Factors of Perceived Risk Affecting Online Purchase Decisions of Consumers

Ankita Popli
Assistant Professor
RDIAS, GGSIPU, Delhi

Dr. Smita Mishra
Associate Professor
RDIAS, GGSIPU, Delhi

Abstract

Although electronic commerce (e-commerce) is expanding, online sales account for only a small percentage of the total retail sales. Of the factors that affect online consumers' purchasing intentions, one is perceived risk. Therefore, in order to minimize it, understanding of online consumers' risk perceptions and attitudes is needed. It is difficult to understand and predict people's reactions to risk posed by online hazards. Therefore, this research initiative studies online risk perceptions of consumers through literature survey.

Keywords:

E-commerce, Perceived Risk, Risk Perceptions, Online Hazards

Introduction

In the business to consumer (B2C) e-commerce cycle activity, consumers use Internet for many reasons and purposes such as: Searching for product features, prices or reviews, selecting products and services through Internet, placing the order, making payments, or any other means which is then followed by delivery of the required products through Internet, or other means and last is sales service through Internet or other mean (Sinha, 2010). Over the past few decades, the Internet has developed into a vast global market place for the exchange of goods and services. In many developed countries, the Internet has been adopted as an important medium, offering a wide assortment of products with 24 hour availability and wide area coverage. In some other countries, such as Iran, however business-to consumer electronic commerce has been much below than anticipated proportion of total retail business due to its certain limitations (Sylke, Belanger, and Comunale, 2002). Also, E-commerce has become an irreplaceable marketing channel in business transactions. Online stores and services are important sales channels in B2C transactions. Studying online shopping behavior of consumers has been one of the most important research agendas in e-commerce during the past decade (Chen, 2009). The research of online consumer behavior has been conducted in multiple disciplines including information systems, marketing, management science, psychology and social psychology, etc. (Hoffman and Novak, 1996; Koufaris, 2002; Gefen et al., 2003; Pavlou, 2003, 2006; Cheung et al., 2005; Zhou et al, 2007).

In these recent decades, the development of internet technology is more and more rapid and mature, it was becoming inevitable that online shopping would become an alternative way of purchasing goods. The products variety, services, efficiency, security and popularity of online shopping also develop quickly, it is necessary for the online shopping industry have continual improvement to meet consumers changing needs and expectations. Traditionally, consumers have to go to physical stores to buy what they want; the distinctive characteristic between online shopping and traditional shopping is that consumers need not to go to a physical store, but make their choices base on what they see on the internet, so it is useful to discover the factors that might affect online purchasing behaviour, either positively or negatively.

Compared to physical stores, online stores have many advantages: They are convenient and time saving and no more traveling and waiting in lines is needed. They are open in all time and they are accessible anytime and anywhere. These stores provide consumers with free and rich information about products and services. They also have some online tools to help consumers compare and make purchase decisions among various products and services. Hoffman and Novak (1996) indicated that interactivity is the key distinguishing feature between marketing communication on the Internet and traditional mass media. Today online consumers have more control and bargaining power than consumers of physical stores because the Internet offers more interactivities between consumers and product/service providers as well as greater availability of information about products and services. Geissler and Zinkhan (1998) claimed that the Internet shifted the balance of power in favor of consumers as it became very easy for them to make shopping comparisons and evaluate alternatives without being pressured by salespeople. Online stores reduce transaction costs and have advantage for both consumers and vendors.

Objectives of Study

This is a conceptual study that mainly aims at drawing out variables that affect the purchase decisions of consumers in an online purchase setting.

The main objectives of this conceptual study are-

· To study the factors affecting online purchase decisions of consumers

· To find out the risk factors that affect the online purchase decisions of consumers

· To study the Perceived risk factors that affect the consumer decisions in an online purchase setting

Literature Review

Perceived risk is one of the factors affecting online consumers' purchasing intentions. In fact, Bhatnagar, Misra, and Rao (2000), Featherman and Wells (2004), and Kanungo and Jain (2004) noted the negative relationship between perceived risk and purchasing intentions. Chang (2003) saw the perceived risk of engaging in an online transaction as a major barrier to the online shopping adoption. Corbitt and Van Canh (2005) and Miyazaki and Fernandez (2001) claimed that consumer risk perceptions block the growth of e-commerce. Corbitt and Van Canh stated that more than 50% of online users do not purchase online due to high perceived risk. Reduction of online consumers' risk perceptions is critical in order to attract new customers and retain existing ones (Jarvenpaa&Tractinsky, 1999; Verhagen& Tan, 2004; Verhagen, Tan, &Meents, 2004). In fact, Verhagen et al. (2004) reported that perceptions of trust and risk account for 49% of online purchasing decisions. Therefore, understanding of online consumers' risk perceptions and attitudes is desperately needed.

Perceived risk refers to the nature and amount of risk perceived by a consumer in contemplating a particular purchase decision (Cox and Rich, 1964). Before purchasing a product, a consumer considers the various risks associated with the purchase. The different types of risks are referred to as perceived or anticipated risks. Research suggests that consumers generally prefer to use electronic commerce for purchasing products that do not require physical inspection (Peterson etal., 1997). The higher the perceived experience risk, the consumer may shift to brick-and-mortar retailer for the purchase of the product. Whereas, the lower the perceived risk, the higher the propensity for online shopping (Tan, 1999). Risks perceived or real, exist due to technology failure (e.g., breaches in the system) or human error (e.g., data entry mistakes). The most frequently cited risks associated with online shopping include financial risk (e.g., is my credit card information safe?), product risk (e.g., is the product the same quality as viewed on the screen?), convenience (e.g., Will I understand how to order and return the merchandise?), and non-delivery risk (e.g., What if the product is not delivered?)

S.No	FACTORS	SUBFACTORS	DESCRIPTION	AUTHOR
1.	Psychological a. Aesthetics b. Marketing mix.	Motivation (Smith and Rupp, 2003) Customer data abuse.(Harris Interactive, 2001). Guarantees and return policies(a.((Vrechopoulos et al., 2000) b.(Dixon and Blois, 1983; Gro¨nroos, 1994; Gummesson, 1997; Goldsmith, 1999)	Psychological factors are those playing a crucial role in helping online customers unfamiliar with the vendor or unfamiliar with online transactions to overcome fears of fraud and doubts as to the trustworthiness of the Web site and vendor.	Number 2 · 2004 · pp. 111-126 q Emerald Group Publishing Limited
2	Functionality factors	Usability (Nah and Davis) (2002) Interactivity Marketing mix		
3	Cultural characteristics	Culture(kotler and armstrong 2007) Subculture Social class (kotler and Arm strong)	Culture is mentioned as most basic cause of a person's wants and needs. Behaviors are mostly learned and that we are exposed to different sets of value and believe from young age.	(kotler and armstrong 2007)

4	Social characteristics	Family(kotler and armstrong 2007) Roles and status(kotler and armstrong 2007)		
5	Personal characteristics	Occupation(kotler and armstrong 2007) Economic situation Lifestyle Personality (Ryckman 2004) Self-image		
6	Risk Factors	Actual Risk Perceived Risk	There are two major types of Risks that are considered in the minds of consumers while making any online purchase decisions. Actual risk is any kind of risk that may be faced actually by the consumers. Perceived risk factors are those that set in as a fear in the minds of consumers which have probabilities of occurrence.	

Table 1.1: Factors affecting Online Purchase Decisions

Perceived Risk in Product Purchase in E-commerce Settings

The analysis for dimensions of consumer perceived risk in online shopping is a necessary step to know the contents and types of consumer perceived risk, which is considered to be one of the important factors that impact on consumer online shopping decision-making, and it is also one of the important researches for online shopping risk. Previous researchers focused on the risks in the phase of online transactions, some of them put forward the structure of risk dimensions in different perspectives such as the lack of security, privacy risk, the credibility of online retailers or reliability risk, functional risk, shopping risk, time risk, social risk, psychological risk and so on.

Greater perception of risk on the part of consumers acts as a deterrent to their purchase intentions. Several authors have observed that the perceived risk in e-commerce has a negative effect on shopping behavior on the Internet, attitude toward usage behavior and intention to adopt E-commerce.

Dimensions of Perceived Risk in Product Purchase in E-commerce Settings

The following are the major dimensions of consumers' perceived risk that are carved out of the literature review:

Variable	Definition	Related Literature
Economic risk/ Financial Risk	The potential monetary outlay associated with the initial purchase price as well as the subsequent maintenance cost of the product, and the potential financial loss due to fraud	(Cunningham S., 1967)
Privacy risk	Potential loss of control over personal information, when the information is used without permission.	(Cunningham S., 1967)
Time risk	Potential loss of time associated with making a bad purchasing decision by wasting time researching, shopping, or have to replace the unexpected goods.	(Cunningham S., 1967) (Stone & Grønhaug, 1993) (Crespo, del, Bosque, & Sanchez,
Performance Risk	The Performance Risk category included skill level, frequency of searching, and frequency of browsing variables.	Andrade (2000)
Product and Services Risk	The PRP was defined as the overall amount of uncertainty and/or anxiety perceived by a consumer in an online purchase of a product or service. There were five types of PRP: functional loss, financial loss, time loss, opportunity loss, and overall perceived risk with product or service.	Ahn et al. (2001)
Online Transaction Risk	A possible transaction risk a consumer faces with while engaged in an electronic commerce activity. There were four types of PRT: privacy, security (authentication), non-repudiation, and overall perceived risk of an online transaction.	Ahn et al. (2001)

| Health risk	Potential loss of health because of prolonged use of computer will cause fatigue or visually impaired, pressure on one's heart, or buying counterfeit products which is harmful to one's health.	(Pavlou & Featherman, 2003)
Psychological Risk	Potential loss of self-esteem or ego loss from frustration at not achieving the buying goal	Cunningham (1967),Roselius (1971),Featherman and Pavlou(2003)
Quality risk	Thepossibilityoftheproductmalfunctioningandnotperformingasitwasdesignedandadvertisedand thereforefailingtodeliverthedesiredbenefits	(Cunningham, Gerlach, M.D.Harper, & Young, 2005)
Delivery risk	Potential loss of delivery associated with goods lost, goods damaged and sent to the wrong place after shopping.	(Yu, Dong, & Liu, 2007)
After-sale risk	Potential loss of after-sales associated with products problems, commercial disputes, and service guarantee.	(Yu, Dong, & Liu, 2007)
Source Risk	The credibility and reliability of the website that is the portal between the buyer and vendor	McCorkle (1990), Cases (2001), Comegys C. et al. (2009)
Social risk	Potential loss of status in one's social group as a result of adopting a product or service, looking foolish or unpopular.	(Cunningham S. , 1967) (Stone & Grønhaug, 1993) (Crespo, del, Bosque, & Sanchez,

Table 1.2 Dimensions of Perceived Risk affecting online purchase

Research Methodology

The study is descriptive in nature. The paper is thoroughly based upon the findings from the literature. The paper tries to synchronize the factors affecting consumer behavior in an online purchase setting. Further, the risk factors are bifurcated into two more branches that are described further.

Conceptual Model
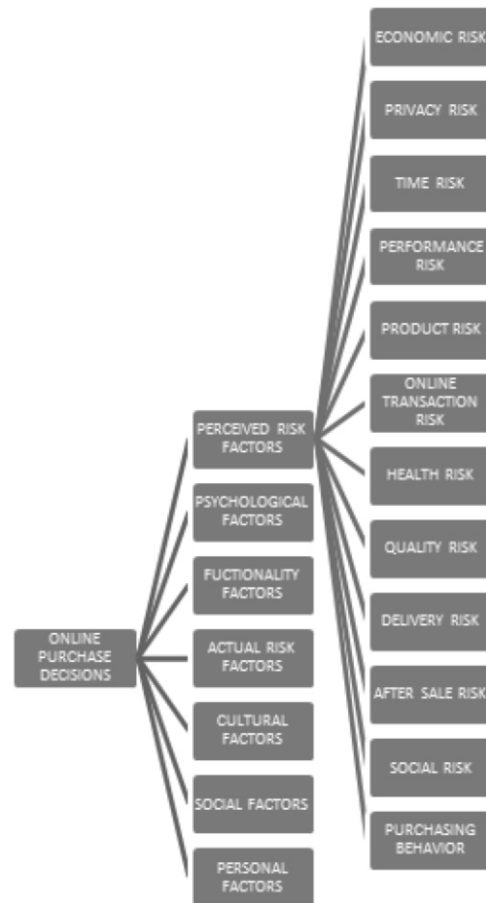
Fig 1.1 Conceptual Framework for the Study

The conceptual model of the paper tries to focus upon the perceived risk factors that affect the consumer behavior in the scenario of an online buying environment.

Factors of Perceived Risk Affecting Online Purchase Behavior

Financial risk

This type of risk involves any loss that involves financial aspects included in the purchase of a product online. It includes the possibility of repair of a product, damaged product, risk in product delivery, hidden maintenance charges etc.

Privacy Risk

The dissemination of personal information of customers on the web without their consent is the biggest challenge that the online marketing portals are facing.

Time Risk

It is the perception that the time that is spent while shopping online may be wasted if it has to get replaced or exchanged. It refers to the inconvenience faced due to delays in orders or problems in navigating the right sites for products.

Performance Risk

The Performance Risk category included skill level, frequency of searching, and frequency of browsing variables.

Product Risk

There is minimum possibility to examine or check the product while making an online purchase. The consumers have to rely upon the limited information provided about the product on the website. The product risk involves the loss when a product fails to meet the expected standard that the consumer has set based on the information provided by the vendor online.

Online Transaction Risk

A possible transaction risk a consumer faces with while engaged in an electronic commerce activity. There were four types of PRT: privacy, security (authentication), non-repudiation, and overall perceived risk of an online transaction.

Health Risk

This type of risk involves the potential risk to the one's health while browsing online for a long time. It may cause fatigue, overstress and harmful effects on eyes or purchase of some products that may physically affect the health of the consumer.

Quality Risk

This risk involves any malfunctioning found in the product after it is purchased. This involves the fear of the product not performing up to the expectations of the consumers that are built based upon the advertisements or the details of the products displayed online.

Delivery Risk

This type of risk involves the potential loss incurred possibly during transit of goods from the point of sale to point of purchase. The fear of delay in delivery, damage during the transit, improper packaging and mismanagement in handling the products are some of the key factors included in this kind of risk.

After Sale Risk

This type of risk involves any potential loss related to problems with the functioning of the products after purchase, disputes or guarantee or warranty of the product. This basically involves the risk of loss that may be faced by the consumer regarding the product after the product has been purchased.

Social Risk

This type of risk involves the fear of disapproval of family and friends about the purchase. It includes loss of status in the social group due to inappropriateness of the product or the use of internet as a medium to make the purchase.

Purchasing Behavior

In the scenario of online shopping, consumers may develop low trust and high risk perception due to lack of actual interaction with the product and lack of any sensory interaction with it. Obtaining better deals and better bargains as compared to physical shopping may reduce this type of risk among the potential buyers over online medium.

Conclusion

Limayem and Khalifa (2000) emphasized that an online shopping is completely different from a traditional shopping. Therefore, it is vital to understand online consumers' behavior. In addition, factors affecting purchasing decision need to be carefully studied. Featherman and Wells (2004) noted that understanding of perceived risk is the key to success for electronic commerce. In fact, Belanger and Carter (2005), Cheung and Lee (2000), Corritore et al. (2005), and Jarvenpaa and Tractinsky (1999) studied perceived risk as part of a trust construct. Featherman and Pavlou (2002) and Kanungo and Jain (2004) studied perceived risk in the context of a technology acceptance model. Teo and Young (2003) studied perceived risk as part of the consumer decision model. Featherman and Wells (2004) and Featherman, Valacich, and Wells (2006) studied the impact of artificiality on perceived risk. Ha (2002) studied the effect of consumer information processing on consumers' perception of risks during the pre-purchase stage. Kim and Prabhakar (2000) studied the role of trust and risk in e-banking.

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