

# Factors Affecting the Intention to Use e-Marketing: A case Study among Students in Jordan

Farah Hanna ZAWAIDEH

Irbid National University, Management Information System Department, e-mail: [Dr.farah.h.zawaideh@gmail.com](mailto:Dr.farah.h.zawaideh@gmail.com)

**Abstract** This study looks into the factors that impact the intention to use electronics marketing among students in Jordan. The causal factors were identified using the Technology Acceptance Model with (TRUST FACTOR). The questionnaires were used as a research instrument and were used on 221 selected students from Jordan universities. This study employed the Partial Least Squares Structural Equation Modeling (PLS-SEM) for analysis purpose. As shown by the statistics for validity assessment, the final overall model demonstrates acceptable fit of the measurement model to the data. This study found that the factors with the highest direct impact on Intention to use E-marketing was Attitude toward using e-marketing. Meanwhile, Compatibility was the factor with the highest indirect impact on Intention to use e-marketing.

**Key words** E-Marketing, Technology Acceptance Model, Trust Factor

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## 1. Introduction

Today Internet is more than a networking media; it functions as a medium of transaction for the consumers at the global market, and is the future dominant retailer. The most important element of e-retail provides a direct interactive channel with restriction in terms of time, people and place. Shopping on the Internet is more convenient and therefore, it is an alternative shopping method to the conventional shopping. On the other hand, conventional shopping has been associated with anxiety, crowdedness, traffic jam, time restriction, parking space issues and so on. In Jordan, internet is still viewed as a new medium toll between the retailers and the students as consumers. Further, for any e-retail store, their most challenging issue is on retaining students as consumer.

This study attempts to find out if students in Jordan have the readiness to embrace Internet shopping. Also, this study wants to find out the reasons why the higher learning students in Jordan, especially those enrolled in a public institution accept or reject internet shopping application. The dominant predictors that impact the intention of student to engage in online shopping in Jordan, Jordan are explored in this study. The results that this study produces could assist the local e-retail in the adjustment of their e-retailing strategies. Consequently, this study is hoped to generate applicable outcomes to the e-retail companies so that they could attract students to do their shopping online. Appearing more attractive makes the students more encouraged to shop with the e-retailer. The relevance of other beliefs in the internet usage for shopping purchase should be tested so that the reason(s) why public higher learning institution students of accept or refuse e-retail as a shopping medium.

## 2. Literature review

Following its transformation into a worldwide interconnection network for the sharing and delivery of information, internet has turned out to be a valuable instrument of marketing tool that functions as transaction platform domestically and internationally. Year 2014 witnessed the growth of retail e-commerce amounting to almost US\$840 billion and this figure surpasses the sales of US\$695 billion in the preceding year (2013) and by 2018, the amount is forecasted to rise to US\$1506 billion (A.T. Kearney, 2015). This constant increase in sales signifies large market potential of e-commerce. Internet-based

powerhouses including ebay, Alibaba, Tenement, Amazon and Groupon are examples of the business model shift of corporates to shift the model of their business from brick-and-mortar to brick-and-click. However, despite the global e-commerce boom, in 2015, Malaysia had dropped out from the 30th position in Top 30th Global Retail E-Commerce ranking (Kearney, 2013).

The behavior of consumer has changed over the decade. This has compelled retailers to explore the psychology of the virtual consumers. However, it is difficult to decode the behavior of online consumer. According to Jiang, Chen and Wang (2008) and Mukherjee and Nath (2007), such difficulty is complicated by nonexistent physical interaction during the transactions. As efforts of to understanding virtual consumers are costly, online sellers did not make further attempt to comprehend consumer behavior. Ramayah and Ignatius (2005) reported that the traditional stores are still the instinctive choice for most consumers despite the significant efforts by the government and private sectors to prosper the platform of virtual shopping. IPSOS Open Thinking Exchange (2012) reported that more than half (56%) of the respondents from 24 countries favor shopping in a traditional store in comparison to the online store (Marketing Charts, 2012). Such phenomenon is also seen in the developed countries such as the United States. In particular, it was found that out of the 63 percent of the US consumers that would survey on goods online, only half of them will actually do their purchase online (NPD Group, 2011).

As mentioned by Hofacker (2001), it is possible that the term Internet was already a familiar term several years back. The Internet is describable as the sum total of devices interconnected made possible by the Internet Protocol. It was created using computer software and since software can be programmed to do almost anything. Historically, the Internet was basically an academic network, but usage of Internet in the domain of business is expanding making it an elite network for communication between research centers no longer (Rowley, 1996). Meanwhile, E-commerce is illustrated by IBM as business to vendors, to customers, to employees, and to suppliers made possible by Intranet, Extranets and Internet. The primary medium of E-Commerce is Internet and therefore, countries that want to achieve better economy with e-commerce usage have to take in Internet and be receptive of both its advantages and disadvantages. Factors that contribute to success and failure of e-commerce are numerous. Thus, this study looks into the factors of trust that could potentially impact users' intention to engage in online transaction.

### 3. Theoretical background

This study attempts to understand what determines acceptance of users of E-marketing. This will require the use of the Technology Acceptance Model (TAM) as explained in this section:

The technology acceptance model (TAM) by Davis (1986) is a renowned model linked to technology acceptance and usage. It comprises a theoretical model that assists in the description and prediction of user behavior of information technology (Legris *et al.*, 2003). TAM is a powerful theory extension of the reasoned action (TRA) (Ajzen and Fishbein, 1980), and its usage has been proposed by Davis (1989) and Davis, Bagozzi, and Warshaw (1989) when researcher attempts to explain the acceptance or rejection of user towards information technology via TRA adaptation. Using TAM, researcher is equipped with a basis with which one traces how external variables influence belief, attitude, and intention to use. TAM posits two cognitive beliefs: perceived usefulness and perceived ease of use. TAM posits that the actual use of an individual of a technology system is directly or indirectly impacted by the individual's behavioral intentions, attitude, perceived usefulness of the system, and perceived ease of the system. This theory also suggests that external factors influence intention and the real usage by way of mediated effects on perceived usefulness and perceived ease of use.

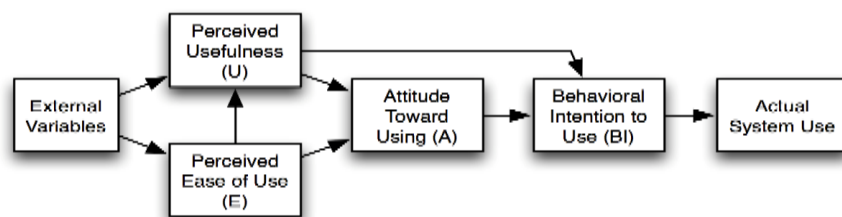


Figure 1. Depicts the original TAM (Davis, 1989)

#### 4. Research model factors

A research model grounded on Davis’s (1989) Technology Acceptance Model (TAM) with an addition of another factor is proposed in this study. It will be employed in the examination of factors that affect users’ acceptance of E-marketing in Jordan. The constructs of this model are highlighted next.

#### 5. Perceived Trust

Many studies suggest lack of trust in online businesses as the reason why many people are yet to become users of online services (Chen *et al.*, 2004) User trust is describable as secure and confident feeling about putting a reliance on a particular service. Within the setting of online services, the factor of trust significantly dictates user acceptance (Kaasinen, 2007). Moreover, Chen *et al.* (2004) reported the positive influence of the factor of trust on the development of positive user intention to use. Further, Gefen (2000) added that in e-commerce setting, the feeling of familiarity, which comprises the comprehension of what, why, where, and when other parties do what they do, also contributes to trust. Additionally, as suggested by past research, trust is creatable via interactions.

In the domain of e-marketing, the factors that influence lack of trust among students in online technology are concerns over personal information privacy and data security. In fact, Benassi (1999) reported the factor of privacy as the leading consumer issue with respect to the Internet. A lot of consumers still feel hesitant about conveying private information particularly financial information through open electronic network. Somehow, Khalifa and Shen (2006) stated that online -commerce customers usually would like to be assured more about the privacy protection and have more control over the releasable personal information.

Since the 1960s, the perceived risk theory has been used in describing consumer’s behavior in decision making (Taylor, 1974). The popularity of online transaction has changed the way perceived risk is described. Perceived risk was chiefly deemed in the past as fraud and product quality but today, the concept refers to some types of financial, product performance, social, psychological, physical, or time risks during online transactions involving the consumer (Forsythe and Shi, 2003). In relation to this, Forsythe and Shi (2003) proposed a technology acceptance model for mobile services. It includes four factors: perceived value (usefulness), perceived ease of use and trust of acceptance.

#### 6. Research framework and hypothesis

With the factors that potentially impact users’ acceptance of e-marketing being considered, TAM is expanded by the inclusion of one new construct namely the trust factor (TF). Doing so allows the scrutiny of the factors that might affect the acceptance of e-marketing. User of e-marketing can comprehensively be described by the condensed model.

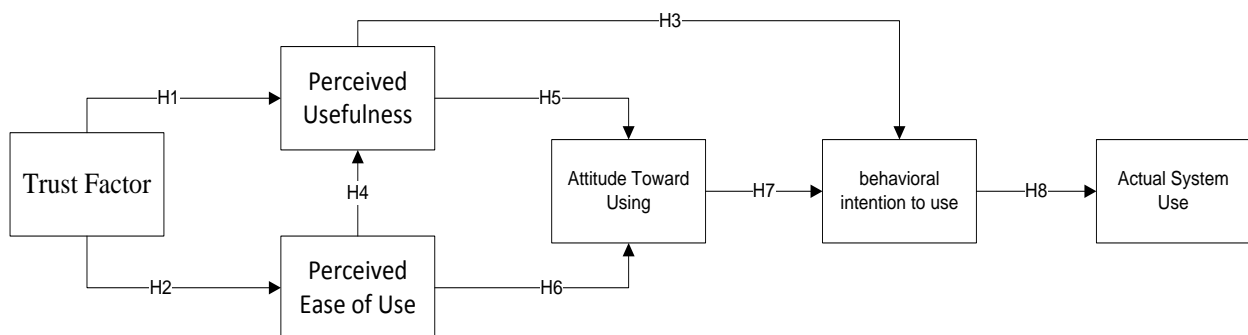


Figure 2. Research Model

#### 7. Research hypothesis

*H1: Trust factor has a significant positive relationship with perceived usefulness to use E-Marketing.*

*H2: Trust factor has a significant positive relationship with perceived ease of use to use E- Marketing.*

*H3: Perceived usefulness has a significant positive relationship with behavioral intention to use E-Marketing.*

H4: Perceived ease of use has a significant positive relationship with perceived usefulness to use E-Marketing.

H5: Perceived usefulness has a significant positive relationship with attitude toward to use E-Marketing.

H6: Perceived ease of use has a significant positive relationship with attitude toward using to use E-Marketing.

H7: Attitude toward Using has a significant positive relationship with use behavior to use E-Marketing.

H8: Behavioral intention to use has a significant positive relationship with actual system use to use E-Marketing.

## 8. Methodology of research

The respondents in this study comprise 221 students enrolled in Jordan universities while the gathering of data was done online (online questionnaires at [www.surveymshare.com](http://www.surveymshare.com)). The questionnaire contain one part comprising of a number of constructs. Several items were formulated to represent each construct. The level of acceptance of user is measured by the 5-point scale. The association between the 6 key factors and behavioral intention to use E-marketing in the context of Jordan is measured by regression analysis. The aim of study is to create an integrated framework that could gauge the citizens' readiness in interacting with E-marketing. In looking into their readiness, validation has to be performed on the factors of trust with Technology Acceptance Model (TAM). In order to measure the factors mentioned, a survey was performed among citizens 18 years of age and above in Irbid National University in Jordan.

### 8.1. Instrument development

The generation of the items was for determining the respondents' awareness of the online access to the E-marketing. In order to determine the reliability of the items, this study used the Chronbach's alpha. In this study, the values obtained for the items were higher than the suggested cut-off of 0.70.

Table 1. Reliability analysis

VARIABLES	ITEMS #	RELIABILITY
Trust	4	.777
Perceived usefulness	4	.732
Perceived ease of use	4	.804
Attitude toward	4	.899
Behavioral intention	4	.801
Actual system use	3	.866

### 8.2. Data analysis

Following the scrutiny of the measurement model, the ensuing step in the PLS Analysis was the evaluation of the structural model. Here, an analysis was performed towards the inner model. The researcher evaluated the significance level of the path coefficients with the use of bootstrapping for the hypotheses testing as proposed by Hair *et al.* (2011).

Using the PLS-SEM structural model, the hypothesized relationships are tested. This model employs the PLS algorithm and also the bootstrapping algorithm in SmartPLS 2.0 3M. In PLS analysis, the path coefficients appear to be very significant. In relation to this, Hair *et al.* (2011) stated that the previously constructed hypothesis should be rejected when paths appear to be non-significant or show signs that contradict the direction of the hypothesized. In short, the path coefficients for all hypotheses show significance and therefore, at this level, each hypothesis is supported. Behavioral intention to use shows positive indirect relationships with the Actual system use while TRUST factor shows positive indirect relationships with the Perceived usefulness as well as Perceived ease of use. As for Perceived usefulness and perceived ease of use, both constructs show positive indirect associations with the Attitude toward. Meanwhile, Perceived usefulness appears to have positive indirect relationships with the Behavioral

intention whereas Attitude toward to use E-marketing shows positive indirect relationships with the Behavioral intention.

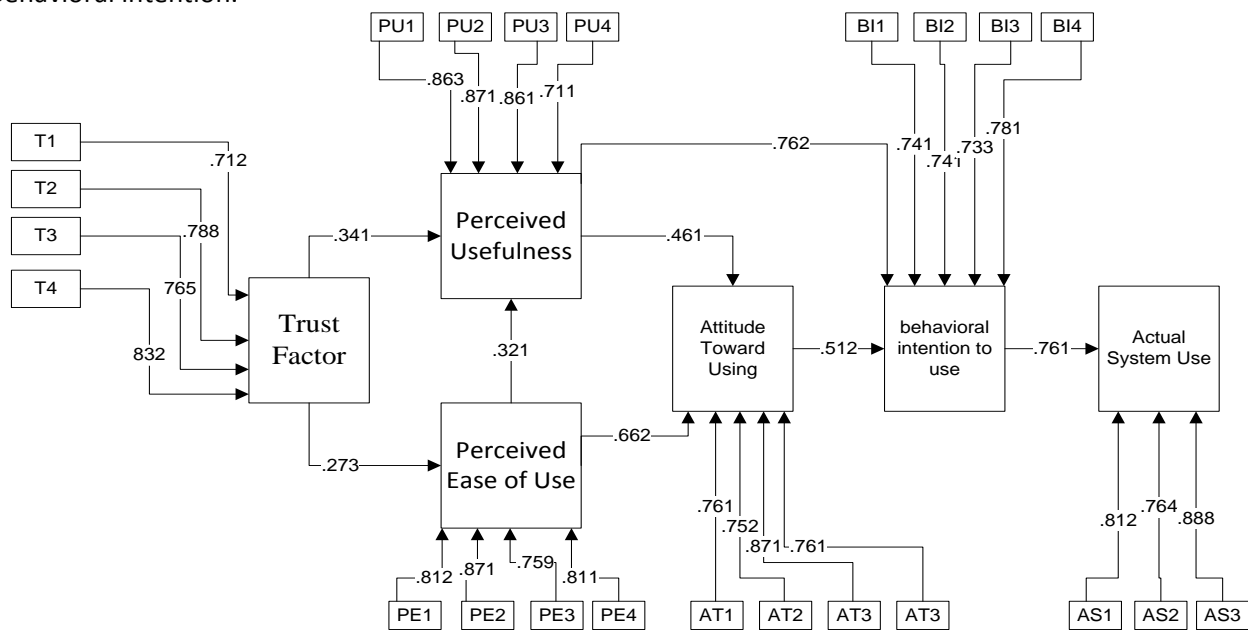


Figure 3. Measurement Model

Lastly, the Behavioral intention appears to have positive indirect associations with the Actual system use. All results from the preceding section and the correlations amongst all factors in the model proposed can be viewed in Table 2.

Table 2. Summary of hypotheses

Hypotheses	Variable	$\beta$	Supported
H1	Trust → Perceived usefulness	.431	Yes
H2	Trust → Perceived ease of use	.273	Yes
H3	Perceived usefulness → Behavioral intention	.762	Yes
H4	Perceived ease of use → Perceived usefulness	.321	Yes
H5	Perceived usefulness → Attitude toward	.461	Yes
H6	Perceived ease of use → Attitude toward	.662	Yes
H7	Attitude toward → Behavioral intention	.512	Yes
H8	Behavioral intention → Actual system use	.761	Yes

## 9. Discussions and implications

This study explores the readiness of the citizens of Jordan to utilize e-marketing services in terms of its extent. Trust, perceived usefulness, perceived ease of use, attitude toward, behavioral intention, and actual system use were the constructs that this study had employed and examined. The government must pay attention these mentioned factors in order that the usage of e-marketing amongst citizens could be increased. This study gathered data from many groups of citizens and the data were then analyzed. Since the data obtained were from diverse pool, the results can mirror the population more. This study brings to the table a model deemed fitting for the Jordan's context. In particular, the proposed model includes the constructs from the Technology Acceptance Model (TAM). With respect to the construct of trust, perceived usefulness, perceived ease of use, attitude toward, behavioral intention, and actual system use, the citizen's intention to apply e-marketing will increase if they have the confidence that the internet would increase their efficiency in their information gathering from the government and in their interaction with the government aside from granting better control to them when they interact with the government. Further, the government should increase the understanding of the citizens about the services that can be found online. This means that an awareness initiative should be adopted by the government. The social

media is particularly the technology of the current time that the government should not neglect. Thus, changing to the modern medium from the traditional one is what the government should do. Doing this, the government could provide the citizens with information in real time. It is suggested that in the next research, the researcher employs this study's model proposed with addition of other constructs namely service quality and computer self-efficacy. In addition, sample from other regions in Jordan should also be used in the future study in order to improve generalizability.

## 10. Conclusions

The developed countries have witnessed the growth of E-marketing within the last decade. Such development has sparked interest in the developing countries especially those located in the Middle East. These countries know that partaking in the e-marketing domain is important. The Middle East also must employ the Internet technology in marketing. For nearly all Middle Eastern countries, users of Internet are still lagging in terms of the varied use of Internet as opposed to those users in the developed countries, even to those users in South East Asia. In the Arab countries in fact, the available e-marketing sites are very few. The outcomes of this study satisfy its primary objective which is to increase the intention to use among Arab users of Arabic e-marketing websites. As such, increase in the number of Arab e-commerce websites would cause the online purchasing intentions of consumer to shift to the local Arab websites. This shift will in turn improve the microeconomics of the Arab countries. This study presents a validated framework model for the creation of Arabic Websites and online shopping industry. Also, this study contributes to the body of knowledge in the pertinent domain while the empirical findings that this study generates contribute to the industry. This is attained with the use of noteworthy model that functions as the key guideline to both the academia and practitioners within the related domain.

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