



Influence of internet shopping experience and the perceived risk for the Consumers- A conceptual framework

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Abstract

The concept of online marketing has come a long way since it was introduced in mid 1990s. It has evolved from promoting the product on internet primarily to give basic information to the potential consumers about the product, to selling products on internet to mobile marketing. Over a period of time, online shopping has become a preferred mode of shopping over traditional brick and mortar shopping, mainly due to the benefits it offers in terms of convenience, availability of quick information, social influence, affordable internet connectivity, etc. Plethora of research has been done in the past to understand consumer behaviour. These studies reveal that, consumers use internet to buy products on account of two factors, perceived usefulness and perceived ease of use.

At the same time, perceived risks they associate with online shopping makes them reluctant to use this medium to do their shopping. In this study, the diverse literature available on consumer behaviour towards online shopping has been explored using interpretative approach, viz., objective, research methodology, sample, respondents and the outcome of the research. It is hoped to build a conceptual frame work for the researchers through a detailed analysis of various empirical studies made on this topic. This paper aims to add value to the literature already available, which hopefully opens new avenues for further research in this area. It is also hoped that it gives an insight to the e-marketers to formulate effective marketing policies.

Keywords: mobile marketing, online shopping, perceived risks, e-commerce, mobile commerce

Introduction

In today's era of digital world, role of internet has increased tremendously. It has pervaded every walk of our life. Primarily, it provides electronic platform for the people to do wide range of activities like shopping, banking, information gathering and sharing, communication, etc., without having to go to traditional brick and mortar shops or banks or hotels, etc. E-commerce refers to the activity of buying or selling of products or services online or over the internet. It makes use of several technologies like mobile commerce, electronic fund transfer, supply chain management, internet marketing, etc. E-commerce can be classified into two types, viz, Business – to Consumer (B2C) and Business – to – Business (B2B). Companies such as Amazon.com, Flipkart.com are engaged to cater mostly to consumers are called B2C companies, The terms 'e-business' and 'e-tailing', 'internet marketing' are often used synonymously with e-commerce. Though early search engines such as Yahoo, InfoSeek, Alta Vista, Lycos and WebCrawler contributed to the development of digital evolution, it was Google, which was launched in 1998 changed the landscape of digital world. Availability of tools to target browsers and formulate strategies based on search outline led to a new means of marketing and communicating. Thus, a product or a particular brand can reach anyone, anywhere at any-time which makes the electronic platform a powerful marketing tool for the discerning marketers.

Theoretical Framework

India has become one of the largest market for e-commerce in the world, with millions of internet users preferring

internet to perform various activities like sending messages, watching movies and videos online, net banking, and of course, to shop. According to a market research by by statista.com, a leading market research website, the number of digital buyers is estimated to grow from 180 millions in 2017 to 329 millions in 2020. It also states that mobile phone internet user penetration in India is projected to reach 37.36 percent of the population in 2021, representing a huge potential in terms of digital and mobile buyer audience. Total internet users in India are estimated to cross 635 million by 2021 and e-retailing reveue is expected to reach \$45 billion by that period.

E-commerce offers a number of benefits in the form of availability of a wide range of products, economical in terms of both time and price, ease of buying, different mode of payment, availability of information, price comparision, anytime – anywhere shopping through smart phones, etc. The advent of smart phones at affordable price is the reason for steep increase in consumers' use of the Internet via mobile devices, which have evolved from one-to-one communication device to multi-faceted form of technology facilitating a wide range of tasks supporting customer interaction (Coursaris and Hassanein 2001). Balasubramanian, *et al.* (2002) states M-commerce as 'where commerce occurs on an anywhere, anytime basis. All these factors attract the modern day consumer towards online shopping. While there are several benefits contributed to the increasing popularity of online shopping, there are certain other factors like security concerns, loss of privacy, absence of physical verification of products, trust, etc., impedes the use of internet for shopping.

Literature Review

There exists a plethora of research literature relating to the empirical study on consumer behaviour while shopping online. While it is true that internet marketing existed since 2000 onwards in India and other Asian countries, it really gained momentum from 2010 onwards in Asia, more so in India. This may be attributed to the availability of high speed internet, greater connectivity, affordable tariff rates, introduction of smart phones, etc. These studies have identified several drivers leading to the adoption of internet for shopping purpose. Susan Rose, *et al.* (2011), identified three drivers – quality of web site and factors contributing to the effective performance of web site, diverse factors encouraging online consumers’ behaviour relating to online search and online purchase and wide range of online service experience relating to using internet for banking, travel booking, news and weather information, education programmes, etc. These diverse range of activities by consumers leads to different experiences and behaviours. Review of earlier studies suggests that benefits attributed to the online customer, change the nature of relationship between the e-seller and consumer in favour of the latter. It is for this reason, a review of literature from the point of view of risk perception is called for. Therefore, a systematic review of the research done in the past ten years is considered by identifying the question, ‘What is the impact or influence of perceived risks on consumers in the context of online shopping?’ and for this number of search words were used like perceived risks, online consumer experience, consumer behaviour with regard to online shopping, m-commerce, etc. The focus of the search was peer reviewed journal articles from a range of data base sources like elsvier, pro quest, research gate, etc. Since online marketing gathered momentum in Asia, in particular India in the last few years, period between 2014 to 2017 is considered peak period for the purpose of this research.

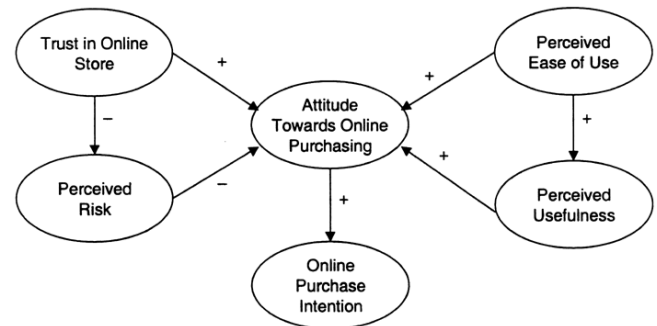
Perceived Risk in E-retailing

Business dictionary gives the meaning of the term risk as “A probability or threat of damage, injury, liability, loss or any other negative occurrence that is caused by external or internal vulnerabilities, and that may be avoided through

pre-emptive action”. “Risk is a function of the importance or magnitude of the goals to be attained and the seriousness of the penalties that might be imposed for non-attainment and the amount of means committed to achieving the goals” (Mitchell, 1999). Stone and Winter (1987) view “risk as an expectation of loss. i.e., higher the expectation of loss, greater is the risk for the individual”.

Ivan Ross (1975) states that “perceived risk is a function of intra personal variables and product variations”. Perceived risk has been mentioned profusely in many empirical studies and it is stated to have pessimistic association with online shopping intention of consumers (Chang, *et al.*, 2005; Faqih, 2011; Huang, *et al.*, 2004; Park, *et al.*, 2004). Besides, the perceived risk may impede the consumers’ intention to partake in e-shopping, because it is supposed to swell the vulnerabilities of online shopping. In fact, “the vague milieu of online shopping involves high perceived risk that would reduce consumers’ intentions to shop online (Pavlou, 2003).

When researching on consumers’ perception towards risk, it was found that this concept is a multi-dimensional construct and not uni-dimensional. The following table shows these different dimensions of risks perceived by the consumer which has a significant influence on his/her buying behaviour along with their meaning and context.



Source: Understanding online purchase intentions: contributions from technology and trust perspectives by Hans van der Heijden, Tibert Verhagen and Marcel Creemers)

Fig 1: Conceptual model (adapted from Ajzen & Fishbein, 1980; Davis, 1989; Jarvenpaa *et al.*, 2000).

Table 1

Type of Risk	Definition	Instances of risks
Financial/Economic/Monetary Risk	Potential loss of current cost as well as additional charges in the future	Theft of online banking account or misuse of debit card/credit card information
Functional/Performance Risk	Performance risk refers to potential loss incurred when a product/service does not perform as expected.	Truthfulness of information given in the web Product quality risk Product function risk Risk of receiving the not product shown in the website
Psychological Risk	Potential loss of self-esteem or loss of ego from frustration at not achieving a buying goal.	Stress on controlling personal information Stress on comparing product information Failure on purchasing activity
Social Risk	It refers to the risk of negative evaluation by family, relatives and friends and its impact on self-image and status.	Evaluation by friends and relatives Evaluation by family Impact on personal image and status
Time Risk	It refers to the time lost in searching for information, processing the transaction, waiting time while processing and receiving the product and refund in case of product being returned.	Time required for searching information Timeout before transaction is completed Delayed delivery of product Waiting time Refund time
Privacy Risk	Privacy risk related to fear of personal and financial information leaking and being used for fraudulent purpose.	Leak of personal information Unauthorised contact Being tracked on internet visits
Service Risk	Potential risk associated not getting the promised service at different stages of buying.	Returning Product Delay in delivery of product Bad after sale service
Physical Risk	It refers to the risk related to the health or safety of consumer or others while handling the product due to faulty or absence of instructions.	Damaged product Incorrect or faulty packing Personal injury or health issues to the consumers

Source: Compiled from various studies

The above mentioned risk dimensions act as barrier to the usage of internet for shopping by the consumer. The following table reveals the summary of different dimensions

of risk indicators impeding the consumers’ intention to do shopping online as discussed by other researchers:

Table 1

Author Name and Year	Financial Risk	Time risk	Security Risk	Social Risk	Physical Risk	Psychological Risk	Product/Performance Risk	Privacy Risk	Service Risk
Mansour Samadi, <i>et al.</i> (2009) ^[3]	✓	✓		✓	✓	✓			
Zhao Hong, <i>et al.</i> (2012) ^[4]	✓	✓	✓		✓		✓	✓	✓
A.Herrero Crespo, <i>et al.</i> (2014)	✓	✓		✓	✓	✓	✓	✓	
Mohd Shoki, <i>et al.</i> (2014) ^[6]	✓			✓		✓	✓	✓	✓
Pratiksinh Vaghela (2014) ^[9]	✓		✓				✓		✓
Seung Hwan Kim, <i>et al.</i> (2014) ^[5]			✓					✓	
Matea Matic, <i>et al.</i> (2014) ^[7]	✓		✓						
A.Mahesh, <i>et al.</i> (2015)	✓	✓	✓				✓	✓	
Dr.Nirmal Sharma (2015)			✓				✓		✓
Dr.Shiney Chib, <i>et al.</i> (2015) ^[11]	✓		✓					✓	
TIAN Ling, <i>et al.</i> (2015)									
Trisna Tanadi, <i>et al.</i> (2015) ^[10]		✓					✓	✓	✓
Avaneet Kaur, <i>et al.</i> (2016)	✓		✓		✓		✓	✓	✓
Nuno Fortes, <i>et al.</i> (2016) ^[14]			✓				✓	✓	✓
Farzeen Rasheed.A.K. (2017)			✓						✓
Kashif Abrar, <i>et al.</i> (2017) ^[18]	✓	✓					✓		
Mihir Joshi, <i>et al.</i> (2017) ^[17]			✓				✓		✓
Prashant Raman(2017) ^[20]	✓		✓					✓	
Zhao Hong, Li Yi, (2012) ^[4]	✓	✓	✓	✓	✓	✓	✓	✓	✓

Source: Compiled from research articles considered)

A comprehensive analysis of earlier empirical studies focussing on the perceived risk dimensions and their effect

on intention to buy online or adoption of online shopping has been given in the form of tabular form:

Table 2

Author, Year & Country	Objectives of the study	Sampling technique & no. of respondents	Statistical Techniques used	Findings/Outcome of the research
YE Naiyi, 2004, ^[1] China6-6-2	To explore and examine the risk perception of online shopper and whether such perception impedes the adoption of online buying.	336 students from Western China.	Confirmatory Factor Analysis	Findings draw attention to consumers’ perception of risk in relation to internet shopping and indicate that risk perceptions of Chinese consumers are significant.
A.Herrero Crespo, <i>et al.</i> , 2009, Spain	The aim of the study was to analyse how perceived risks influence the adoption of online shopping by consumers using TAM for both internet and non-internet users.	998 respondents selected through non-probabilistic, quota sampling method.	CFA , SEM	Results indicated that, buyers’ behaviour towards internet shopping was positively influenced by perceived benefits and negatively influenced by perceived risks.
Mansour Samadi, <i>et al.</i> (2009), ^[3] Iran	To determine the level of risk perception of online shoppers and their choice of risk reduction mechanisms while shopping online.	360 respondents selected through convenient sampling	Correlation analysis Regression analysis	The findings of this research shows that consumers perceive higher level of risks in online shopping as compared to store shopping.
Zhao Hong, Li Yi, 2012, ^[4] China	To determine the effect of perceived risk at each stage of purchasing decisions when consumer is shopping online with data and personal logical reasoning.	327 respondents	Percentage analysis	Findings revealed that while for most of the consumers discount, personality advertising stimulates immediate purchase behaviour, they are also afraid of fake products being delivered, and being cheated.
Seung Hwan Kim, <i>et al.</i> , 2014, ^[5] USA	To find out the variations in the degree of risk perception by B2C e-commerce shoppers and to test whether or not they trust the information given in the web on their first visit to the marketer’s website.	302 students from a university in Midwest in the USA.	Factor Analysis	The study revealed that majority of the respondents was trust sensitive and risk-averse. Therefore, unless they are convinced of genuinity of the web, they were hesitant to buy online. This is more so in case of female shoppers than male.
Mohd Shoki Md Ariff, <i>et al.</i> , 2014, ^[6] Malaysia	To investigate the impact of risks perceived on buying intention of online shoppers.	300 selected through convenient sampling	Confirmatory Factor Analysis and Multiple	Results indicated that while product risk, financial risk and non-delivery risk have negatively affected the consumers’ attitude

			Regression Analysis.	and intention to buy online, convenience risk has positive effect on consumers' attitude and intention towards internet shopping.
Matea Matic, <i>et al.</i> , 2014, ^[7] Croatia	The purpose of the study was to examine the influence of insecurity while using internet for online shopping.	253 Croatian students from University of Dubrovnik	Cross Tabulation Analysis and Spearman's Rank Correlation	Results indicate that, consumers' confidence in online shopping is low when they are new to this mode, but as the frequency of online purchase increases, they become more confident and comfortable to online shopping.
Bo Dai, <i>et al.</i> , 2014, ^[8] USA	To study the impact of internet shopping experience on risk perceptions associated with buying digital and non-digital products without the intermediary effect of perceived risks.	2500 college students selected through convenient sampling	Structural Equation Model	The findings of this study confirms the assumption that risk associated with online shopping is multi-dimensional and because of that previous experience will not necessarily have a definite impact on the future purchase intentions.
Pratiksinh Vaghela, 2014, ^[9] India	The purpose of the study is to understand the perception of customers towards e-shopping gender-wise	150 respondents through convenient sampling.	Tabulation, Chi-square test, Cross tabulation.	The study indicate that most of the customers are familiar with e-shopping and feels e-shopping is better than traditional store shopping in spite of facing problems like delayed delivery, expensive, confusing web sites, etc.
Trisna Tanadi, <i>et al.</i> , 2015, ^[10] Malaysia	This research aims to investigate the role of perceived benefits and perceived risks to enhance the frequency of internet shopping among young consumers in Malaysia.	150 respondents selected through simple random sampling.	Pearson Correlation and Multiple Regression Analysis	The study reveals that the relationship between perceived benefits and intention to shop online among gen-Y is positive and significant, however, these young consumers have certain reservations about privacy risk and product risk.
Dr. Shiney Chib, <i>et al.</i> 2015, ^[11] India	To identify the key variables influencing online shopping behaviour amongst tech savvy engineering students.	180 engineering students from Nagpur in Maharashtra.	Factor Analysis	Four factors representing risk perceived, internet traits, attitudinal traits and convenience were found to be influencing the buying behaviour of young consumers in different degrees.
Neeraj Mathur, 2015, ^[12] India	To analyse Indian consumers' online shopping behaviour in the milieu of perceived risks associated with e-commerce.	400 respondents through convenience sample	Binomial Distribution	Research findings reveal that in spite of having awareness about e-commerce, Indian consumers still faces risks while shopping online.
Shivani Arora, <i>et al.</i> , 2016, ^[13] India	To provide meaningful insight into customers' perspectives towards e-commerce.	300 respondents selected through judgement sampling from major cities in North India	Factor Analysis	The analysis clearly indicate that four factors – demanding consumer, problems in web marketing, selling on web and understanding the interactivity and customization, influences significantly the buyers perception towards e-commerce.
Nuno Fortes, <i>et al.</i> , 2016, ^[14] Portugal	The aim of the study is to assess the influence of privacy risks on the buyers' behaviour towards e-commerce.	900 respondents selected through non-random sampling	Exploratory Factor Analysis and Structured Equation Model	The result of the study shows that attitude of consumers relating to the adoption of online buying has diverse effect. i.e., constructs like trust, perceived ease of use, and usefulness have positive impact and perceived risks adversely impact the online buying intention.
Aparna Chaterjee, 2016, ^[15] India	The aim of the study is to give a detailed analysis of how and why specific factors influence consumers' intention to buy online.	150 respondents from West Bengal.	Exploratory Factor Analysis	Research identified timely information, security, effective technology, better performance, ease of use and user friendly are the factors significantly impact buyers' decision to purchase online.
Dushmanth Kumar Padhi, 2017, ^[16] India	To assess the inconvenience of customers in online shopping and to suggest measures for enhancing the adoption of online shopping.	150 respondents.	Factor analysis	The result clearly showed that product risk is the most significant risk perceived by the respondents followed by financial, psychological, no-delivery and time risk.
Mihir Joshi, <i>et al.</i> , 2017, ^[17] India	The focus of the study is to evaluate the significance of having third party security seals on websites of e-retailers amongst different age group.	200 students from a cosmopolitan city	ANOVA, Linear Regression	The findings reveal that data security breach has a significant impact on buying decisions of e-shoppers and the degree of significance differs with difference in age of shoppers.
Kashif Abrar, <i>et al.</i> , 2017, ^[18] Pakistan	To study the effect of different dimensions of risks on impulsive online buying tendency of consumers.	200 respondents identified through stratified random sampling technique.	Correlation analysis and Regression analysis.	The result indicated a moderate negative relationship between risk perception and impulsive online buying.
Avaneet Kaur, <i>et al.</i> , 2017, ^[19]	To explore the factors affecting online shopping and to understand consumers'	124 respondents selected through convenience	Correlation analysis and Factor analysis	The study revealed that demographic profiles except education impacts the intensity of online shopping. While perceived benefits

	perception about online shopping.	sampling.		have a positive bearing on buyer's intention, perceived risks are considered as hurdles.
	To investigate consumers' perception in adopting online shopping.	124 respondents through random sampling	Pearson correlation analysis.	Perceived usefulness has a strong positive impact on consumer's intention and inspite of accepting internet technology, there is still a uncertainty in majority of the respondents towards adoption of online shopping.
Prashant Raman, 2017, ^[20] India.	The purpose of the study is to examine the determinants influencing repeat purchase intention amongst women consumers.	909 female respondents identified through random sampling.	Multiple Regression Analysis.	The finding of the study shows that repeat purchase intention of female consumers is greatly affected by their age, income and education. Their response differs with respect to different dimensions of perceived benefits and risks.

Source: Compiled from research articles considered

Discussion

Most of the researchers found that perceived risk dimensions have a significant adverse impact on intention to use internet for shopping. While product risk, privacy risk, security risk comes out to be the major concerns for majority of the consumers, social risk and psychological risk are considered insignificant by them. Mohd Shoki Md Ariff, *et al.* (2014), ^[6] Prashant Raman (2017) ^[20] found that trust acts a go-between perceived risk intention to use internet for shopping. Studies by A. Herrero Crespo, (2014), Pratiksinh Vaghela, (2014), ^[9] Nuno Fortes (2016), ^[14] have used TAM variables i.e. perceived usefulness and perceived ease of use as mediating variables to study relationship between perceived risk and consumer behaviour towards online shopping. Mansour Samadi (2009) ^[3] integrated the theory of perceived risk with TAM to know the consumer behaviour towards e-shopping. Correlation analysis, Multiple-regression analysis and Factor analysis are the popular statistical tools used for statistical data analysis.

Conclusion

Critical analysis of the literature confirms that, in spite of technological advancement made to eliminate different dimensions of risk, consumers still do not feel confident while buying online. In order for the future empirical studies on this variable to show positive correlation, it is for e-marketers to take necessary steps to mitigate the risk perception of e-shoppers.

Suggestions

This paper would give insight to the e-marketers to understand the various dimensions of risks perceived by the consumers. To overcome the consumers' risk perceptions, it may be suggested that e-marketers may provide guidance for easy navigation information in the web site regarding money back guarantee, cash on delivery, product return option, delivery of product according to the convenience of consumers, quality guarantee certificate, etc. Such measures go a long way in reducing the risks perceived by the consumers and also provide a pleasant shopping experience to the consumers.

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