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FACTORS AFFECTING THE ONLINE PURCHASE INTENTION OF CONSUMERS IN TURKEY

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ABSTRACT

The main aim of this study is to examine the effect of independent variables such as financial risk, product performance risk, social risk, psychological risk, delivery risk, online payment risk, product variety, convenience and usefulness on online purchasing intention. Also, the effect of perceived risk on cross-channel free-riding is searched. To do so, an Internet survey was prepared, and 220 people participated in it. Data collected are evaluated in IBM SPSS 20.0 for reliability, factor, correlation, and regression analyses. The results of the analyses indicate that there is a negative relationship between purchase intention and risks such as financial risk, product performance risk, psychological risk, social risk, delivery risk and online payment risk. Also, it is shown that there is a positive relationship between purchase intention and variables such as product variety, convenience and usefulness. Moreover, according to the analysis results, it is found that cross-channel free-riding increases as the perceived risk increases.

Keywords: Online shopping, e-Commerce, Cross-channel free-riding, Perceived risk, Purchase intention

1. INTRODUCTION

With the technological developments, consumers' shopping behaviors have also changed, and consumers have started to use online channels to shop. Compared to traditional shopping, the most overriding feature of online shopping is convenience [1]. Consumers are shopping online because of the variety of product and consumers are more satisfied with the web site as they have a wide selection of products in online shopping [2, 3, 4]. However, together with the benefits of online shopping, there are also some negative aspects being perceived risk the most important. The perceived risk in e-commerce is a factor negatively affecting the intention and behavior of online purchasing [5, 6]. Perceived risk in online shopping is examined in various sub-dimensions such as performance, financial, social, psychological, delivery, and online payment risk [7, 8].

Parallel with the increasing popularity of technologies such as the Internet, mobile and social networks, each day, a higher number of consumers are using a variety of channels to purchase service or products [9, 10]. Some consumers complete the whole shopping process using a single channel while others use different channels at different stages of shopping in one category (eg. some consumers prefer to make purchases from brick and mortar retailers, even though they obtain all the information they need online [11]). For this reason, it is very important to understand customers who have multi-channel shopping behaviors [12].

Therefore, examining the factors that affect consumers' online purchasing intentions is important in understanding their shopping behaviors. This study is conducted to examine the effects of factors such as financial risk, product performance risk, psychological risk, social risk, delivery risk, online payment risk, product variety, convenience and usefulness on consumers' online buying intentions. It also examines the relationship between perceived risk and cross-channel free-riding.

2. LITERATURE REVIEW

According to Cox and Rich [13], the perceived risk can be described as "the quantity and amount of perceived risk for a consumer who think on a particular purchasing decision". The risk perceived by the consumer is directly proportional to the amount of uncertainty s/he perceives and the amount that s/he puts in jeopardy in the purchase decision. It can be sourced from the product, brand, retailer or channel.

There are some empirical studies indicating that there is a negative relationship between perceived risk and intent to purchase. It is reported in these studies that consumers who perceive a great risk avoid shopping online since they do not know what they will encounter as a result of the shopping process [8, 14, 15].

Consumers can easily switch to different channels in multi-channel environment. Even though consumers use a retailer's channel to collect information, evaluate the product and prepare the purchase, they can buy the product from another retailer's channel. This is defined as cross-channel free ride.

Cross-channel free-riders try to meet needs such as price comparison, comfort and flexibility. Consumers are more likely to use cross-channel free riding while they accept formally multi-channel behavior rather than single-channel behavior. It was found that although the possibility of cross-channel free circulation differs among the products, there is no sociodemographic difference [16].

3. RESEARCH MODEL

The relation between the factors affecting online shoppers (financial risk, product performance risk, psychological risk, social risk, delivery risk, online payment risk, product variety, convenience, and usefulness) and purchasing intentions is examined in this study.

In Turkey, as anywhere else, online shopping is becoming more and more pervasive. However, it does not necessarily mean that every customer visits online shopping sites to shop. Today, many consumers examine the product they want to buy from the online channels and purchase the product in the physical store, or vice versa. Therefore, another aim of this study is to investigate the effect of perceived risk on cross-channel free-riding.

The principal aim of this study is to determine the main factors of the online shoppers and to find out their impact on purchase intention.

4. METHODOLOGY

Survey data was gathered via cross-sectional e-mail survey using a questionnaire. The survey instrument is composed of questions relating to six constructs that include Online Shoppers' risks, Product Variety, Convenience, Usefulness, Cross Channel Free-Riding and Purchase Intention. To assess the dimensions of the study, 48 items were measured using a five point Likert scale ranging from "very low" to "very high".

The questionnaire was pre-tested several times to ensure that the wording, format, and sequencing of questions were appropriate. Surveys were sent out to more than 500 people, and nearly 250 people responded to our questionnaire. After eliminating several surveys because of largely missing and recurrent values, the final usable sample had 220 observations.

5. ANALYSIS AND FINDINGS

Data analysis was conducted in three steps. First, an exploratory factor analysis (EFA) with varimax rotation was performed to determine the underlying dimensions of the study. The Second step involved testing of the reliability of each construct using Cronbach's Alpha in order to determine if the extracted dimensions in step 1 offered a good fit to the data. Finally, based on regression analysis we tested the hypothesis of the study using IBM SPSS 20 software. These steps are given below.

Exploratory factor analysis of the 37 variables yielded seven factors with eigenvalues greater than one explaining 75% of the total variance. Based on the items loading on each factor, these factors were labelled as 'Usefulness' (Factor 1), 'Product Performance Risk' (Factor 2), 'Delivery Risk' (Factor 3), 'Social Risk' (Factor 4), 'Financial Risk' (Factor 5), 'Online Payment Risk' (Factor 6) and 'Convenience' (Factor 7). The Cronbach's alpha measures of reliability for the seven factors vary between 0.75 and 0.86, which are well above the traditionally acceptable value of 0.70.

In order to test the impact of the study's constructs on Purchase Intention, linear regression analysis was employed, with the independent variables being the constructs derived from EFA. It may be noted that the pairwise correlations do not seem to present serious multicollinearity problem for the regression analysis, as none of the coefficients are above 0.50.

Regression results are given in Table 1. The F statistics indicate that regression model is significant (p<0.01), indicating a good linear fit with the data sets. The adjusted R square values of the Model is 0.62, exhibiting a satisfactory level of explanatory power for such an exploratory study.

Table 1. Regression results on Purchase Intention

Independent Variables	Regression Coefficient
Usefulness	0.71***
Product Performance Risk	-0.09**
Delivery Risk	-0.074*
Social Risk	-0.1**
Financial Risk	-0.095**
Online Payment Risk	-0.072*
Convenience	0.29***

^{*}*p*<0.1; ***p*<0.05; ****p*<0.01

6. CONCLUSION

The results indicate that usefulness had a strong and positive impact on purchase intention. Usefulness was found as the most important factor of online shoppers. It was discovered that convenience has been found to significantly and positively influence on purchase intention. Convenience is the second important factor of online shoppers. On the other hand, unlike previous studies, the risks that consumers perceive in online shopping were examined with a highly number of factors such as financial risk, product performance risk, social risk, online payment risk and delivery risk. It was found that these factors affect consumers' online purchase intention negatively.

7. REFERENCES

- [1] Jarvenpaa, S. L., Tood P.A.: Consumer reactions to electronic shopping on the World Wide Web. *International Journal of Electronic Commerce*, 1 (2), pp. 59-88, 1997.
- [2] Bansal, H.S., Mcdougall, G.H.G., Dikolli, S., Sedatole K.L.: Relating E-Satisfaction to Behavioral Outcomes: An Emprical Study. *Journal of Services Marketing*, 18 (4), 290-302, 2004.
- [3] Lim, H., Dubinsky A.J.: Consumers' Perceptions of E- Shopping Characteristics: An Expectancy-Value Approach. *Journal of Service Marketing*, 18 (7), pp. 500-513, 2004.
- [4] Koo D.M.: The Fundamental Reasons of E-Consumer's Loyalty to an Online Store. *Electronic Commerce Research and Application*, 5 (2), pp. 117-130, 2006.

- [5] Bhatnagar, A. and Ghose S.: Segmenting Consumers Based on Benefits and Risks of Internet Shopping. *Journal of Business Research*, 57 (12), pp. 1352-1360, 2004.
- [6] Doolin, B., Dillons, S., Thompson, F. And Corner J.L.: Perceived Risk, the Internet Shopping Experience and Online Purchasing behavior: A New Zealand Perspective. *Journal of Global Information Management*, 13 (2), pp. 66-88, 2005.
- [7] Zheng, L., Favier, M., Huang, P. and Coat F.: Chinese Consumer Perceived Risk and Risk Relievers in E-shopping for Clothing. *Journal of Electronic Commerce Research*, 13 (3), pp. 255-274, 2012.
- [8] Hong, I. B. & Cha, H. S.: The mediating role of consumer trust in an online Merchant in predicting purchase intention. *International Journal of Information Management*, 33 (6), pp. 927-939, 2013.
- [9] Chiu, H.C., Hsieh, Y.C., Roan, J., Tseng, K.J. & Hsieh J.K.: The challenge for multichannel services: Cross-channel free-riding behavior. *Electronic Commerce Research and Applications*, 10 (2), pp. 268-277, 2011.
- [10] Chiou J.S., Wu L.Y., Chou, S.Y.: You do the service, but they take the order. *Journal of Business Research*, 65 (7), pp. 883-889, 2012.
- [11] Evans, P., Wurster, T.S.: Strategy and the New economics of information. *Harvard Business Review*, 75 (5), pp. 71-82, 1997.
- [12] Cho, J.: Likelihood to abort an online transaction: influences from cognative evaluations, attitudes, and behavioral variables. *Information & Management*, 41 (7), pp. 827-838, 2004.
- [13] Cox, D. F. & Rich, S.U.: Perceived risk and consumer decision making. *Journal Marketing Research*, 1 (4), pp. 32-39, 1964.
- [14] Jarvenpaa, S.L. & Leidner D.E.: Communication and Trust in Global Virtual Teams. *Journal Organization Science*, 10 (6), pp. 791-815, 1999.
- [15] Pavlou, P.A.: Consumer acceptance of electronic commerce: Integrating trust and risk with the technology acceptance model. International Journal of Electronic Commerce, 7 (3), pp. 69-103, 2003.
- [16] Spahn, S.H.: Cross-channel free-riding consumer behavior in a multichannel environment: An investigation of shopping motives, sociodemographics and product categories, Journal of Retailing and Consumer Services, 20 (6), pp. 570-578, 2013.