

# PERCEIVED FACTORS AFFECTING CUSTOMERS ATTITUDES TOWARD ELECTRONIC SHOPPING: AN EMPIRICAL STUDY

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***Abstract:** The purpose of this research is to develop an understanding of the Perceived Factors influencing Omani customers to switch to electronic shopping by recognizing the effects of Perceived Channel Risk, Perceived Price Search, and Perceived Efforts of Search and Evaluation on customers' intention to adopt electronic shopping. A manual questionnaire of 191 Omani customers was carried out to examine the proposed model of customers' intention to adopt electronic shopping using multiple linear regression analysis. The results support most of the proposed hypotheses. For Omani customers Perceived Channel Risk, Perceived Price Search, and Perceived Efforts of Search and Evaluation are significant predictors of customers' intention to adopt electronic shopping. Implications, suggestions of study are also discussed.*

***Keywords:** Perceived Channel Risk, Price Search, Search Efforts, Evaluation Efforts, electronic shopping intentions.*

## 1. INTRODUCTION

The successive developments have transformed the internet networks from a tool to share information to effective instrument for doing businesses (Chen, Hornig, & Huang, 2014). Hence, to understanding and satisfying the needs of customers and expanding the market share especially with high levels of competition; thereby companies are impressed to use technology and moving their customers to use this technology in regard to reducing costs and increasing customer satisfaction (Duening, Hisrich, & Lechter, 2015; Hoehlea, Scornavaccab, & Huffb, 2012). To move from traditional to electronic shopping customers need Electronic channels that can be used directly by

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customers to purchase what they need over the internet (Lovelock & Wirtz, 2010). Many studies had tested customers intention to adopt electronic shopping by different countries, to the best of our knowledge, very limited empirical research has been performed to identify the critical factors that affect electronic shopping adoption among Omani consumers, such as study of (Al Balushi & Al Lawati, 2011) which focused on time pressure, physical efforts, perceived relative advantage, shopping enjoyment, perceived complexity and perceived compatibility. Another study integrated between perceived risk and technology acceptance model to examine Omani customers' acceptance of e-commerce (ALraja & Aref, 2015). in different study Alraja depended on UTAUT model, to test the usage intention to use electronic mail system (Outlook) among potential users (Alraja, 2015). Another study from Oman context in different field studied the adoption of electronic services that provided by government from citizens perspective (ALRAJA, HAMMAMI, & ALHOUSARY, 2015). In this study we strive to fill the lack in such research of study environment, by adopting very specific model which integrate variables from the perspective of purchasing decision. Thus, the knowledge of the critical factors for the shift of consumers from traditional to electronic shopping, in a country that stretches over a wide area, this will push business developers to make use of them and work to remove the concerns of consumers, thereby, achieving business and consumers objectives at the same time. The main objective of this study is to identify the extent to which the adopted factors (Perceived Channel Risk, Perceived Price Search, and Perceived Efforts of Search and Evaluation) affect Omani customers' intention to adopt electronic shopping, and to subsequently fill this gap. An instrument was developed and conducted in Dhofar Governorate.

## **2. LITERATURE BACKGROUND AND RESEARCH HYPOTHESES**

### **2.1. Literature Background**

The general objective of purchasing transformation from traditional to electronic way is to reduce purchasing costs. While companies get many benefits such as cost savings and accounting, informational, and operational benefits (Parikh & Joshi, 2005). Hence, Comparing between past and future online purchasing (Weisberg, Te'eni, & Arman, 2011) found social context has very important role in online shopping. The study of (Wu, 2003) illustrated that consumer characteristics have important effect on consumer electronic purchasing decisions. Moreover, education, marital status, income, age and perceived usefulness of online purchasing are important factors affecting customers' intention to adopt online shopping (Gong, Stump, & Maddox, 2013). From the customers experience the study of (Pappas, Pateli, Giannakos, & Chrissikopoulos, 2014) demonstrated that the satisfaction of high-experienced online purchasing customers affected only by trust and performance expectancy. While, the satisfaction of low-experienced online purchasing customers affected by trust, effort expectancy and self-efficacy. To expound why customers hesitate to shop online, (Huang & Oppewal, 2006) studied the effect of situational factors on consumers' grocery shopping channel choice.

They found that to promote online shopping we should focus on the time saving rather than lowering delivery fees. From another side to inspect the intentions of customers to repurchase using online shopping (Chiu, Chang, Cheng, & Fang, 2009) are extended the technology acceptance model by enjoyment, e service quality dimensions, and trust. The results shown that following factors enjoyment, perceived usefulness, trust, and perceived ease of use are significant predictors of customers' intentions to repurchase using online shopping. Whatever, adopting of electronic shopping by customers may affected by various factors such customer characteristic (Gong, Stump, & Maddox, 2013), customer knowledge (Liaoa & Chenb, 2004) (Yoon, Hostler, Guo, & Guimaraes, 2013), service quality, consumer resources, product variety, subjective norms, website factors, and convenience (Clemes, Gan, & Zhang, 2014) (Sorooshian, Salimi, Salehi, Nia, & Asfaranjan, 2013). Depending on the components of purchasing decision model, this study has adopted four constructs and proposed that they may have a major impact on the users' intention to utilize electronic shopping. The factors of Perceived Price Search, Perceived Channel Risk, Perceived search efforts, and Perceived evaluation efforts have been analyzed. Figure 1 represents the research model, in which every construct being used in the study has been defined.



Figure 1: Research Model

## 2.2. Research Hypotheses

### 2.2.1. Perceived Channel Risk

In spite of electronic channels may reduce the costs of search for requested products, it may increase the risk of fraud, information reveal, financial risk, performance risk, psychological risk, and social risks (ego-related) risk (Dewan & Hsu, 2004; Koppius, Hecka, & Wo, 2004; Overby & Jap, 2009; Gupta, Su, & Walter, 2004). As regards to our study customers who believe that the level of perceived Channel risk is low they tend to adopt electronic shopping. This led us to hypothesize the following hypothesis:

H1: Low level of Perceived Channel Risk has positive effect on electronic shopping adoption.

### **2.2.2. Perceived Price Search**

Price has vital influence on customers to make purchasing decision (Khan, Liang, & Shahzad, 2015). Hence, many consumers expect that they can get lower prices by electronic shopping (Maxwell & Maxwell, 2001; Close & Kukar-Kinney, 2010). This expectation will lead customers to compare between prices of the same item in different stores. Because an electronic shopping provide them with tools, such as search engines and agencies, to do that. Thus, that will have positive impact on customers' intention to adopt electronic shopping. This leads to suggest the following hypothesis:

H2: Low level of Perceived Price Search has positive effect on electronic shopping adoption.

### **2.2.3. Perceived Efforts of Search and Evaluation**

Using search engines over internet has increased the search and evaluation efficiency by reducing a lot of frustrations such as parking space, long checkout lines, and traffic (Khan, Liang, & Shahzad, 2015; Figueiredo, 2000). In turn, adopting electronic shopping enable customers to collect all appropriate information about the products and services they need (Chau & Tam, 2000). Moreover, the availability of information about products in high quality has critical effect on customers when they compare and evaluate products to make purchasing decision (Chen & Tseng, 2011; Bennetta, Härtelb, & McColl-Kennedy, 2005; Figueiredo, 2000). According to this study, customers who perceive that electronic shopping necessitate much less efforts for searching and evaluating products; they will have higher readiness to adopt electronic shopping. This will lead to adopt the following hypotheses:

H3: Low level of perceived Search Efforts has positive effect on electronic shopping adoption.

H4: Low level of perceived Evaluation Efforts has positive effect on electronic shopping adoption.

## **3. METHODOLOGY**

Data for this study were collected by distributing the survey manually to assess the extent to which the participants (Omani consumers) are aware of the research variables with a benchmark study about Consumer Switching from Traditional to Electronic Channels conducted by Gupta, Su, and Walter (2004). The results were analyzed using multiple linear regression tests.

### **3.1. Sample**

The number of valid questionnaires for analysis was 191. This was completed by the Omani consumer in Dhofar governorate. 67% of the respondents were female, respondents' age ranged from 20 - 60. Approximately, 89% of them were within 20-40 age-group. The annual income of respondents' family ranged from \$15000 - \$60000. Approximately, 40% of them were within \$30000- \$60000 income-group. Majority of respondents never complete any electronic shopping transaction.

### 3.2. Instrument Development

The questions of our survey compiled from many validated instruments (Moon, 2004; Salam, Rao, & Pegels, 2003; Khalifa & Liu, 2007; Kim, Galliers, Shin, Ryoo, & Kim, 2012). Some changes were made to fit the Omani context. After that for each construct, randomly, the study has ordered result items. On the survey instrument, the 5-point likert-type is used to measure survey questions, ranging from 1 (strongly disagree) to 5 (strongly agree). For reliability, all items were tested using chroubach's alpha (see table 1).

**Table 1**  
**Reliability Analysis**

<i>Constructs</i>	<i># Items</i>	<i>Reliability</i>	<i>Mean</i>	<i>Std. Deviation</i>	<i>Correlations (ATES)</i>
PCR-Perceived Channel Risk	5	0.786	3.8890	0.61270	0.757**
PPS-Perceived Price Search	4	0.810	3.9306	0.62363	0.621**
PSE-Perceived Search Efforts	3	0.709	3.9040	0.66718	0.685**
PEE- Perceived Evaluation Efforts	3	0.742	3.9145	0.70852	0.739**
ATES-Attitude Toward Electronic Shopping	3	0.798	3.8709	0.68881	1

\*\* . Correlation is significant at the 0.01 level (2-tailed).

## 4. ANALYSIS OF DATA

This study has used multiple linear regression analysis to test research model. The model is composed of four independent variables (Perceived Channel Risk, Perceived Price Search, Perceived Search Efforts, and Perceived Evaluation Efforts) and one dependent variable (Consumer Attitude toward Electronic Shopping). The research aims to determine the extent to which respondents' perception of research variables (independent variables) affects their intentions to adopt electronic shopping (dependent variable).

### 4.1. Results of Study

**Table 2**  
**Multiple Linear Regression Analysis Result**

<i>Adjusted R Square</i>	<i>F</i>	<i>Sig.</i>
0.662	93.855	0.000

Predictors: (Constant), PCR, PPS, PSE, PEE  
Dependent Variable: ATES

Table (2) is clearly depicting the results of multiple linear regression analysis. The adjusted R square = 0.662, which reflects the model interpretation to be 66.2% of the variance in students' intention for the adoption of e-mail system. In spite of the whole, model was significant (F= 93.855, P= 0.00). It is due to the fact that each variable was

tested for its individual significance. Depending on this test, only three out of four hypotheses are supported. Table (3) shows the significant and insignificant constructs, as well as supported and unsupported hypotheses.



Figure 2: Significant Results

Table 3  
Hypotheses Test

<i>Hypotheses</i>	<i>Coefficients</i>	<i>T value</i>	<i>Sig.</i>	<i>Supported</i>
H1 (PCR)	0.335	4.563	0.000	YES
H2 (PPS)	0.045	0.726	0.469	NO
H3 (PSE)	0.211	3.373	0.001	YES
H4 (PEE)	0.329	4.887	0.000	YES

## 5. DISCUSSION AND CONCLUSION

This study tested the Perceived Factors influencing Omani customers to switch to electronic shopping by exploring the effects of Perceived Channel Risk, Perceived Price Search, and Perceived Efforts of Search and Evaluation on customers' intention to adopt electronic shopping. Only three out of four constructs of the adopted model are significant. These three constructs include Perceived Channel Risk and Perceived Efforts of Search and Evaluation. Therefore, customers will be more likely to adopt electronic shopping, if lower degrees of Perceived Channel Risk and Perceived Efforts of Search and Evaluation are expected. Further, the study clarified that those factors should be taken in consider by businesses to increase customers adoption of electronic shopping. In addition to that, we collected and analyzed data from a diverse pool of customers that are more representative of the population than University students are. Also, this study suggested a model according the local context of Oman.

On the other hand, surprisingly Perceived Price Search was not significant. This contrasts with the study of (Khan, Liang, & Shahzad, 2015). This contradiction may be because of the three reasons. Firstly, that the Sultanate of Oman despite being a developing country, but it is one of the petroliferous countries, where the average per capita income is high to some extent. Secondly, if we observed average of annual income for members of the sample, we find that around 40% of respondents have an annual income of more than \$ 30.000, and this is what explains that consumers are concern with effort to find the product and comparing it each other, but with higher quality or /and additional specifications in elsewhere, as well as, seeking to reduce all risks of financial, information, psychological, social aspects. Thirdly, government support for all sectors, especially sectors of education, health, and fuel, in addition to the lack of taxes, this means that a portion of income may be allocated to purchase products with higher quality.

In this study, the four major constructs (Perceived Channel Risk, Perceived Price Search, and Perceived Efforts of Search and Evaluation) are used to investigate customers' perceptions about electronic shopping. The study shows that Perceived Channel Risk can be considered salient indicator on electronic shopping adoption. For future research, it is recommended that there should be an attempt to use actual electronic shopping as the dependent variable and explore the effects of Perceived Channel Risk, Perceived Price Search, and Perceived Efforts of Search and Evaluation. Moreover, all the constructs must also be moderated by other factors like age, gender, culture. However, it is even better to obtain respondents from other regions in Oman, and to use multiple methods to collect data in the future research studies.

Overall, this study contributes by validating a Perceived Channel Risk, Perceived Price Search, and Perceived Efforts of Search and Evaluation measures and by showing how these measures relate to electronic shopping construct. We believe that the model and the measures hold significant promise to help practitioners and researchers better understand the e-commerce domain.

## **6. CONCLUSION**

This study proposes a framework of electronic shopping adoption and determined the variables that affect the customers' intention to switch to electronic shopping, by integrating variables from the model of purchase decision. The results point out that Perceived Channel Risk and Perceived Efforts of Search and Evaluation are critical factors of respondents' intention to adopt electronic shopping.

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