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Perceived Risk Dimensions in Online Shopping.

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ABSTRACT

O*nline shoppers hold some prejudice towards risk involved in the purchase from an e-tailer. The buyers are not only concerned about the risk arising from seller's side but they are also concerned about errors from their own side. This paper specifies premise to explain occurrence of perceived barriers in acceptance of online shopping. The study focuses on three perceived risk dimensions- buyers' side risk factors, seller's side risk factors & intermediary's side risk factors and set forth proposition describing relationship between each of the mentioned factor & perceived barriers in acceptance of online shopping. It specifies an integrated model that incorporates the mentioned factors & their influence on risk perception. Results suggest that the three perceived risk dimensions are useful in explaining perceived barriers in acceptance of online shopping. Further the paper also outlines the implications of the study for future research & practice. By suggesting making customer experience more favourable is a way to reduce such issues of risk & barriers involved in online purchase.*

Keywords— online shopping, perceived risk, risk factors

INTRODUCTION

This study analyse risk perception that online buyer holds towards online shopping. It hypothesised relationship between risk factors and perceived barrier in adopting online shopping. Risk factors are assumed to have origination from buyer's side, seller's side & intermediary's side as the real concern is not what is perceived as risk but also the doubt of error & uncertainty of performance from either side. These risk factors are assumed to be contributing to make buyers risk averse and thus not accepting online shopping. To examine empirical support for the conceptual model put forward the various dimensions of risk & barriers to adopt online shopping were analysed to test causal relationship that exists. The study points towards importance of making customer experience better, by making an effort to reduce risk perceived by the buyers.

Literature Review:

Risk has been defined as 'Risk is the potential that a chosen action or activity (including the choice of inaction) will lead to a loss (an undesirable outcome). The notion implies that a choice having an influence on the outcome exists (or existed). Potential losses themselves may also be called "risks". Almost any human endeavour carries some risk, but some are much more risky than others.'[1]

The literature on risk outlines attempt undertaken to differentiate various dimensions of risk. One of the first debates met in the literature is that on the existence of objective risk. Bauer (1960) strongly emphasised that he was concerned only with subjective (perceived) risk and not "real world" (objective) risk. The issue highlighted here is that consumer has his own limitations i.e. available information, semi reliable memory,

less number of trials. In addition to this he has to face new purchase situation at times, making it impossible to relate to his previous purchase experience. This makes accurate assessment of risk almost impossible. Even if the consumer could calculate accurately the risk involved, it is not this objective risk which motivates behaviour, but the consumer's subjective impressions of it. Any measurement of risk perception must be developed with these limitations in mind. [2]

Attempt to differentiate risk from uncertainty is also found in literature; Knight's (1948) definition separates the concepts of risk and uncertainty. Knight proposed that "risk" has a known probability while "uncertainty" exists when knowledge of a precise probability is lacking. Cunningham (1967, p. 83) makes the point that uncertainty or consequences may involve either a known or unknown probability. Even though this distinction between uncertainty and risk has been drawn in terms of distribution of outcomes, invariably marketers have allowed the two concepts to be used synonymously. [2]

Cunningham (1967, p. 37) conceptualized perceived risk in terms of two similar components, namely; the amount that would be lost if the consequences of an act were not favorable, and the individual's subjective feeling of certainty that the consequences will be unfavourable. It shows that if services provided are unreliable, risky then this would enable banking customers to feel reluctant to adopt Internet banking. (Rotchanakitumnuai et al, 2003). [4]

Pointing towards relationship between perceived risk and risk aversion tendency. Risk aversion is a concept in psychology, economics, and finance, based on the behaviour of humans (especially consumers and investors) while exposed to uncertainty to attempt to reduce that uncertainty. [3]

Munusamy et al (2012) identified perceptual barriers of Internet banking adoption among Malaysian retail banking customers. The perceptual barrier factors that analysed were difficulty to operate, hassle to use, unreliable, perceived risk and high connection fees. [5]

Perceived risk is known as a major behavioural determinant, moreover it has been found to be a barrier against e-commerce adoption. (Patricea Elena Bertea, 2010) [9]

Gefen et al (2003) found that repeat customers trusted the e-vendor more, perceived the website to be more useful and easier to use, and were more inclined to purchase from it. Their results also show that while repeat customers' purchase intentions were influenced by both their trust in the e-vendor and their perception that the website was useful, potential customers were not influenced by perceived usefulness, but only by their trust in the e-vendor. [17]

Featherman & Wells (2004) focused on perceptions and reactions to the intangible nature of newly digitized transaction processing systems. For many consumers, the intangibility of information system-based processes generates beliefs that they are fake, non-genuine, artificial and therefore inherently risky to use. [6]

CONCEPTUAL FRAMEWORK:

The research carried on so far concentrates on perceived risk as a concept of subjective evaluation. The very nature of this concept makes it different from real world risk i.e objective risk; that is measurable at times. [2] As the concept of perceived risk is subjective, its degree will change from person to person. However, subjective evaluation also means having chances of bias or prejudice for something.

Similarly online buyers have some prejudice of risk involved in purchase from an e-tailer. In actual purchase situation if buyer finds that his prejudice of risk matches reality then he becomes reluctant for repurchase. In contras if the e-tailer make an effort to reduce the degree of perceived risk by concentrating on various encounters that buyer has to face in online purchase, he can make the buyer favourable. Hence, we have analysed perceived risk from three dimensions viz. buyer's side factors, seller's side factors & intermediary's side factors. These three dimensions are proposed to have effect on barrier that the buyer considers in adopting to purchase from an e-tailer.

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CONCEPTUAL MODEL:

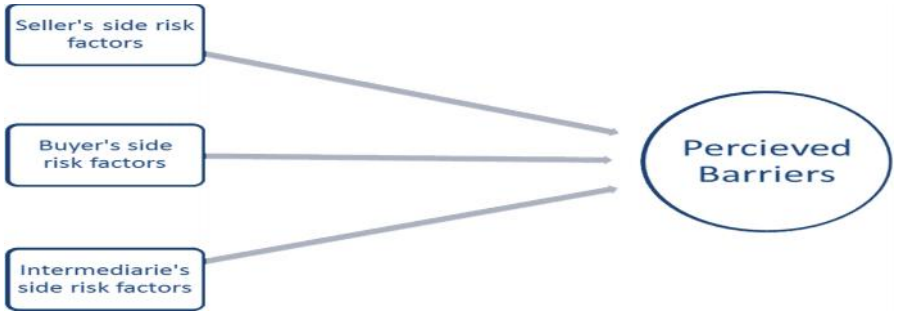

Figure No.1: CONCEPTUAL MODEL

Buyer's Side risk factors: Buyers have to interact with the ecommerce environment; success of an ecommerce transaction depends upon flawless performance from their side. In a purchase situation buyer performs many crucial tasks like; information search, selection of product, order placement & payment. Therefore buyer is worried of risk involved in such situations, which arise from his own side. This develops anxiety; thus making buyer least concerned about various experiential cues. The buyer is more concerned of performing his task accurately, if not, he is creating chances of error & risk on unexpected event.

Seller's side risk factor: Buyers are concerned about the errors from seller's side like; product delivered is not as per specifications, seller does not meet order on time and sellers do not provide proper feedback & information. Therefore over here buyer is concerned about error or uncertainty from seller's side

Intermediary side risk factors: Buyers are concerned about reliability of various intermediaries and they are mostly concerned about misuse of his details by these intermediaries. In their study, Hoffman, Novak and Peralta found that consumers, on the Web, may fear providing credit card information to any commercial Web provider and that consumer simply do not trust most Web providers enough to engage in exchange relationships involving money. [7]

Perceived Barriers: Perceived barriers are the factors that restrain buyer from adopting online shopping. This construct includes factors like, high setup cost, difficulty, safety, reliability & hassles involved.

The study focuses on identifying the relationship between the three risk dimensions and perceived barriers and suggests reducing perceived risk by focusing on buyer-etailer encounters. Thereby, suggesting building better customer experience. Customer Experience is defined as "the quality as apprehended by a customer resulting from direct or indirect contact with any touch point of a company" (David Jacques, 2005). [12] This supports the claim that if the e-tailer works on building positive experience, he can develop favourable attitude.

HYPOTHESES:

- **H1.** Seller's side risk factors have significant influence on perceived barriers in adopting online shopping.
- **H2.** Buyer's side risk factors have significant influence on perceived barriers in adopting online shopping.
- **H3.** Intermediary's side risk factors have significant influence on perceived barriers in adopting online shopping.

METHODOLOGY:

The data for this study was collected via self-administered questionnaire. This questionnaire was distributed to 50 online shoppers. Non-probabilistic Convenience sampling method was applied. Three risk dimensions & perceived barriers measurement was developed with question representing each of this construct. The respondents were asked to rate each of these questions on a scale of 1 to 7 In order to get unbiased response

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respondents were asked to relate to their latest online purchase experience. Data collected from the survey was analysed using confirmatory factor analysis (CFA) and structural equation modelling (SEM). CFA was employed to test the validity and reliability of measurements & to extract factor score for each construct, while SEM was employed to test the hypotheses and the model. Factor scores extracted for each of the four constructs viz, buyer's side risk factors, seller's side risk factors, intermediary's side risk factors and perceived barriers are used for structural equation modelling. As factor scores may be computed and used in subsequent analyses. Factor scores are composite variables which provide information about an individual's placement on the factor(s). [13]

RESULTS & DISCUSSION:

Data collected was tested to ensure internal consistency using Cronbach's Alpha; with acceptable coefficient of 0.6 or more. The result of the data reliability test for each item in the construct was found to be well in acceptable limit. The lowest coefficient found for any item was .628. Whereas overall value of reliability test was found to be Cronbach's Alpha = .693**.** Even though acceptable value was taken as 0.6 or more, which is questionable, it shows fair reliability value as the overall alpha is near to 0.7 that is acceptable. [14] Moreover Confirmatory Factor Analysis (CFA) showed that items measuring a construct were sufficient with the sample size. The Kaise Meyer Olkin (KMO) measure of sampling adequacy was found to be 0.665 for three perceived risk dimensions & for perceived barriers as 0.617. In CFA factor scores were saved as regression for all observations. These factor scores were used for structural equation modelling. Following this first step was to check model fit, results showed that model had a perfect fit at p-value =1 with RMSEA below 0.5. This showed no requirement to further modify the model. Hypotheses are tested using absolute t-value of each path between latent variables in the structural model. A hypothesis is rejected if the absolute t-value of its path is below 1.96, vice versa. The model had three paths.

Complete path diagram of the structural model is shown in **Figure No. 2**,

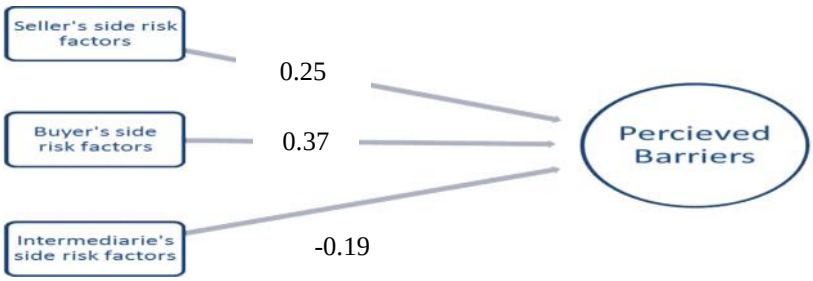

Figure No.2: PATH ANALYSIS STANDARDIZED ESTIMATES

Out of three hypotheses, two are rejected. Both rejected hypothesis showed absolute t-value of less than 1.96. The results are shown in Table No.1;

TABLE NO.1: RESULTS OF HYPOTHESES TESTING

Hypotheses	t-value	Conclusion
H1. Seller's side risk factors have significant influence on perceived barriers in adopting online shopping.	1.93	Rejected
H2. Buyer's side risk factors have significant influence on perceived barriers in adopting online shopping.	2.89	Accepted
H3. Intermediary's side risk factors have significant influence on perceived barriers in adopting online shopping.	-1.45	Rejected

CONCLUSION:

This study shows that there is observable effect of three risk dimensions upon perceived barriers in adopting online shopping. Out of the three dimensions Buyer's side risk dimension's influence on perceived barrier is significant. This shows that many factors that have originated from buyer's side are forming risk perception. These factors cannot be related to objective evaluation but can be said as subjective evaluation of buyer. If in reality these risk factors match the buyers experience then he will become reluctant from repurchase. With the rise of multi-channel retail formats there is a need to study the measures that will make customer experience more positive. Especially in online retailing as there is the question of trust, intangibility & risk involved, the need to make customer experience more positive is evident.

MANAGERIAL IMPLICATIONS:

As increasing amount of time is spent on the internet, people are demanding a more positive, intuitive, and instant online experience—each and every time. In short, they expect the time they invest in the Web to be worth every millisecond devoted to it. Likewise, business leaders know that every visit to an organization's Website affects the way consumers view their companies as a whole. Thus, each online interaction must be better than good and, at best, generate positive buzz. Just one negative experience, after all, can generate a negative buzz heard around the world. [15] Companies should focus on web requirements that are key to maximizing customer experience. These practices are like; Make the Website easy to find, Make the Website easy to use, Understand your customers' issues, Provide clear and readable content, Offer multi-channel choice, Capture public feedback about the Web experience, Optimize your site's performance, Deliver a personalized experience, Ensure that your site is accessible. [15] They should **develop a multi-channel choice so that customers transitioning from mobile to fixed web to contact centre all have the same rich, seamless experience that will keep them coming back for more.**

Kotha , Rajgopal & Venkatachalam (2001) provided evidence on the role played by online customer experience in acquiring traffic and converting traffic to sales in a sample of pure Internet firms. They found a positive association between traffic and a composite score of online customer experience quality. And also found that two specific dimensions, website navigability and relationship services, help attract traffic. In contrast, five dimensions of online customer experience (onsite resources, price leadership, and customer confidence besides website navigability and relationship services) moderate the relationship between web traffic and sales. [10] Salam et al (2003) put forth that consumer-perceived risk is reduced with the increase in economic incentives. This means that consumer-perceived risk may be reduced by offering products or services at a price that is below that offered in the traditional market, thereby inducing consumers to transact. This also implies that online merchants need to be cost competitive and recognize that consumers vary in their perception of risk of transactions over the Internet.[8] Yi-Ching Hsieh et al (2005) found that financial, social, and structural bonds have positive impacts on customer commitment. In addition, financial bonds were found to be more successful in strengthening customer commitment for search goods/services than for experience or credence goods/services. Structural bonds were found more important for credence and experience goods/services than for search goods, and social bonds were almost equally important for all three types of goods/service. [16] One of the study indicated that the delivery system is one of key success factors for B2C that would encourage consumers to repurchase. Other factors are the reliability and responsiveness in term of delivery the right product (accuracy) at right time and faster response to customers, variety and price of product, product's information accuracy, the online payment security system, choices for payment, efficiency of recording and transmittal business transaction system, and office's location of vender. [11] Therefore it is quiet obvious that making buyer positive is making his experience better. In course of making buyer's experience better research has suggested ways that will also reduce inherent as well as perceived risk in online purchase.

LIMITATIONS:

The focus of the study was only to know how buyer can perceive risk involved in online purchase, it was in relation to the contact point or role to be played by each of the parties involved. As the domain of the study

was perceived risk, no separate effort is taken to know about customer experience from the existing respondents, whereas the questions asked to them where indirectly pointing towards direct or indirect contact with any touch point of e-tailer. Therefore the focus was to know what exactly they perceive can go wrong. The sample size is small hence future studies can be made on larger sample size, with relatively more items for measuring the risk constructs. The results of data analysis may vary with the change in sample size. But with the current sample size the results are at least moderately good, if not perfectly depicting the situation.

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