

A
Synopsis
On

A Study of Consumer Perceived Risk towards Online Shopping
In Selected Cities of Gujarat

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Degree Programme In Management

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a. Abstract

We are living a time of techno-savvy consumers that are connected 24 hrs, 7 days a week, for whom all information is a click away as a result, the consumer's pattern for shopping has changed. Now consumer is moving towards a new platform i.e. online shopping. Online shopping provides various benefits that consumer can derive. First, it saves time and efforts for today's time starved customer. Second it provides plenty of choices for wide category of items and also the ease of comparing the offerings from different vendors, only at the click of mouse. Another most important benefit is the significant discount provided by the e-retailers to attract the customers. Online shopping also provides global access of products and not bound with the global time differences.

Online shopping opens a new world of opportunities and experiences for customers. The array of products and services that online shopping offers at different price range makes it an unbelievable market place. Most consumers have open heartedly adapted to online shopping while others have fear of various types of risks. These risks act as deterrent to online shopping.

The main objective of research to study online perceived risk and its impact on consumers' online purchase intentions. The study was also aimed to identify various influencing factors and their impact on online perceived risk. The study was conducted on 600 respondents from select cities of Gujarat namely Ahmedabad, Surat, Rajkot and Vadodara who were approached through both online & offline survey. Various factors of perceived risk were extracted through literature review and CFA was used to verify the factor structure of a set of observed variables. Their impacts were also studied with various types of perceived risk associated with online shopping. The respondents were government and private employees, students and businessmen. Their perceptions of Financial Risk, Performance Risk, Social Risk, Time Risk, Psychological Risk and Privacy Risk for online shopping were assessed using linear and multiple regression analysis.

b. Description on the state of the art of the research topic

Online shopping is truly catching in India. Consumer found lot of benefits like it saves time, efforts, money etc, while they shop online. However, many people still locate information on the

Internet and purchase product through traditional stores. It is noticed that the conversion rate is very low. One of the main reasons is the perceived risk associated with the online shopping.

Schiffman et al (2007) explain perceived risk as an uncertainty that consumer faces when he cannot foresee the consequences of his purchase decisions. It shows how much a consumer believes in the probability of a negative outcome from any purchase decision. Consequences may involve performance goals (e.g. will the product function according to my anticipation?), psychosocial goals (e.g. what would be the impact of others thinking towards me?), or resources such as money, time and attempt spent to accomplish those goals.

Risks perceived by consumer can become a hurdle to performing internet transactions (Gerrard and Cunningham, 2003). Various types of perceived risk have a considerable influence on the selection of medium of shopping. There are variety of risks that have been suggested, including Financial, Performance, Physical, Social, Convenience, Psychological, Source and Privacy (Hassan et. al. 2006).

Financial Risk refers as a probability that a purchase results in loss of money or other resources. Performance Risk refers as a probability that a product purchased results in failure to function as expected. Social Risk refers as a probability that a product purchased results in disapproval by family or friends. Psychological Risk refers to probability that a product results in inconsistency with self-image. Time Risk refers as a probability that a purchase results in loss of time to buy or retain the product the fear of losing time to buy or retain the product. Privacy Risk refers as a probability of losing privacy online. (Naiyi 2004, Chaudhuri 2000).

When consumer prefer internet for shopping, they are actually using and accepting technology and innovation. Consumers who buy new products are termed as innovators and the product which they buy are termed as innovations (Manzano, Navarre, Mafe and Blas (2009). Concept of innovativeness is related to the new product adaptation process. Rogers (1995) establishes a classification with five groups of adopters. Consumers who are the first to adopt an innovation are described as innovators. This personality construct of individuals reflects their degree of adoption of new products and ideas which they never experienced (Hirschman, 1980). Researchers have used many techniques to measure consumer innovativeness; two main approaches to the concept can be distinguished: general innovativeness and innovativeness

applied to a specific domain. General innovativeness reflects openness and an individual's search for new experiences and it is a significant predictor of shopping intention (Craig and Ginter, 1975, Joseph and Vyas, 1984). Empirical research by Nakata and Sivakumar (1996) shows that risk-taking behaviour is a typical characteristic of innovative managers. Within the context of online shopping, an individual innovative personality is related to risk-taking tendencies, since an innovative behavior such as online banking use involves unavoidable risk and uncertainty (Gerrard and Cunningham, 2003). According to Gatignon and Robertson (1991), innovators have more favorable attitudes towards risk. They are characterized as highly educated, higher income level, greater social mobility, higher self esteem and opinion leadership. They are less sensitive for risk associated with online process. Individuals who are highly innovative are more willing to handle uncertainty associated with innovative technologies (Rogers 1995). It is observed that the personality of online shoppers have innovative and risk taking characteristics and both the characteristics are related to each other.

Self efficacy is a construct which describes the confidence of an individual in their own abilities. Self efficacy is defined as the belief in one's capabilities to perform a particular behavior and successfully execute certain actions to attain goals (Bandura, 1997; Gist & Mitchell, 1992). Self-efficacy does affect risk taking (Barbosa et al., 2007). Krueger and Dickson (1994) showed that individuals with higher self-efficacy would be more likely to perceive less risk in B2C e-commerce. First, they are confident of their ability to deal with problems which might arise; thus, they may care less about such problems arising. Second, they are confident in their capability to make good use of all the information deemed necessary to achieve a satisfactory transaction, therefore they are confident of achieving a satisfactory transaction. For instance, if people are confident that they usually are able to purchase exactly the items they want from Web vendors, they are more likely to trust a Web vendor and make purchase in the future.

The motives of online shoppers could be of utilitarian and hedonic shopping motives. Bhatnagar & Gosh (2004) explains that utilitarian shopping motives include convenience-seeking, variety seeking, searching for quality of merchandise, and reasonable price rate, etc. and hedonic shopping motives are related to emotional needs of individuals for enjoyable and interesting shopping experiences. Hopkinson & Pujari (1999) have explained how hedonic consumption

takes place in a high-involvement situation, where an individual is deeply involved in experiencing a consumption event. Batra and Ahtola (1990) have examined the composition of the overall consumer attitude. This finding reinforces the fact that any brand has both utilitarian and hedonic attributes. They have suggested that in the cases of most of the products or brands, the total consumer attitude is composed of at least two dimensions, utilitarian and hedonic. Online shopping is a mode of shopping where both utilitarianism and hedonism are likely to persist.

c. Definition of Problem

According to internetlivestates, in 2015, the number of internet user in India was 354 million. India stood at second place in number of internet users followed by China. Internet has brought in a revolution in shopping patterns and trends. According to ASSOCHAM the average online purchases are expected to increase from 66% in 2015 to 78% in 2016. Around 55 million consumers purchased online in the year 2015. It has been seen that there is an explosive growth of online users and a positive growth of online shoppers which has led to dramatic shifts in the way purchase activities and transactions are conducted. But a clear gap between number of internet users and number of online shoppers can be seen, which could be a challenge for marketers. It is important for marketers to understand the reason behind this situation. They have to put efforts in understanding the mindset of internet users and their fear for not opting internet as a medium of shopping.

d. Research objectives & Scope

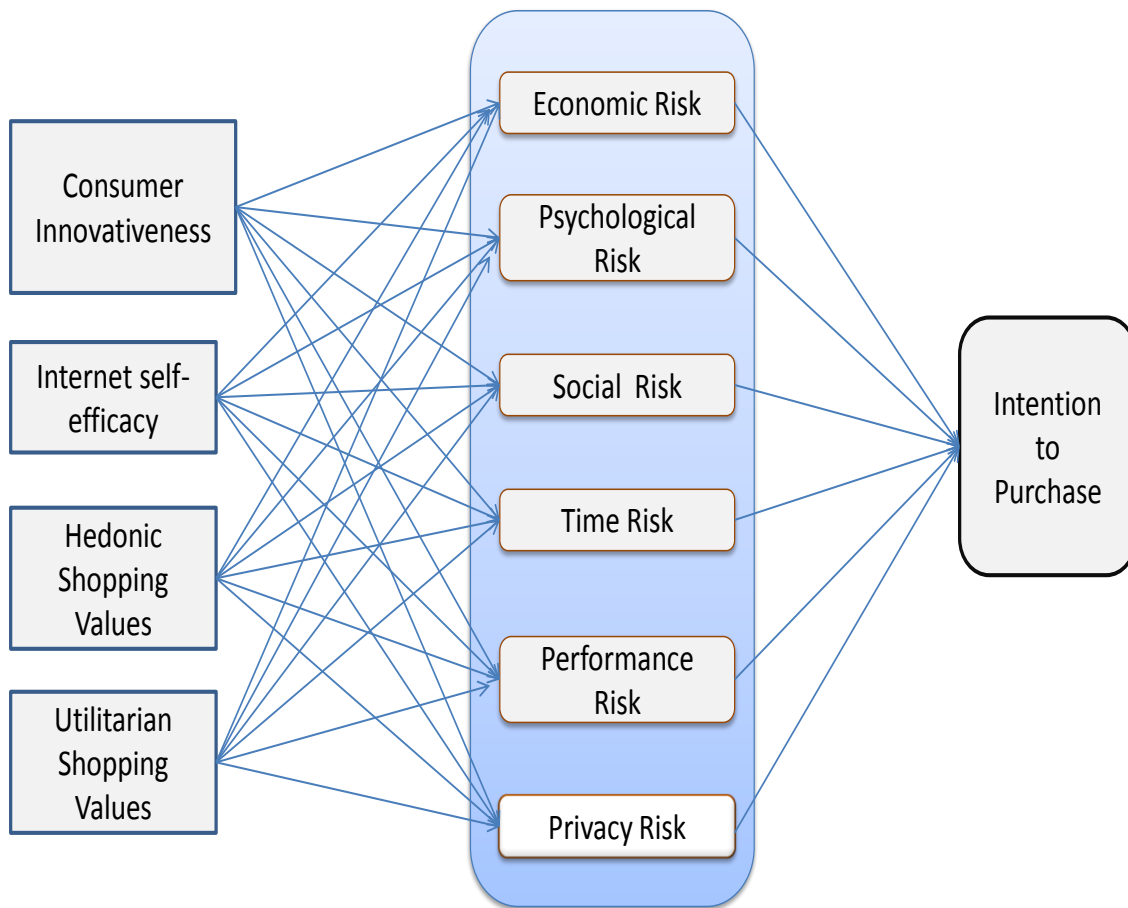
The following research objectives were used as the basic focus of the study.

1. To identify various types of perceived risk associated with online shopping.
2. To analyze impact of various perceived risk on consumers' online purchase intentions.
3. To identify factors influencing consumer perceived risk for online shopping.
4. To analyze impact of identified factors on each type of perceived risk. (factors are consumer innovativeness, internet self-efficacy, hedonic and utilitarian shopping value)

Scope of work

The research carried out in the thesis focus on consumers' online perceived risk, its impact on customer purchase intentions and factors influencing perceived risk. Four major cities of Gujarat were selected: Ahmedabad, Baroda, Surat and Rajkot. SPSS 20 and AMOS 20 software were used for analysis of the data. This research would guide online vendors in understanding online shopper's mindset towards risk and it helps them in designing strategies to reduce online perceived risk.

e. Original contribution by the thesis



Conceptual framework

Theoretically, this research has contributed to the existing body of knowledge pertaining to the factors of consumers' online perceived risk by incorporating new information. An empirical

model of consumers' online perceived risk has developed and it has added richness to the perceived risk constructs studied so far in the context of online shopping. Utilizing this model has helped the researcher in studying its relationship with consumers' purchase intentions for online shopping.

It is very much essential for the e vendors to understand the role and importance of the risk perceived by online consumers. With the use of empirical model of perceived risk developed in the thesis, e-vendors will be able to identify how consumer innovativeness, internet self-efficacy, hedonic shopping value and utilitarian shopping value affect consumer perceived risk which reduces consumers purchase intentions. On the basis of understandings, e-vendors can formulate the strategies for reducing online perceived risk and strategies for increasing consumers' purchase intentions.

f. Methodology of Research, Results & Comparison

Research Methodology

Research Design: Descriptive Research

Target Population: Online Shoppers who have shop atleast once in last six months of selected cities of Gujarat

Sample Unit: The sample consists of online shoppers from five major cities of Gujarat including Ahmedabad, Surat, Vadodara & Rajkot.

Sampling Technique: Non Probability Judgmental Sampling

Sample Size: 600 Respondents

Scaling Technique: 5 Point Likert Scale ranging from 1 (= strongly disagree) to 5 (= strongly agree) use in the research.

Pilot Study: Pilot Study was done with the use of Cronbach Alpha. Test results of Cronbach Alpha was 0.913.

Statistical Tools Used: Different tools used for the different objectives as below:

No.	Research Objectives	Tools used
1	To identify various types of perceived risk associated with online shopping.	Literature review
2	To analyze impact of various perceived risk on consumers' online purchase intentions.	Linear Regression Analysis
3	To identify factors influencing consumer perceived risk for online shopping.	Literature review and Confirmatory Factor analysis
4	To analyze impact of identified factors on each type of perceived risk. (factors are consumer innovativeness, internet self-efficacy, hedonic and utilitarian shopping value)	Linear Regression Analysis

Results:

Objective 1: To identify various types of perceived risk associated with online shopping.

Six types of perceived risk has identified through literature review. Details are given below:

Types of perceived risks		
Dimensions	Definition	Research
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 (1967), Crespo, Bosque and Sanchez(2009), Stone and Gronhaug(1993)
Social Risk	Potential loss of status in one's social group as a result of adopting a product or service, looking foolish or untrendy	Cunningham (1967), Crespo, Bosque and Sanchez(2009), Stone and Gronhaug(1993)
Time Risk	Potential loss of time associated with making a bad purchasing decision by wasting time researching and making the purchase, only to have to replace it if it does not perform to expectations.	Cunningham (1967), Crespo, Bosque and Sanchez(2009), Stone and Gronhaug(1993)
Privacy Risk	Potential loss of control over personal information, Such as when information about you is used without your knowledge or permission.	Crespo, Bosque and Sanchez(2009), Stone and Gronhaug(1993), Featherman and Pavlou(2003)

Performance Risk	The possibility of the product malfunctioning and not performing as it was designed and advertised and therefore failing to deliver the desired benefits.	Cunningham (1967), Crespo, Bosque and Sanchez(2009), Stone and Gronhaug(1993)
Psychological Risk	Potential loss of self-esteem (ego loss) from the frustration of not achieving a buying goal.	Crespo, Bosque and Sanchez(2009), Stone and Gronhaug(1993),

Objective 2: To analyze impact of various perceived risk on consumers' online purchase intentions.

Hypothesis	R Square value	Sig. Value	Result
H1a: Financial Risk has a significant impact on consumer purchase intention.	.351	.000	Accepted
H1b: Performance Risk has a significant impact on consumer purchase intention.	.285	.000	Accepted
H1c: Social Risk has a significant impact on consumer purchase intention.	.455	.000	Accepted
H1d: Time Risk has a significant impact on consumer purchase intention.	.430	.025	Accepted
H1e: Psychological Risk has a significant impact on consumer purchase intention.	.364	.000	Accepted
H1f: Privacy Risk has a significant impact on consumer purchase intention.	.163	.000	Accepted

R square values of the above table stipulate that to what extent each factor causes the variation in consumer purchase intention towards online shopping. A comparative value of the above table shows that various types of perceived risk results variation in consumers intentions to shop online.

Objective 3: To identify factors influencing consumer perceived risk for online shopping.

Through literature review, four factors were extracted which influenced consumer perceived risk for online shopping. These factors are consumer innovativeness, internet self-efficacy, hedonic shopping value and utilitarian shopping value. Factor structure was developed and validities were checked through confirmatory factor analysis.

Objective 4: To analyze impact of identified factors on each type of perceived risk. (Factors are consumer innovativeness, internet self-efficacy, hedonic and utilitarian shopping value)

Impact of Consumer Innovativeness

Hypothesis	R Square value	Sig. Value	Result
H2a: Consumer innovativeness has a significant impact on Financial Risk	.196	.000	Accepted
H2b: Consumer innovativeness has a significant impact on Performance Risk	.161	.000	Accepted
H2c: Consumer innovativeness has a significant impact on Social Risk	.262	.000	Accepted
H2d: Consumer innovativeness has a significant impact on Time Risk	.186	.000	Accepted
H2e: Consumer innovativeness has a significant impact on Psychological Risk	.185	.000	Accepted
H2f: Consumer innovativeness has a significant impact on Privacy Risk	.067	.000	Accepted

R square values of the above table specify that to what extent consumer innovativeness causes the variation in various types of consumer perceived risk for online shopping. Comparison of R square value shows that which type of perceived risk shows maximum variation.

Impact of Consumer Internet Self-efficacy

Hypothesis	R Square value	Sig. Value	Result
H3a: Internet self-efficacy has a significant impact on Financial Risk	.188	.000	Accepted
H3b: Internet self-efficacy has a significant impact on Performance Risk	.162	.000	Accepted
H3c: Internet self-efficacy has a significant impact on Social Risk	.163	.000	Accepted
H3d: Internet self-efficacy has a significant impact on Time Risk	.170	.000	Accepted
H3e: Internet self-efficacy has a significant impact on Psychological Risk	.302	.000	Accepted
H3f: Internet self-efficacy has a significant impact on Privacy Risk	.098	.000	Accepted

R square values of the above table specify that to what extent consumer internet self-efficacy causes the variation in various types of consumer perceived risk for online shopping. Comparison of R square value shows that which type of perceived risk shows maximum variation.

Impact of Consumer Hedonic Shopping Values

Hypothesis	R Square value	Sig. Value	Result
H4a: Consumer hedonic shopping value has a significant impact on Financial Risk.	.202	.000	Accepted
H4b: Consumer hedonic shopping value has a significant impact on Performance Risk	.255	.000	Accepted
H4c: Consumer hedonic shopping value has a significant impact on Social Risk	.324	.000	Accepted
H4d: Consumer hedonic shopping value has a significant impact on Time Risk	.236	.000	Accepted
H4e: Consumer hedonic shopping value has a significant impact on Psychological Risk	.206	.000	Accepted
H4f: Consumer hedonic shopping value has a significant impact on Privacy Risk	.165	.000	Accepted

R square values of the above table specify that to what extent consumer hedonic shopping value causes the variation in various types of consumer perceived risk for online shopping. Comparison of R square value shows that which type of perceived risk shows maximum variation.

Impact of Consumer Utilitarian Shopping Values

Hypothesis	R Square value	Sig. Value	Result
H5a: Consumer utilitarian shopping values has a significant impact on Financial Risk	.244	.000	Accepted
H5b: Consumer utilitarian shopping values has a significant impact on Performance Risk	.197	.000	Accepted
H5c: Consumer utilitarian shopping values	.193	.000	Accepted

has a significant impact on Social Risk			
H5d: Consumer utilitarian shopping values has a significant impact on Time Risk	.221	.000	Accepted
H5e: Consumer utilitarian shopping values has a significant impact on Psychological Risk	.253	.000	Accepted
H5f: Consumer utilitarian shopping values has a significant impact on Privacy Risk	.040	.000	Accepted

R square values of the above table specify that to what extent consumer utilitarian shopping value causes the variation in various types of consumer perceived risk for online shopping. Comparison of R square value shows that which type of perceived risk shows maximum variation.

g. Achievements with respect to the objectives

- In the first objective, total six types of perceived risk associated with online shopping were identified through literature review. These risks are financial risk, performance risk, social risk, time risk, psychological risk and privacy risk.
- In the second objective, impact of all six types of perceived risk on consumers purchase intentions has been identified. It was found that perceived risk directly influences the intentions to increase the level of online shopping. All six types of perceived risk statistically significantly predicted consumers' intentions to purchase online. Statistics shows that social risk and time risk has comparatively more impact on purchase intentions of consumer and privacy risk has least influence on consumers' online purchase intentions.
- In the third objective, various factors which influence consumers' online perceived risk were identified. After then, through expert opinion four major factors were extracted. These factors are consumer innovativeness, internet self-efficacy, hedonic shopping value and utilitarian shopping value. Factor structure was developed and validities like Content Validity, Construct Validity, Convergent Validity, Discriminant Validity and Nomological Validity were checked through confirmatory factor analysis.
- In the third objective, impact of consumer innovativeness, internet self-efficacy, hedonic and utilitarian shopping values on all six types of consumer perceived risk were

identified. It is found that consumer innovativeness has a significant influence on all six types of perceived risk. If consumer is Innovative then he/she will perceive less risk in compare to those who are less innovative. Statistics shows that innovative consumers are most sensitive towards social risk and less sensitive towards privacy risk.

Internet self-efficacy also plays vital role in consumers' perceived risk. It is proved that internet self-efficacy has a significant statistical influence on perceived risk. If consumer has high internet self-efficacy then they found to be most sensitive towards psychological risk and less sensitive towards privacy risk in comparison to financial, social, performance and time risk.

Both hedonic shopping value and utilitarian shopping value influence consumers' online perceived risk. Consumers with high hedonic shopping value perceived less risk on the other hand consumer with high utilitarian value perceived more risk. Hedonic shopping value majorly influences social risk and utilitarian shopping value majorly influences time risk and psychological risk. Other risks like financial risk, performance risk and privacy risk were moderately affected by hedonic and utilitarian shopping values.

h. Conclusion

Consumer online perceived risk and its dimensions were studied by different authors since years. In this doctoral research, consumer online perceived risk and its dimensions were studied in three parts specifically for Gujarat state. In the first part, various types of perceived risk were studied. It was found that there are six major types of perceived risks and these were Financial Risk, Performance Risk, Social Risk, Psychological Risk, Time Risk and Privacy Risk.

In the second part, influences of all six types of risk on consumers purchase intentions were studied. It was found that there was a statistically significant influence of perceived risk on purchase intentions of online consumers. Statistically it was proved that financial risk, social risk, time risk and psychological risk has more impact in compare to performance and privacy risk.

In the third part, various factors were identified which have influence on consumers' online perceived risk. These factors were consumer innovativeness, internet self-efficacy, hedonic shopping values and utilitarian shopping values. Impact of these identified factors on perceived risk was studied. An empirical model of online perceived risk was developed based on it. Based on statistical result, it was found that social risk was majorly influenced by consumer innovativeness and hedonic shopping value. Psychological risk was majorly influenced by internet self-efficacy and utilitarian shopping values of consumers. Financial risk and time risk had major impact of utilitarian shopping values of consumer.

i. References

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