

Exploring Online Buying Decision Making with reference to Perceived Risks: Does Gender Matters?

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ABSTRACT

Since last decade, retail has evolved from 'brick and motor' to online mode; and the rationale behind the same is changing life style, increase in the purchasing power, dynamism in the searching and selecting pattern of individual, working partners, ease of use and many more. This study aims to find whether gender makes a difference in making online buying decisions with reference to perceived risks. For that, a structured questionnaire was constructed and a sample of one hundred and fifty respondents was taken, out of which one hundred respondents finally were considered. It is found that there is moderate influence of perceived risks on online buying decision making and also gender does not make any significant difference in decision making.

1. Introduction

People invest their quality time and resources for buying their necessities from the market. The five R's of retail merchandising- right product, right people, right time, right way and right time, are the foundation for justifying the merchandising for the consumers. Apart from big advantage of convenience, the shift in retailing from brick and motor to online also carries few disadvantages.

Turn to look at disadvantages of online buying, various perceived risks (PRs) prominently come on the surface of discussion and ultimately for research. As perceived risk is the uncertainty a consumer has when buying items and possess a challenge to the consumers in making the buying decision in all its stages i.e. from need recognition and last up to post purchase behaviour. In case of online shopping, these PRs, according to literature, have influenced consumers at every stage of decision making process.

One of the fastest growing industries in India having a size of total 672 billion accounts for nearly 10 % to the GDP and 8% to the employment of the country. The mammoth size of retail industry in India is having a potential of accommodating 8 % of the employment which is a quite large share. Over the last two decades with rapid change in technology and changing business models, this industry went through a radical transformation. As per the report by IBEF (2017), India has a potential to grow with a CAGR of 16.7 % over 2015-20 which accounts for US\$ 1.3 trillion by 2020 and similarly the growth potential of online retail is 31.2 percent CAGR over five years which accounts for US\$ 64 billion by 2021(ASSOCHAM-Forrester). In 2016, cross border shoppers which is 13.8 million spent on an average Rs 42,400/-, which comprises of 54% clothing, footwear and accessories, 42% cosmetics and beauty products and 43% consumer electronics (Maction Consulting Private Limited, 2017) The competitive advantage for India, being an important site for e- retailing is because of growing demand, increasing investment, attractive opportunity and policy support (IBEF, 2017).

With increasing in the acceptability of different strata for online buying, it becomes essential to access the various dimensions of consumers' behaviour for online purchase at regular intervals. In this regard, the phase of decision making during online buying occupies prime concern for the consumers as well as online retailers to draft appropriate strategies. As the process of online buying decision making is influenced by various factors particularly perceived risks such as product risk, price risk, social risk, economic risk, time risk etc., the views of consumers may provide workable insights regarding decision making process adopted by them in light of these PRs.

2. Literature Review

Though areas of online buying is being considered as one of the popular contours of the marketing and online shopping as well in India, much work has been carried out at international level in the last couple of years. The overview of few of those studies is as under:

Marti'n S Sonia and Camarero C (2008) examined the effects of perceived risk on online buying; the present research work revolves around the reputation of firm, consumer satisfaction, experience of consumers with old bricks-and-mortar format and the influence of perceived risk on online buying. The collected the data through interview over five hundred and seven Spanish online buyers and to analyse the data SEM was used. The findings of the study said that the previous buying satisfaction plays a big role in building the trust, whereas perceived risk is directly proportional to the firm reputation.

Lee H Chai et. al. (2010) worked on the factors which affects the buying intentions to repurchase services and product online. In that study a sample of one hundred and two was taken from Malaysia and the respondents has prior experience of buying at least once. Snowball technique was used to collect the responses and regression model was used for analysis. The findings of the study direct that the perceived ease of use, usefulness, privacy, reliability affects the intention to buy reputedly online and the contributions of affecting factors

are different from one another, which helps in taking out the most important factor among all.

L Chinho & L Watcharee (2013) investigated the effects of online repurchase intentions in which PLS technique is used to analyse the measurement and create a model. The responses were taken from Taiwan shoppers, who have already experienced online shopping. The two hundred and forty respondents reveal that experience of online shopping is the main driving factor for the satisfaction of the online shoppers. Further, the satisfaction to shoppers is the main prominent factor of repurchase intention online and adjusted expectations.

Liu T Matthew et al. (2012) investigated about the influence of perceived risk, benefits and trust on the buying behaviour of Chinese consumers. For the data collection the researcher has undertaken a structured online survey with five hundred and seventy eight valid samples collected. Multiple regression method was used for the analysis of the data. The outcome of the study shows that as benefit, perceived recreational benefits, price & convenience in online shopping shows positive influence on the attitude of online shoppers and as trust, perceived website trustworthiness, reputation and structural assurance also shows the same trends.

Becerra P. Enrique et al (2009) examined the effect of product, brand and vendor trust belief collectively on consumers' intention to buying online along with the willingness to share personal information online. Usable sample of Four hundred and twenty two students were taken to analyse from the available sample of Four hundred and thirty three students. For analysing the responses linear regression, MNOVA and SOBEL tests were used. It was concluded that there was a relation between trust belief and online intentions which acts as important factors in online sales increment. The brand trust is an important factor which effects the relation between trust belief and online buying intention.

Colla Enrico et al. (2012) identified the main success factor in "click & trick" model in grocery which was created by French Grocerer and works towards finding the basis for their competitive advantage. The authors reviewed and analysed various grocery drive-in approaches which are developed in France by applying a multi-method qualitative perspective which comprises of semi-structured interviews with managers and e-consumer focus groups. The key success factor found for achieving the competitive advantage was customer reception quality. This is the most important and most valued factor by consumers and managers both.

Roca C Juan et al. (2008) investigated how perceived trust, security and privacy jointly influence the e –investors. TAM model was used towards examining the behaviour of e-investors intentions in using the services of dealers and stockbrokers. The perceived usefulness, trust and ease in using the services were most important reasons for creating the intentions to use. Structural Equation Modelling was applied for the same and the findings indicates that these three factors perceived trust, ease of use and usefulness are the important factors in online trading. Recommendations was made on security concerns since online investors made a

perception about perceived security which enhance the trust factor and subsequently the use of these services will increase if the financial is useful for their purposes.

Beneke Justin et al. (2012) investigated regarding the link between perceived risk and private label brands in premium grocery and extend this to find the impact of these perceived risks on the purchase intention. The sample of three hundred and twenty five was collected from South Africa. Partial least square method was used to analyse path modelling which might find the relation between perceive risk and purchase intention in consumers. It was concluded that time and functional risk influence negatively in consumer's purchase intention. While others like physical, Psychological, financial and social risks do not has any considerable influence in purchase intention.

3. Objectives of the study

The primary aim of the study is to explore the key attributes of online buying decision making with regard to various perceived risks involved in buying online. In addition to this, examining impact of gender difference is also substantial concern of the study.

4. Methodology

Hypothesis

H_0 : There is no significant difference in the decision making as per gender of respondents

Research Design

An exploratory cum descriptive research design is adopted to figure out the determinants of online buying decision making of online buyers belonging to National capital region, comprising Gurugram, Delhi, Faridabad, Sonipat and Rohtak. For this, survey method was adopted in addition to adopting quantitative research approach qualitative aspects of online retailing and buying behaviour are also incorporated.

Sample

A total of one hundred fifty respondents were approached. Out of which only 87 % reported that comprises one hundred and thirty respondents and out of these thirty responses had to be left due to missing values on one or more items/statements. Finally a sample of one hundred respondents in the form of cross sectional sample in terms of age, gender, marital status, income groups, location, occupation and educational qualification was taken for desired analysis. Around eighty percent respondents were approached through emails by using snow ball sampling technique with the help of practitioners of this field and remaining respondents were interacted personally by applying convenience sampling technique in which the same scale in printed form was used. Following table presents cross sectional information of the selected respondents in terms their age, marital status, income, education, residential status and occupation. Moreover, fifty seven are male respondents while remaining are female so in terms of gender, sample quite represents both the strata.

Table 1: Demographic profile of respondents

| Gender | Male | Female |
|--------------------------------|------|--------|
| | 57 | 43 |
| Age of Respondents | | |
| Less than 18 Years | 0 | 1 |
| 18 to 25 Years | 7 | 9 |
| 25 to 35 Years | 34 | 27 |
| 35 to 45 Years | 14 | 5 |
| Above 45 Years | 2 | 1 |
| Marital Status | | |
| Married | 41 | 28 |
| Unmarried | 16 | 15 |
| Annual Income | | |
| no income but pocket money | 4 | 9 |
| less than 3 lacs | 2 | 8 |
| 3 to 5 lacs | 11 | 8 |
| 5 to 10 lacs | 26 | 14 |
| more than 10 lacs | 14 | 4 |
| Education qualification | | |
| Graduation | 17 | 10 |
| Post Graduation | 26 | 18 |
| Doctorate | 7 | 8 |
| Professional | 7 | 7 |
| Location | | |
| Rural | 7 | 1 |
| Urban | 50 | 42 |
| Occupation | | |
| Student | 4 | 12 |
| Service Govt/Private | 43 | 22 |
| Professional self employed | 9 | 4 |
| House wife | 0 | 3 |
| Others | 1 | 2 |

Source: Primary Survey

Scale construction

For primary survey a structured and self report questionnaire was framed by considering 31 Likert scale (1 for strongly disagree - 5 for strongly agree) statements covering the aspects of need recognition, information search, alternative evaluation, buying decision making and post purchase behaviour which are the integral components of buying decision making process. These statements were designed by keeping various perceived risks in to consideration.

Statistical tools applied

In order to analyse the collected information SPSS version 21.0 is applied to identify antecedents of consumers' online

buying decision making. As required cronbach alpha coefficient for the statements was found 0.91. which shows strong reliability of scale particularly for internal consistency. After this, simple statistical tools like mean, standard deviation, cross tab and t-test were mainly applied.

5. Data Analysis and Results

In the administered survey, usage level of internet by selected respondents is also accessed through incorporating two aspects in the questionnaire- a) the length of internet use in years b) Average time spend on internet per week. It is purposed to identify pattern of internet being used by the respondents.

Table 2: Usage Pattern of Internet by Respondents

| | N | Mean | Std. Deviation |
|--|-----|--------|----------------|
| a) Its how long respondent is using internet | 100 | 4.1300 | .99143 |
| b) Time spent by respondent per week | 100 | 3.5500 | 1.43108 |

Source: Primary Survey

Table 2 provides information about it and according to the mean value of statement 'a' (4.13), it is found that respondents under study have been using internet on an average, since more than 7 years and precisely close to 10 years. Further, they use to spend time over internet around 15 hours per week i.e. on an average 2 hours a day.

Further it can be concluded that the selected respondents were having a countable experience in using the internet and weekly usage symbolises their frequency of using internet on daily/weekly basis. This establishes that the selected

respondents are not new to online shopping rather they are mature and rational in their saying.

Now, following section deals with core part of the work taken under study. It shows all the major stages come under the buying decision making model i.e. need recognition, information search, evaluation of alternatives, decision and post purchase behaviour. A response regarding each statement which broadly comes under above said five stages, mean value is taken under consideration. It shows the inclination of respondents towards the agreement and disagreement towards particular statement.

Table 3: Statements regarding different dimensions of online buying decision making: Descriptive statistics and results of t-test (for assessing gender difference)

| | | Mean | Std. Deviation | t | df | Sig. (2-tailed) |
|-------------------------------------|------|--------|----------------|--------|----|-----------------|
| Need Recognition(NR) 3.64 | NR1 | 3.6200 | .97214 | -.484 | 98 | .629 |
| | NR2 | 3.7200 | .93290 | -.224 | 98 | .823 |
| | NR3 | 3.5800 | .87824 | -.243 | 98 | .809 |
| Information Search (IS) 3.15 | IS1 | 2.8400 | 1.10755 | 1.869 | 98 | .025 |
| | IS2 | 3.2700 | .90849 | .356 | 98 | .722 |
| | IS3 | 3.4100 | .87727 | .374 | 98 | .709 |
| | IS4 | 2.9300 | 1.21651 | -.002 | 98 | .999 |
| | IS5 | 3.3300 | 1.11060 | .760 | 98 | .449 |
| Evaluation of Alternatives(EA) 3.62 | EA1 | 3.7200 | 1.02573 | 1.784 | 98 | .078 |
| | EA2 | 3.3600 | .99005 | .097 | 98 | .923 |
| | EA3 | 3.6300 | 1.05078 | 1.766 | 98 | .081 |
| | EA4 | 3.9800 | .84063 | 1.484 | 98 | .141 |
| | EA5 | 3.4300 | 1.04693 | 1.060 | 98 | .292 |
| Decision Making(DM) 3.33 | DM1 | 3.7100 | .87957 | .809 | 98 | .420 |
| | DM2 | 2.3800 | 1.10810 | -.483 | 98 | .630 |
| | DM3 | 3.4800 | 1.04910 | -1.032 | 98 | .304 |
| | DM4 | 3.1700 | 1.13756 | -1.924 | 98 | .047 |
| | DM5 | 3.4900 | .95869 | -.827 | 98 | .410 |
| | DM6 | 3.0500 | 1.05768 | -1.119 | 98 | .266 |
| | DM7 | 3.6600 | .92354 | .300 | 98 | .764 |
| | DM8 | 3.3100 | 1.06073 | .823 | 98 | .412 |
| | DM9 | 3.2600 | 1.17740 | 1.765 | 98 | .081 |
| | DM10 | 3.3000 | 1.10554 | .346 | 98 | .730 |
| | DM11 | 3.3300 | 1.11060 | -.328 | 98 | .744 |
| | DM12 | 3.0900 | 1.12002 | .156 | 98 | .876 |
| | DM13 | 3.9800 | .76515 | -.226 | 98 | .822 |
| | DM14 | 3.4000 | 1.00504 | .641 | 98 | .523 |
| Post Purchase(PP) 3.47 | PP1 | 3.2500 | 1.13150 | .489 | 98 | .626 |
| | PP2 | 4.1500 | .51981 | 2.156 | 98 | .033 |
| | PP3 | 3.4400 | .93550 | 1.953 | 98 | .054 |
| | PP4 | 3.0500 | 1.14040 | .911 | 98 | .364 |

Source: Primary Survey, Note: Second column of the table comprises short form of the statements pertaining to the respective dimensions of decision making. See annexure for details.

More over majority of mean values are found to be more than the average value (3), which shows a neutral behaviour of respondents towards the given statements and dimensions of online buying decision making.

Before discussing the extent of influence of various types of perceived risks on different steps of online buying decision making, it is to underline that out of thirty one given statements, four statements- NR1, NR2, DM13 & PP2 are positive in nature. The reason for their inverse nature is to takeout genuine response. Remaining statements pertaining to

influence of perceived risk such as product risk, privacy risk, financial risk, health risk, social risk etc on various stages of online buying decision making. It is evident from table 3 that the average mean score of selected statements under the given stages of decision making varies between 3.15 to 3.64, as 3 shows the neutral level of response while 4 depicts agreement towards the given statement. So, it is found that there is moderate influence of perceived risks on online buying decision making.

But, in spite of having moderate level of agreement towards influence of perceived risks on online buying decision making, the continuous buying through online mode is shown by the mean scores of statements DM13 & PP2. The reason behind this behaviour may be the internet usage pattern of selected respondents which is quite long & it may induce online buying.

Further, according to the statistics of t –test and corresponding value of p, it is observed that out of thirty one statements, four statements shows significant difference in terms of the responses given by male and female respondents which is not substantial much. Hence, it may be concluded that there is no significant difference, in over all, in the responses given by male and female respondents with regard to the statements pertaining to influence of perceived risk on online buying decision making.

6. Conclusion

Since there are numerous benefits of online shopping in the eyes of consumers such as 24*7, convenience, accessibility, time saving etc., consumers use to perceive various concerns regarding the buying of material through online mode. Here it is referred as perceived risk in online shopping. As online retailing in India is consistently increasing

its consumer base, understanding online buying behaviour of consumers in terms of the possible perceived risk has been the background of this study. The findings of the study based on the survey of online shoppers belonging to Haryana state serve the said purpose. Though analysis has been carried out in basic statistical format , outputs of analysis favours the existence of different types of perceived risk at moderate level such as product risk, privacy risk, social risk, security risk, health risk etc during each stage of online buying decision making process(refer table 3). In contrast, it is also evident that online shoppers still prefer to shop online. It means it is required that there should be sustained strategies regarding reducing the level of perceived risk so as to foster the trend online selling.

Additionally impact of gender on online buying decision making regarding perceived risk is also checked and it is found that on the basis of gender no significant difference does exist as per the result of t-test. It aligns with the results of prior research conducted by Garbarino & Strahilevitz (2004). The findings of the study may be generalised with care as study is conducted on a relatively small sample in context of Haryana state, even though these offers countable contribution to the literature. The same aspect of online shopping may be investigated further by having large number of online shoppers and significant factor determining online shopping buying behaviour may be identify by applying factor analysis and structural equation modelling. In addition to this, extension of this work could look into first to study the level of perceived risk being perceived by the online shoppers and the non shoppers also and then its impact ultimately on decision making process. This could serve comprehensive contribution in this field for academicians, researchers and detailing companies of this area as well.

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| Annexure 1: Description of statements as abbreviated | | |
|--|-----|---|
| Need Recognition(NR) | NR1 | Big Billion day and other savings day sale motivate me to go online for need justification |
| | NR2 | I buy from online stores only if they are visually appealing and the navigation flow is user friendly |
| | NR3 | Most of the time online presentation of the material is deceptive and may mislead the buyer |
| Information Search (IS) | IS1 | I may not search information in depth because i think my search history may be compromised |
| | IS2 | The feeling that a site does not react responsibly to the user's information needs |
| | IS3 | The feeling that the site may not provide personalized information to meet the unique information needs to each user. |
| | IS4 | Too much personal information is required before I start searching online which bothers me to buy online |
| | IS5 | Navigation from one page to another may reduce the willingness to search more |
| Evaluation of Alternatives(EA) | EA1 | Cannot make the right evaluation of the product because of the inability to touch or feel the item |
| | EA2 | It would be difficult to differentiate between two similar products |
| | EA3 | Overfeed with information may confuse the buyer |
| | EA4 | Online product reviews which might be paid, can mislead the evaluation of the product(few says that the product has zero value and few others rate the product very high) |
| | EA5 | The feeling of restricted exchange of information between user and web site in comparison to the offline shopping where customer can interact with seller |
| Decision Making(DM) | DM1 | Perceived product quality risk reduce the probability of making buying decision online |
| | DM2 | Purchase from online would involve more social risk as compare to traditional method of shopping as society may start considering me discount shopper |
| | DM3 | Purchase from online would involve more privacy risk as compare to traditional method of shopping as my credit card /debit card or other financial information may be compromised |
| | DM4 | Prolonged online search of products may lead to health issues like eye, back pain, muscular pain etc |
| | DM5 | Add on charges like delivery charges which may vary as per courier services may leads to perceived economic risk, which further results in avoidance in buying online |
| | DM6 | Purchase from online would involve more financial risk as compare to traditional method of shopping because of other add on charges |
| | DM7 | Purchase from online would involve more product risk as compare to traditional method of shopping as the product received may be different from the one available over web |
| | DM8 | I am least confident about the fit or suitability of the product online which makes me avoid buying online |
| | DM9 | Due to lack of trust in brands available online, it would be difficult for me to make a buying decision |

| | | |
|-------------------|------|--|
| | DM10 | Online Purchase has overall perception of high risk, compare to traditional method of shopping |
| | DM11 | Linking web pages leads to take long time in search of right product |
| | DM12 | The experience of looking for the right product online is less enjoyable as compare to traditional method of searching |
| | DM13 | I buy from the online stores only if the site content is easy for me to understand and the information provided is relevant |
| | DM14 | I need the material immediately but online delivery may take few days which leads to perceived time risk, which further results in avoiding buying online. |
| Post Purchase(PP) | PP1 | I will not buy an item through online in near future (If post purchase behavior is unsatisfactory) |
| | PP2 | I am likely to make another online purchase if the product I bought prove to be useful |
| | PP3 | More time to receive the order makes me reluctant to buy online again |
| | PP4 | Tedious task in return and exchange of bought products makes me avoid future online buying. |