In general, Jordan's economic sectors use E-commerce at very limited levels; where 5% of internet users do online transactions in Jordan (Ghazal, 2015). The amount and the number of online transactions in Jordan are very small, so this study comes to explore the reasons behind the limed amount and numbers by answering the following question: *What are the threats and the risk factors that affect the limiting usage of E-commerce from the perspectives of Jordanian insurance companies' employees who experienced E-commerce?* To answer this question, the following research points can be formulated:

RP1: There is no significant effect due to risk resources factors accompanied by E-commerce transactions.

RP2: There is no significant effect due to client gender on E-commerce transactions.

RP3: There is no significant effect due to each client perceiving risk on E-commerce transactions.

Therefore, this study aims to identifying the risk resources factors accompanied by E-commerce transactions and determining their size. In addition, examining the effect of demographic variables on E-commerce usage as well as determining the prediction relations between predicted variables: perceived ease of use, perceived usefulness, perceived risk with products/services, and perceived service quality with the criterion variable (E-commerce transaction).

The importance of this study comes from adding new findings to the literature in this issue, especially in exploring, identifying, weighting, and ranking the main factors of risks affecting E-commerce in Jordan from the viewpoint of insurance companies' employees. Providing recommendations can be used for avoiding some sorts of risks facing E-commerce in Jordan;

determining the size of E-commerce transactions in the insurance sector in Jordan; examining the effect of gender, age, and positions on E-commerce transactions in the insurance sector in Jordan; and finally, determining the characteristics of the websites used in E-commerce transactions from the viewpoint of Jordanian employees in the insurance sector.

The remainder of this study is organized as follows. Section 2 reviews the literature by introducing the main and recent studies related to this study as well as the contribution of this research to the literature. Section 3 describes the sample and the population, the tools, the model, and the variables of the study. Section 4 tests the hypotheses and discusses the results and Section 5 introduces the conclusions and the recommendations for future research.

2. LITERATURE REVIEW

The threats and the risks that limit E-commerce and online shopping have been examined and attracted the interest of many researchers in developed and developing countries (Lee, Park, & Ahn, 2011; Jusoh & Ling, 2012; Evelina, Kusumawati, Nimran, & Sunarti, 2020). So, this section will review some of the studies that explore the threats and the risks of limiting E-commerce.

Al-Alak and Al-Saed (2006) determine whether consumers' reactions to websites influence their subsequent brand attitude and assess whether these websites have an impact on consumers' attitudes toward Internet advertising itself. The results show that most of the respondents state that the website has a positive impact on the recall of brands seen on the Internet that leading to improving their views of the brand. Besides, it reveals that consumers who feel that websites improving their perceptions of brands find more advantages in Internet advertising but they perceive more disadvantages as well. Finally, consumers highly favored advertising in other media, such as TV and magazines. Gefen and Heart (2006) explore whether definitions of trust beliefs as conceptualized and verified in the US apply in Palestine which differs markedly in individualism, uncertainty avoidance, and power distance. The results of cross-validating the scale of trust and its antecedents in both cultures generally support the proposition that trust beliefs apply across cultures, and maybe a relatively unvarying aspect of E-commerce. However, as expected, the effects of predictability and familiarity on trust beliefs may differ across national cultures. Lee et al. (2001) examine the factors affecting E-commerce transactions, namely, perceived ease of use, perceived usefulness, perceived risk with products/services, and perceived risk by applying the structural equation modeling technique. The results report that online shopping is significantly affected by perceived usefulness, perceived risk, and perceived risk with products/services. Baig, Raz, and Farooq (2011) conduct a cross-cultural study that aims to analyze the pattern of E-commerce adoption from a consumer perspective and the factors that have a greater influence on the adoption of E-commerce, as a comparative study between Sweden and Pakistan. The results show that factors of trust on online sellers, national culture, the infrastructure involved in the overall E-commerce activities, and

the education level of consumers have a significant impact on the adoption of E-commerce. In addition, the national culture whereby the propensity to trust the online seller and risk-taking is influenced by the different cultural orientations of consumers. Swedish culture appears to be more adaptive towards E-commerce than Pakistani culture. Swedish customers exhibit more trust in suppliers of online services and products. Finally, insufficient infrastructure and low education level are also the main hurdles that refrain most of the consumers in Pakistan to make online purchases.

Jusoh and Ling (2012) examine the effect of product perception, customers service, and consumers' risk on consumers' attitudes toward online shopping. The results report that there is a difference in attitude towards online shopping among income group. However, there is no difference in attitude towards online shopping among age and occupation groups. AlGhamdi, Nguyen, and Jones (2013) investigate the nature of E-commerce in Saudi Arabia and the challenges and strengths of Business to Customers (B2C) E-commerce as well as they review the literature identifying the factors influencing the adoption and diffusion of B2C E-commerce. They find that the Saudi Government does not support E-commerce and the relevant involvement by both customers and retailers. Akbar and James (2014) examine the main factors affecting online shopping. They also investigate how socio-demographic (age, income, and occupation), a pattern of online buying (types of goods, E-commerce experience and hours use on the internet), and purchase perception affect online shopping. The results report that search engines have a moderate relationship to receptivity to online shopping. Online shopping malls have a moderation relationship to receptivity to online shopping, and auction websites have a strong relationship to receptivity to online shopping.

In a recent study, Arora and Rahul (2018) examine the effect of perceived risk on E-commerce and online shopping for a sample of 508 Indian women. Structural equation modeling is used for data analysis. As a tool of study, an online questionnaire is structured and distributed to obtain the data from respondents. The results of the study report that online shopping is insignificantly affected by perceived risk while security risk has a significant effect on online shopping. In another recent study, Aldaej (2019) explores the main factors that limit online shopping for a sample of Saudi women by using a qualitative method based on structured interviews. The results of the study show that E-commerce for Saudi women is affected by 13 factors which are then classified into 6 groups, namely: 1) products-related factors, 2) logistics-related factors, 3) customer service-related factors, 4) payment-related factors, 5) technology-related factors, and 6) culture-related factors.

In a more recent study, Evelina et al. (2020) determine the influence of utilitarian value, hedonic value, social value, and perceived risk on E-commerce customer satisfaction in Indonesia. An online survey is used for data collection. The results report that utilitarian value, hedonic value, and perceived risk significantly influence customer satisfaction. However, social value does not have a significant effect on customer satisfaction. In another more

recent study, Salem and Nor (2020) explore the effect of COVID-19 on consumers' behavior in Saudi Arabia by identifying 10 factors, namely: perceived usefulness (PU), perceived ease of use (PEOU), subjective norms (SN), perceived behavioral control (PBC), perceived lack of alternatives, perceived risk, perceived punishable infractions, risk-taking propensity, perceived external pressure, and government support. Online social media is used for gathering data by employing the snowball sampling technique. One hundred and ninety (190) responses are used in their study for data analysis. The results show that the consumers' intention to use E-commerce during the pandemic is significantly affected by PU, risk-taking propensity, PBC, perceived lack of alternatives, and government support. On the other hand, the consumers' intention to use E-commerce during the pandemic does not affected by PEOU, SN, perceived external pressure, perceived risk, and perceived punishable infractions exerted. In a most recent study, Tokar, Jensen, and Williams (2021) prepare a study concerning guidance to the seen costs and unseen benefits of E-commerce. The results show that the negative effects of E-commerce are easy to be seen and are often to be noted in the popular press. They also consider that packaging and waste, traffic and emissions, and energy and resource consumption are all costs of E-commerce. The study recommends that policymakers should pay attention and be careful before developing and adopting policies that could alter this shift and limit innovation.

Some previous studies have examined the effect of the websites on the attitudes of customers toward E-commerce (Al-Alak & Al-Saed, 2006), while others have focused on the effect of the trust on sellers and cultures on E-commerce (Gefen & Heart, 2006; Baig et al., 2011; Aldaej, 2019). On the other hand, some studies have examined the effect of demographic characteristics (age, gender, job) of respondents on online shopping (Jusoh & Ling, 2012; Akbar & James, 2014). Finally, some studies have examined the effect of the COVID-19 pandemic on E-commerce (Salem & Nor, 2020). This study is similar to the study by Lee et al. (2001) and the study by Salem and Nor (2020) in 3 independent variables (perceived ease of use, perceived usefulness, and perceived risk with product/services), however, this research is based on 5 independent variables that are not all included in the previous studies as well as based on 5 dependent variables, so we use 5 multiple regression models, and each model represents the different dependent variable. This study also takes into account the effect of age, gender, and occupation on E-commerce, while some studies are based on only females (Aldaej, 2019). Furthermore, this study is the first in Jordan that examines the impact of perceived risk resources coming from the characteristics of websites on limiting E-commerce transactions by using a different approach in identifying the factors of risks from direct observations of customers when using E-commerce, when they transact by E-commerce. This study also examines the effect of risk sources on limiting E-commerce in Jordan.

3. RESEARCH METHODOLOGY

3.1. Population and sample

The population of the study is composed of all members who work in 25 insurance companies in Jordan in May 2016. The sample consists of the officials of 5 insurance companies (Arab insurance, Middle East, Arab orient, Jordan French insurance, Arab assurance companies), which are selected randomly from 25 insurance companies. The sample size is contained from 84 respondents (58 male and 26 female), reflects the retained valid questionnaires from the 220 questionnaires distributed by hand to the respondents.

3.2. Tools of study

A questionnaire of 30 items on a 5-level Likert scale applied on website characteristics part which is developed for determining the factors limiting E-commerce in Jordan trading according to the usage of the commonly used E-commerce webs (Amazon, eBay, Alibaba, and others). These items are collected from published documents of study tools in the same topic at the University of Minnesota conducted by Lee et al. (2001). Multiple linear regression analysis is used to test the hypotheses of the study. T-test is used for independent samples to examine the difference between two unrelated groups. One-way ANOVA is used to study the difference between 3 or more unrelated groups (Pedhazur, 1983). Scheffe's procedure is used when ANOVA shows significant differences between means, it is used to conduct multiple comparisons of groups' means in order to identify which group's mean is significantly different from others (Gonzalez, 2019).

3.3. Variables definition

The demographic variables that used in this study are *gender, age,* and *position.*

The dependent variables are *E-commerce transaction* that includes the *amount of online purchasing* in Jordanian Dinar (JOD), the *delay delivery time* (days), the *amount of money lost* (JOD), the *frequency of attaining different products* (numbers), and the *transaction loss* (JOD).

The independent variables are *website characteristics* as sources of risk in dealing with E-commerce. It is the estimated scores of the sample respondents to the questionnaire items: *perceived ease of use, perceived usefulness, perceived risk with products/services, perceived risk in the context of transaction*, and *perceived service quality.*

3.4. Model specification

Some previous studies used different statistical techniques such as structural equations modeling (Lee et al., 2001; Arora & Rahul, 2018), while others used structured interviews (Aldaej, 2019). This study applies descriptive research design in exploring the factors of risk resources that limiting the application of E-commerce transactions and exploring the effect of demographic variables (*gender, age,* and *position of customer*). It also applies the correlated designs in extracting

the prediction coefficients between the dependent variable (*E-commerce transactions*) and the independent variables (*perceived ease of use, perceived usefulness, perceived risk with products/services,* and *perceived service quality*). Furthermore, this study is based on the ordinary least squares multiple regression models, generally, the dependent variable (E-commerce transaction) is represented by 5 variables, namely: the *amount of online purchasing*, the *delay delivery time*, the *amount of money lost*, the *frequency of attaining different product*, and the *transaction loss*. Accordingly, 5 regression models are used. Firstly, we regress the amount of online purchasing on perceived ease of use, perceived usefulness, perceived risk with products/services and perceived services quality; secondly, we regress delay delivery time on perceived ease of use, perceived usefulness, perceived risk with products/services and perceived services quality, thirdly; we regress the amount of money lost on perceived ease of use, perceived usefulness, perceived risk with products/services and perceived services quality, fourthly, we regress the frequency of attaining different product on perceived ease of use, perceived usefulness, perceived risk with products/services and perceived services quality, and finally, we regress the transaction loss on perceived ease of use, perceived usefulness, perceived risk with products/services and perceived services quality to answer the question of this study, and to reject or accept the null hypotheses. Therefore, the model of this study can be formulated as:

$$ECT = B_0 + B_1PEU + B_2PU + B_3PRP + B_4PSQ + E \quad (1)$$

where, *ECT* is *E-commerce transaction*; B_0 is constant (intercept); *PEU* is the *perceived ease of use*; *PU* is the *perceived usefulness*; *PRP* is the *perceived risk with products/services*; *PSQ* is the *perceived service quality*; *Bs* is regression coefficients of the independent variable; *E* is random error.

4. RESULTS AND DISCUSSION

This section will test the formulated hypotheses and identify whether to reject or not reject the null hypotheses as well as discusses the results.

4.1. Transaction in E-commerce

Table 1 shows that the total amount of online purchasing paid by the individuals is 39472 JOD while the total number of transactions is 114 made by the respondents. It can be concluded that every respondent paid (39472/84) 470 JOD ≈ 500JOD a year. This amount of money is reasonable where the GDP *per capita* in Jordan is 5174\$ (IMF, 2016). It also shows that the most websites used in E-commerce by the sample members is the other websites (52 transactions) with an amount of 26772 JOD paid for those transactions by the users of other websites. The lower website used in E-commerce by the sample numbers is the Alibaba website where the number of transactions is 12 transactions and the amount of purchasing payments for them is 3000 JOD. Also, it seems from Table 1 there are 74 cases of delay, the total sum of delay was 624 days. The highest delay cases (38) are

found in other websites with the total sum of delays of 374 days, where the lowest transactions equal to 6 done by the Alibaba website with a total sum equals to 46 days. It also shows that the total amount of money lost in email transactions (16 transactions) is 198 JOD. The highest total sum of the amount lost is 72 JOD done by eBay with

6 transactions by sample respondents, where the lowest is 22 JOD happened with 2 cases in Alibaba. The total cases transaction loss happens with 34 members in 22 transactions. The highest total sum of transaction loss is 14 done by eBay with 8 transactions by a sample member, where the lowest total sum is 2 happened with 2 cases in Amazon.

Table 1. Frequency, a sum of E-commerce transactions by websites

Website	Amazon		eBay		Alibaba		Others		Total	
E-commerce transaction	*No.*	*Sum*	*No.*	*Sum*	*No.*	*Sum*	*No.*	*Sum*	*No.*	*Sum*
Amount of online purchasing (JOD)	22	2680	28	7020	12	3000	52	26772	114	39472
Delay time in delivery (days)	12	52	18	152	6	46	38	374	74	624
Amount of money lost (JOD)	2	60	6	72	2	22	6	44	16	198
Frequency of attaining different product (numbers)	6	12	6	24	2	100	18	54	32	190
Transaction loss	2	2	8	14	2	6	10	12	22	34

Table 2 shows sum of squares (SS), mean squares (MS), and F-test of E-commerce transactions according to websites as a source of variation (SV). The distribution of the amounts in the above Table 1 is not uniform, where it seems from Table 2 that

the websites means differ significantly (sig ≤ 0.05) on the *frequency of attaining different product*, where F-value = 3.06 and on the *amount of money lost*, where F-value = 10.62.

Table 2. Sum of squares, mean squares and F-test of E-commerce transaction according to websites as a source of variation

E-commerce transaction	SV	SS	d.f	MS	F	Sig.
Amount of online purchasing (JOD)	Between groups	2952941	3	984313.79	1.96	0.12
	Within groups	55259504	110	502359.13		
	Total	58212445	113			
Frequency of transactions	Between groups	2089.435	3	696.48	3.06	0.03
	Within groups	25058	110	227.80		
	Total	27147.44	113			
Amount of money lost (JOD)	Between groups	778.417	3	259.47	10.62	0.00
	Within groups	293.333	12	24.44		
	Total	1071.75	15			

Table 3 shows the means, standard deviation of E-commerce transactions by gender groups, and mean difference with T-test value. It indicates that the difference in the mean of the amount of online purchasing between males and females of the study sample is 47.88 (360.53-312.65), which is insignificant at $p \leq 0.05$, where T-value = 0.33. It is clear that the difference in mean of frequency of transactions between males and females of the study sample is 0.93 (7.88-6.94), which is also insignificant at $p \leq 0.05$, where T-value = 0.29.

According to the first hypothesis (*H1*) of the study which handled the effect of gender on E-commerce transactions, it is shown from Table 3 that there are no statistically significant differences at $p \leq 0.05$ of gender on any of the E-commerce transaction components the *amount of online purchasing* and the *frequency of transactions* accordingly, we cannot reject the null hypothesis $H1_0$: There are no significant differences (at $\alpha \leq 0.05$) of gender on the E-commerce transactions.

Table 3. Means, standard deviation of E-commerce transactions by gender group, and mean difference with T-test value

E-commerce transaction	Gender	No.	Mean	S.D.	T	d.f	p	Mean difference
Amount of online purchasing (JOD)	Male	80	360.53	827.19	0.33	112	0.75	47.88
	Female	34	312.65	352.57				
Frequency of transactions	Male	80	7.88	17.27	0.29	112	0.77	0.93
	Female	34	6.94	10.38				

Table 4 shows the sum of squares (SS), mean squares (MS), degrees of freedom (d.f), and F-test according to age groups as a source of variation (SV) on E-commerce transactions. According to the hypothesis (*H2*) talking about the effect of client age on E-commerce transactions components (the *amount of online purchasing* and the *frequency of transactions*); it is found that the means of E-commerce transactions differ significantly at the amount of online purchasing at $p \leq 0.05$ and the frequency of transactions done by members of

the study. The age group means of the amount of online purchasing are not equal, where F-value = 8.99, which is significant at $p \leq 0.05$. It is obvious that the age group means of the frequency of transactions are not equal as well, where F-value = 3.39, which is significant at $p \leq 0.05$. Accordingly, we reject the null hypothesis $H2_0$: There are no statistically significant differences (at $\alpha \leq 0.05$) of age on E-commerce transactions. This result disagrees with what Jusoh and Ling (2012) found in their study.

Table 4. Sum of squares, mean squares, degrees of freedom, and F-test according to age groups as a source of variation on E-commerce transactions

E-commerce transaction	Group	No.	Mean	S.D.	VS	SS	d.f	MS	F	Sig.
Amount of online purchasing (JOD)	18–27	14	112.14	125.45	Between	8117053	2	4058526	8.99	0
	28–37	76	227.79	251.11	Within	50095392	111	451309.8		
	38–47	24	857.92	1401.7	Total	58212445	113			
Frequency of transactions	18–27	14	4.14	4.055	Between	1560.391	2	780.195	3.39	0.04
	28–37	76	6	10.331	Within	25587.05	111	230.514		
	38–47	24	14.67	27.481	Total	27147.44	113			

Table 5 shows the mean differences between age groups (Scheffe's procedure) that the mean differences of the *amount of online purchasing* are between 18–27 age group, and 38–47 age group, where the difference between their means is 745.774 JOD, which is significant at $p \leq 0.05$. It also shows that the mean differences of the *amount of online purchasing* are between 28–37 age group, and 38–47 age group is not neglected, where the mean difference between them is 630.127 JOD, which is significant at $p \leq 0.05$.

Table 5. Mean differences between age groups (Scheffe's procedure)

E-commerce transaction	(I) age	(J) age	Mean difference (I–J)
Amount of online purchasing (JOD)	18–27	28–37	-115.65
		38–47	-745.77*
	28–37	38–47	-630.13*
Frequency of transactions	18–27	28–37	-1.86
		38–47	-10.52
	28–37	38–47	-8.67

*Note: *the mean difference is significant at $p \leq 0.05$ level.*

Table 6 shows the sum of squares (SS), mean squares (MS), degrees of freedom (d.f), and F-test according to position groups as a source of variation (SV) on E-commerce transactions. Table 6 also shows the means of position groups on the amount of online purchasing are equal, where F-value = 2.75, which is significant at $p \leq 0.05$. It is obvious that the position groups means of the frequency of transactions are not equal, where F-value = 3.06, which is significant at $p \leq 0.05$. According to the hypothesis (*H3*) talking about the effect of client position on E-commerce transactions components (the *amount of online purchasing* and the *frequency of transactions*), it seems that the *frequency of transactions* means differs significantly at $p \leq 0.05$. Accordingly, we rejected the null hypothesis $H3_o$: There are no statistically significant differences (at $\alpha \leq 0.05$) of position on the E-commerce transactions. This result is inconsistent with the results of Jusoh and Ling (2012) who found the insignificant difference in attitude towards online shopping among occupation groups.

Table 6. Sum of squares, mean squares, degrees of freedom, and F-test according to position groups as a source of variation on E-commerce transactions

E-commerce transactions	Type	No.	Mean	S.D.	SV	SS	d.f	MS	F	Sig.
Amount of online purchasing (JOD)	Managers	8	587.5	873.72	Between groups	2748875	2	1374437	2.75	0.07
	Supervisors	36	531.11	1145.84	Within groups	55463570	111	499671.8		
	Officials	70	223.6	245.75	Total	58212445	113			
	Total	114	346.25	717.74						
Frequency of transactions	Managers	8	11.75	12.52	Between groups	1419.18	2	709.592	3.06	0.05
	Supervisors	36	12.11	24.24	Within groups	25728.26	111	231.786		
	Officials	70	4.8	7.68	Total	27147.44	113			
	Total	114	7.6	15.5						

Table 7 shows mean differences between position groups and the mean differences of the *frequency of transactions* that occurred between supervisors' position group, and officials' position group is not neglected, where the mean difference between them was 7.31, which is significant at the level of $p \leq 0.05$.

Table 7. Mean differences between position groups (Scheffe's procedure)

Dependent variable	(I) position	(J) position	Mean difference (I–J)
Amount of online purchasing (JOD)	Managers	Supervisors	56.39
		Officials	363.90
	Supervisors	Officials	307.51
Frequency of transactions	Managers	Supervisors	-0.36
		Officials	6.95
	Supervisors	Officials	7.31*

4.2. Characteristics of websites

According to the level of estimations done by the members of the sample characteristics of the used websites in E-commerce, Table 8 shows the estimated means, standard deviations of the websites characteristics as factors of the threats of the risk. It also shows that the Amazon website has earned the highest degrees of estimation in all dimensions of the websites characteristics, where the means of *perceived ease of use* (dim 1), *perceived usefulness* (dim 2), *perceived risk with products/services* (dim 3), *perceived risk in the context of transaction* (dim 4), and *perceived service quality* (dim 5) are 4.27, 4.29, 3.82, 4.29, and 4.18, respectively. These values are high ($\geq 3.82/5 = 0.78$) as shown in Table 2. The highest characteristic of the Amazon website is the *perceived usefulness* (dim 2) and the *perceived risk in the context of transaction* (dim 4), where their means as shown in Table 8 is 4.29, while the lowest characteristic of the Amazon website is the *perceived risk with products/services* (dim 3), where its mean is 3.82, as shown in Table 8. The highest perceived characteristic of the eBay website is *perceived ease of use* (dim 1) with mean = 3.93 as shown in Table 8, while the lowest characteristic of eBay website is the *perceived risk with products/services* (dim 3), its mean is 3.35 as shown in Table 8. It can also be seen that the higher characteristic of the Alibaba website is the dimension of the *perceived ease of use* (dim 1), where its mean is 3.93. The lowest characteristic of

the Alibaba website is the *perceived risk with products/services* (dim 3), where its mean is 3.60. Table 8 also indicates that the highest characteristic of other websites used in E-commerce was the *perceived ease of use* (dim 1) with mean = 3.76. The lowest characteristic of other websites dictated from Table 8 is the *perceived risk in the context of transaction* (dim 4), where its mean is 3.32. Returning to Table 8 it is clear that the *perceived risk with products/services* means of the Amazon website of 3.82, and the eBay website of 3.60 is greater than the Alibaba website of 3.35 and other websites of 3.39. In the same manner, it is shown that the *perceived risk in the context of transaction* mean of the Amazon website of 4.29 and the eBay website of 3.89 are greater than the Alibaba website of 3.52 and other websites of 3.32. The means of the *perceived service quality* of websites for the Amazon website of 4.18 and the eBay website of 3.76 are greater than the Alibaba website of 3.40 and other websites of 3.61 while the sample members gave it the high estimations of characteristics as shown in Table 8, this result is opposing the universal trend of using Amazon in B2C sort of E-commerce. On the other hand, a thorough study must be done on the conflict between what is perceived or believed about characteristics of websites and what is experienced according to high perceived estimation as in the case of the Amazon website in E-commerce. In general, all means were high, which indicates the members of the sample were confident and trustful with the websites they used.

Table 8. Means, standard deviations of the websites characteristics as factors

Website	Amazon		eBay		Alibaba		Others		Total	
Characteristics dimensions	Mean	S.D	Mean	S.D	Mean	S.D	Mean	S.D	Mean	S.D
Perceived ease of use (dim 1)	4.27	0.76	3.93	0.81	3.93	1.01	3.76	0.92	3.94	0.88
Perceived usefulness (dim 2)	4.29	0.86	3.77	0.96	3.85	1.13	3.74	0.85	3.88	0.94
Perceived risk with products/services(dim 3)	3.82	1.06	3.60	0.78	3.35	1.04	3.39	0.98	3.53	0.97
Perceived risk in the context of transaction (dim 4)	4.29	0.88	3.89	0.95	3.52	1.13	3.32	1.28	3.71	1.15
Perceived service quality (dim 5)	4.18	0.68	3.76	0.73	3.40	1.03	3.61	0.75	3.74	0.81

Table 9 shows that the distribution of the amounts in Table 8 is not uniform, where it seems from Table 9 that the website means differs significantly at a significant level of $p \leq 0.05$ on the dimension of the *perceived risk in the context of*

transaction, where F-value = 5.44, and on the *perceived service quality* dimension, where F-value = 4.93. In addition, the difference in means of all dimension estimated scores (total mean) is also significant where F-value = 4.47.

Table 9. Sum of squares, mean square, degrees of freedom, and F-test according to the website as a source of variation on the characteristics dimensions of the websites (ANOVA)

Characteristics dimensions	SV	SS	d.f	MS	F	Sig.
Perceived ease of use	Between	4.96	3	1.65	2.18	0.09
	Within	103.17	136	0.76		
	Total	108.13	139			
Perceived usefulness	Between	6.45	3	2.15	2.49	0.06
	Within	118.93	138	0.86		
	Total	125.38	141			
Perceived risk with products/services	Between	4.23	3	1.41	1.53	0.21
	Within	123.44	134	0.92		
	Total	127.67	137			
Perceived risk in the context of transaction	Between	19.75	3.	6.59	5.44	0.00
	Within	159.76	132	1.21		
	Total	179.51	135.			
Perceived service quality	Between	8.93	3	2.98	4.93	0.00
	Within	82.13	136.	0.60		
	Total	91.06	139.			

Table 10 shows means, a standard deviation of the characteristics dimensions of the websites by the gender groups, and mean difference with T-value. Female members have given high estimations for two characteristics dimensions: the *perceived ease of use*, where the mean of female estimations is 4.22 and male mean is 3.85 where the difference between them is 0.37. This difference is significant at where T-value is 2.5. It also indicates that female members have given high estimations for two characteristics dimensions: the *perceived usefulness*, where the mean of female estimations is 4.12, and the male mean is 3.81, where the difference between them is 0.31. This difference is significant where T-value is 2.00. According to the hypothesis (*H4*) talking about the effect of gender on perceiving the characteristics of the used websites in E-commerce as a source of risk when using E-commerce, it is obvious that two dimensions have significant differences due to gender variable, those dimensions are the *perceived ease of use* where T-value = -2.52, this result rejected the null hypothesis $H4_0$ which states that there are no

statistically significant differences of respondent gender on the scores of the *perceived ease of use* factor and the *perceived usefulness* of the websites. There are statistically significant differences of respondent gender where T-value = -2.00, this result also rejected the null hypothesis $H5_0$ which states that there are no statistically significant differences of respondent gender on the scores of the *perceived usefulness* factor. The evidence from the results of Table 10 reinforces the acceptance of the following null hypotheses: $H6_0$ which states that there are no statistically significant differences of respondent gender on the scores of the *perceived risk with products/services* where T-value of the *perceived risk with products/services* = -0.49 and $H7_0$ which states that there are no statistically significant differences of respondent gender on the scores of the *perceived risk in the context of transaction* = -0.54 as well as $H8_0$ which states that there is no statistical significance of respondent gender on the scores of the *perceived service quality* where T-value of service quality = -0.36.

Table 10. Means, standard deviation of the characteristics dimensions of the websites by the gender groups, and mean difference with T-value

Characteristics dimensions	Gender	No.	Mean	S.D.	T	d.f	Sig.	Mean difference
Perceived ease of use	Male	106	3.85	0.93	-2.52	77.26	0.01	-0.37
	Female	34	4.22	0.67				
Perceived usefulness	Male	108	3.81	1.00	-2.00	78.10	0.05	-0.31
	Female	34	4.12	0.71				
Perceived risk with products/services	Male	104	3.51	1.02	-0.49	136	0.63	-0.09
	Female	34	3.60	0.78				
Perceived risk in the context of transaction	Male	102	3.68	1.19	-0.54	134	0.59	-0.12
	Female	34	3.80	1.04				
Perceived service quality	Male	106	3.73	0.86	-0.36	138	0.72	-0.06
	Female	34	3.79	0.65				

Table 11 shows the sum of squares (SS), mean squares (MS), degrees of freedom (d.f), and F-test according to the age groups as a source of variation (SV) on the characteristics dimensions of the websites. According to the hypothesis (*H9*) talking about the effect of age of the respondent on estimating the characteristics of the used websites in E-commerce as a source of risk when using E-commerce, it is obvious from Table 11 that 3 dimensions are statistically significantly different by age, those dimensions are the *perceived ease of use*, the *perceived risk in the context of transaction*, and the *perceived service quality* of the websites. Table 11 also shows that the age groups means of the *perceived ease of use* dimension are importantly different, where F-value = 4.49 which is significant at $p \leq 0.05$. This result rejected the null hypothesis $H9_0$ which states that there are no statistically significant differences of respondent age on the scores of the *perceived ease of use* factor. The age groups means of the *perceived risk in the context of*

transaction dimension are also importantly different, where F-value = 13.29, which is significant. This result rejected the null hypothesis $H12_0$ which states that there are no statistically significant differences of respondent age on the scores of the *perceived risk in the context of transaction*. The age groups means of the *perceived service quality* dimension are importantly different, where F-value = 4.99 and on total where F-value = 7.871. This result rejected the null hypothesis $H13_0$ which states that there are no statistically significant differences of respondent age on the scores of the *perceived service quality*. The evidence from the results of Table 11 reinforces the acceptance of the following null hypotheses: $H10_0$ which states that there are no statistically significant differences of respondent age on the scores of the *perceived usefulness*, where F-value = 2.77 and $H11_0$ states that there are no statistically significant differences of respondent age on the scores of the *perceived risk with products/services*, where F-value = 0.74.

Table 11. Sum of squares, mean square, degrees of freedom, and F-test according to age groups as a source of variation on the characteristics dimensions of the websites

Characteristics dimensions	Age	No.	Mean	SD	VS	SS	d.f	MS	F	Sig.
Perceived ease of use	18–27	14	3.71	0.88	Between	6.65	2	3.33	4.49	0.01
	28–37	92	4.09	0.78	Within	101.48	137	0.74		
	38–47	34	3.61	1.04	Total	108.13	139			
	Total	140	3.94	0.88						
Perceived usefulness	18–27	14	3.67	1.12	Between	4.80	2	2.40	2.77	0.07
	28–37	90	4.02	0.88	Within	120.58	139	0.87		
	38–47	38	3.63	0.98	Total	125.38	141			
	Total	142	3.88	0.94						
Perceived risk with products/services	18–27	14	3.29	1.16	Between	1.39	2	0.69	0.74	0.48
	28–37	88	3.60	0.81	Within	126.29	135	0.94		
	38–47	36	3.47	1.21	Total	127.67	137			
	Total	138	3.53	0.97						
Perceived risk in the context of transaction	18–27	14	3.86	0.96	Between	29.90	2	14.95	13.29	0.00
	28–37	88	4.00	1.08	Within	149.61	133	1.13		
	38–47	34	2.90	1.06	Total	179.51	135			
	Total	136	3.71	1.15						
Perceived service quality	18–27	14	3.21	0.56	Between	6.19	2	3.09	4.99	0.01
	28–37	88	3.88	0.66	Within	84.87	137	0.62		
	38–47	38	3.62	1.07	Total	91.06	139			
	Total	140	3.74	0.81						

Table 12 shows the mean differences between the age groups on the characteristics dimensions of the websites (Scheffe's procedure) as shown from Table 11. It is also be seen from Table 12 that the significant mean differences on the *perceived ease of use* between the age group 28–37 and the age group 38–47 of 0.49 is significant. Table 12 also shows that the significant mean differences on the *perceived risk in the context of transaction* dimension between 18–27 age group and 38–47 age of 0.96 is significant and also between 28–37 group and 38–47 age group of 1.10 is significant. It also shows that the significant mean differences on the *perceived service quality* dimension between 18–27 age group and 28–37 age group of 0.67 are significant. The significant mean differences on total between 28–37 age group and 38–47 age group of 0.51 are significant.

Table 12. Mean differences between the age groups on the characteristics dimensions of the websites (Scheffe's procedure)

Dependent variables	(I) age	(J) age	Mean difference (I–J)
Perceived ease of use	18–27	28–37	-0.38
		38–47	0.11
	28–37	38–47	0.49*
Perceived usefulness	18–27	28–37	-0.36
		38–47	0.04
	28–37	38–47	0.39
Perceived risk with products/services	18–27	28–37	-0.31
		38–47	-0.18
	28–37	38–47	0.13
Perceived risk in the context of transaction	18–27	28–37	-0.14
		38–47	0.96*
	28–37	38–47	1.1 0*
Perceived service quality	18–27	28–37	-0.67*
		38–47	-0.40
	28–37	38–47	0.26

*Note: * the mean difference is significant at $p \leq 0.05$ level.*

Table 13 shows the sum of squares (SS), mean squares (MS), degrees of freedom (d.f), and F-test according to the position groups as a source of variation (SV) on characteristics dimensions of websites. According to the hypothesis (*H17*) talking about the differences between the websites used in E-commerce on the characteristics dimensions due to the position of members, it seems that the characteristics dimensions means differ significantly on the *perceived risk in the context of transaction* dimension, where F-value = 4.21. This result rejected the null hypothesis $H17_0$ which states that there are no statistically significant differences of respondent position on the scores of the *perceived risk in the context of transaction.* The evidence from results in Table 13 reinforce the acceptance of the following null hypotheses $H14_0$ which states that there are no statistically significant differences of the respondent position on the scores of the *perceived ease of use*, where F-value = 1.50, $H15_0$ which states that there are no statistically significant differences of the respondent position on the scores of the *perceived usefulness*, where F-value = 1, $H16_0$ which states that there are no statistically significant differences of respondent position on the scores of the *perceived risk with products/services*, where F-value = 1.76 and $H18_0$ which states that there are no statistically significant differences of the respondent position on the scores of the *perceived service quality* F-value = 1.03.

Table 13. Sum of squares, mean square, degrees of freedom, and F-test according to the position groups as a source of variation on the characteristics dimensions of the websites

Characteristics dimensions	Position	No.	Mean	SD	SV	SS	d.f	MS	F	p
Perceived ease of use	Managers	8	3.42	0.85	Between	2.311	2	1.156	1.50	0.23
	Supervisors	56	3.98	1.00	Within	105.81	137	0.772		
	Officials	76	3.96	0.78	Total	108.13	139			
Perceived usefulness	Managers	12	3.83	1.11	Between	1.778	2	2	1	0.37
	Supervisors	54	4.02	1.05	Within	123.599	139	139		
	Officials	76	3.79	0.83	Total	125.377	141	141		
Perceived risk with products/services	Managers	10	3.80	1.11	Between	3.236	2	2	1.76	0.18
	Supervisors	52	3.68	1.05	Within	124.437	135	135		
	Officials	76	3.40	0.87	Total	127.673	137	137		
Perceived risk in the context of transaction	Managers	8	3.58	1.68	Between	10.681	2	2	4.21	0.02
	Supervisors	52	3.37	1.23	Within	168.832	133	133		
	Officials	76	3.96	0.98	Total	179.513	135	135		
Perceived service quality	Managers	12	3.46	0.79	Between	1.35	2	2	1.03	0.36
	Supervisors	52	3.83	1.02	Within	89.712	137	137		
	Officials	76	3.73	0.63	Total	91.062	139	139		

*Notes: ** Correlation is significant at the 0.01 level (2-tailed). The conceptual variables included in correlation analysis.*
Source: Authors' calculations.

Table 14 shows the mean differences between the position groups on the characteristics dimensions of the websites (Scheffe's procedure). To compare between means Scheffe's procedure results are summarized in Table 14. From Table 14 it can be seen that the mean differences of the *perceived risk in the context of transaction* occurred between supervisors and officials position group, the difference is -0.58, which is significant at $p \leq 0.05$.

Table 14. Mean differences between the position groups on the characteristics dimensions of the websites (Scheffe's procedure)

Characteristics dimensions	(I) position	(J) position	Mean difference (I–J)
Perceived ease of use	Managers	Supervisors	-0.56
	Managers	Officials	-0.55
	Supervisors	Supervisors	0.56
Perceived usefulness	Managers	Supervisors	-0.19
		Officials	0.04
	Supervisors	Officials	0.24
Perceived risk with products/services	Managers	Supervisors	0.12
		Officials	0.40
	Supervisors	Officials	0.28
Perceived risk in the context of transaction	Managers	Supervisors	0.21
		Officials	-0.37
	Supervisors	Officials	-0.58*
Perceived service quality	Managers	Supervisors	-0.37
		Officials	-0.27
	Supervisors	Officials	0.10

*Note: * the mean difference is significant at the 0.05 level.*

4.3. The relationship between the website characteristics and E-commerce transaction

According to the hypothesis (*H19*) which handles the prediction effect of the relationship between the website characteristics as predictors and E-commerce transactional (the *purchasing amount* (*PA*), the *frequency of purchasing* (*FP*), the *delay delivery* (*DD*), the *loss of money* (*LM*), the *frequency of different product* (*FDP*), and the *transaction loss* (*TL*)) as the criteria variables, Tables 15 through 20 show the raw regression coefficients (*B*) and standardized regression coefficients (*Beta*) for prediction of the transaction behaviors in E-commerce as the criteria variables from the characteristics of the perceived resource as risk resources from used websites in E-commerce as the predictive variables.

It seems from Table 15 that the *B* coefficient is significant only with the predictor variable *perceived risk with products/services* to predict the purchasing amount, where $B = -195.95$ and the value of T-value is -2.79; which is significant at $p \leq 0.05$. Therefore, the prediction equation is:

$$PA = 1390.67 - 195.95PRT \qquad (2)$$

So, the results reject the null hypothesis $H19_0$ which states that there is no significant relationship (at $\alpha \leq 0.05$) between the predictor variables (the *perceived ease of use*, the *perceived usefulness*, the *perceived risk with products/services*, and the *perceived service quality*) and the frequency of purchasing and the amount of transaction.

Table 15. B, Beta coefficients of the predictive variables on PA

	B	Std. Error	Beta	T	Sig.
Constant	1390.67	372.49		3.73	0
Perceived ease of use (PEU)	-63.17	103.28	-0.08	-0.61	0.54
Perceived usefulness (PU)	-12.39	121.11	-0.02	-0.10	0.92
Perceived risk with products/services (PRP)	-68.71	86.97	-0.09	-0.79	0.43
Perceived risk in the context of transaction (PRT)	-195.95	70.25	-0.31	-2.79	0.01
Perceived service quality (PCQ)	63.80	154.16	0.06	0.41	0.68

Table 16 shows that there is no significant coefficient for any predictor on the *frequency of purchasing* (*FP*), so it can be considered as constant. This result accepts the null hypothesis $H19_0$ which states that there is no significant prediction of relationship at $\alpha \leq 0.05$ between the predictor variables (*PEU*, *PU*, *PRP*, and *PCQ*) and *FP*.

Table 16. B, Beta coefficients of the predictive variables on FP

	B	*Std. Error*	*Beta*	*T*	*Sig.*
Constant	-17.38	8.11		-2.14	0.03
Perceived ease of use (PEU)	1.29	2.25	0.07	0.57	0.57
Perceived usefulness (PU)	3.58	2.64	0.20	1.36	0.18
Perceived risk with products/services (PRP)	0.50	1.89	0.03	0.26	0.79
Perceived risk in the context of transaction (PRT)	-2.28	1.53	-0.17	-1.49	0.14
Perceived service quality (PCQ)	3.39	3.36	0.16	1.01	0.32

Table 17 shows 3 significant coefficients to predict the *delay of delivery* (*DD*) at $\alpha \leq 0.05$ from the following predictor variables: *PEU*, where $B = 5.11$, with T-value of 2.80, *PRP*, where $B = -3.94$, with T-value of -2.51, and *PCQ*, where $B = -5.02$, with T-value = 1.98 which are all significant at $p \leq 0.05$. So, the regression equation here is:

$$DD = 15.68 + 5.11 PEU - 3.94 PRP - 5.02 PCQ \quad (3)$$

These results have been seen in the above equation reject the null hypothesis $H19_0$ which states that there is no significant prediction of relationship (at $\alpha \leq 0.05$) between the predictor variables (*PEU*, *PU*, *PRP*, and *PCQ*) and *FP* and *DD*.

Table 17. B, Beta coefficients of the predictive variables on the delay delivery (DD)

	B	*Std. Error*	*Beta*	*T*	*Sig.*
Constant	15.68	7.31		2.15	0.04
Perceived ease of use (PEU)	5.11	1.82	0.36	2.80	0.01
Perceived usefulness (PU)	0.97	2.21	0.08	0.44	0.66
Perceived risk with products/services (PRP)	-3.94	1.57	-0.32	-2.51	0.01
Perceived risk in the context of transaction (PRT)	0.15	1.17	0.02	0.13	0.90
Perceived service quality (PCQ)	-5.02	2.54	-0.32	-1.98	0.05

Table 18 shows that there are 2 significant coefficients to predict the *loss of money* (*LM*) at $\alpha \leq 0.05$ from the following predictor variables: *PRT*, where $B = -6.43$, with a T-value of -7.01, which is significant at $\alpha \leq 0.05$ and *PCQ*, where $B = 5.59$, with T-value of -2.51 which is significant (at $\alpha \leq 0.05$).

$$LM = 4.26 - 6.43 PRT + 5.59 PCQ \quad (4)$$

These results from the above equation reject the null hypothesis $H19_0$ which states that there is no significant prediction of relationship (at $\alpha \leq 0.05$) between the predictor variables (*PEU*, *PU*, *PRP*, and *PCQ*) and *FP* and *LM*.

Table 18. B, Beta coefficients of the predictive variables on LM

	B	*Std. Error*	*Beta*	*T*	*Sig.*
Constant	4.26	5.77		0.74	0.48
Perceived ease of use (PEU)	-0.18	2.49	-0.02	-0.07	0.94
Perceived usefulness (PU)	-0.53	1.76	-0.04	-0.30	0.77
Perceived risk with products/services (PRP)	3.95	2.09	0.37	1.90	0.09
Perceived risk in the context of transaction (PRT)	-6.43	0.92	-0.61	-7.01	0.00
Perceived service quality (PCQ)	5.59	1.81	0.44	3.09	0.01

Table 19 shows that there is no significant coefficient for any predictor on the *frequency of different product* (*FDP*) variables, so it can be considered as constant. This result accepts the null hypothesis $H19_0$ which states that there is no significant relationship (at $\alpha \leq 0.05$) between the predictor variables (*PEU*, *PU*, *PRP*, and *PCQ*) and *FP*.

Table 19. B, Beta coefficients of the predictive variables on FDP

	B	*Std. Error*	*Beta*	*T*	*Sig.*
Constant	-34.09	14.76		-2.31	0.03
Perceived ease of use (PEU)	-1.87	4.36	-0.15	-0.43	0.67
Perceived usefulness (PU)	2.10	6.91	0.13	0.30	0.76
Perceived risk with products/services (PRP)	0.76	2.80	0.07	0.27	0.79
Perceived risk in the context of transaction (PRT)	3.83	2.29	0.38	1.67	0.11
Perceived service quality (PCQ)	5.45	5.08	0.32	1.07	0.29

Table 20 shows 4 significant coefficients to predict the *transaction lost* (*TL*) at $\alpha \leq 0.05$ from the following predictor variables: *PEU*, where $B = 1.66$, with T-value of 5.13 which is significant (at $\alpha \leq 0.05$), *PU*, where $B = -0.67$, with T-value of -3.15 which is significant (at $\alpha \leq 0.05$), *PRP*, where $B = -0.53$ with T-value of -2.12, which is significant (at $\alpha \leq 0.05$) and *PCQ*, where $B = -1.60$, with T-value of -4.21 which is also significant at $p \leq 0.05$.

$$TL = 8.27 + 1.66 PEU - 0.67 PU - 0.53 PRP - 1.60 PCQ \quad (5)$$

The results of equation (5) reject the null hypothesis $H19_0$ which states that there is no significant prediction of relationship (at $\alpha \leq 0.05$) between predictor variables (*PEU*, *PU*, *PRP*, and *PCQ*) and *FP* and *TL*.

Table 20. B, Beta coefficients of the predictive variables on TL

	B	Std. Error	Beta	T	Sig.
Constant	8.27	1.44		5.74	0.00
Perceived ease of use (PEU)	1.66	0.32	1.58	5.13	0.00
Perceived usefulness (PU)	-0.67	0.21	-0.48	-3.15	0.01
Perceived risk with products/services (PRP)	-0.53	0.25	-0.38	-2.12	0.05
Perceived risk in the context of transaction (PRT)	-0.50	0.27	-0.40	-1.89	0.08
Perceived service quality (PCQ)	-1.60	0.38	-0.89	-4.21	0.00

5. CONCLUSION

The number of online transactions in Jordan is very small because of the existence of some threats and risks associated with these transactions, so this study is an attempt to explore the risks that limit online transactions. To achieve the goal of this study, a sample of 114 insurance companies' employees from 5 insurance companies are chosen randomly out of 25 insurance companies listed in the Amman Stock Exchange. The sample of this study represents both males and females. A questioner is structured and distributed to the respondents in order to identify the risks that limit online transactions from the viewpoint of insurance companies' employees. The results show that the perceived ease of use, the perceived usefulness, and the perceived risk with products/services are the main effective factors for predicting transaction loss, while the delay time is significantly affected by the perceived ease of use and the perceived risk with products/services. On the other hand, the older age (38–47 years) is more attracted toward purchasing with E-commerce than the younger age groups because the older age customers may experience the benefits of E-commerce more than the younger age group customers. This result may propose studies discussing the benefits of E-commerce to the public at younger age levels. The lower positions do more email transactions than the higher positions because the respondents of lower positions are directly treated with organization customers' transactions more than the higher position groups. The results also reject the null hypothesis that the acceptance of null hypothesis between of the predictive (the perceived ease of use, the perceived usefulness, and the perceived risk with products/services, and the perceived service quality) and the criterion (E-commerce transaction) variables is expected according to the variance of perceptions of the sample respondents. The acceptance of the previous null hypothesis with the loss of money and the frequency of purchasing could result from the small data collected about it. Female respondents perceived ease of use and usefulness of using E-commerce webs more than males; this result may be related to the differences of services or products of their transactions. Thus for enhancing E-commerce usage; the Jordanian financial market should conduct programs about the characteristics of E-commerce websites and how to deal with them. Future research recommends examining the relationship between what people believe and what they do in the E-commerce process. In addition, due to the limitation of the sample size of the study, further studies may be conducted with large samples to overcome its effect on the results. We also recommend future researchers to take into consideration the effect of gender on online shopping by comparing the online shopping between males and females. This study has some limitations such as the difficulty of reaching a large number of respondents and the difficulty of obtaining some information because of its privacy.

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