

Factors Affecting the Adoption of E-Commerce: An Evidence from Developing Country

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Abstract — This research aims to discover and determine the factors (perceived usefulness and social presence) that may affect the intention to use e-commerce. The data has been collected manually distributed questionnaire. The analysis of collected data was done by using diverse statistical methods for reliability and hypotheses test like Cronbach's alpha and multiple linear regression test. The research findings revealed a significant statistical impact of perceived usefulness and social presence on the intention to use e-commerce which interprets (36.5%) of the variation in the customers' intention to adopt e-commerce. Consequently, companies are advised to invest more on building the e-commerce infrastructure as well as enhancing the people awareness about e-commerce as the results shows that still a lot of respondents are not sure about the e-commerce. Moreover, future studies may try to investigate more variables that may affect the intention to adopt e-commerce through using different models.

Keywords — perceived usefulness, social presence, intention to use e-commerce.

I. INTRODUCTION

Social commerce became an important platform within e-commerce that lately evolved by the Information and Communication Technologies (ICTs) development, and Web 2.0 technologies [1]–[5]. Appearance of Web 2.0 applications has improved social relationships for consumers which allow them to work actively and support each other on the internet. Web 2.0 is the new channels as blogs, social sites, communities and social media make the communication among the consumers increased rapidly. Also, there are modern channels for businesses to contact with customers [3]. This new channel provides consumers a good chance to find their needs quickly, and easily. In order to gain a successful social commerce, there are two essential facts which is creating of a friendly social environment via online and the other fact is the use of social media and its content [6], [7]. According to [8] the interactions between people are attracted by using the applications of web 2.0 in addition to content generated on the websites. These activities which used by consumers have increase the trust and intention levels to buy.

Electronic commerce is a part of Electronic business that is a business activities which include buying, selling and exchanging of goods and services via internet [9], [10]. E-commerce provides consumers the ability to buy products and services by using internet technologies [11]. E-commerce sites have two main categories which are Business to Business (B2B) and Business to Consumer (B2C) that providing services to companies and users respectively [12], [13]. Information and services concerning products are provided up-to-date through e-commerce sites for users and businesses [13]–[19]. Rajmohan, Rushdi, and Sabha (2010) found that 60 percent of the consumers who are using Internet and they have good and very good readiness to order products by using the internet [20]. However, this study strives to identify the important factors that may help Omani people to be ready to accept e-commerce. In addition, we need to recognize that if they will accept to use e-commerce in their daily transactions. Therefore, the main goal of this study is to identify the effects of perceived usefulness and social presence on intention to use e-commerce.

II. LITERATURE REVIEW

- A. **Perceived Usefulness** according to Davis (1989) define perceived usefulness is the individuals tend either to use application or not to the level which they think it well assist them to perform their job better [21]. One of the successful theories in predicting an intention of individuals for use technology is Technology Acceptance Model (TAM), which include two factors are perceived usefulness and perceived ease of use [3]. Perceived usefulness is one of the most essential factors that affect the intention of individuals' behaviors when using of the technology [9], [22]. According to Shen (2012) said that perceived

usefulness is the level that an individual's thinks that utilizing of a specific website will develop their performance. There are some studies have claim that perceived usefulness is affect directly on the intentions of individual behavioral to utilize a system [22]. More, majority of researchers think that the perceived usefulness impacts the intentions of users to use electronic commerce [23]. Perceived usefulness considered as a significant factor of TAM model and it has been tested and validated by many investigators [3]. Hajili (2013) suggested a model which assumed consumer behavior possibly affected through both perceived usefulness and trust. The intention to use social commerce affected directly through perceived usefulness which is the general premise [24]. According to Pavlou (2003) there is a significant effect of ease of use and perceived usefulness on transaction intentions which indicates that TAM may can be extend to the online behavior of consumer to clarify acceptance of e-commerce [24].

B. Social Presence the extent to which the user to can experience others as being psychologically present by intermediate is social presence [25], [26]. Many studies presented that activating the interaction's imagination with other people can be achieved when the sense of social presence increased. For example, via content of pictures and texts, personalized greetings, people audio and video, intelligence factors or actual interaction with others through provided means [27]. Further, there are research have illustrated that personalization, recommendation, and consumer reviews are examples of technologies which enable feeling of the site where individuals react that will increase the social presence on websites [28]. In addition, for example perceived usefulness can be affected through increasing of social presence [29]. Social presence and trust are positively correlated which influence the purchasing intention from websites which highlighted by some studies [30].

III. RESEARCH MODEL

Based on the literature the suggested model is presented in figure (1). More, the research suggests the following hypotheses:

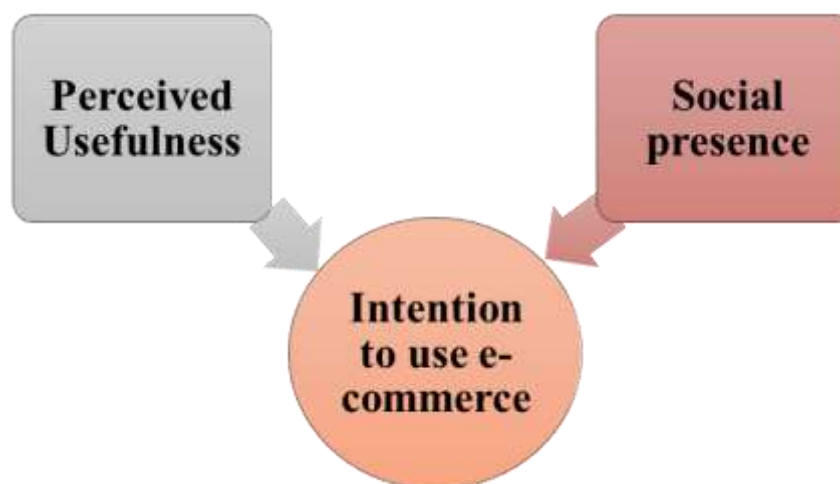


Figure (1): suggested Model

H1: Perceived usefulness has positive affect on Intention to use e-commerce.

H2: Social presence has positive affect on Intention to use e-commerce.

IV. RESEARCH METHODOLOGY

A questionnaire-based survey has been distributed manually to collect the primary data about the study variables (perceived usefulness, and social presence). However, the study instrument has been prepared based on previously validated models [9], [31]. All the instruction to get the questionnaire filled up has been written on the first page, and confidentiality and privacy has been confirmed. Moreover, five-point Likert scale was adopted ranging from 1 strongly disagree to 5 strongly agree. The final version of the questionnaire was distributed to the targeted customers (150) randomly from Salalah city, only 137 questionnaires were returned. As some respondents gave same answer to all items and other left some items without answers therefore 11 cases were dropped. Thus, the remained cases for final analysis were 126 cases. Further, to confirm the internal

consistency of constructs and measures validity the reliability test (Cronbach's Alpha) was conducted[32]. As well as, multiple regression were used for hypotheses test.

V. DATA ANALYSIS

Table 1 shows the coefficient of alpha Cronbach's which are ranging from (0.663) for social presence, (0.675) for the perceived usefulness, and (0.709) for customers intention to use e-commerce. More, the mean reflect high level of availability of study variables[33].

Table 1. Descriptive and Reliability Statistics

	N	Mean	Std. Deviation	Cronbach's Alpha
Perceived Usefulness	126	3.6852	.91341	.675
Social Presence	126	3.4339	.88871	.663
Intention to use e-commerce	126	3.5079	.99997	.709

Multiple linear regression analysis was conducted with the social presence, and perceived usefulness as predictor variables, and customers intention to use e-commerce as a dependent variable.

Table 2. Results of regression analysis ^a

Adjusted R ²	F	Sig.
.354	35.295	.000 ^b

a. Dependent Variable: Intention to use e-commerce

b. Predictors: (Constant), Social presence, Perceived usefulness

Table 3. the results of hypotheses test ^a

Suggested Hypotheses	B	Std. Error	Beta	t	Sig
H1	.231	.079	.211	2.920	.004
H2	.617	.081	.548	7.604	.000

a. Dependent Variable: Intention to use e-commerce

A number of 126 responses have been analyzed. The statistical results presented in Table 2 shows that the entire model was significant {F (2, 126) = 35.295, P < 0.001} with adjusted R2 being (0.354) which explains only (35.4 %) of the changes in the Intention to adopt e-commerce. Both constructs perceived usefulness ($\beta = 0.211$; $t = 2.92$), and social presence ($\beta = 0.548$; $t = 7.6$) were significant.

VI. DISCUSSION

The main objective of this study is to identify the effects of perceived usefulness and social presence on intention to use e-commerce. The study revealed that (1) perceived usefulness plays significant role in intention to accept e-commerce. This finding aligns with Pavlou (2003) found that perceived usefulness impact directly on intention to use social commerce. Thus, companies should take this advantage in which people who find that e-commerce is useful for them they are ready to transform into online purchasing. Therefore, they should improve their online capabilities to reach a maximum number of consumers. (2) Social presence has a significant effect on intention to adopt e-commerce. This finding agrees with Hassanein & Head (2007) who found that the positive relationship between social presence and trust will influence the intention to purchase online. Hence, the interactions among users as well as sellers make people feel comfortable to use e-commerce.

Thereby, Firms can be more active in social commerce sites by presenting suitable advertisements that influence consumers' sense of human warmth which can affect the intention to buy.

However, improving the background of people regarding online shopping is highly recommended because still many of respondents are not sure about online shopping and may they still feel fear of it. Further, businesses are requested to improve the quality of content of their websites which will attract new customers to use and interact on their websites.

VII. CONCLUSION

Current study aimed to identify the influences of perceived usefulness and social presence on intention to use e-commerce. After data analysis and hypotheses testing, the results show that perceived usefulness and social presence have a significant statistical influence on the intention to accept e-commerce. Future studies may can thoroughly study the effect of other factors on customers to adopt e-commerce such as facilitate conditions, risk, and ease of use e-commerce.

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