INTRODUCTION

Internet is one component which has recently become the key ingredient of quick and rapid lifestyle. Be it for communication or explorations, connecting with people or now as a medium of transactional business, 'internet' has become the central-hub for all. Electronic commerce encompasses all business conducted by means of computer networks. India has an internet user base of 250.2 million as of June, 2014.

Online shopping in India is growing at a dramatic rate. The e-commerce industry in India will touch \$15 billion by 2016, with over 50 million new buyers from tier 1 and tier 2 cities whereas the total number of online shoppers will triple to 100 million by 2016 including 40 million women, finds a survey from Google and Forrester Consulting.

Considering that India's e-commerce space may grow 50% in the next 5 years (Economic Survey, 2014-15) and seeing the consumer confidence growing significantly in these years, the marketers are further propelled to work on understanding the lifestyles of online shoppers for the purpose of segmentation, targeting, positioning and promotions. There are numerous factors that influence the online consumer behavior like Demographic, sociological, economic, legal, environmental, attitudinal etc. which are cultural and country dependent. Therefore, the scales for such requirements developed in other countries may not be apt for use in India. Hence there is a need to develop appropriate scales applicable in the Indian context. Within India as well, the tide is changing in the consumer behavior riding on the back of higher disposable income, changing lifestyle, urbanization of semi-urban and rural communities, shifting demography, increasing consumer awareness, growing Internet penetration and innovative promotional campaigns.

Jih and Lee (2003) in their study appropriately argued that 'Lifestyle' is the most important market 'segmentation' variable rather than demography and culture. With the varying lifestyles due to the fast moving technological era, its utmost important to probe more into the lifestyle drivers of online consumers. By way of review of the previous literature, exploratory study through interviews and focus group and by conducting an online survey with the online shoppers and experts in the field, this dissertation work aims to study the perceived risk, benefits and the trust factors that play an important role in the online buying behavior of an Indian consumer.

Objectives of the study

The purpose of conducting is study was:

- To explore whether and how trust affects perceived risk in the online shopping context and vice versa.
- To determine the different perceived risks involved in online shopping in Indian context.
- To understand elements of each perceived risk in online shopping.
- To find out reasons for reluctance to online shopping.

Hypothesis of the study

Considering the above objectives the following hypothesis was tested:

- There is no significant difference in the perception of online buyers of different age groups.
- Gender does not affect the perception of a buyer in online shopping.
- Gender and age do not affect adoption of a specific mode of payment for online shopping.
- There is no relationship between Income level of people and trust in online shopping.
- Trust in online shopping is independent of Education level of customers.

LITERATURE REVIEW

The growth of Internet and its user base in recent years has been truly phenomenal. According to Lee and Turban (2001), in most of the developed countries, the number of Internet users is 20-50 percent of total population. According to Internet Advertisement and Mobile Association of India (IAMAI) report, the number of people who can use the Internet unaided has tripled over the past seven years, and stands at 65 million.

Despite the phenomenal growth of the Internet over the past few years, the vast potential of conducting business over the Internet remains largely untapped. For example, according to Indian Readership Survey (IRS) 2007, online shopping accounted for only 1.2 percent of total Internet Usage. Thus there still exists much room for online shopping to grow. Authors Teo T.S. (2006) and Rudolph T. et al (2004) state perceived risk while authors Yoon S.J. (2012), Kraeuter G. S. (2002), Hemphill T. A. (2002) and Pang C. et al (2007) state lack of trust the main cited reasons for consumers not purchasing online.

ONLINE MARKETING

Online Marketing is defined as "the art and science of selling products and/or services over digital networks, such as Internet and cellular phone networks". Here the art of online marketing refers to

- Discovering the right online marketing mix of strategies which attracts the target market for actually converting into sales.
- Selecting the online marketing strategies to be applied and evaluating the success of those online marketing strategies through research and analysis.

Online marketing is also referred as i-marketing, web marketing, internet marketing or e-marketing. E-commerce (electronic commerce) is type of online marketing and is defined as "the art and science of selling products and/or services over the Internet".

Perceived risk

Perceived risk is defined as "the nature and amount of uncertainty perceived by consumers in completing particular purchase decision. Two elements, uncertainty and consequences may play a significant role in perceived risk. Difficulty of identifying buying goals and matching these goals with product or brand offerings leads to uncertainty. In the online context, perceived risk is defined as "the expectation of any loss or any negative consequences as a result of online shopping".

Types of perceived risk

Perceived risk is multifaceted and its essence cannot be captured by a single concept. There are a variety of risk types:

- Perceived financial risk.
- Perceived performance risk.
- Perceived physical risk.
- Perceived social risk.
- Perceived convenience risk.
- Perceived psychological risk.
- Perceived source risk.
- Perceived privacy risk.

Trust and Online Shopping

Trust is a complex and abstract concept and is often used interchangeably with related concepts such as credibility, reliability or confidence. Thus it is difficult to define trust and to identify the elements that construct it. Online trust refers to "consumers trust directed towards e-commerce web sites or merchants on the Internet and only applies to Business – to Consumer (B2C) ecommerce transactions". Trust in context of Internet or online shopping is defined as

"the belief that the Internet shopper has in an Internet merchant and is willing to engage in an Internet shopping transaction, even with the possibility of loss, based on the expectation that the merchant will engage in generally acceptable practices, and will be able to deliver the promised products or services".

Consumer Behavior

Consumer behavior is defined as "behavior that consumers display in searching for, purchasing, using, evaluating and disposing of products and services that they expect will satisfy their needs". Consumer behavior also deals with consumer decision making process and all external and internal influences that should be considered to make product final choice of consumers in buying decision process. Thus the main purpose for studying consumer behavior is to comprehend why and how consumers make their purchase decisions. These insights enable marketers to design more effective marketing strategies, especially today, when advanced technologies enable marketers to collect more data about consumers and target them more precisely.

Impact of digital technologies in marketing strategies

Greater customization of products, services and promotional messages is allowed by digital technologies than do older marketing tools. These digital technologies enable marketers to adapt the elements of the marketing mix to consumer's needs more quickly and efficiently, and to build and maintain relationships with customers on a much greater scale.

The linkage of Online Marketing, Trust, Perceived Risk and Consumer Behavior

The growth of Internet and its user base globally in recent years has been truly phenomenal. Twenty to fifty (20-50) percent of the total population in most of the developed countries are using the internet. Report released by Internet Advertisement and Mobile Association of India, indicates very robust growth of Internet penetration in India. As per the report, the

Internet penetration for people having used the Internet at least once has grown by 32 percent from 210 million in December 2013 to 278 million in December 2014. According to the report around 173 million or 57 percent of Indian internet users' access internet from their mobile phones. The percent of mobile internet users has grown more rapidly than traditional broadband users. 49 million new mobile internet users have been added between October 2013 and October 2014.

With increasing computer literacy and broadband penetration, the Indian consumer is becoming more and more net savvy, and this is observed not only in the six major metros, but also in the tier II cities to a large extent. The report also states that the number of people who can use the Internet unaided has tripled over the past seven years. Growth in Internet penetration as per the industry estimates is around 4 percent month-on-month currently and is expected to double over the next few years. Online shopping and bill payments, matrimonial and sports are the three main purposes emerged out of internet usage with almost 40% growth over last year. This implies that tremendous potential exists for using internet for purpose of purchasing goods and services and it is expected that the Internet will become a universal medium to obtain information and to buy and sell products or services. But as per the IAMAI Report, online shopping accounted 33 percent of total Internet indicating that many users are adapting to make purchases on the Internet. Thus, there is still much room for online shopping to grow. Perceived risk and lack of trust are the main cited reason for consumers not purchasing online. Developing trust in online shopping environment is especially challenging because of the lack of direct contacts with the physical stores, salesperson and physical products in the digital world.

Consumers' experiences are different while purchasing the same product through online or offline. In a physical store, consumers can see, touch, try and feel the product and its quality which is absent in online shopping. In online environment consumer interact in a virtual environment through the website interface.

Online shopping medium has its own drawbacks such as reduced opportunities for sensory shopping, social shopping, and face – to- face interactions with sales personnel, and the postponement of the consumption or enjoyment of tangible goods. Thus owing to the conventional procedures, security concerns and existing habits, shopping for Indians implies physical purchase of products that have a high touch feature. Due to its in-home characteristics, online shopping may be associated with risks similar to other in-home

shopping methods (e.g. mail order, television shopping, print catalogue shopping). Such risk is perceived due to uncertainty and consequences of buying. As a result trust and risk taking or amounts of perceived risk are very important aspects of online shopping.

Perceived risk is understood to decrease among people who have an online shopping experience. Trust is critical to the study of online business because it has a significant effect on consumer behavior. The concept of trusting beliefs means that a potential online shopper believes that the online store is benevolent, competent, honest or predictable. Thus trust is a prime mechanism for reducing uncertainty in Internet shopping.

ONLINE SHOPPING

Introduction

Presently Internet is used for several purposes including interactive communication, information search and shopping. Internet is also a means through which businesses can effectively and economically perform their marketing activities. Online shopping is getting more attention from shoppers for several reasons.

Advantages of Online Shopping

Online shopping has following advantages over traditional storefront shopping:

1. Convenience and time –saving

In various ways, online shopping is considered as the most convenient and easiest mode of shopping. It reduces the opportunity costs of effort and time involved in shopping activities. Because of the changing lifestyles and lack of time (due to hectic schedule), consumers now have hardly time to go out to shop at physical locations such as stores and shopping malls. Due to this convenience and time saving characteristics has become even more essential in recent times. Online shopping can be done from anywhere as it is not restricted to any certain geographic area or certain stores. Thus shoppers can buy the product required from vendors located in different place anywhere in the world if in case the product is not available at their location. Further, online shopping can be done at any time (24 hours a day, 7 days a week and holidays).

2. Better price information and Lower prices

An expense for running physical store is high as the cost includes rent of physical premises and operating costs (such as electricity and wages of sales staff). As these costs are absent in the online store, they pass on cost savings to shoppers by lowering prices of the items. As the internet provides broad reach of information and navigator websites, it has become easier for the online shoppers to compare and find lower prices of the items. Online shopping also provides the shoppers with benefit of discounts, special offers, promotions, free shipping, and no tax on items by many stores.

3. Lower search costs and better product selection

As online stores are not restricted to any physical space, it provides unlimited choice in products to the shoppers. Online shoppers can locate vendors, view detail product information from a variety of vendor's website, compare prices and quality and finally make purchase.

4. Powerful research Instrument

In the purchasing process, Internet can be used as a powerful research instruments. According to Forrester Research, 46 % of online buyers research online to purchase offline, while 27 % research offline to purchase online and 17 % research in both ways. Ernst and Young's report states that more than 50% of Internet users collect information and research products online and afterwards purchase them through traditional channels.

Disadvantages of Online Shopping

- 1. Privacy and Security Issues.
- 2. Access to the Internet and computer necessary.
- 3. Enjoyment of retail shopping lost.
- 4. Perceived Risk.

Classification of Internet Sites

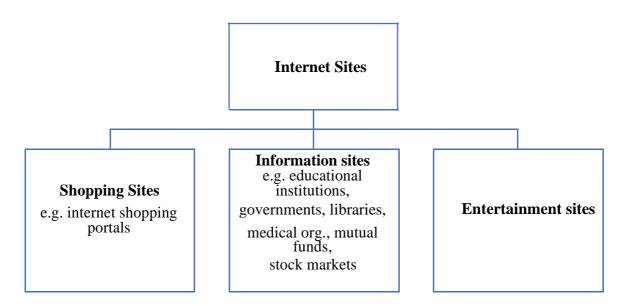


Figure 1: Classification of Internet Sites

Barriers to Online Shopping

Functional and psychological barriers are found in the online shopping context. Functional barrier emerges when a consumer perceive important changes from adopting an innovation. Such barriers in online shopping context are due to significant differences related with this channel as compared to physical store shopping. Functional barriers can be divided into usage, value and risk barriers. Every consumer has some shopping habits and if they feel that they have to make a major change in this habit and consumption routine for online shopping then usage barrier occurs.

The second functional barrier is value which refers "to the value consumer perceive from the online shopping experience". For example, due to inability to see and touch merchandise in person, it becomes difficult for the consumers to make judgments about the quality and value provided during online buying process. Lack of interaction with sales personnel who provides information, advice and human contact during the buying process is also a major value barrier. Risk is the third functional barrier corresponding to the uncertainty and potential undesired side effects that cannot be anticipated and can exhibit consumer adoption of innovation. In the online context, perceived risk appears very often as a significant barrier to purchasing over the Internet. Both buyers and non-buyers Internet users tend to perceive risk in online shopping based on the lack of trust in online shopping channel.

Psychological barriers occur when innovations cause consumers to be in disagreement with their previous beliefs. Tradition and Image barriers are two types of psychological barriers identified. When consumers have to undergo changes in these traditions i.e. culture then it results in traditional barrier. When consumers hold unfavorable beliefs resulting from stereotypical thinking then image barrier is said to occur.

Perceived Risk

The notion of perceived risk was originally introduced by Bauer, R. A. (1967) as a psychological, subjective construct to explicate phenomena's such as information seeking and brand loyalty. Cox D.F. (1964) defines perceived risk as "the nature and amount of uncertainty or consequences experienced by the consumer in contemplating a particular purchase decision". Adobor H. (2005) says that perceived risk is 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 unfavorable. Dowling, G. R. and Staelin, R. (1994) define it as the consumer's perception of the uncertainty and concomitant adverse

consequences of buying product or service. In context of online shopping, Hassan A. M. et al (2009) define perceived risk as the expectations of any loss or any negative consequences as a result of online shopping.

Bettman J.R. (1973) distinguished risk into inherent and handled risk. The former refers to the risk before and the latter to the risk after the consumer has applied risk –reduction strategies. Thus, inherent risk is a determinant of risk, whereas handled risk is the result thereof. Internet is an open environment. As a result, Lu, H. P. (2009) quotes that online applications or technology is exposed to security threats such as worms, crackers, viruses, spoofing and password sniffing, theft of funds, breaches of personal privacy and attacks by hackers. Consequently personal security may be threatened when people use online applications. Intangible nature of online environment also adds to perceived risk. Intangibility is defined by Laroche M. (2003) as "lack of physical evidence and the degree to which a product or service cannot provide a clear concrete image".

Types of Perceived Risk in Traditional Shopping

According to Lu H. P. (2005) perceived risk is multifaceted and its essence cannot be captured by a single concept. Kaplan, L.B. and Roselius, T. (1974) have suggested a variety of risks, including financial, performance, physical, social, convenience, psychological, source and privacy. Authors Chen, R.et al (2003) have described six components of perceived risk: financial risk, performance risk, social risk, psychological risk, physical risk and time loss risk.

Table 1: Types of risk

Categories	Definition
Financial risk	The probability that a purchase results in
Tilialiciai fisk	loss of money or other resources.
Performance risk	The probability that a product purchased
1 CHOIMANCE HSK	results in failure to function as expected.
Social risk	The probability that a product purchased
Social fisk	results in disapproval by family or friends.
Psychological risk	The probability that a product results in
1 Sychological fisk	inconsistency with self-image.
Physical risk	The probability that a product purchased
Thysical fisk	results in personal injury.
Time risk	The probability that a purchase results in
Time fisk	loss of time to buy or retain the product.

Types of Perceived Risk in context of Online Shopping

Financial Risk

Perceived financial risk is defined by Hassan A. M. (2006) as "concern over any financial loss that might be incurred because of online shopping". They are various reasons due to which a consumer may feel financial risk. This risk may arise when consumer is making payment through credit card resulting to financial loss. Financial loss as described by Salam A.F. (2003) here refers to the money lost as when the consumer cannot get a refund when needed or is not able to reverse the transaction or to stop payment after discovering the mistake. Biswas D. (2005) also explains that sometimes due to fraudulent and unauthorized use of credit cards also financial loss may occur.

Performance Risk

Hassan A. M. et al (2006) say that perceived performance risk is concern over the functionality of the communication channel i.e. Internet. If a consumer feels that a product or brand may not perform as anticipated or there may be chances of the product failing to meet the performance requirements originally intended at the time of purchase while online shopping, then according to Ueltschy L.C. (2004) performance risk occurs. Thus the product ordered with specific color and quality as displaced on the Web site may not match with the delivered product.

Time Loss Risk

Time loss risk is defined as "concern over the amount of time required to receive the product. This risk may arise due to various reasons: time wasted in case of poor choice of product; long waiting relating to slow downloading depending on the network, traffic at site and the kind of information being obtained; late or missed deliveries; time wasted when facing with difficulties with site navigation, inability to locate items and complex procedures; time lost due to technological difficulty encountered in browsing through the Web site; time lost in returning or exchanging the product. Dellaert B. (2004) and Lim, H. et al (2005).

Physical Risk

Hassan, A.M. et al (2006) further go on to describe perceived physical risk as the chances of any physical injury because of online shopping. This risk may involve the fear of experiencing eyestrain and backache because of frequent exposure or sitting long hours and using internet or viruses affecting the system while shopping. While purchasing apparels online, consumers may be concerned about the bodily comfort, discomfort and appearance leading to physical risk.

Psychological Risk

Hassan A. M. et al (2006) say psychological risk reflects concern about the psychological discomfort and tension that may arise because of online shopping. According to Simon S.M. Ho, (1994), in general psychological risk refers to how the consumer perceives himself after making a wrong purchase. This risk broadly describes instances where product consumption may harm the consumer's self-esteem or perceptions of self.

Social Risk

Hassan A. M. et al (2006) and Simon S.M. Ho, (1994) describe perceived social risk as the likelihood that online shopping will affect the way others think of the online prospective shopper. Social risk also refers to the consumer's perception of how others will react to his purchase. It is concerned with an individual's ego and the effect that a purchase will have the opinions of reference groups.

Source Risk

With respect to source risk, Hassan A. M. et al (2006) describe that the fear or worry whether or not the approaching shoppers can trust the online vendors and feel comfortable in doing business with them may lead to perceived source risk. The set of perceptions that receivers of communication hold towards a source involves source credibility. Difficulty in determining the reliability, expertise, reputation, trustworthiness and believability of some online companies may result in source risk.

Privacy Risk

Perceived privacy risk refers to concern over the loss of sensitive and proprietary information Hassan A. M. et al (2006). Privacy of personal information is significant issue for some consumers. Privacy concerns reflected in Eggert A. (2006) work identity risk –consumer's fear of not being able to protect their anonymity in the online environment, or e.g. the reception of unsolicited contracts from online retailers (junk mail). In the online environment, consumers feel threatened by the idea of retailers abusing their personal information and tracking their purchasing habits for marketing purposes. Besides the loss of anonymity, Internet shoppers are concerned about a potentially poor system security that allows malicious individuals, such as hackers, to access and exploit databases with financial and personal information (e.g. that concerning credit cards). Websites dedicated to provide support and resources for a specific health problem, do take lot of personal information. Miyazaki A. D. et al (2001) state that privacy risk also involves sharing (selling, renting) personal information to other companies without permission of consumers which result in unwanted calls from business companies.

To deal with uncertainty and amend the consequences of a purchase decision that is perceived to be risky, Park, J. and Stoel, L. (2005), state that consumers look for information. According to authors Kuhlmeier, D. and Knight, G. (2005), differences in levels of experience in using the internet, proclivity to use the Internet and perceptions of risk regarding the internet, influence the likelihood to purchase goods online. Also Park C.H. and Kim Y. G. (2003) say that information quality, users interface quality and security perceptions are considerably related to each consumer's site commitment and actual purchase behavior in online context. Researchers have identified number or risk relievers which reduce perceived risks which are product cost, product newness, brand experience, manufacturer's name, distribution reputation, money-back guarantee, free sample/trial and endorsement by a trusted third party, Pires, G. et al (2007), in their study found that frequency of online purchasing was not related with perceived risk and satisfaction with prior internet purchase was negatively related with the perceived risk of intended purchases.

Authors Liebermann, Y., and Stashevksy, S. (2002) have examined the concrete fears that lead to emergence of risk perception and developed a detailed perceived risks map, which consists of nine different risks: Internet credit card stealing, supplying personal information, pornography and violence, vase Internet advertising, information reliability, lack of physical contact, not supplying Internet product purchased, missing the human side in Internet purchases, and Internet usage addiction. The study also found that women and elderly consumers perceive higher degree of perceived risks in online shopping. Authors Rudolph, T. et al (2004) further expanded the notion of intangibility and the barriers emerging out of it. They found that there are four barriers to online shopping, namely digital barriers, security barriers, online channel barriers and experience/access barriers. A related theme of research on online shopping behavior has been to relate the perception of risk with specific attributes of Web-based shopping sites or with the socio-cultural attributes of online shoppers. A survey was conducted by authors Jarvenpaa, S.L. & Todd, P.A. (1997), on consumer reactions to Web-based shops with a sample size of 220 respondents. Through the survey, it was found that 31 per cent of respondents were disappointed with product variety and 80 per cent had at least one negative comment about customer service online.

Another interesting theme that emerged from the literature is that the perceived risk towards online shopping varies from country to country. Several studies have concluded that the perception of risk is affected by cultural values and ecommerce infrastructure existing in the

host society. A study by authors Choi, J., & Lee K.H. (2010) found that the online purchase product choice differed between Korean and US consumers. While the Americans were inclined to purchase apparel and rejected purchasing cosmetics, the Korean consumers were inclined to purchase standardized products such as books and CDs online. The study also found that the perceived risk of online shopping was higher in the case of Korean consumers than Americans.

Trust

Lack of trust on online shopping has been conceived as the basic barrier to the adoption of online shopping. Mayer R.C. et al (2011) built a relationship between trust and risk hence, found out that they are closely interrelated. Trust is vital factor under conditions of uncertainty and risk. Lee M.K. and Turban E. (2010). Also trust is significant in adoption of new technologies including the Web and e-commerce. Further, Gefen D. and Straub D. (2013) state that due to the inherent uncertainty created by the need to depend upon others in many types of commerce transactions and the resulting possibility of facing opportunistic behavior or behaving in an unpredictable manner, trust becomes significant aspect in commerce. The Oxford English Dictionary defines trust as:

- Confidence in or reliance on some quality or attribute of a person or things, or the truth of a statement.
- Accepting or giving credit to without investigation or evidence.
- Giving credence to, believing (a statement) relying upon the veracity or evidence of (a person, etc.).
- Confident expectations of something.
- The quality of being trustworthy, fidelity, reliability, loyalty, trustiness.

Svensson G. (2011) describes trust as a multidimensional concept that has been discovered to contain various dimensions such as confidence, predictability, ability, competence, expertness, intentions or motives, benevolence, motivation to lie, business sense and judgment, altruism, loyalty, integrity, congruence, consistency, fairness, character, openness of management, liking, respect, faith, acceptance and security.

McKnight D. H et al (1998) in their finding conclude that trust is conceptualized as a belief about certain traits of the trustee, or as an attitude towards the trustee by some management

researchers. In the marketing field, Singh J. and Sirdeshmukh (2000), define trust as psychological state comprising intention to accept vulnerability based on one's positive expectation of the intentions or behaviors of another or willingness to rely on an exchange partner. According to Gefen D. et al (2003), trust has been conceptualized as a set of beliefs about an Internet vendor in electronic commerce research. In context of online shopping, trust is defined as the belief that an Internet shopper has in an Internet merchant and is willing to engage in an Internet shopping transaction, even with the possibility of loss, based on the expectation that the merchant will engage in generally acceptable practices, and will be able to deliver the promised products or services. In order to generate trust in online environment author Lim K. H et al (2006) have categorized trust into different types: calculus-based trust, knowledge based trust, relational trust and institutional based trust. Authors Chen C.H. and Saeedi M (2006), have proposed a generic typology of trust, consisting of three dimensions: ability, benevolence and integrity.

Online Trust

Intensity of risk perception has resulted in a parallel line of research – to develop a construct which can be used by the marketers to overcome the perceived risk. The construct which has been accepted in the field is 'online trust'. Online trust is defined by Zhang, Ping & Li, Na (2003) as "one kind of subjective belief of one party towards another that the latter will act as commonly predicted and exploit no vulnerability under the online environment filled with uncertainties and risks". Author Yoon S.J. (2012), has categorized three dimensions of online trust: technical based (Web searching, technology and presentation), uncertainty of transactions and security (security assurance) and competency based (reputation, fulfilment and interactions).

According to Chen Y. H and Barnes S. (2007) online trust plays a key role in creating satisfied and expected outcomes in online transactions. Apart from inspiring and meeting consumer's high expectation of gratifying transactions, high degree of trust reduces uncertainty, perceived risks and interdependence in most of online transactions. Thus trust enhances consumer's belief that e-vendors will not engage in opportunistic behavior. According to authors Jarvenpaa S. L et al (1999) past experience, long-term orientation, positive trusting stance and feeling of control drives trust. In testing virtual personal advisors, authors Urban, G.L et al (2000) have discovered high trust and adoption for a virtual advisor. They also found that quantity, quality and timeliness of information increased trust.

Site longevity, selection of items, online community, links to and from other sites, search engine on the site and privacy are other potential drivers of online trust. Security and privacy were found as key drivers of online trust by authors Hoffman, D.L. et al (1999). Credibility/reliability, emotional comfort and quality of the company were found to be essential dimensions of trust.

The authors also found that navigation, advice, no errors, fulfilment, community, privacy/security, trust seals, brand and presentation were drivers of trust and self-confidence/ Internet savvy, past behavior, Internet shopping experience and entertainment experience affected trust. In an electronic store according to Jarvenpaa S. L et al (2000), perceived size and perceived reputation were found to determine trust which impacted the attitude, risk perception and which in turn influenced the willingness to buy in an electronic store. Authors Fogg, B.J. et al (2001) in their study found that real-world feel, ease of use, expertise, trustworthiness and tailoring was the most significant factor affecting Web credibility.

Some studies have focused on evoking how to build online trust. Authors Chen C.H. and Saeedi M (2006) have found that there are four factors: online vendors, e-environment, cultural issues and individual characteristics which organizations have to concentrate on in order to gain trust from its online consumers and make sure they will come back more regularly. Authors Pang C. et al (2007) have found that there is correlation between past online experience and income. They found that higher e-trust levels are more likely to have higher purchasing power with experience and high income. Authors Ha H.Y. and Helen, P. (2005) have examined that brand trust is affected by web purchase related factors: security, privacy, brand name, word-of mouth, good online experience, and quality of information. Authors Chen Y. H and Barnes S. (2007), found four major categories of determinants: perceived technology, perceived risk, company competency and trust propensity that affected consumer's online initial trust.

Online Shopping

It was suggested by authors Lee M.K. and Turban E. (2010) that consumer trust in Internet shopping is driven by trustworthiness of Internet merchant, trustworthiness of Internet shopping medium and contextual factors and that individual trust propensity moderated each of the relationships between the antecedents of trust and trust. Gefen D. et al (2008) state that trust in online environment is based on beliefs in the trustworthiness of a trustee, which is

composed of three distinct dimensions: integrity, ability and benevolence. Inferior product quality, poor content of the Web site, complex or unintuitive navigation, technology failure(s), inferior customer service, poor response time and problems in order fulfilment can lead to loss of trust quote Yakov B. et al (2005). There are several ways in which online trust can be increased. To build online trust, Authors Urban G. L et al (2000) have suggested the following ways: maximize cues that build web site trust, use virtual advisor technology to gain customer confidence and belief, provide unbiased and complete information, include information on competitive products and keep promises. Authors Jarvenpaa S. L (2000) suggest that by quoting policies of customer satisfaction, returns and refunds trust can be enhanced. Consumers should be provided with the chance of being anonymous while engaging in information exchanges and online transactions to increase online trust.

Author Schneiderman B. (2012) suggests that companies should reveal past performances patterns, give references from past and current users, acquire third –party certifications and build it easy to locate, read and implement policies relating to privacy and security. Trust can be increased by credit card loss assurance; product warranty and merchandise return policies, availability of escrow service, ability to schedule human customer service and availability of user friendly interfaces. Third party involvement and privacy statements can improve trust. Lee M.K. and Turban E. (2001).

There are several factors which affect consumers to shop online. Authors Monsuwe´.P T et al (2004) have found that attitude towards online shopping and intention to shop online is affected by ease of use, usefulness, enjoyment, consumer traits (age, gender, education and income), situational factors, product characteristics, previous online shopping experience and trust in online shopping, personality characteristics (expertise, self-efficacy, need for interaction). Several authors have studied the attitudes towards online shopping. Several authors, Pamela, A., Robert S. (2012), Teo T. S (2011) and Yang, Z et al (2001) have tried to understand the attitude towards online shopping in itself or vis a vis brick and mortar shopping or catalogue shopping. Other studies Wang, M.S. et al (2007) have utilized the theory of planned behavior to establish explanatory relationship between attitude and intention to shop online.

The theme of drivers of adoption of online shopping has not been examined in detail and only a few studies exist. All the studies treat online shopping from the theoretical perspective of adoption of innovation and discover the factors which facilitate adoption of innovation.

Author Pavlou (2003) has concluded that basic drivers of adoption are perceived usefulness, risk and ease of use. Authors Lu H. P. et al (2005) have found perceived usefulness, playfulness and novelty seeking as factors which explain adoption of online shopping. Another interesting but emergent research theme online shopping is purchase behavior and decision making. Author Teo T. S (2006) in his study had diagnosed the product category which more often purchased in an online environment and the frequency of such purchases. Authors Comegys, C et al (2006) have applied the famous 5 stage purchase decision making to online purchase. But the nature of online shopping is completely different from brick and mortar companies. The journal 'Advances in Consumer Research' recognized this fundamental difference and organized a special session to understand the issues involved. Authors summarized these three articles and commented that two of these three papers concentrated on the interactivity in online shopping and how it is changing the way we take purchase decision.

RESEARCH METHODOLOGY

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. As marketing research is a systematic inquiry, it involves systematic planning at all the stages. Each stage of the procedure is methodologically sound, well documented and as much as possible planned. Thus the following six steps of marketing research process have been carried out in this study which is systematic and conceptually sound:

- Problem Identification.
- Approach to the problem.
- Research Design.
- Fieldwork or Data collection.
- Data Preparation and Analysis.
- Report preparation and presentation.

Problem Identification

This study is designed to provide suggestions to online marketers and e-vendors regarding barriers to online shopping. There are several questions that need to be answered so that internet users do online shopping without any risk fear or lack of trust.

Approach to the problem

Development of an approach to the problem includes formulating an objective or theoretical framework, analytical models, research questions and hypothesis and identifying the information needed.

Research Design

A research design is a framework or blueprint for conducting the scientific inquiry. It details the procedures necessary for obtaining the information needed to structured or solve marketing research problem. The purpose of the research design is to provide the plan for answering the research question or testing the hypothesis. The research design for this study is descriptive in nature and both qualitative and quantitative research methodologies are used. In this two stage

research design, first stage of the research design is exploratory. Output of the exploratory is used in the second stage of the research. Qualitative output was used for the formulation of questionnaire especially for item construction for the scale to measure risk and trust.

Fieldwork and Data Collection

Data was collected from online responses during the period of Feb 2015 to Mar 2015. Data was collected after checking the respondent's awareness of online shopping.

Data Analysis

Data preparation included the editing, coding, transcription, and verification of data. Analysis of data is the process by which data is converted into useful information. Raw data as collected from questionnaires cannot be used unless it is processed in some way to make it amenable to drawing conclusions. The collected data was then subjected to suitable statistical analysis including:

- One Way ANOVA multiple comparison tests.
- Chi-square test.

Report Preparation and Presentation

Reports help to present the study in a systematic manner. Research problem, current scenario and future directions can be effectively presented in form of report. A Research reports typically contain Literature Survey and identification of knowledge Gaps, Nature and Scope of study, Methodology, analysis of data, findings and conclusion.

DATA ANALYSIS AND INTERPRETATION

The data received through the questionnaire were tabulated and analysed with the help of different statistical tools. Interpretations were made to get the meaningful inferences. A total of 160 responses were collected out of which 157 were complete responses that were used for analysis. Data was collected majorly from Delhi and includes respondents varying from students, young IT professionals and middle aged people.

Demographic Characteristics of the Respondents

Respondents were asked about their demographic profile, which included gender, age, qualification, income, occupation and marital status. Characteristic wise respondents profile is presented through pie charts and briefly discussed to better understand the characteristics.

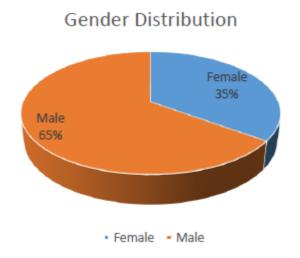


Figure 2: Gender Distribution of sample respondents

It is apparent from above graph; the percentage of male respondent is 65 % whereas the percentage of female respondents is 35%.

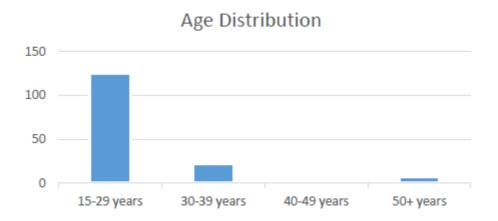


Figure 3: Age Distribution of sample respondents

As expected, the largest proportions of respondents (79.6%) are between 15-29 years of age, as this is the general age range for higher education. 14% of the respondents are between 30-39 years of age followed by rest in age group above 40 years.



Figure 4: Occupation Distribution of sample respondents

Most of the respondents are pursuing their studies (student 59%) followed by 36% in service and remaining 5.3% self-employed and 1% in other category comprising of homemaker and retired.

Education Distribution

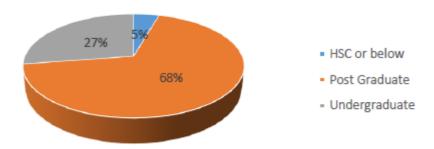


Figure 5: Education distribution of sample respondents

More than half of the respondents (68%) have Post graduate degree followed by 27% of the respondents having UG degree and remaining 5% having HSC or below degree.

Income Distribution

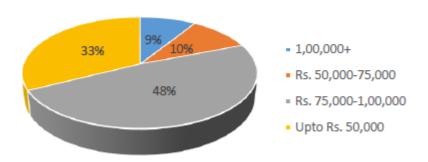


Figure 6: Income distribution of sample respondents

33% of the respondents are in the range of less than Rs.50, 000 per month. 10% and 48% of the respondents have a salary range between Rs. 50,000-75,000 and 1, 00,000+ respectively.

Marital Status Distribution

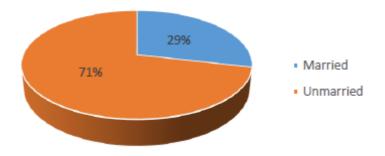


Figure 7: Marital Status Distribution of sample respondents

With the age profile the way it is observed it is no surprise that the marital status of a large part of the respondents is single (71%) and remaining 29% are married. This is understandable since a large number of the respondents are relatively young (between 15 to 29 years of age, 70.2%).

Internet Usage among Buyers and Non-Buyers

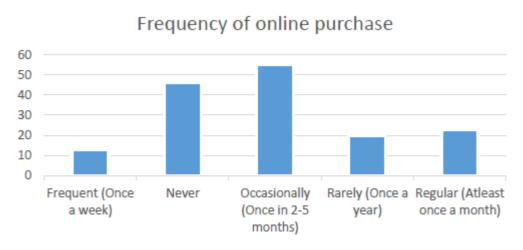


Figure 8: Frequency of online purchase

It is clear from above figure that 29% of the respondents have never done online shopping (Non Buyers). Remaining 35% of the respondents did online shopping occasionally, 13% of the respondents did online shopping rarely followed by 15% doing regularly and 8% doing frequently.

The internet usage pattern was collected for both set of internet users Buyers and Non-buyers and it is seen that the highest number of response lie in the 0-1 hr and the 2-3 hr range.

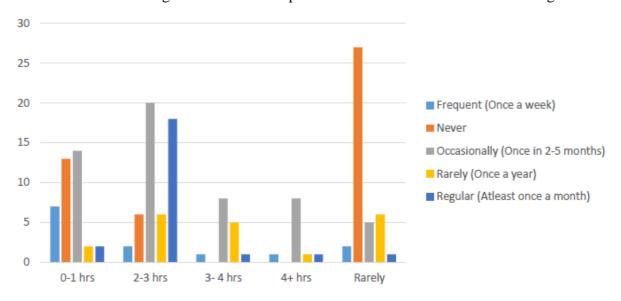


Figure 9: Frequency of purchasing online

It can be seen that 51% of the respondents have spent amount less than 5000 as the highest amount in one transaction followed by 28% spending Rs. 5000- Rs. 15000.

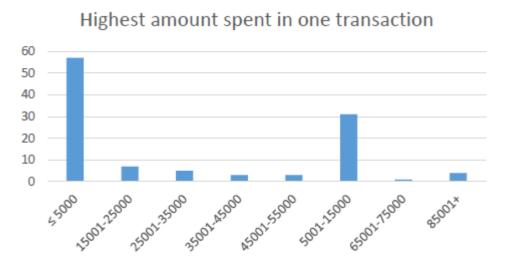


Figure 10: Highest amount spent in one transaction

It is clear that 44% of the buyers prefer using cash on delivery facility for payment followed by debit card, credit card and net banking.

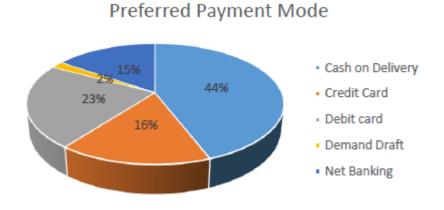


Figure 11: Preferred Payment Mode

Analysis of reasons of purchasing online as perceived by online buyers

1. Age wise analysis

The following hypothesis were set to understand the perception of online buyers

- H0 (a): There is no significant difference in the perception of online buyers of different age groups regarding convenience.
- H1 (a): There is a significant difference in the perception of online buyers of different age groups regarding convenience.
- H0 (b): There is no significant difference in the perception of online buyers of different age groups regarding timesaving.
- H1 (b): There is a significant difference in the perception of online buyers of different age groups regarding timesaving.
- H0 (c): There is no significant difference in the perception of online buyers of different age groups regarding inclination towards trying something new.
- H1 (c): There is a significant difference in the perception of online buyers of different age groups regarding inclination towards trying something new.
- H0 (d): There is no significant difference in the perception of online buyers of different age groups regarding ease of finding products.
- H1 (d): There is a significant difference in the perception of online buyers of different age groups regarding ease of finding products.
- H0 (e): There is no significant difference in the perception of online buyers of different age groups regarding ease of comparison.
- H1 (e): There is a significant difference in the perception of online buyers of different age groups regarding ease of comparison.
- H0 (f): There is no significant difference in the perception of online buyers of different age groups regarding non-availability of products.
- H1 (f): There is a significant difference in the perception of online buyers of different age groups regarding non-availability of products.
- H0 (g): There is no significant difference in the perception of online buyers of different age groups regarding no need to deal with sales people.
- H1 (g): There is a significant difference in the perception of online buyers of different age groups regarding no need to deal with sales people.
- H0 (h): There is no significant difference in the perception of online buyers of different age groups regarding product customization.

- H1 (h): There is a significant difference in the perception of online buyers of different age groups regarding product customization.
- H0 (i): There is no significant difference in the perception of online buyers of different age groups regarding offers/discounted prizes.
- H1 (i): There is a significant difference in the perception of online buyers of different age groups regarding offers/discounted prizes.

Table 2: Reasons of purchasing online and age

			Standard
Reasons	Age Groups	Mean	Deviation
Convenience	15-29 years	4.16	0.77
	30-39 years	4.21	0.71
•	40-49 years	3.00	0.00
•	50+ years	4.50	0.84
	Grand Total	3.97	0.58
Time Saving	15-29 years	4.34	0.57
•	30-39 years	4.26	0.56
	40-49 years	4.00	0.00
•	50+ years	4.17	0.75
	Grand Total	4.32	0.57
Inclination	15-29 years	3.58	1.03
towards trying	30-39 years	3.63	1.07
something new	40-49 years	3.00	0.00
•	50+ years	3.00	1.26
	Grand Total	3.55	1.04
Ease of finding	15-29 years	3.94	1.02
new products	30-39 years	3.84	0.96
	40-49 years	5.00	0.00
ļ	50+ years	3.33	1.37

	Grand Total	3.90	1.03
Ease of	15-29 years	3.94	0.96
comparison	30-39 years	3.63	0.90
	40-49 years	4.00	0.00
	50+ years	4.00	1.26
	Grand Total	3.89	0.96
Non availability of	15-29 years	3.82	0.92
products	30-39 years	3.58	1.07
	40-49 years	4.00	0.00
	50+ years	4.17	0.75
	Grand Total	3.80	0.93
No need to deal	15-29 years	3.65	1.08
with sales person	30-39 years	3.63	0.60
	40-49 years	4.00	0.00
	50+ years	3.33	1.37
	Grand Total	3.63	1.02
Product	15-29 years	3.55	1.00
customization	30-39 years	4.32	0.80
	40-49 years	5.00	0.00
	50+ years	3.00	0.82
	Grand Total	3.67	1.02
Offers/Discounted	15-29 years	3.68	0.97
prices	30-39 years	3.84	1.07
	40-49 years	3.00	0.00

50+ years	3.83	1.33
Grand Total	3.71	0.99

ANOVA analysis for the factors

Table 3: ANOVA of reasons scores of purchasing online gender wise

	F	Sig.	Decision
Convenience	3.823	0.002	Reject H0 (a)
Time Saving	1.674	0.259	Do not reject H0 (b)
Inclination towards trying something new	0.378	0.682	Do not reject H0 (c)
Ease of finding products	0.435	0.529	Do not reject H0 (d)
Ease of comparison	0.765	0.546	Do not reject H0 (e)

Can't find products in the stores	2.761	0.043	Reject H0 (f)
No need to deal with sales people	2.786	0.042	Reject H0 (g)
Product customization	1.498	0.487	Do not reject H0 (h)
Offers/Discounted prices	1.261	0.391	Do not reject H0 (i)

2. Gender wise analysis

The following hypothesis were set to understand the perception of online buyers

H0 (a): There is no significant difference in the perception of online buyers of different genders regarding convenience.

H1 (a): There is a significant difference in the perception of online buyers of different genders regarding convenience.

- H0 (b): There is no significant difference in the perception of online buyers of different genders regarding timesaving.
- H1 (b): There is a significant difference in the perception of online buyers of different genders regarding timesaving.
- H0 (c): There is no significant difference in the perception of online buyers of different genders regarding inclination towards trying something new.
- H1 (c): There is a significant difference in the perception of online buyers of different genders regarding inclination towards trying something new.
- H0 (d): There is no significant difference in the perception of online buyers of different genders regarding ease of finding products.
- H1 (d): There is a significant difference in the perception of online buyers of different genders regarding ease of finding products.
- H0 (e): There is no significant difference in the perception of online buyers of different genders regarding ease of comparison.
- H1 (e): There is a significant difference in the perception of online buyers of different genders regarding ease of comparison.
- H0 (f): There is no significant difference in the perception of online buyers of different genders regarding non-availability of products.
- H1 (f): There is a significant difference in the perception of online buyers of different genders regarding non-availability of products.
- H0 (g): There is no significant difference in the perception of online buyers of different genders regarding no need to deal with sales people.
- H1 (g): There is a significant difference in the perception of online buyers of different age groups regarding no need to deal with sales people.
- H0 (h): There is no significant difference in the perception of online buyers of different age groups regarding product customization.
- H1 (h): There is a significant difference in the perception of online buyers of different age groups regarding product customization.
- H0 (i): There is no significant difference in the perception of online buyers of different age groups regarding offers/discounted prizes.
- H1 (i): There is a significant difference in the perception of online buyers of different age groups regarding offers/discounted prizes.

Table 4: Reasons of purchasing online and gender

D	A C	Mana	Standard
Reasons	Age Groups	Mean	Deviation
	Female	4.23	0.78
	remaie	4.23	0.78
Convenience	Male	4.15	0.76
	Grand Total	4.18	0.77
Time Sering	Female	4.13	0.52
Time Saving	Male	4.42	0.58
	Grand Total	4.32	0.57
Inclination			
	Female	3.54	1.05
towards trying			
something new	Male	3.56	1.05
	Grand Total	3.55	1.04
	Grand Total		1.04
Ease of finding	Female	3.79	0.98
new products	Male	3.96	1.05
	Grand Total	3.90	1.03
Ease of	Female	3.95	0.92
comparison	Male	3.86	0.98
	Grand Total	3.89	0.96
Non availability of	Female	3.72	0.86
products	Male	3.85	0.97
	Grand Total	3.80	0.93
No need to deal	Female	3.85	1.04
with sales person	Male	3.51	0.99

	Grand Total	3.63	1.02
Product	Female	3.74	1.09
customization	Male	3.63	0.98
	Grand Total	3.67	1.02
Offers/Discounted	Female	3.67	0.87
prices	Male	3.74	1.06
	Grand Total	3.71	0.99

ANOVA analysis for the factors

Table 5: ANOVA of reasons scores of purchasing online gender wise

	F	Sig.	Decision	
Convenience	0.000	0.996	Do not reject H0 (a)	
Time Saving	1.235	0.267	Do not reject H0 (b)	
Inclination towards	0.019	0.759	Do not reject H0 (c)	
trying something new				
Ease of finding products	0.329	0.722	Do not reject H0 (d)	
Ease of comparison	0.492	0.398	Do not reject H0 (e)	
Can't find products in the stores	3.097	0.052	Do not reject H0 (f)	
No need to deal with sales people	1.451	0.403	Do not reject H0 (g)	
Product customization	2.239	0.138	Do not reject H0 (h)	
Offers/Discounted prices	0.566	0.247	Do not reject H0 (i)	

Analysis of normally adopted payment mode

1. Age Wise analysis

To explore normally adopted payment mode by online buyers of different age group following hypothesis were set:

- H0 (a): There is no significant difference in adoption of credit card by different age groups.
- H1 (a): There is a significant difference in adoption of credit card by different age groups.
- H0 (b): There is no significant difference in adoption of debit card by different age groups.
- H1 (b): There is a significant difference in adoption of debit card by different age groups.
- H0 (c): There is no significant difference in adoption of net banking by different age groups.
- H1 (c): There is a significant difference in adoption of net banking by different age groups.
- H0 (d): There is no significant difference in adoption of cash on delivery by different age groups.
- H1 (d): There is a significant difference in adoption of cash on delivery by different age groups.

Table 6: Cross Tab of Cash on Delivery and age

			15-29	30-39	40-49	50+	Grand
			years	years	years	years	Total
Cash on Delivery	Yes	Count	37.00	9.00	0.00	3.00	49.00
		% of Total	33.3%	8.1%	0.0%	2.7%	44.1%
	No	Count	48.00	10.00	1.00	3.00	62.00
		% of Total	43.2%	9.0%	0.9%	2.7%	55.9%
	Total	Count	85.00	19.00	1.00	6.00	111.00
		% of Total	76.6%	17.1%	0.9%	5.4%	100.0%

Table 7: Cross Tab of Credit Card and age

			15-29 years	30-39 years	40-49 years	50+ years	Grand Total
Credit Card	Yes	Count	15	3	0	0	18.00
		% of Total	13.5%	2.7%	0.0%	0.0%	16.2%
	No	Count	70.00	16.00	1.00	6.00	93.00
		% of Total	63.1%	14.4%	0.9%	5.4%	83.8%
	Total	Count	85.00	19.00	1.00	6.00	111.00
		% of Total	76.6%	17.1%	0.9%	5.4%	100.0%

Table 8: Cross Tab of Debit Card and age

			15-29	30-39	40-49	50+	Grand
			years	years	years	years	Total
Debit card	Yes	Count	20	2	1	2	25.00
		% of					
		Total	18.0%	1.8%	0.9%	1.8%	22.5%
	No	Count	65.00	17.00	0.00	4.00	86.00
		% of					
		Total	58.6%	15.3%	0.0%	3.6%	77.5%
	Total	Count	85.00	19.00	1.00	6.00	111.00
		% of					
		Total	76.6%	17.1%	0.9%	5.4%	100.0%

Table 9: Cross Tab of Net Banking and age

			15-29 years	30-39 years	40-49 years	50+ years	Grand Total
Net Banking	Yes	Count	12	4	0	1	17.00
		% of					
		Total	10.8%	3.6%	0.0%	0.9%	15.3%
	No	Count	73.00	15.00	1.00	5.00	94.00
		% of					
		Total	65.8%	13.5%	0.9%	4.5%	84.7%
	Total	Count	85.00	19.00	1.00	6.00	111.00
		% of					
		Total	76.6%	17.1%	0.9%	5.4%	100.0%

Chi Square Results to test difference in adoption of different payment modes by different age groups:

Table 10: Chi Square Chi- square of various payment modes and age

	Value	Df	Asymp. Sig. (2 sided)	Decision
Cash on Delivery	2.167	3	0.209	Accept H0 (a)
Credit card	0.583	3	0.767	Accept H0 (b)
Debit Card	2.954	3	0.235	Accept H0 (c)
Net banking	0.065	3	0.973	Accept H0 (d)

2. Gender Wise analysis

To explore normally adopted payment mode by online buyers of different age group following hypothesis were set:

- H0 (a): There is no significant difference in adoption of credit card by male and female buyers.
- H1 (a): There is a significant difference in adoption of credit card by male and female buyers.
- H0 (b): There is no significant difference in adoption of debit card by male and female buyers.
- H1 (b): There is a significant difference in adoption of debit card by male and female buyers.
- H0 (c): There is no significant difference in adoption of net banking by male and female buyers.
- H1 (c): There is a significant difference in adoption of net banking by male and female buyers.
- H0 (d): There is no significant difference in adoption of cash on delivery by male and female buyers.
- H1 (d): There is a significant difference in adoption of cash on delivery by male and female buyers.

Table 11: Cross Tab of Cash on Delivery and Gender

			Female	Male	Grand Total
Cash on Delivery	Yes	Count	17	32	49.00
		% of			
		Total	15.3%	28.8%	44.1%
	No	Count	22.00	40.00	62.00
		% of			
		Total	19.8%	36.0%	55.9%
	Total	Count	39	72	111
		% of			
		Total	35.1%	64.9%	100.0%

Table 12: Cross Tab of Credit Card and Gender

			Female	Male	Grand Total
Credit card	Yes	Count	5	13	18.00
		% of Total	4.5%	11.7%	16.2%
	No	Count	34.00	59.00	93.00
		% of Total	30.6%	53.2%	83.8%
	Total	Count	39	72	111
		% of Total	35.1%	64.9%	100.0%

Table 13: Cross Tab of Debit Card and Gender

			Female	Male	Grand Total
Debit Card	Yes	Count	11	14	25.00
		% of Total	9.9%	12.6%	22.5%
	No	Count	28.00	58.00	86.00
		% of Total	25.2%	52.3%	77.5%
	Total	Count	39	72	111
		% of Total	35.1%	64.9%	100.0%

Table 14: Cross Tab of Net Banking and Gender

			Female	Male	Grand Total
Net banking	Yes	Count	6	11	17.00
		% of Total	5.4%	9.9%	15.3%
	No	Count	33.00	61.00	94.00
		% of Total	29.7%	55.0%	84.7%
	Total	Count	39	72	111
		% of Total	35.1%	64.9%	100.0%

Chi Square Results to test difference in adoption of different payment modes by different age groups:

Table 15: Chi Square Chi- square of various payment modes and gender

	Value	Df	Asymp. Sig. (2 sided)	Decision
Cash on Delivery	0.263	1	0.625	Accept H0 (a)
Credit card	4.125	1	0.041	Reject H0 (b)
Debit Card	1.996	1	1.947	Accept H0 (c)
Net banking	0.437	1	0.553	Accept H0 (d)

Trust in online merchants

Ability, benevolence and integrity are the three factors, which lead to trust in online merchants.

The following measures were identified for the three factors:

Ability

- Most internet merchants have a good reputation.
- Internet merchants have sufficient expertise and resources to do business on the internet.

Integrity

- I am never overcharged by Internet merchants during sales transactions.
- Internet merchants act sincerely in their dealings.
- I cannot rely on Internet vendors to keep the promises that they make.
- Internet merchants keep promises and commitments.

Benevolence

- I feel that internet merchants are likely to care for my welfare.
- If there is any problem with my transaction Internet vendor will help me.

It is seen from the survey data that 3 factors contributing to trust in online merchants are "keep promises and commitments", "will care for my welfare" and "in problem will help me".

Table 16: Mean Score for trust in online merchants

	Mean	Standard Deviation
Never overcharged by Internet merchants	3.78	1.02
Most internet merchants	3.43	1.22
have a good reputation	J.+J	1,22
Cannot rely on Internet	3.32	1.27
vendors to keep the promises		
Internet merchants have sufficient expertise and resources to do business on		1.10
the internet	3.55	1.08
In problem will help me Keep promises and	3.21	1.08
commitment	2.04	1.17
Will care for my welfare	3.04	1.17
Act sincere in their dealings	3.12	1.31

To test Hypothesis 1 related to trust and education, the following two hypothesis were tested:

H0: Trust in online shopping is independent of education level of customers.

H1: Trust in online shopping is dependent of education level of customers.

Table 17: Descriptive for education and trust

		Mean	Std. Dev
Ability	HSC or below	3.56	1.09
	UG	3.46	0.98
	PG	3.61	0.97
		3.54333333	1.01333
Benevolence	HSC or below	3.21	0.893
	UG	3.85	0.876
	PG	3.73	1.02
		3.59666667	0.92967
Integrity	HSC or below	3.32	0.98

UG	3.45	0.871
PG	3.56	1.04
	3.44333333	0.96367

ANOVA Results for Education and trust:

Table 18: ANOVA for education and trust

	F	Sig.	Decision
Ability	1.543	.32	Do not reject H0
Benevolence	3.731	.012	Reject H0
Integrity	1.720	.313	Reject H0

Thus, the p value for benevolence is less than 0.05. Thus, there is dependence between benevolence and qualification. P-value for ability and integrity is greater than .05, which indicates that there are no significant differences between them and qualification.

To test Hypothesis 2 related to trust and income, the following two hypothesis were tested:

H0: Trust in online shopping is independent of income level of customers.

H1: Trust in online shopping is dependent of income level of customers.

Table 19: Descriptive for trust and income

		Mean	Std. Dev
Ability	Upto Rs. 50,000	3.58	1.01
	Rs. 50,000-1,00,000	3.56	0.93
	1,00,000+	3.21	0.87
		3.45	0.936666667
Benevolence	Upto Rs. 50,000	3.68	0.932
	Rs. 50,000-1,00,000	3.66	0.953
	1,00,000+	3.56	1.01
		3.633333333	0.965
Integrity	Upto Rs. 50,000	3.43	0.765
	Rs. 50,000-1,00,000	3.39	0.792
	1,00,000+	3.12	0.759
		3.313333333	0.772

ANOVA Results for Income and Trust

Table 20: ANOVA for trust and income

	\mathbf{F}	Sig.
Ability	1.908	.098
Benevolence	0.683	.413
Integrity	0.862	.281

Thus, the p value for ability, benevolence and integrity are all more than 0.05. Thus, there is no dependence of these factors on the qualification.

FINDINGS AND CONCLUSIONS

Demographic findings

The study examines the demographic profile of the online shoppers and tries to establish the link between the attitude of the buyers and their shopping behavior.

In the study there were predominant male respondents comprising about 65% of the total. While, most of these about 80% were in the age bracket of 15-29 years of age. Both these are in accordance with the India Broadband forum Report which confirms that most shoppers and online visitors are males and in the age bracket of 18-30 years. As the survey responses were collected online and through an MNC firm, most of the respondents were either undergraduates or postgraduates with a healthy monthly income. It is found that a person is more prone to online shopping with a higher income. This also is in accordance with the latest articles stating that the youth of India have the highest spend on online shopping. Since education is often correlated with the level of Internet literacy, better-educated Internet users are still the principal composition of online purchasers.

In the study it was also found that a staggering number of respondents had never shopped online. However, they did respond to the questions posed to them related to the trust of the online vendors. Thus, proving that there were still some barriers when it comes to online shopping. The online shopping of consumers ranged from frequent (once in a week) to rarely (once a year) with most of the respondents saying that they shopped at least once a month or once in 2-5 months.

Also, we see that most online shoppers spend about 2-3 hours on the internet every day. Thus, we can infer that a regular usage of the internet does incline you towards shopping online. It can be seen that 51% of the respondents have spent amount less than 5000 as the highest amount in one transaction followed by 28% spending Rs. 5000- Rs. 15000.

The highest spent on online shopping is still very low with about 85% of the respondents saying that they had never bought an item more than 15,000 from the internet. This is due to the lack of trust in the online vendors and also because of the perceived risk from the consumer's side in buying high involvement goods. Another reason identified for this behavior is that most of the users are in the age group of 15-29 years who are either students or have just started earning, hence limiting their spend capacity.

As was expected, the most favored payment mode for an Indian online shopper is still the Cash on delivery service. About 50% of the respondents marked Cash on delivery as their favored mode of payment followed by credit card, debit card and net banking facility respectively.

Reasons for purchases online

In this study it is found that time saving, convenience and ease of finding new products are the three biggest motivations for consumers to shop online. Also, inclination towards finding something new and ease of comparison scored highly, thus, we can infer that online shoppers can benefit by having a large number of choices, an easy interface and customer friendly services. This would allow shoppers to make their own decisions and shop without interruptions and hassles and with ease and time saving.

With respect to age, it was found that there exists a significant difference amongst the various age groups identified in this study when it comes to convenience, non-availability of products and no need to deal with sales people. However no significant differences were identified when it came to the other factors such as time saving, inclination towards buying something new, ease of finding products, and ease of comparison and other like factors. This shows that the reasons for purchasing here were convenience, price competency, services provided and ordering processes.

With respect to gender, we see that there is not much significant difference in the perception of online buyers when it comes to convenience, time-saving, inclination towards trying something new, ease of finding products, ease of comparison, non-availability of products, no need to deal with sales people, product customization and offers/discounted prize was found.

Payment modes

Cash on delivery is the most used payment mode for all ages. As seen there is no significant difference in any of the adoption mode by different age groups and all the age groups respond equally to the various modes of payment.

There is a significant difference in the adoption of credit cards by the male online shopper as compare to their female counterparts. As analyzed, the number of males using credit cards is much more than the usage of credit cards by female respondents. The interesting part to note

is that a similar statistic is not seen in the usage of debit cards. This reflects on the female online shopper's perception towards security and the credit principle involved with credit cards.

Trust in online merchants findings

The study aimed at finding a link between the education level and the trust of the shopper in the online merchants. It is seen from the survey data that 3 factors contributing to trust in online merchants the most are "keep promises and commitments", "will care for my welfare" and "in problem will help me". On the basis of the three factors we see that the internet shopper feels that the internet merchant is dependable when it comes to fulfilment of promises.

It can also be concluded that respondents who are more educated do trust in terms of benevolence of online vendors. But more education does not lead to trust in online merchants in terms of ability and integrity. Also, the respondents laid focus on the benevolence factor by giving importance to the internet merchant showing care for the welfare of the buyer.

No significant difference was found between the ability of the vendor, his trust and the income level of the respondents. Therefore, we conclude that there is no relationship between trust in online vendors and income level.

LIMITATIONS AND FUTURE SCOPE

Limitations

Even though various advantages and benefits related to this study are pointed, this study is not free from limitations.

- 1. The major limitation of this study is the use of non-probability. The major reasons why this kind of sampling is used is because of the time and cost constraint and also unavailability of a more holistic list of online shoppers. Though, it is fully understood that the results of a study from non-probabilistic sampling cannot be applied to the general population as a whole, the main purpose of the study is to derive major insights about the risks and trust issues faced by the online shopper in the Indian context. Also, the findings from this study can be used as a benchmark for a more detailed study.
- 2. Another limitation of this study is that the respondents mainly comprise of students. Even though a conscious effort was made to get responses from people from other walks of life the sample space remains skewed to a student population. Given that this study was not intended to establish the proportion of the population that use the internet to purchase online, but was intended to investigate the online buying behavior of those that do, the Net Generation's i.e. student's highly literate and heavy online users are certainly more qualified and better able to provide the requisite information.

Future Scope

Study of more elaborated facets of perceived risk would be a promising area for future research. Moreover, future research is required to explore and examine the nature and role of risk at a more detailed level due to the significance of risk reduction in on-line consumer-marketer dyads.

Due to changes occurring in the society, some of the findings may change over time. Thus future research should investigate the variation in online shopping behavior taking into account demographic and psychographic variables.

Through this study, it was found that some categories were purchased more online. Future research should explore and examine why some types of goods are more popular online compared to others.

Future research is needed to identify differences in perceived risk felt towards buying situations which can help the development of marketing strategies to reduce concerns of consumers when purchasing different types of product online.

BIBLIOGRAPHY

Adobor H. (2005), "Trust as sense making: the microdynamics of trust in interfirm alliances", Journal of Business Research, Vol. 58, pp. 330–337

Bauer, R. A. (1967) in Hassan A. M., Kunz M.B., Pearson A. W. and Mohamed F A(2006), "Conceptualization and measurement of perceived risk in online shopping", Marketing Management Journal, Vol.16, No.1, pp.138-147

Bettman J.R. (1973), "Perceived risk and its components", Journal of Consumer Research, Vol.10, pp. 184-190

Bhattacherjee A. (2002), "Individual trust in online firms: scale development and initial test", Journal of Management Information Systems, Vol. 19, No.1, pp. 211-241.

Biswas D. and Biswas A. (2004), "The diagnostic role of signals in the context of perceived risks in online shopping: do signals matter more on the web?" Journal of Interactive Marketing, Vol. 18 No. 3, pp. 30-45.

Chen C.H. and Saeedi M (2006), "Building a Trust Model in the Online Market Place" Journal of Internet Commerce, Vol. 5(1), pp.101-117.

Chen R. and He F (2003) in "Examination of brand knowledge, perceived risk and consumer's intention to adopt an online retailer", TQM and Business Excellence, Vol. 14, No.6, pp.677-693.

Chen Y. H and Barnes S. (2007), "Initial trust and online buyer behavior", Industrial Management & Data Systems, Vol. 107, No. 1, pp. 21-36.

Choi, J., & Lee K.H. (2010), "Physical perception and e-shopping: A cross –cultural study", Journal of Fashion Marketing and Management, Vol. 7, No. 1, pp. 49-64.

Comegys, C, Mika, H., and Jaan V. (2006), "Longitudinal comparison of Finnish and US online shopping behavior among university students: The five-stage buying decision process", . Journal of Targeting, Measurement & Analysis for Marketing, Vol. 14, No.4, pp. 336-356.

Cox, D. F. and Rich, S.U. (1964), "Perceived risk and consumer decision making-the case of telephone shopping", Journal of Marketing Research, Vol. 1, No.4, pp. 32-49

Dellaert B. and Kahn, B.E. (2004), "How tolerable is Delay? Consumers' evaluations of Internet Web sites after waiting", Journal of Interactive Marketing, Vol. 13 No. 1, pp.41-54

- Dowling, G. R. and Staelin, R. (1994), "A model of perceived risk and intended risk handling activity", Journal of Consumer Research, Vol. 21, pp. 119-134.
- Eggert A. (2006), "Intangibility and Perceived risk in online environments", Journal of Marketing Management, Vol.22, pp.553-572.
- Fogg, B.J., Marshall J., Laraki O., Osipovich A, Varma C, Fang N, Paul J, A Rangnekar A., Shon J., Swani P., Treinen M.(2001), "What Makes Web Sites Credible? A Report on a Large Quantitative Study," ACM SIGCHI, Vol. 3, No.1, pp.61-67.
- Gefen D. and Straub D. (2013), "Managing User trust in B2C e-services", e-Service Journal, Vol.2, No. 2, pp.7-25.
- Gefen D., Benbasat I. and Pavlou P. A. (2008), "A Research Agenda for Trust in Online Environments", Journal of Management Information Systems, Vol. 24, No.4, pp. 275-286.
- Gefen D., Karahanna E. and Straub D.W (2003), "Trust and TAM in Online Shopping: An Integrated Model", MIS Quarterly, Vol. 27, No.1, pp. 51-90.
- Ha H.Y. and Helen, P. (2005), "Effects of consumer perceptions of brand experience on the web: Brand familiarity, satisfaction and brand trust", Journal of Consumer Behavior, Vol.4, No.6, pp. 438-452.
- Hassan A. M., Kunz M.B., Pearson A. W. and Mohamed F. A.(2006), "Conceptualization and measurement of perceived risk in online shopping", Marketing Management Journal, Vol.16, No.1, pp.138-147.
- Hemphill T. A. (2002), "Electronic Commerce and Consumer Privacy: Establishing Online Trust in the U.S. Digital Economy", Business and Society Review, Vol. 107, No.2, pp. 221-239
- Hoffman, D.L., Novak, T.P. and Peralt, M. (1999), "Building consumer trust in online environments: the case for information privacy", Communications of the ACM, Vol. 42, No. 4, pp. 80-95
- Jacoby, J. and Kaplan, L. (1972), "The Components of Perceived Risk" in Simon S.M. and Victor T.F. (1994), "Customer's risk perceptions of electronic payment systems", International Journal of Bank Marketing, Vol. 12, No.8, pp. 26-38.
- Jarvenpaa S. L, Tractinsky J., and Vitale M. (2000), "Consumer Trust in an Internet Store," Information Technology and Management, Vol.1, No.1/2, pp. 45-71.
- Jarvenpaa S. L., Joam T., and Saarinen L. (1999), "Consumer Trust in an Internet Store: A Cross-cultural Validation", Journal of Computer Mediated Communication, 5 (2), http://www.asusc.org/jcmc/vol5/issue2
- Jarvenpaa, S.L. & Todd, P.A. (1997), "Consumer reactions to electronic shopping on the world wide web", International journal of Electronic Commerce, Vol.1, No.2, pp.59-88.

Kaplan, L.B., George, J.S. and Jacoby, J. (1974), "Components of perceived risk in product purchase", Journal of Applied Psychology, Vol. 59, pp. 287-91

Kraeuter G. S. (2002), "The role of consumer's trust in online shopping", Journal of Business Ethics, Vol. 39, pp. 43-50

Kuhlmeier, D.and Knight, G. (2005), "Antecedents to internet –based purchasing: a multinational study", International Marketing Review, Vol. 22, No.4, pp. 460-473.

Laroche M., Bergeron J. and Goutalang C. (2003), "How intangibility affects perceived risk: the moderating role of knowledge and involvement", Journal of services marketing, Vol.17.No.2.pp.122-140.

Lee M.K. and Turban E. (2010), "A Trust Model for Consumer Internet Shopping", International Journal of Electronic Commerce, Vol.6, No.1, pp 75-91.

Liebermann, Y., & Stashevksy, S. (2002), "Perceived risks a barriers to Internet and e-commerce usage", Qualitative Market Research: An International Journal, Vol. 5, No. 5, pp. 291-300

Lim H. and Dubinsky A.J. (2005), "Consumer's perceptions of e-shopping characteristics: an expectancy-value approach", Journal of services marketing, Vol. 18, No.7, pp. 500-513.

Lim K. H, Sia C. L., Lee M.K and Benbasat I. (2006), "Do I Trust You Online, and If So, Will I Buy? An Empirical Study of Two Trust-Building Strategies", Journal of Management Information Systems, Vol.23, No.2, pp. 233-266.

Lu H. P., Hsu C.L. and Hsu H.Y. (2005), "An empirical study of the effect of perceived risk upon intention to use online applications", Information Management & Computer Security, Vol. 13 No. 2, pp. 106-120.

Lu, H. P., Hsu, C.L. and Hsu, H.Y. (2005), "An empirical study of the effect of perceived risk upon intention to use online applications", Information Management & Computer Security, Vol. 13 No. 2, pp. 106-120.

Mayer R.C., Davis J.H. and Schoorman F.D. (2011), "An integrative model of organizational trust", Academy of Management Review, Vol. 20, No.3, pp. 709-734.

McKnight D. H, Cummings L.L and Chervany N.L. (1998), "Initial trust formation in new organizational relationships", Academy of Management Review, Vol. 23, No. 3, pp. 473. 490.

McKnight D. H., Choudhury V. and Kacmar C. (2002), "Developing and validating trust measures for e-commerce: An integrative typology", Information Systems Research, Vol.13, No.3, pp. 334-359.

Miyazaki A. D. and Fernandez A. (2001), "Consumer Perceptions of Privacy and Security Risks for online shopping", the journal of Consumer Affairs, Vol.35, No.1.

Monsuwe'.P T, Dellaert B.G.C. and Ruyter K.D (2004), "What drives consumers to shop online? A literature Review", International Journal of Service Industry Management, Vol. 15, No.1, pp.102-121.

Pamela, A., Robert S. (2012), "Gender effects on Internet, catalogue and store shopping", Journal of Database Marketing, Vol.9, No.2, pp. 150-183.

Pang C., Yen D.C., Tarn J.M. (2007), "Exploring online shopper's e-trust in China", Human Systems and Management, Vol. 26, pp. 193-198.

Park C.H. and Kim Y. G. (2003), "Identifying key factors affecting consumer's purchase behavior in an online shopping context", International Journal of Retail and Distribution Management, Vol. 31, No.1, pp. 16-29

Park, J. and Stoel, L. (2005), "Effect of brand familiarity, experience and information on online apparel purchase", International Journal of Retail & Distribution Management, Vol.33, No.2, pp.148-160.

Pavlou (2003), "Consumer Acceptance of Electronic Commerce: Integrating Trust and Risk with the Technology Acceptance Model", Vol. 7, No.3, pp.101-134.

Pires, G., Stanton, J., and Eckford, A. (2007), "Influences on the perceived risk of purchasing online", Journal of Consumer Behavior, Vol 4, No. 2.

Roselius, T. (1971), "Consumer rankings of risk reduction methods", Journal of Marketing, Vol. 35, No. 1, pp. 56-61.

Rudolph T., Rosenbloom B. and Wagner T. (2004), "Barriers to Online Shopping in Switzerland", Journal of International Consumer Marketing, Vol. 16, No.3, pp. 55-73

Salam A.F., Rao H.R. and Pegels, C.C. (2003), "Consumers – Perceived Risk in E-Commerce transactions", Communication of the ACM, Vol. 14, No. 12, pp. 325-331

Schneiderman B. (2012), "Designing Trust into Online Experiences," Communications of the ACM, Vol. 43, No.12, pp. 57-59.

Simon S.M. Ho, Victor T.F. Ng, (1994) "Customers' Risk Perceptions of Electronic Payment Systems", International Journal of Bank Marketing, Vol. 12, No. 8, pp.26 – 38

Singh J. and Sirdeshmukh (2000), "Agency and Trust mechanisms in consumer satisfaction and loyalty judgments", Journal of the Academy of Marketing Science, Vol. 28, No.1, pp. 150-167.

Svensson G. (2011), "Extending trust and mutual trust in business relationships towards a synchronized trust chain in marketing channels", Management Decision, Vol.39, No.6, pp.431-440.

Teo T. S (2006), "To buy or not to buy online: adopters and non-adopters of online shopping in Singapore", Behavior and Information Technology, Vol.25, No.6, pp.497-509

Teo T. S (2011), "Attitudes toward online shopping and the Internet", Behavior and Information Technology, Vol. 21, No.4, pp. 259-271.

The Lintas media guide, 2008

Ueltschy L.C., Krampf R.F.and Yannopoulos P. (2004), "A Cross –National Study of Perceived Consumption Risk towards Online (Internet) Purchasing", the multinational Business Review, Vol. 12, No.2, pp.59-82.

Urban G. L., Fareena S and William Q (2000), "Making Trust the Center of Your Internet Strategy," Sloan Management Review, Vol. 1, pp. 39–48.

Urban, G.L., Sultan, F., Qualls, W.J. (2000), "Placing trust at the centre of your internet strategy", Sloan Management Review, Vol. 42, No.1, pp.39-48

Wang, M.S., Chen, C.C., Chang, S.C and Yang, Y.H. (2007), "Effects of online shopping attitudes, subjective norms and control beliefs on online shopping intentions: A test of the Theory of Planned Behavior", Journal of Management, Vol. 24, No. 2, pp. 296-302.

Yakov B., Venkatesh S., Urban, F. and Glen U. (2005), "Are the drivers and role of online trust the same for all web sites and consumers? A Large-scale exploratory empirical study", Journal of Marketing, Vol. 69, No.4, pp. 133-152

Yang, Z., Peterson, R.T. and Huang, L. (2001), "Taking the pulse of internet pharmacies", Marketing Health Services, Vol.21, No.2, pp. 5-10.

Yoon S.J. (2012), "The antecedents and consequences of trust in online –purchase decision", Journal of Interactive Marketing, Vol. 16, No.2, pp.47-63.

Zhang, Ping & Li, Na (2003), An Assessment of Research in MIS Oriented HCI Studies, American Psychological Association, Symposium of Divisions 21 and 14: The Many Faces of HCI Researchers in IS, Toronto, Canada, August.

APPENDIX

The survey used for the study is attached below.



Study of Trust and Risk in Online Shopping

I'm a final year management student of DSM, DTU. This questionnaire, a part of my dissertation, is created to analyse the perceived risks and benefits associated with online shopping of Indian consumers. The information gathered through this survey will be used only for the purpose of publishing this research work. Please forward the link to friends and family after you've submitted your responses. Thank you for your valuable time!!

*Required

Gender *

- Male
- Female

Age *

- 15-29 years
- @ 30-39 years
- @ 40-49 years

Occupation *

- Profession/Service
- Student
- Self Employed
- O Other

Qualifications *

- HSC or below
- Undergraduate
- Post Graduate

Monthly income *

- Upto Rs. 50,000
- Rs. 50,000-75,000
- Ra. 75,000-1,00,000
- 0 1,00,000+

Marital Status *

- Unmarried
- Married

Time Spent/day on the internet *

- Rarely
- 0-1 hour
- 1-2 hours
- @ 2-3 hours
- 3-4 hours

Buying frequency online *

- Never
- Frequent (Once a week)
- Regular (Atleast once a month)
- Occasionally (Once in 2-5 months)
- Rarely (Once a year)

Highest amount spent in Shopping Online

- ⊚ ≤5000
- 5,000-15,000
- 15,000-25,000
- 25,000-35,000
- 35,000-45,000
- 45,000-55,000
- 55,000-65,00065,000-75,000
- 9 75,000-85,000
- J 10,000 00,0
- 85,000+

Preferred Payment mode

- Credit Card
- Debit Card
- Demand Draft
- Net Banking
- Cash on Delivery
- Other:

Reasons for purchasing online

Rate the following criteria's on a scale of 1 to 5 (1: least likely, 5 most likely)

	1	2	3	4	5
Convenience	0	0	0	0	0
Time saving	0	0	0	0	0
Inclination towards trying something new	0	0	0	0	0
Ease of finding products	0	0	0	0	0
Ease of comparison	0	0	0	0	0
Cant find products in the stores	0	0	0	0	0
No need to deal with sales people	0	0	0	0	0
Product customization	0	0	0	0	0
Offers/Discounted prices	0	0	0	0	0

Trust in online merchants *

Rate the following criteria's on a scale of 1 to 5 (1: least likely, 5 most likely)

	1	2	3	4	5
I am never overcharged by Internet merchants during sales transactions	0	0	0	0	0
Most internet merchants have a good reputation	0	0	0	0	0
Cannot rely on Internet vendors to keep the promises	0	0	0	0	0
Internet merchants have sufficient expertise and resources to do business on the internet	0	۰	۰	0	0
In problem will help me	0	0	0	0	0
Internet vendors keep promises and commitment	0	0	0	0	0
I feel that internet merchants are likely to care for my welfare	0	0	0	0	0
Internet merchants act sincerely in their dealings	0	0	0	0	0