



Volume 3 | No. 3 | December 2017

SALU-Commerce &  
Economics Review  
www.cer.salu.edu.pk

## Impact of Perceived Risk Factors on Online Shopping Behavior.

Zeeshan R. Sylvester<sup>1</sup>

Lecturer, Faculty of Management Sciences @ SIMT, Malir Campus, Karachi,

Jalil Ahmad Thaibo

Lecturer, Faculty of Management Sciences @ SZABIST, Larkana Campus.

---

### Abstract:

*The online shopping is increasing with the passage of time, therefore this channel certain behaviors also emerged among the customers of online companies. Risk factor is one of the aspect of online shopping and there are certain risk factors associated with it which includes financial risk, time risk, social risk and physical risk. Internet has brought strong influence on the marketing environment at worldwide level and connectivity of internet has provided organization an opportunity to increase their business through e-marketing. The Research Objectives are to study perceived risk factors, to measure the impact of risk factors regarding motivating or de-motivating online shopping customers, To examine the influence of an individual's domain specific innovativeness on online shopping behavior, to identify effects of perceived risks on buyers attitude towards online shopping of electronic goods. The philosophy of this research paper is based upon post positivist approach. Non probability purposive samplings method has been selected for data collection from three private sector universities through questionnaire and correlation and regression test run through SPSS software. Findings of this research papers explains that online shopping website must adopt certain campaign to increase the satisfaction and buying behavior level of online buyers through providing them most secure financial services, providing them delivery on time that they may enhance online shopping in social circle of their surroundings.*

**Key Words:** *Online Shopping, Consumer Behavior, Financial risk, Social risk*

---

<sup>1</sup> Email: [zeeshan892003@yahoo.com](mailto:zeeshan892003@yahoo.com)

## 1. Introduction

Today's world is the world of technology and the consumers of this world are linked with internet for most of their daily routine activities. With reference to business activities, consumer are linked for various reasons like finding of features of a particular product, searching for affordable and suitable prices, making purchase decisions, placing orders through online net markets or any other way which deal with business activities. Rather than going to the market, consumer are giving priority to the online shop may be before making purchase decisions, as vendor they get fundamental information about the company, product and its services (Sinha, 2010).

The process of online shopping behavior is also known as online shopping behavior or net shopping and buying behavior which refers to that particular process in which purchasing of a product or receiving services through internet. During the particular process of online shopping, consumer search via internet services regarding their desired products and services. Rather than physical visitation and searching, time conscious consumers feel mostly attached to get the maximum information in limited time for their required products or services. This typical process also helps them to search the best fit item for them and their required criteria. In the last, purchase transaction took place to receive post sales services (Li and Zhang, 2002).

In the world of online shopping service providers, Amazon has been labeled as online shopping Centre which has maintained, developed and brought customers in the zone of satisfied consumers on net purchasers. Therefore, their numbers of consumers has reached at maximum level, which brought result in increasing their numbers of users (Anil et al.,2012). Apart from this, it is a fact that even there are numbers of online users but still there is majority of consumers as well who are not much satisfied and interested for going through online shopping. Their lack of interest in online shopping is their past worst experience which has kept them away for being online consumers (Lingying et al., 2012).

Internet has brought strong influence on the marketing environment at worldwide level and connectivity of internet has provided organization an opportunity to increase their business through e-marketing (Anchal Agarwal, 2015). To facilitate customer for the best of companies and its product, internet is becoming the most popular medium to facilitate the information regarding the purchase, choice and information based search. To sale their products and services, organizations have been involved in business-to-consumer (B2C) through the operations of electronic commerce. Through these technological offers, an individual customer becomes a channel for receiving services and as well as its cost efficient and effective process for the organizations and an opportunity to increase choice and convenience among retailers (Muhammad Ibrahim, 2015). From customer's point of view, online shopping have been the most time efficient, getting rid of from bargaining, crowds and the most important, 24 hours shopping availability has become the best resource. On other hand, online shopping has become the most fear and threat full factor for traditional shopping channels like retail stores and catalogs in various businesses offers, (Mamta Chawla, 2015).

Mohammad Hossein., *et al.* (2016) has investigated and explored the dimension so f perceived risks of consumers and has experiences to investigate their influence towards shopping behavior. Yue Chen. (2015) has aimed to identify factors influencing online shopping behavior of consumers and how perceived risk impart towards the attitude of customers. The study of Preeti Devi (2014), has investigated the relationship of six perceived risk i-e financial, psychological, physical, time, social and privacy risk with online shopping behavior of consumers. Results of this study have indicated that risk

perception has a strong negative influence on purchase intention through online shopping. Another research work of Kim et al., (2013) had experimented that and investigated the impact of trust and risk over online buying decision of consumers. With intention to examine the perceived risk and benefits, a scale was developed by Forsythe et al., (2012) to make measurement of certain perceived risks in accordance with web shopping behavior.

In 1984, the first Business-to-Consumer (B2C) tele-shopping system was developed, but that was not for general customer and only particular and prescribed customer was served through this service. The world's first World Wide Web server and browser were invented by Tim Berner-Lee in 1990 and this server and its services became commercial in use in 1991. In the year 1994, other developments took place in web browsing when Pizza Hut for the first time launched online pizza shop and in the same year, the concept of online banking also took place. In 1995, Amazon launched its online shopping site for online exchange of books and became the world's largest online book shop.

Less work has been done on any particular compound of constructs and variable due to which recommendation of a particular factor is missing. Therefore, the following research questions have been stated:

- i- To study perceived risk factors affecting online shopping behavior of consumer's goods.
- ii- To measure the impact of risk factors regarding motivating or de-motivating online shopping customers.
- iii- To examine the influence of an individual's domain specific innovativeness on online

## **2. Literature Review**

In the system of purchased and decision system, risk has rich publication history. Various authors and philosophers have defined the term "risk" in various aspects and concepts. According to the Santana and Loureiro, (2010), perception of perceived risk has not only been defined as the psychological spur but it is also the relationship between certain purchasing environments with the internal conditions of the consumers. Therefore, according to the nature of consumers, perception of perceived risk varies. An outcome of a particular purchased decision has been considered as risky situation with highly relation with the future results and events and as well as even known with probabilities (Tombu & Mandal, 2003).

An aggregate ratio of loss and the possible outcome of that subject loss have been defined as the components of two possible combinations regarding the perceived risk analysis in the scenario of consumer's buying behavior Bauer (1960). According to him, the meaning of perceived risk behavior in marketing context is a result of a possible measure of consumer's outcome behavior towards decision making process. He also stated that a reaction of consumer after purchased decision, which cannot be anticipated after the decision and makes him/her almost unpleasant regarding the experienced decision.

There are two important categories are associated with the process of online shopping regarding perceived risk. At first, perceived risk is interlinked with product or services, which includes the loss of financial, time, opportunity and product. The second category is related with the transactions make by online such as personal information, privacy, and security, Zhilin Leeat et al., (2004). Amongst of these factors, there is a significant relationship between financial, product, privacy and security risk with the online shopping behavior of customer, Shergil and Chen, (2005). Garbarinoa and Strahilevitzb, (2004) have observed that perceived risk factors also differ according to the gender i-e male/female. According to them, women are more willing to buy through online if any

particular online shopping website has been recommended by their friends and even being aware from the reduction of online shopping volume and risk factor, yet women are strongly willing to buy on bases of certain recommendations.

Risk has been considered and conceptualized regarding involving two elements in marketing research which are uncertainty and consequences. Bauer (2006) has stated that risk is involved in consumer's behavior because decision of consumers and their actions which shall produced consequences which he cannot anticipate with anything approximating certainty, and some of which at least are like to be unpleasant. Therefore, as purchasing process and transactions made by online has openness in nature and this nature creates and allow various risk dimensions to be entered into the online buying behavior of consumers. And in result, various numbers of consumers are de motivated for re-purchased decision due to experience or perceiving of certain risk factors (L. Zhang et al., 2012).

Pavlou, (2006), had explained that various researchers had explained Engel, Kottat and Blackwell known as EKB model of consumer buying behavior and decision making as the best fit mode for online buying process. Anil et al., (2012), have proposed that purchasing behavior of consumer is based on two important aspects. At first consumers required best fit price tags on their desired products and the best value for in exchange for which they are paying. (Sajid & Sheeba, 2013) have examined that attitude and emotion, perception, motivation and personality are such psychological factors which affect consumer a lot regarding their buying behavior. Along with this privacy and cultural are also a set of factor which influence and affect the buying decision process.

According to Haffman and Novak (2010), online store have various advantages then physical stores. Online stores are more convenient and save time, travelling and waiting in lines. Physical stores are time and day bounded which online stores are open in all them and accessible anytime and anywhere. These stores give bulk of information about their products and services with free at any time. They also have online links and tools to help their customer even after purchasing process and can be contacted at any time by consumers. Zhang, Tian, & Xiao, (2014), now days, online shops have provided more interactivities between consumers and product/services by providing bulk of information and have maintained control and bargaining power then customers of physical stores.

Alternative shopping mode from physical shop to online shopping method, various negative aspects are also increasing and associated with the growing level of internet shopping. Customers are worried regarding the concept that purchasing through online system still has certain security and personal informational leaking problem by using their credit cards, (Pallab, 1996).The perception of financial risk is that amount of shopping can be lost if the product will not work properly. As well as, financial loss has also been defined as net loss of money and this loss include the concept of insecurity regarding using of credit cards online, which has be experience in major practices of online shopping, (Maignan & Lukas, 1997).

Time risk is the perception or concept according to which convenience or effort during online shopping process, it can be wasted even for replacing or replacement of product, Time risk is considered as inconvenience happening during online shopping process, Hanjun et al., (2004). This often results in submitting of orders as well as receiving of products some time take plenty of time during to certain reasons (Forsythe *et al.*, 2006).

In the category of perceived risk, social risk in considered that purchasing decision, process or product can be disapproved by certain group or class in which a customer survives, (Li and Zhang, 2012). Moreover, this factor of risk also refers the potential loss of status in the social group circle due to using of internet as a shopping medium, (Stone and Gronhaug, 2013). This has been observed that usually, consumers take suggestions

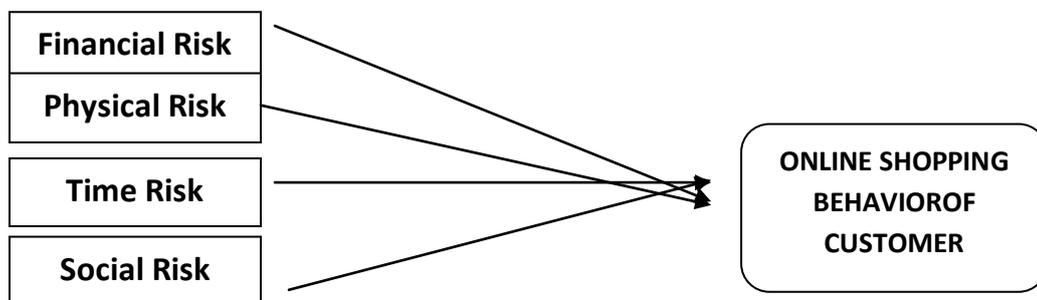
and advice from other members of their concerned social group to reduce social risk while deciding about online shopping decision.

It's difficult for customers to examine physically about any product on computer screen while making decision process as limited information and pictures are shown for making shopping through internet linked stores, (Jarvenpaa and Tractinsky, 2009). The perception of product risk means that purchased product may fail to function as organically expected desires of the customers, (Kim et al., 2008). When a product or any brand of a company does not perform as per the expectations of the customer, that results great loss in the productivity of an organization and it also happens due to inability of the shopper to evaluate the quality of the product accurately while having online shopping, (Bhatnagar et al., 2000).

### 3. Research Methodology

The philosophy of this research paper is based upon post positivist approach. Reason of this paper being post positivist is that its operational tools are in quantitative nature and secondly, it checks causal relationship among some IVs and DV. In cause and effect it specifically establishes the relationship perceived risks between (financial, physical, social & time) with online shopping behavior of customers.. Time horizon of this study is cross sectional because the research has been conducted at one point of the time. To check the causal relationship, deductive approach has been implemented in this paper and hence, hypotheses have been expressed. Moreover, SPSS statistical software has been applied to check this causal relationship to examine the investigation for getting possible outcomes. It is an explanatory research paper as some of online shopping behaviors have been ascertained to build up that their relationship. The type of investigation used for this paper is correlation as the independent variables, which are linked with online shopping behavior, has been described. The method of data collection of this paper is mono method because of being quantitative nature of study. Survey questionnaire is the tool to collect primary data, which are in touch of net surfing and in habit of online buying.

### 4. Theoretical Frame Work



## 5. Hypotheses

H1: There is no significant relationship between financial risk and online shopping behavior of customer.

H2: There is no significant relationship between physical and online shopping behavior of customer.

H3: There is no significant relationship between social and online shopping behavior of customer.

H3: There is no significant relationship between time risk and online shopping behavior of customer.

## 6. Data Analysis and Finding

### 6.1 Reliability and Validity

The data analysis has been done in accordance with the already described research questions. Data has been gathered through the questionnaire delivered to different universities in Karachi. Questionnaires has been be given to the university level student in Karachi along with the confidential envelop so that the confidentiality of the responses could be maintained. Moreover, few items are added in the questionnaire after consultation with the senior Marketing professionals working in the organization of the researcher and the marketing sector professionals in the social circle of the researcher. Thus the validity of the selection of the items has been established through consultation with the experts of domain and marketing professionals (objects of research). The Statistics Package for Social Science software (SPSS 18 version) has been used in the analysis of the survey. Inferential and descriptive statistical tools are employed to quantify and estimate the collected data, and to study their basic patterns. Correlation and regression test have been implemented to check the causal relationship between variables.

**Table No. 1. Reliability**

<b>Cranach's Alpha</b>	<b>N of Items</b>
.709	16

<b>Variable</b>	<b>N of Items</b>	<b>Cranach's Alpha</b>
Online Buying Behavior / Attribute	04	.701
Financial Risk	03	.698
Product Risk	03	.659
Time Risk	03	.707
Social Risk	03	.703

The minimum acceptable Cranach's' alpha is 0.60. Whereas the reliability of this study is 0.709, which shows that scale is reliable.

**Table No. 2. Correlations**

		Shopping Attribute	Financial Risk	Product Risk	Time Risk	Social Risk
Shopping Behavior	Pearson Correlation	1	.136*	.921**	-.096	.545**
	Sig. (2-tailed)		.041	.000	.153	.000
	N	271	271	271	271	271
Product Risk	Pearson Correlation	.136*	1	.106	.927**	-.076
	Sig. (2-tailed)	.041		.113	.000	.258
	N	271	271	271	271	271
Financial Risk	Pearson Correlation	.548**	-.048	.592**	-.125	.992**
	Sig. (2-tailed)	.000	.470	.000	.062	.000
	N	271	271	271	271	271
Time Risk	Pearson Correlation	.921**	.106	1	.035	.581**
	Sig. (2-tailed)	.000	.113		.606	.000
	Sig. (2-tailed)	.000	.113		.606	.000
Social Risk	Pearson Correlation	.545**	-.076	.581**	-.148*	1
	Sig. (2-tailed)	.000	.258	.000	.026	
	N	271	271	271	271	271

Note: Correlation is significant at the 0.05 level (2-tailed)

The result describe that there is positive correlation between financial risk, time risk and social (independent variables) with shopping behavior (dependent variable). Product risk has negative correlation with online shopping behavior. It means with every increase in the unit of shopping behavior factors has been decrease in the one unit of attribute in online buying. Although, the direction of the independent variables with the dependent variable is negative but is important to check whether correlations are weak, moderate or strong. Correlations are strong if  $r$  is greater than .7 and closer to 1 and significant with  $p$  value less than .05, whereas product risk has almost no correlation with online buying behavior. Therefore, result in the table show that financial risk, time risk and social risk are positively correlated.

Therefore, it is important to check the correlation of independent variables with dependent variable of attributes in online shopping instead of checking the correlation among independent variables. Although, correlations show the direction of the variables but it is necessary to perform regression analysis for checking the contribution of each independent variable in the dependent variable. Likewise, hypothesis testing also requires the regression analysis.

On the basis of above finding, following hypotheses have been proved.

- H0: There is a significant relationship between financial risk with attribute of online shopping
- H0: There is a significant relationship between time risk with attribute of online shopping
- H0: There is a significant relationship between financial risk with attribute of online shopping
- H1: There is no significant relationship between product risk with attribute of online shopping

## 7. Regression

**Table No. 3. Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.983 <sup>a</sup>	.966	.965	.11515	2.031

The 96% of R square explained that this much percentage, all the independent variable are contributing towards dependent variable and moreover, adjusted R square of 95% of possible and expected shrinkage in the R square.

**Table No. 4. ANOVA**

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	81.471	5	16.294	1228.941	.000 <sup>a</sup>
Residual	2.904	219	.013		
Total	84.375	224			

a. Predictor: (Content), Product Risk, Financial Risk, Time Risk and Social Risk

b. Dependent Variable: Attribute to online shopping

ANOVA shows that the F ratio is higher than 1 with significant *p* value .001 that is less than .05. Therefore, model is considered as fit. In other words the group of independent variables reliably predicts the dependent variable of attribute to online shopping. However, as this is overall significance test which shows the collective influence of the independent variables.

**Table No. 5. Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	T	Sig.
(Constant)	-.021	.049		-.430	.668
Financial Risk	-.991	.040	-.862	-25.038	.000
Time Risk	1.229	.020	.987	62.434	.000
Social Risk	.755	.039	.672	19.561	.000
Product Risk	.094	.136	.068	.693	.289
a. Dependent Variable: Shopping Behavior					

- Since the significance value of financial, time and social risk is 0.000 which less than 0.05 therefore null hypotheses rejected
- Since the significance value of product risk is 0.489 which is more than 0.05 therefore alternate hypotheses reject.

The frequency table of descriptive statistics shows that 67% respondents were female while 33% were male. Age group 36-40 was 83% each in responding while 30% above group were minimum with 13%. Majority of respondents are holder Masters Degree while 18% only are under graduate.

## **8. Findings**

Result of this study explains that between financial, time and social risk (independent variables) has positive relationship with online buying behavior (dependent variable), while product risk has negative relationship. Therefore, level of product risk of online consumers is low which means consumers have low level regarding physical feature of the online product. However, collectively the model of independent variables and dependent variable is good and significant. For the reason, for financial risk, time risk and social risk, null hypothesis has been rejected and product risk, alternate hypothesis is rejected. It has also been found out that if the numbers of sampling size would have been increased then the results may have changed significantly. To overcome on this problem, sampling size should be increased.

## **9. Conclusion**

The purpose of this research paper was to investigate the relationship between online buying behavior with perceived risk factors (product risk, financial risk, time risk and social risk). Result showed that the level of online buying behavior is very regarding product risk and had almost no relationship. Whereas, financial, social and time risk are having positive related variables have strong influence on online buying behavior. To resolve the lacking and minor gaps in the research, if the numbers of depended variables are increased (as mentioned in other research papers of literature review) then this will give some more positive result. Finally, the summary of research is that online merchants must increase the level of customer regarding time, social and financial risk as customer are more conscious about these three factors.

## **10. Recommendation**

Findings of this research papers explains that online shopping website must adopt certain campaign to increase the satisfaction and buying behavior level of online buyers through providing them most secure financial services, providing them delivery on time that they may enhance online shopping in social circle of their surroundings. The results of the study showed that product risk has less level of interaction with online buying behavior. Consumers have not found more conscious regarding physical features of a product while going to make purchase decision on time.

## **References**

Asmatara Khan & Dr Chadrnahauns R. Chavan. (2015). Factors affecting on-line shoppers behavior for electronic goods purchasing in Mumbai. *International Journal in Management and Social Science (Impact Factor- 3.25), Vol.03 Issue-03, (March, 2015)*.

Amit Bhatnagar, Sanjog Misra & H Raghav Rao, (2000). On risk, convenience, and Internet shopping behavior. *Association for Computing Machinery. Communications of the ACM; Nov 2000; 43, 11; ABI/INFORM Global, pg. 98*

Ajzen, I. (1991). The Theory of Planned Behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. doi:10.1016/0749-5978(91)90020-T

Bauer, R.A. (1960) Consumer Behavior as Risk Taking. In: Hancock, R.S., Ed., *Dynamic Marketing for a Changing World, Proceedings of the 43rd. Conference of the American Marketing Association*, 389-398.

Cox, D.F. and Rich, S.V, (1967). Perceived risk and consumer decision-making - the case of telephone shopping. *Journal of Marketing Research*, 1964, 1, 32-39.

Cunningham, S.M, (1967). Perceived risk as a factor in product-oriented word-of-mouth behavior: A first step. In L.G. Smith (Ed.), *Reflections on Progress in Marketing. Chicago: American Marketing Association*, 1964. Pp. 229-238.

Fishbein, M. & Ajzen, I. (2011). *Predicting and changing behavior: The reasoned action approach*. Retrieved from <http://books.google.co.in/books>

Forsythe et al., (2006).The Impact of Online Shopping Experience on Risk Perceptions and Online Purchase Intentions: Does Product Category Matter? *Journal of Electronic Commerce Research, VOL 15, NO 1, 2014*.

Foxall, Gordon R. 1987. Radical Behaviorism and Consumer Choice. *International Journal of Research in Marketing*. 4 111-129.

Hanjun, K., Jaemin, J., Joo Young, K. and Sung Wook, S. (2002). Cross-Cultural differences in perceived Risk of Online Shopping”, *Journal of Interactive Advertising*, 4(2), 20-29.

Ivan Ross (1975) ,"Perceived Risk and Consumer Behavior: a Critical Review", *NA - Advances in Consumer Research*, Volume 02, eds. Mary Jane Schlinger, Ann Arbor, MI : Association for Consumer Research, Pages: 1-20.

Hanjun, K., et al (2002). Cross-Cultural differences in perceived Risk of Online Shopping. *Journal of Interactive Advertising*, 4(2), 20-29.

Jarvenpaa, S.L. and Tractinsky, N., (1999). Consumer Trust in an Internet Store: A Cross-Cultural Validation. *Journal of Computer-Mediated Communication*, 5 (2)

Kim et al. (2008). A trust-based consumer decision-making model in electronic commerce: The role of trust, perceived risk, and their antecedents. *Decision Support Systems*, 44 (2008) 544 –564.

Laroche et al (2015). *A Neutral Theory for Interpreting Correlations between Species and Genetic Diversity in Communities*. Vol. 185, No. 1 the American naturalist January 2015.

Li, N., & Zhang, P. (2002). Consumer online shopping attitudes and behavior: An assessment of research. In *AMCIS 2002 Proceedings* (pp. 508–517). Retrieved from <http://aisel.aisnet.org/cgi/viewcontent.cgi?article=1433&context=amcis2002>

Mamta Chawla & Mohammad Naved Khan. (2015). On line buying behavior: A brief review and update. *AIMA Journal of Management & Research*, May 2015, Volume 9 Issue 2/4, ISSN 0974 – 497.

Preeti Devi & Sunil Kumari. (2015). A Study on Consumer's Perception Regarding Online Shopping. *Indian Journal of Applied Research*, Volume : 5, Issue : 5, May 2015, ISSN - 2249-555X.

Sajid Nazir Wani & Sheeba Malik (2013). A Comparative Study of Online Shopping Behavior: Effects of Perceived Risks and Benefits. *International Journal of Marketing and Business Communication*, Volume 2 Issue 4 October 2013

Tamimi, N., Rajan, M. and Sebastianelli, R. (2003), The state of online retailing, *Internet Research, Applications and Policy*, Vol. 13 No. 3, pp. 146-55.

Yue Chen & Xiangbin Yan. (2015). Examining the Effects of Decomposed Perceived Risk on Consumer Online Shopping Behavior. *Inzinerine Ekonomika-Engineering Economics*, 2015, 26(3), 315–326

Zhang, H., Tian, C. & Xiao, T. (2014). Study on Consumers' Channel Choice Behavior Based on Fishbein's Model of Reasoned Action. *In Proceedings of the 5th International Asia Conference on Industrial Engineering and Management Innovation* (pp. 39–44). Paris, France: Atlantis Press. doi:10.2991/iemi-14.2014.9.