



“A STUDY TO ASSESS CONSUMER PERCEIVED RISK TOWARDS ONLINE PURCHASE IN SELECT TIER II CITIES IN INDIA”

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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 610 respondents from select cities of Rajasthan namely jaipur who were approached through both online & offline survey. Various factors of perceived risk were extracted through literature review and exploratory factor analysis. Confirmatory factor analysis 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 simple regression analysis.

1. INTRODUCTION

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.

In this chapter, researcher has tried to study about the background of the online shopping. It includes internet and its users, growth of online shopping, its pros and cons, current trends in online shopping, challenges of online shopping, and terminology used in the study. This chapter has also gives a brief outline of the overall structure of the study.

Internet:

Internet is a big network which is formed by connecting many small networks. It works as a platform for all the users which are connected to it. The cyberspace, the information super highway and the net are the other terms used for Internet. According to Camp L. J. (2000), Internet is a set of networks connected using protocols that are open and portable, and that enable the entire research community to share information". Protocols are the set of rules and regulations which are meant for efficient working of Internet. An open protocol refers to those facts that there are no secrets about the working of the software. And a portable protocol associated with the multi functioning of a network with many operating systems.

Internet in India: Users and Usage

According to a report published by **Statist the Statistics Portal** India is the second [largest online market](#), with over 460 million internet users, ranked only behind China. It is estimated that by 2021, there will be about 635.8 million. Instead of having large base of internet users in India, only 34.8 percent of

the 2015. This is a considerable increase in contrast to the previous years, considering the internet penetration rate in India stood at about 10 percent in 2011. Following table shows year wise data of internet users in India and their penetration rate:

Online Shopping and Internet Marketing:

Internet is used for several purposes including information search, information sharing, interactive communication, and shopping. Internet is also a medium through which businesses can economically and effectively perform their marketing activities. Online shopping and online marketing are the two terminologies used in online environment. Both are related to the same concept but a different perspective.

According to Susan Ward, Internet Marketing could be defined as “the art and science of selling products and/or services over digital networks such as internet and cellular phone networks”. Internet marketing is basically discovery of appropriate online marketing mix of strategies through which potential customers could be attracted and converted into the consumers for long time. On the other hand, online shopping is the act of purchasing products or services over the internet. The popularity of online shopping has grown over the years and the reasons are the convenience, comfort and a shop accessible from home and office (BusinessDictionary.com). As it is a form of e-commerce, the sale and purchase activities are completely done electronically and interactivity in real time.

2. NEED FOR THE STUDY

India is one of the fastest growing e-commerce markets. Its e-commerce growth rate in 2015 was 129.5 per cent. The growing number of Internet users in the country helped e-marketers in controlling the consumers' skepticism about buying goods and services online. Being one of the fastest growing states in India, Gujarat also shows a significant increase in e-commerce. With only 6 per cent of India's land mass and barely 5 per cent of its population, Gujarat has managed to account for 7.6 per cent of the India's GDP and 22 per cent of its exports. Its annual Gross State Domestic Product (GSDP) growth from 2001 to 2013 averaged nearly 10 percent. According to a report released by Forrester Consultancy & tech giant in 2014, 100 million Indians will shop online by the year 2016. Snapdeal also claims that their 5 million customers are from Gujarat state. In the past one year, the numbers have gone up by 10 times for Snapdeal. Popular categories of product among Rajasthan include smartphones, computers and apparels. While the Indian e-commerce industry is growing, e-retailers say that a large number of their customers come from Gujarat and the buyers from the state have been increasing tremendously. An Amazon India spokesperson comments on Jaipur is amongst the top ten cities in terms of sales of Amazon. Moreover the e-commerce adoption is 20 percent higher than India average and m-commerce is the fastest growing segment for Amazon India.”

Online shopping offers a new world of opportunities and amazing experiences for customers. The

assortment of products and services that online shopping offers at different price range makes it an unbelievable market place. Most of the consumers have open heartedly adapted to online shopping while others have fear of uncertainties and of not fulfilling their expectations. These uncertainties are basically perceived risk. Schiffman et. al. (2007) explains perceived risk as an uncertainty that consumer faces when he cannot foresee the consequences of his purchase decisions. Risks perceived by consumer can become a hurdle in performing internet transactions (Gerrard and Cunningham, 2003).

In this study, researcher has focused on consumer perceived risk towards online shopping, its dimensions and various factors affecting consumer perceived risk.

3. OBJECTIVE

The research was focused on the following objectives:

- 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)

4. HYPOTHESIS

An effort has been made by the researcher to design and test various statistical hypothesis derived from review of literature.

For second objective which is to analyze impact of various perceived risk on consumers' online purchase intentions, list of hypothesis has been given as follows:

- Financial risk has a significant impact on consumer purchase intention.
 - Performance risk has a significant impact on consumer purchase intention.
 - Social risk has a significant impact on consumer purchase intention.
 - Time risk has a significant impact on consumer purchase intention.
 - Psychological risk has a significant impact on consumer purchase intention.
 - Privacy risk has a significant impact on consumer purchase intention.
- For fourth objective which is to analyze impact of identified factors on each type of perceived risk, list of hypothesis has been given as follows:
- Consumer innovativeness has a significant impact on Financial Risk.
 - Consumer innovativeness has a significant impact on Performance Risk.
 - Consumer innovativeness has a significant impact on Social Risk.
 - Consumer innovativeness has a significant impact on Time Risk.
 - Consumer innovativeness has a significant impact on Psychological Risk.

- Consumer innovativeness has a significant impact on Privacy Risk.
- Internet self-efficacy has a significant impact on Financial Risk.
- Internet self-efficacy has a significant impact on Performance Risk.
- Internet self-efficacy has a significant impact on Social Risk.
- Internet self-efficacy has a significant impact on Time Risk.
- Internet self-efficacy has a significant impact on Psychological Risk.
- Internet self-efficacy has a significant impact on Privacy Risk.
- Consumer hedonic shopping value has a significant impact on Financial Risk.
- Consumer hedonic shopping value has a significant impact on Performance Risk.
- Consumer hedonic shopping value has a significant impact on Social Risk.
- Consumer hedonic shopping value has a significant impact on Time Risk.
- Consumer hedonic shopping value has a significant impact on Psychological Risk.
- Consumer hedonic shopping value has a significant impact on Privacy Risk.
- Consumer utilitarian shopping values has a significant impact on Financial Risk.
- Consumer utilitarian shopping values has a significant impact on Performance Risk.
- Consumer utilitarian shopping values has a significant impact on Social Risk.
- Consumer utilitarian shopping values has a significant impact on Time Risk.
- Consumer utilitarian shopping values has a significant impact on Psychological Risk.
- Consumer utilitarian shopping values has a significant impact on Privacy Risk.

5. ASSUMPTION

1. The study assumes that the samples selected for analysis are an accurate representation of the population.
2. It is assumed that NSDC's list of training centers is inclusive of the entire training centers that are covered under the skill development program.
3. The study assumes that the information provided by NSDC on their websites is updated and accurate to the best of their knowledge

6. REVIEW OF LITERATURE

In recent year's world has seen a phenomenal growth of internet and users base. In 2014, almost 75% (2.1 billion) of all internet users in the world (2.8 billion) live in the top 20 countries. And the remaining 25% (0.7 billion) is distributed among the other 178 countries, each representing less than 1% of total users (Internetlivestates.com). China, the country with most users (642 million in 2014), represents nearly 22% of total, and has more users than the next three countries combined (United

States, India, and Japan). Among the top 20 countries, India is the one with the lowest penetration: 19% and the highest yearly growth rate. On the other hand of the range, United States, Germany, France, U.K., and Canada have the highest penetration: over 80% of population in these countries has an internet connection (Internetliveatates.com).

According to annual FICCI-KPMG Indian Media and Entertainment Industry Report 2015, the penetration rate of internet users in India is 19 % which is very slow but in future it would be growing and India is close to replace US as the second largest enabled market with number of internet users. In 2016, statistics shown by Internetlivestates.com also justifies the above report. United State was replaced by India as the second country having largest number of internet users. The penetration rate is also reached by 27% and 34.8% in 2015 and 2016 respectively. But still the gap of internet users and internet non-users is high comparatively.

The phenomenal growth of internet and its user base influenced each area of economy. It influenced consumers shopping pattern also. Internet provides a new platform for shopping in the form of online shopping. 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. 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. Despite of the explosive growth in internet user base, a clear gap between number of internet users and number of online shoppers can be seen, which could be a challenge for marketers.

Literature analysis has made it clear that a barrier to online shopping has been largely examined in terms of risk perception.

2.3 Perceived risk:

The basic concept of perceived risk was first time introduced as a subjective and psychological construct to elucidate phenomena of information seeking and brand loyalty (Bauer, 1967). Perceived risk is considered as a fundamental notion of consumer behavior and is frequently used to explain consumers' risk perceptions and risk reduction methods (Shin, 2010). Schiffman et al. (2007) defines consumers' online perceived risk as the uncertainty that consumers face when they cannot anticipate the consequences of their purchase decision. It shows the consumers' subjective faith about the probability of a non-desirable outcome from any purchase decisions in terms of perceived risk. It is also proved by many researchers that perceived risk develops from consumer uncertainty, especially in the case of Internet shopping (Bakos, 1997; Martin and Camarero, 2008). Cunningham (1967) advised that perceived risk contains two dimensions of risk: uncertainty and consequences. 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). Jahankhani (2009) verified that when consumer is engaged with any kind of buying situation, they always perceive a certain level of risk. He also define that risk perceived by consumer is a function of two variables i.e. the amount of consequences and individuals feeling of prejudiced certainty of failure and success. Park and Stoel (2005) have identified that the amount or extent of perceived risk depends and basically varies on the consumer's 'subjective elucidation' of the uncertainty associated with online shopping environment.

Dowling and Staelin (1995), describes consumer behavior towards online shopping. According him, if a consumer perceived risk during an online purchase, they starts employing strategies to reduce risk until it become acceptable, otherwise they will withdraw their purchase decision. Bettman (1973) differentiate perceived risk in two types: inherent and handled risk. Inherent risk is referred as risk before consumer applied risk reduction strategies and handled risk is defined as the risk after the consumer has applied risk reduction strategies. According to Lu et al. (2005), online technology and applications have to expose to security threats like viruses, worms, crackers, password sniffing and spoofing, breaches of personal privacy, theft of fund and hackers Perceived risk proves as one of the main reason which stops consumer to shop online. Perceived risk derives from consumer uncertainty, especially in the case of Internet shopping (Bakos, 1997; Martin and Camarero, 2008). Li Guo (2011), conducted a research on influencing factors of consumer purchasing behavior in cyberspace in china and the result of study shows that security of online shopping, prices and commercial credits are the prime factors affecting consumers' shopping behavior and designs of store and genders education levels of consumers are the secondary influencing factors. A Study on attitudes towards online shopping and the internet was conducted by Teo in 2002 has analyzed various factors including consumers' perceived risk and he identify perceived risk as a critical determinant of consumers' willingness to buy online. He said both experts and non-experts individuals differ in their perceptions of risk depending on the nature of the product purchased.

Perceived risk has been examined in surplus of research studies and they all identified a negative association with consumers' online purchase intentions. In addition, perceived risk has a characteristic to generate a restrain aspect of consumers' willingness to participate in online shopping because it has been perceived to increase susceptibilities of online shopping (Pavlou,2003). In 2013, Khaled Faqih has conducted a research in Jordon, and confirmed that consumer perceived risk is a powerful indicator for explaining consumers' behavior when consumers are more tend to avoid mistakes than to increase utility in online purchasing. He said that it become very important to understand consumers' risk perception and how this risk can be reduced by implanting risk – reduction techniques within online shopping medium. Theodosios Tsiakis (2012) has analyzed consumers' perceived security risk. According to

him, the primary factor or reason behind decreasing consumers' willingness on e-business is perceived security risks associated with online transactions. Nepomuceno et al. (2012) have conducted a research on Relationship between intangibility and perceived risk in North America and also investigate the moderating effects of privacy, system security and general security concerns for online shopping environment. The result shows that consumers' perception of risk is increased when two negative pieces of information are processed simultaneously like product intangibility and privacy concern. Besides that, system security is identified as the most relevant concern in online shopping environment.

Chang and Wu (2012) have analyzed the moderating effect of decision making style on consumers' perceived risk and its consequences on online purchase intentions. The finding indicates that consumer perceived risk toward the web site and product affects online purchasing intention through cognition- and affect-based attitudes. Result shows that lower perceived risk can increase higher cognition-based attitude, affect-based attitude, and online purchasing intention. It is being confirmed that perceived risk is associated with the selection of decision- making styles, including involvement and heuristics. In 2006, Lin and Fang examined the effects of perceived risk of word-of-mouth (WOM) communications by the sender and receiver. The result of the study found that people will avoid WOM communications when they perceive product risky, as the consequences of shopping that product may be more serious than when a product is not risky and individual can be feel regretful and guilty because he/she has suggested the same product.

7. METHODOLOGY

Research is the conception of new knowledge and the use of existing facts in a fresh and creative way so that new concepts, methodologies and understandings can be generated. Market research is the systematic collection of information or data about people or companies – a market- and analyzes them to better understand their needs and requirements. The results of market research then used to help organizations to take more informed decisions related to company's strategies, future plans, potential customer base and operations. According to American Marketing Association, Market research defines as "Marketing Research is the Function that links the consumer, customer and public to the marketer through information- information used to identify and define marketing opportunities and problems-generate, refine and evaluate marketing actions; monitor marketing performance; and improve understanding of marketing as a process".

The process of marketing research identifies the relevant information required to deal with these issues, designs information collection methods, implements the data collection process efficiently, analyzes the results and execute the findings and their real world implications 1. Market research provides a platform

to understand likes and dislikes needs and requirements, capabilities and expectations of consumers. Market research required a systematic planning of all the stages of process as it is a systematic enquiry. Each stage of market research process should be sound, well planned and well documented as much as possible.

8. ANALYSIS AND INTERPRETESION

610 respondents were questioned about their demographic profile. Their demographic profile included gender, age, qualification, income, occupation and their frequency of online purchase in last six months. Responses of respondents are presented in the following table. Pie chart is used to present characteristic wise respondent profile and for better understanding, its interpretation is also given with the chart

Table 1: Demographic profile of respondents

Sr. No.	Characteristics	Category	Frequency	%
1	Gender	Male	533	72.16
		Female	167	27.83
2	Age	18-25	168	28
		26-35	295	59
		35-50	123	20.5
		50 & above	15	2.5
3	Education	Graduate	307	51.16
		Post - graduate	253	50.5
		Doctorate	12	2
		Others	38	6.33
4	Occupation	Student	256	51
		Business	57	9.5
		Govt. Employee	66	11
		Pvt. Employee	222	37
		Others	9	1.5
5	Income (annual)	Below Rs. 100000	105	17.5
		Rs. 100001 – 300000	520	70
		Rs. 300001 – 500000	60	10
		Rs. 500001 & above	15	2.5

Gender-wise distribution of respondents:

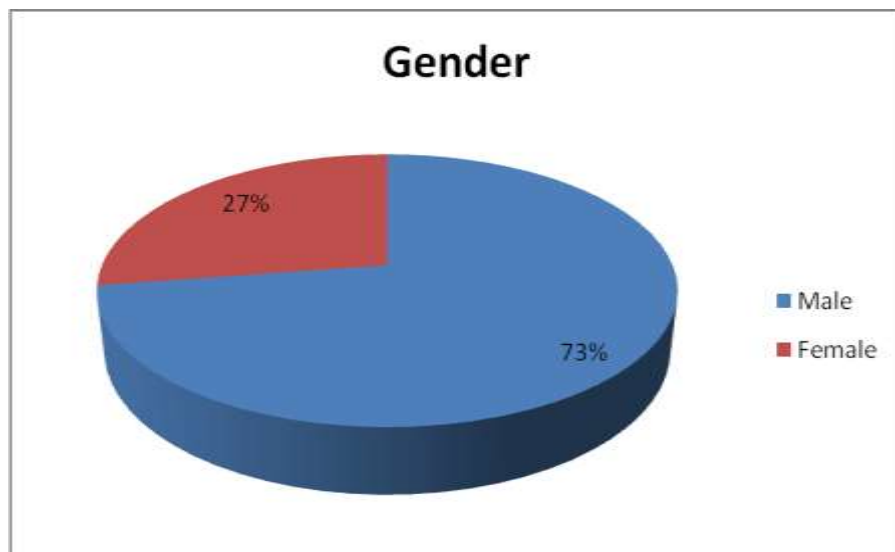


Figure 1 Gender-wise distribution of respondents

It is evident from the above graph that out of 610 respondents; the percentage of male respondent is 73%; on the other hand the percentage of female respondents is 27%.

Age group-wise distribution of respondents:

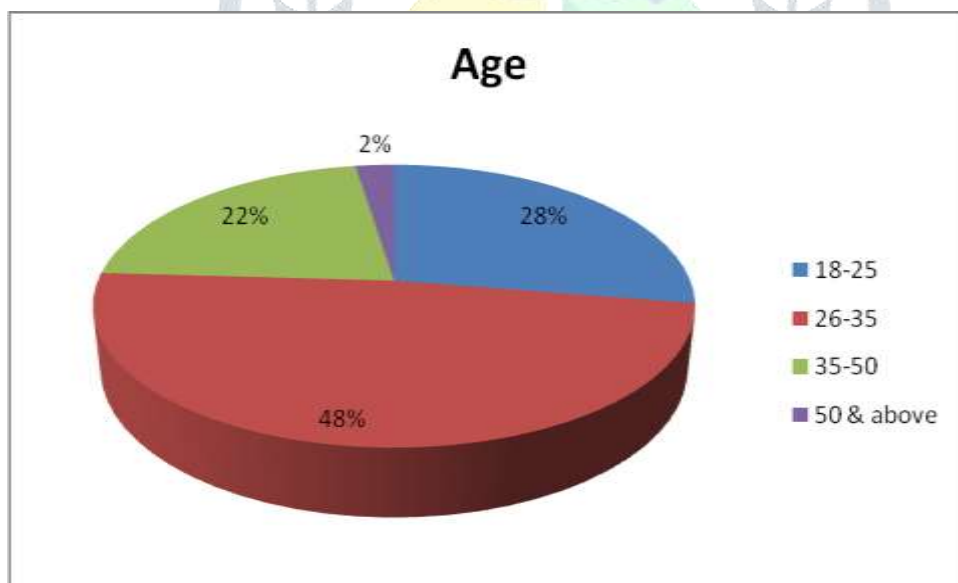


Figure 2: Age group-wise distribution of respondents

From the above graph it is clear that maximum proportions of respondents are from the age group of 26-35 i.e. 48%. It is obvious because in this age group most of the people are into their early earning stage and they are innovative. The second highest group is 18-25 with 28%, which include students. The age group 35-50 is having 22% proportion and the least proportion is from age group 50 & above.

Education-wise distribution of respondents:

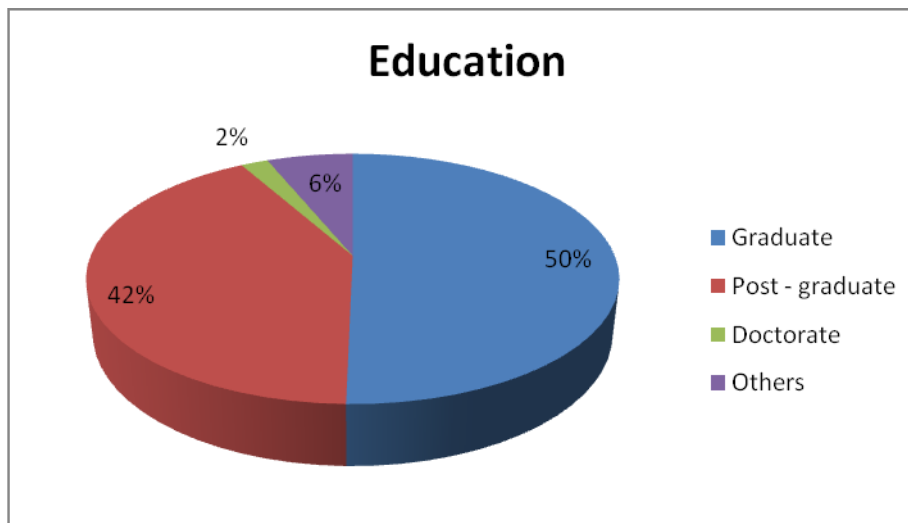


Figure 3: Education-wise distribution of respondents

As seen from above 50% of the respondents who are graduate shares largest proportion followed by post-graduate respondents with 42% of proportion. Which is obvious that educated people prefers online shopping. From all respondents, 6% respondents are doctorate and remaining belongs to others category.

Occupation-wise distribution of respondents:

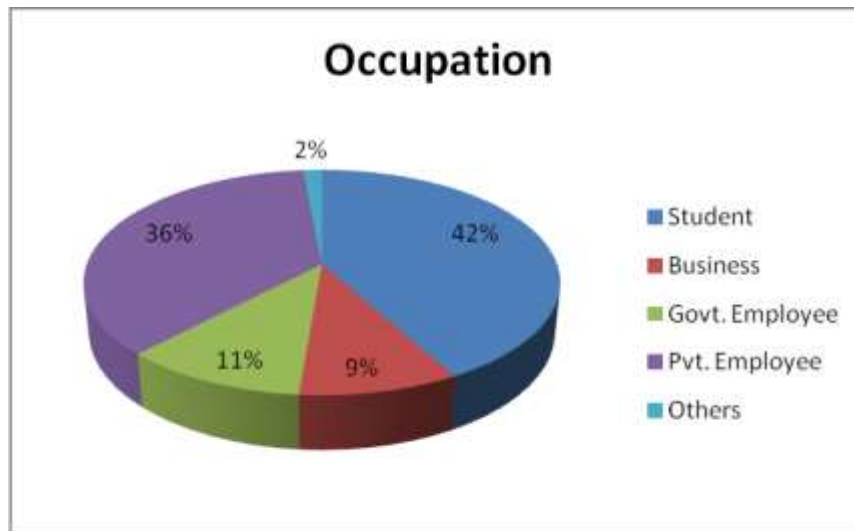


Figure 4 : Occupation-wise distribution of respondents

Out of 610 respondents, most of the respondents are pursuing their studies. The student category consist maximum proportion i.e. 42% followed by 36% of private employees. Remaining respondents belongs to 11 % of government employees and 9 % belongs to the businessmen.

Income-wise distribution of respondents:

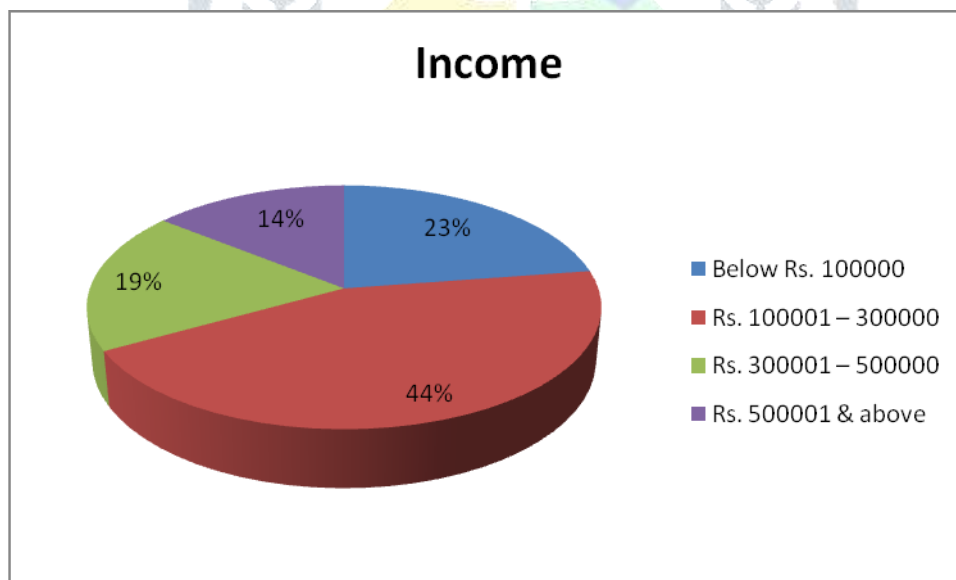


Figure 5: Income-wise distribution of respondents

It is apparent from the above graph, that out of 610 respondents 44% of the respondents belong to the income category Rs. 100001 – Rs. 300000. This category has maximum students and the people who are in their early employment. Another higher proportion comes from income category below Rs. 100000 followed by income categories Rs. 300001 – Rs. 500001 and Rs. 500001 & above with the proportion of 23%, 19% and 14% respectively.

Respondents' distribution on the basis of their frequency of online purchase:

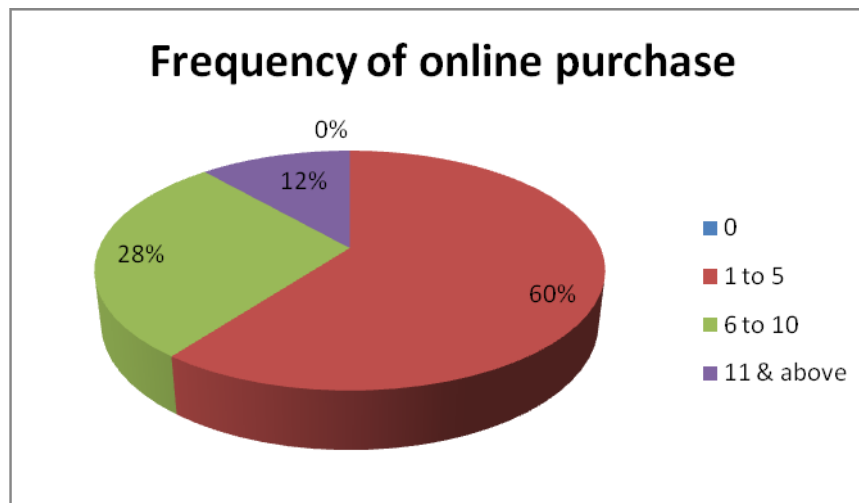


Figure.6: Respondents' distribution on the basis of their frequency of online purchase

60% of the respondents agreed to purchase around 1 – 5 items in last 6 months and 28% of the respondents agreed to purchased 6 – 10 items in last 6 months. Out of 610 respondents 12% of respondents purchased 11 & above items in last 6 months so they are considered as frequent online purchaser. None of them belongs to the category 0 as only those people are approached who have purchased online at least ones in last 6 months.

9. MAJOR FINDING OF THE STUDY

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

Based on literature review on consumers' online perceive risk, researcher has analyzed perceived risk associated with online environment and identified six types of online perceived risk. These risks are: Financial Risk, Performance Risk, Social Risk, Time Risk, Psychological Risk and Privacy risk.

An illustrative list of references of all types of perceived risk is given below:

Sr. No.	TYPES OF PERCEIVED RISK	REFERENCES
1	Financial Risk	Cunningham (1967), Jacoby & Kalpan(1972), Peter & Ryan (1976), Ingene & Hughes(1985), Stone & Gronhughes(1993), Roselious(1971), W. Huang, H. Schrank and A. J. Dubinsky (2004), Sonia San Marti ´n, Carmen Camarero and Rebeca San Jose, 2007, Bhatnagar et al.(2000) and Pradeep A. KorgaonkarÆ Eric J. Karson (2007)
2	Performance Risk	Cunningham (1967), Jacoby and Kaplan (1972), Peter and Ryan (1976), Ingene and Hughes (1985), Stone and Gronhaug (1993)W. Huang, H. Schrank and A. J. Dubinsky (2004) and Biswas & Burman (2009)
3	Social Risk	Cunningham (1967), Jacoby & Kalpan(1972), Peter & Ryan (1976), Sheth (1981), Ingene & Hughes(1985), Stone & Gronhughes(1993), Roselious(1971), W. Huang, H. Schrank and A. J. Dubinsky (2004), Sonia San Marti ´n, Carmen Camarero and Rebeca San Jose, 2007

4	Psychological Risk	Cunningham (1967), Jacoby & Kalpan(1972), Peter & Ryan (1976), Stone & Gronhughes(1993), Roselious(1971), W. Huang, H. Schrank and A. J. Dubinsky (2004) and Pradeep A. KorgaonkarÆ Eric J. Karson (2007) and Sonia San Marti ´n, Carmen Camarero and Rebeca San Jose (2007)
5	Time Risk	Cunningham (1967), Peter & Ryan (1976), Ingene & Hughes(1985), Stone & Gronhughes(1993), Roselious(1971), Chen & He (2003), Forsythe and shi (2003) and Littler and Melanthiou (2006)
6	Privacy Risk	Jarvenpaa and Todd (1997), Featherman and Pavlou (2003), J. A. Manzano, C. L. Navarre, C. R. Mafe & S.S. Blas (2009), G. R. Milne, A. J. Rohm and S. Bahl (2004)

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

For e-marketers it is very important to understand consumer behavior towards their future purchase intentions. Researcher has made an attempt to analyze consumers' online purchase intentions by studying impact of all types of perceived risk on consumers' purchase intentions. A simple regression analysis has been performed to analyze impact of perceived risk.

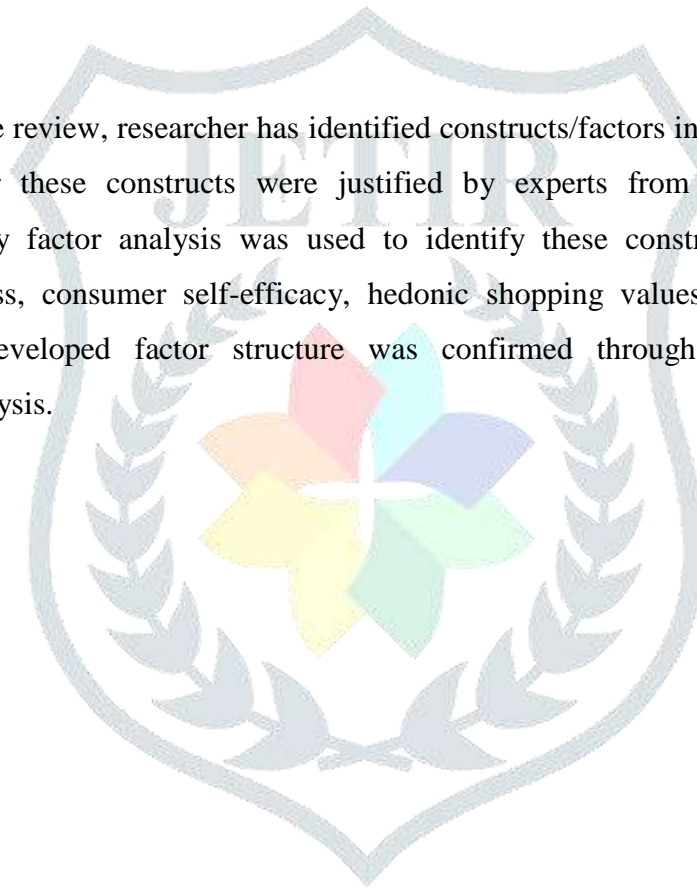
Table 2 R²value for online purchase intentions

R SQUARE VALUE	
TYPES OF PERCEIVED RISK	R Square Value
FINANCIAL RISK	0.351
PERFORMANCE RISK	0.285
SOCIAL RISK	0.455
TIME RISK	0.43
PSYCHOLOGICAL RISK	0.364
PRIVACY RISK	0.163

The result of the study indicates that out of all six types of perceived risk social risk has a maximum impact on consumers' online purchase intention for future. That means online consumers of Gujarat state are perceived higher social risk when they are planning to shop online. After social risk, time risk is another risk which bothers online consumers most. According to statistical analysis privacy risk has least R square value which means consumers of Gujarat state perceives less privacy risk while they opt online shopping. Over an all social risk, time risk, psychological risk and financial risk plays important role while online consumers of Gujarat state are planning for online shopping.

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

On the basis of literature review, researcher has identified constructs/factors influencing online consumer perceived risk. Further these constructs were justified by experts from academics and industry. Statistically, exploratory factor analysis was used to identify these constructs. The constructs are: consumer innovativeness, consumer self-efficacy, hedonic shopping values and utilitarian shopping values. Further the developed factor structure was confirmed through another statistical tool, confirmatory factor analysis.



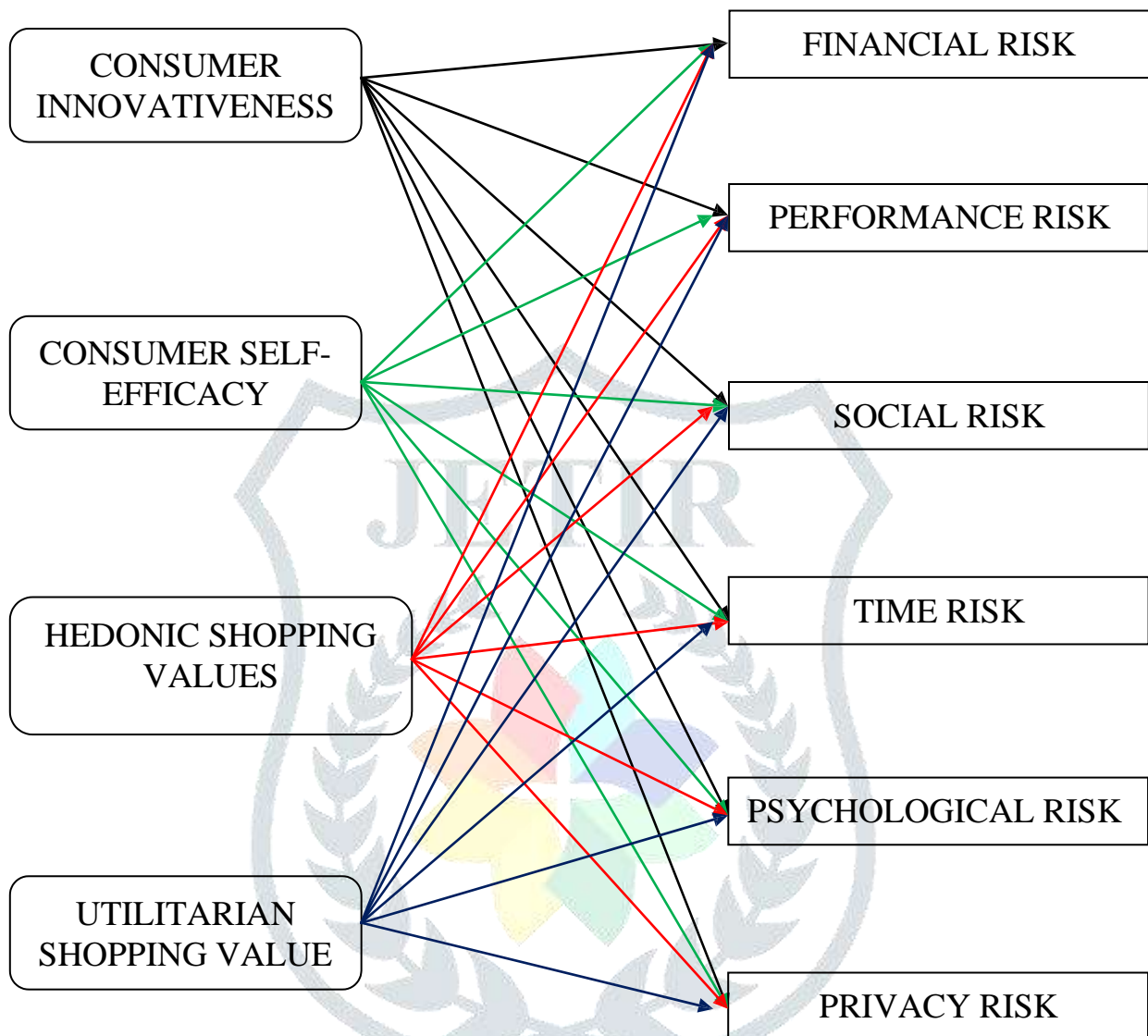


Figure 7: Factor Structure

The first factor is consumer innovativeness which describes that how much online consumers are receptive towards new shopping medium, new product, new technology and new way of transaction. The same factor was studied by Manzano, Navarre, Mafe and Blas (2009) but in the context of online banking.

The second factor is consumer self-efficacy which describes the self confidence of consumers. Which is basically the extent to which consumer believe that they are capable of performing specific behavior in order to attain certain goal. The same factor was explored by Kim and Kim (2005) and they found an inverse impact of self –efficacy on perceived risk. They have analyzed perceived risk as a whole concept rather than its dimensions.

The third factor is consumers' hedonic shopping value which reflects shopping's potential entertainment and emotional worth which is subjective and personal more from fun and the playfulness. The same factor was analyzed by Childers et al. (2001) and they had found that consumers with high hedonic shopping motives perceived more risk with online shopping as it lacks direct interaction. The study was conducted in foreign context.

The last and fourth factor is a consumer utilitarian shopping value which is basically an overall measurement of functional benefits and sacrifices associated with online shopping. This factor was analyzed by A. Sarkar (2011) and he found a negative influence of utilitarian shopping values on the perceived risk. The perceived risk was not analyzed with its dimensions but as a whole concept.

Table 3: Consistency with previous research

Sr. No.	Name of Constructs	Reference
1	Consumer Innovativeness	Norazah BTE Mohd Suki (2004), Joaquin Aldas - Manzano et. Al. (2008), Enrique Bigne - Alcaniz et. al. (2008), Kamran Khan & Kim Hyunwoo (2009), Meenakshi Handa & Nirupama Gupta (2009) and Arun Kumar Kaushik & Zillur Rehman (2014)
2	Consumer Self – Efficacy	Young Hoon Kim & Dan J Kim (2005), Satyabhushna Dash & Saji (2007), Young Hoon Kim et. Al. (2009), Xianjin Jha, Jing Li & Yalan Yan (2013), Rachana Kumar & Cevahir Uz Kurt And Claudia Iconaru (2013)
3	Consumers' Hedonic Shopping Values	Childers et. Al. (2001), Dholakia, R. R. & Uusitalo (2002), Parsons, A. G. (2002), Abhigyan Sarkar (2011) And Arpita Khare & Sapna Rakesh (2011)

4	Consumers' Utilitarian Shopping Values	Childers et. Al. (2001), Dholakia, R. R. & Uusitalo (2002), Parsons, A. G. (2002), Abhigyan Sarkar (2011) And Arpita Khare & Sapna Rakesh (2011)
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Findings for Objective 4: To analyze impact of identified factors on each type of perceived risk.

For analyzing impact of all four factors on each types of risk, a simple regression analysis has been carried out.

Impact of consumer innovativeness on various dimensions of perceived risk:

Table 4: R² value for consumer innovativeness

R SQUARE VALUE FOR CONSUMER INNOVATIVENESS	
TYPES OF PERCEIVED RISK	R Square Value
FINANCIAL RISK	0.196
PERFORMANCE RISK	0.161
SOCIAL RISK	0.262
TIME RISK	0.186
PSYCHOLOGICAL RISK	0.185
PRIVACY RISK	0.067

The result of the study shows that social risk has been influenced by consumer innovativeness by the maximum extent. This means that consumers who are highly innovative perceive less social risk in comparison to the other types of risk. Financial risk is another dimension of the perceived risk which is negatively influenced by consumers' innovative nature. This means that if an individual is innovative, he/she will not take care of what society is thinking about them and any

types of monetary loss associated with online shopping. Privacy risk has minimum R square value which means that even innovative consumers are also having privacy concerns.

Impact of consumer self-efficacy on various dimensions of perceived risk:

Table 5: R² value for consumer self-efficacy

R SQUARE VALUE FOR CONSUMER SELF-EFFICACY	
TYPES OF PERCEIVED RISK	R Square Value
FINANCIAL RISK	0.188
PERFORMANCE RISK	0.162
SOCIAL RISK	0.163
TIME RISK	0.17
PSYCHOLOGICAL RISK	0.302
PRIVACY RISK	0.098

The analytical result shows that consumers' self-efficacy has a maximum impact on psychological risk. This means that a highly self-confident consumer is having less mental pressure, anxiety and stress during the online purchase. Financial risk is another dimension which is less influenced by self-efficacy. This means that highly self-efficacy consumer is confident that he/she will not face any monetary loss during online shopping. On the other hand, even a highly self-efficacy consumer is also concerned about the privacy measures.

Impact of consumers' hedonic shopping value on various dimensions of perceived risk:

Table 6 R² value for hedonic shopping value

R SQUARE VALUE FOR HEDONIC SHOPPING VALUE	
TYPES OF PERCEIVED RISK	R Square Value
FINANCIAL RISK	0.202
PERFORMANCE RISK	0.255
SOCIAL RISK	0.324

TIME RISK	0.236
PSYCHOLOGICAL RISK	0.206
PRIVACY RISK	0.165

The above R square table shows the impact of hedonic shopping behavior of consumers on all types of risk perceptions. Statistics reveals that hedonic shopping values of a consumer has maximum impact on social risk, which means that if a consumer is having high hedonic motives, he/she will perceive high level of social risk. Except social risk, performance risk is also highly influenced by such consumers because they want to touch and experience the product before purchasing. Statistically, consumers with high hedonic value perceive less privacy risk which means that they are having less privacy concerns.

Impact of consumers' utilitarian shopping value on various dimensions of perceived risk:

Table 7 R² value for utilitarian shopping value

R SQUARE VALUE FOR UTILITARIAN SHOPPING VALUE	
TYPES OF PERCEIVED RISK	R Square Value
FINANCIAL RISK	0.244
PERFORMANCE RISK	0.197
SOCIAL RISK	0.193
TIME RISK	0.221
PSYCHOLOGICAL RISK	0.253
PRIVACY RISK	0.04

The above table shows comparative value of R square of consumers' utilitarian shopping value and various dimensions of perceived risk. The R square value reveals that consumers with high utilitarian shopping value perceive maximum psychological risk, financial risk and time risk. This means that consumer who is expecting more benefits from shopping process; do not want any types of mental pressure, monetary threat and wastage of time while shopping, therefore, they perceive more psychological risk, financial risk and time risk. Such consumers comparatively perceive less privacy risk.

Comparative R² value of all factors with ranking

COMPARITIVE R SQUARE VALUE OF ALL FACTORS WITH RANKING				
	CONSUMER INNOVATIVENESS	CONSUMER SELF-EFFICACY	HEDONIC SHOPPING VALUE	UTILITARIAN SHOPPING VALUE
FINANCIAL RISK	0.196(3)	0.188(4)	0.202(2)	0.244(1)
PERFORMANCE RISK	0.161(4)	0.162(3)	0.255(1)	0.197(2)
SOCIAL RISK	0.262(2)	0.163(4)	0.324(1)	0.193(3)
TIME RISK	0.186(3)	0.17(4)	0.236(1)	0.221(2)
PSYCHOLOGICAL RISK	0.185(4)	0.302(1)	0.206(3)	0.253(2)
PRIVACY RISK	0.067(3)	0.098(2)	0.165(1)	0.04(1)

The above comparative table of R square for all four influencing factors gives a comparative structure of their relationship. It is shown that for financial risk, utilitarian shopping value has maximum impact and for performance risk, hedonic shopping value has a maximum impact. The R square values of social risk, time risk and privacy risk also shows a maximum influence of hedonic shopping value. On the other hand, consumer self-efficacy has a maximum impact on psychological risk.

10. CONCLUSION

Consumer online perceived risk and its dimensions were studied by different authors since years. In this doctoral research, consumer online perceived risk was studied in three parts specifically for Gujarat state. In the first part, various dimensions of perceived risk were studied through literature review. 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 on consumers' future intentions to shop online.

In the third part, various factors were identified which have influence on consumers' online perceived risk. These factors were consumer innovativeness, consumers' self-efficacy, hedonic shopping values and utilitarian shopping values. An empirical model of online perceived risk was developed based on it. This model was further validated by confirmatory factor analysis. Impact of these identified factors on perceived risk was studied with the help of simple regression analysis. Based on statistical result, it was found that performance risk, social risk, time risk and psychological risk were highly influenced by hedonic shopping values. Utilitarian shopping value has a great influence on psychological risk and financial risk and consumer self- efficacy has a great influence of psychological risk. Consumer innovativeness has also influenced social risk, financial risk and time risk.

11. LIMITATIONS OF THE STUDY:

Even though, this study has pointed various advantages and benefits still this study is not free from limitations. There are certain limitations as follows:

- this study is restricted to the four major cities of jaipur rajasthan only. This restricts the generalization of the study.
- As the sampling method was chosen as judgmental sampling, hence the researcher bias in choosing the respondents may have been present.
- Non-probability sampling is being used because of sampling- time, cost constraint and unavailability of the entire list of Gujarat online shoppers.
- The responses given by the respondents too were subject to their personal choices and biases, could be a limitation.
- Researcher collected data online (Survey Monkey) and offline by personally meeting respondents. As during online data collection researcher presence was not there, hence the possibility of resolving respondent's query, if any, was limited.
- incomplete questionnaire were received from online source more than offline.
- Personal interaction with respondent was found to be more time consuming.
- Few respondents which include housewives and small businessmen found it difficult to understand the questionnaire in English.

- Statistical interpretation is possible from used quantitative method was successful in establishing relationship between variables, but behavioral analysis might had limitation.
- As this study is based on the perception of the online consumers, which may change with time as it is related to their behavior.
- The generalizability of the research study results may not be true as it is limited to a small sample size.

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