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| **Effect of Attitudes, Subjective Norms, Perceived Behavioral Control and Domain Specific Innovativeness on Online Buying** | |
| NewAIMSLogo2x3_OutlinesLow | **Deepal Joshi**  *Som Lalit Institute of Business Administration*  ([deepal2277@gmail.com](mailto:deepal2277@gmail.com))  **Sarla Achuthan**  *B.K. School of Business Management*  (sarlaachuthan@gmail.com) |
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| *Internet has fast emerged as an alternative channel for shopping. In this changing scenario, the authors have tried to design and check a model of the various factors affecting shopper behavior for online buying in the Indian context. An individual’s attitude for online buying along with his subjective norms, perceived behavioral control and domain specific innovativeness can make his intention to buy online in future. A structured undisguised questionnaire and snowball sampling have been used to collect data from respondents across four largest cities of Gujarat state. The instrument has been checked for validity and reliability and then result of the proposed model has been tested. The results suggest attitude and domain specific innovativeness of an individual are positively related, but subjective norms and perceived behavioral control are not related to future intention to buy online. Web retailers would be interested in knowing what factors affect an individual’s intention to buy online in future as the growth of online retailing definitely depends on this construct.*  **Keywords**: Behavior, B2C, Online, Shopping, India | |

1. **Introduction**

The decision making process of consumers has changed in a big way with internet as an alternative channel for shopping. Internet retailing or e-tailing or online buying, as it is popularly known, is buying and/or selling of goods, services and information using internet as a medium (Turban, Lee, King & Chung, 2000). The new wave of consumerism coupled with the urbanization and ever increasing middle class with shift in their demographic and psychographic dynamics have driven consumers to use retail websites to search for product information and/or make purchases (Prasad & Aryasri, 2009). According to a Forrester research, it is estimated that e-commerce market in India is expected to touch $8.8 billion by 2016 (Phadnis & Kurian, 2013).

Internet shopping provides a number of benefits such as privacy, convenience, good product information, comparison for selection, shopping comfort, and enjoyment. However, the Indian picture of internet retailing is quite different as compared to the advanced Western nations. A number of studies have focused on the perceived benefits and perceived risks associated with internet shopping (Bhatnagar, Misra & Rao, 2000; Forsythe, Liu, Shannon & Gardner, 2006). Besides perceived benefits and risks of internet shopping, which could develop the attitude for online buying, the influence of significant others, self efficacy, perceived behavioral control and domain specific innovativeness(Goldsmith & Hofacker, 1991) of an individual can develop his buyer behavior for internet shopping (George, 2004).

Since internet retailing is growing as an alternative channel for shopping of goods and services, the significance of designing and validating a model of consumer behavior for Business to Consumer e-shopping is emerging at a fast rate (Prasad & Aryasri, 2009). The objective of this study and this paper is to design and test a model of buyer behavior for online shopping in the Indian context. The paper is structured as follows:- The next presented is the review of relevant literature and hypothesis formulation leading to the research model, followed by research methodology, statistical analysis and findings, conclusion, scope for further research and limitations, followed by references.

1. **Literature Review and Hypothesis Formulation**
   1. **Perceived Benefits in Online Buying**

Perceived benefit of shopping online is the consumer’s subjective perception of gain from shopping online (Forsythe et. al, 2006). Sheth (1983) stated that personal determinants of shopping in traditional formats can be broadly understood as being influenced by functional and nonfunctional motives. Functional motives are related to physical advantages such as convenience, variety and quality of merchandise, and price, whereas nonfunctional (hedonic) motives are related to social and emotional needs for enjoyable, interesting shopping experiences (Childers, Carr, Peck, & Carson, 2001; Menon & Kahn, 2002; Bhatnagar & Ghose, 2004a, 2004b). Childers et al. (2001) concluded that both functional and hedonic motives for online shopping were important predictors of attitudes toward online shopping. Alba et al., (1997) and Parsons (2002) have also studied the effect of perceived benefits of online buying. Forsythe et al., (2006) have designed and refined a scale to measure perceived benefits of online shopping using convenience, product selection, shopping comfort and enjoyment as the factors for benefits. Prasad and Aryasri (2009) have also used convenience, service and enjoyment as the determinants of buyer behavior in an online buying situation.

1. **Convenience as Perceived Benefit in Online Buying**

Convenience in online buying addresses the benefit associated with purchasing products and services through an online retailer. Convenience is one of the most important factors affecting consumer behavior for online buying. Consumers’ perception of convenience as manifested by the opportunity to shop at home twenty four hours a day; seven days a week is expected to develop a positive attitude for online shopping(Hofacker, 2001). Convenience in online shopping increases search efficiency through the ability to shop at home eliminating buyer issues such as traffic snarls, parking problems, billing lines among others (Childers et.al, 2001). Consumers who perceive online buying offering greater convenience by reducing the above mentioned costs involved with physical buying are likely to develop a positive attitude for online buying.

In the Indian context, more recent studies such as Kiran, Sharma and Mittal (2008), Mishra (2009), Prasad and Aryasri (2009), Sarkar (2011) and Khare, Khare and Singh (2012) have also suggested that convenience is a major benefit for the online shopper. Kiran et al., (2008) have studied the attitudes and preferences of online buyers in India and they concluded that convenience is a significant factor influencing online buying. Mishra (2009) has created a conceptual framework for creating value in e-tailing in India and suggested that convenience is a complementary benefit during the pre-purchase search and evaluation stage and again, convenience is a core benefit during the transaction and purchase stage in case of online buying. Prasad and Aryasri (2009) have studied determinants of consumer behavior for e-tailing and concluded that convenience has significant impact on willingness to buy from online retail stores.

Sarkar (2011) has used the perceived benefits framework of Forsythe et al., (2006) to study the impact of hedonic and utilitarian shopping values on individual’s perceived benefits and risks in online shopping. His study suggests that consumers with high utilitarian shopping values e.g. convenience perceive greater benefits in online shopping; thus concluding that convenience is one of the greatest benefits of buying through the internet. Most of the online stores provide the utilitarian benefits to their customers by saving their time and costs. Customers primarily make online purchase in order to get greater convenience (Sarkar, 2011). Khare et al., (2012) have used the constructs from Technology Adoption Model (TAM) coined by Davis (1989). They conclude that perceived ease of use and perceived usefulness of online shopping make it convenient for online shoppers to buy online. Therefore, the proposed hypothesis is:

**H1:** Convenience in online buying will have a positive effect on the attitude of an individual for online buying.

1. **Product Selection as Perceived Benefit in Online Buying**

Onlineshopping reduces the cost of getting pre-purchase product information. It reduces search benefits by giving a broader range of product alternatives at lower cost as compared to buying from brick and mortar stores. Wide product selection can be a huge perceived benefit for convenience shoppers category (Sheth, 1983) and this is in turn can build a positive attitude for online buying (Bhatnagar & Ghose, 2004b).

In the Indian context, product selection benefit has been specifically mentioned by Mishra (2009) and Sarkar (2011). Mishra (2009) suggests that, as far as customer value in e-tailing is concerned, product information is a core benefit and product choice is a complementary benefit during the pre-purchase search and evaluation stage in e-tailing in India. Again, substitutability of personal examination is a complementary benefit during the transaction and purchase stage in e-tailing. Sarkar (2011) report that utilitarian motives such as getting good product information, wide product selection and product reviews are perceived benefits of online buying. Thus, product selection benefit can build a positive attitude for online buying. Therefore, proposed hypothesis is:

**H2:** Wide product selection in online buying will have a positive effect on the attitude of an individual for online buying.

1. **Shopping Comfort as Perceived Benefit in Online Buying**

Online shopping gives comfort in terms of taking as much time as one wants to for shopping. An added advantage for online shoppers could be avoiding the embarrassment even if nothing is bought after browsing the sites for many long hours and many a times. The same may not be possible with brick and mortar stores. According to Sheth (1983), recreational shoppers are motivated by shopping comfort which is provided by online shopping and therefore, shopping comfort can develop a positive attitude for online shopping.

In the Indian context, Mishra (2009) suggests that shopping comfort provided by ease of use is a complementary benefit in the pre-purchase search and evaluation stage for an online buyer in India. Sarkar (2011) and Khare et al., (2012) also report that shopping comfort through ease of use is a perceived benefit of online shopping in India, which builds a positive attitude for online buying. It provides the flexibility to take as much time to shop and avoid the embarrassment if anything is not purchased. Both these shopping comfort elements are nowhere available through the brick and mortar stores. Therefore, the proposed hypothesis is:

**H3:** Ease or comfort in online buying will have a positive effect on the attitude of an individual for online buying.

1. **Shopping Enjoyment as Perceived Benefit in Online Buying**

Enjoyment means that an online shopper perceives fun, pleasure and attractiveness in online buying. Highly successful e-businesses tend to differentiate themselves by developing Web sites that are pleasing to the eye and mind by presenting attractive, vivid, interesting, and exciting visuals, illustrations, formats, and content throughout the shopping experience—from beginning to end. (Anderson & Swaminathan, 2011) Studies have shown that individuals do not find it difficult to learn to use websites for online shopping, if they find the process enjoyable (Venkatesh, 2000; Venkatesh et al., 2002). Even if the content of the website is poor or it is difficult to search the website, if the visitors find the website appealing and enjoyable, they consider it easy to use (Venkatesh et al., 2002). Online shoppers may find online shopping attractive, fun to use and pleasure to browse through, or it may be otherwise. They may also consider it like trying as a new experience.

In the Indian context, studies of Prasad and Aryasri (2009), Sarkar (2011) and Khare et al., (2012) are worthy of mention. Prasad and Aryasri (2009) state that web shopping enjoyment influences the consumer attitude towards e-tailing. In-store retail formats provide more benefits to consumers than simply having merchandise readily available and helping them to buy it. It is indeed a place for entertainment and social interaction and can be a stimulating experience for some people. As against this, internet retail formats were limited in the degree to which they can provide entertainment and social interaction experience. However, with increasing advances in technology and communication, internet retailers are creating the most attractive and inventive web pages and video clips. Online atmospherics research demonstrates that there is a positive relationship between website design and shopping pleasure (Prasad & Aryasri, 2009).

Sarkar (2011) has used shopping enjoyment as a hedonic shopping motive to study its impact on perceived benefits and perceived risks in online buying context. Khare et al. (2012) have used TAM model to study the shopping enjoyment factor in an online buying situation in the Indian context. Therefore, the proposed hypothesis is:

**H4:** Enjoyment of engaging in online buying will have a positive effect on the attitude of an individual for online buying.

* 1. **Perceived Risks in Online Buying**

Perceived risk of shopping online is the consumer’s subjective perception of potential loss from shopping online (Forsythe et. al, 2006). Consumers perceive a higher level of risk when purchasing on the Internet compared with traditional retail formats (Lee & Tan, 2003). Several studies have suggested that product performance and financial risk are two types of risk that have been associated with Internet shopping (Bhatnagar et al., 2000; Bhatnagar & Ghose, 2004a, 2004b). Other studies (Forsythe, Petee, & Kim, 2002; Forsythe & Shi, 2003) have investigated the various types of risk perceived by Internet shoppers and found that three types of risk—product performance risk, financial risk and time/convenience risk—were related to online buying. Swinyard and Smith (2003) and Karayanni (2003) have compared the web shoppers and non-shoppers to compare the benefits and risks associated with online shopping. Other studies related to internet purchase risk include Chen and Dubinsky (2003); Biswas and Biswas (2004); Cunningham, Gerlach, Harper and Young, (2005); Park, Lennon and Stoel, (2005) and Drennen, Mort and Previte, (2006). Internet product purchase risk is one of the major deterrents to the growth of internet retailing (Coker, Ashill & Hope, 2011). However, there is highly limited research to empirically prove that which type of risks will have more effect in online buying, especially in the Indian context.

1. **Lack of Trust and Finance as Perceived Risk in Online Buying**

Since the beginning of online shopping, financial risk has been the most important concern of buyers. Financial risk, here, is defined as the risk involved in conducting financial transaction through the internet. Financial risk has been identified as the primary reason consumers choose not to shop online (Miyazaki & Fernandez, 2001; Teo, 2002). Examples of risk may include the loss of credit card information, theft of credit card information, or overcharge (Bhatnagar, Misra & Rao 2000; Forsythe & Shi 2003).

Trust in B2C e-commerce is defined as the belief that allows consumers to willingly become vulnerable to web retailers after having taken the retailers’ characteristics into consideration (Pavlou, 2003). The significance of trust is enhanced in e-commerce environment due to uncertainty. Consumers fear timely delivery of product, product quality, service from web retailer and privacy of personal and financial information, among others (Pavlou, 2003; Forsythe et al., 2006; Rajamma et al., 2009).

In the Indian context, Kiran et al., (2008), Mishra (2009), Prasad and Aryasri (2009), Suresh and Shashikala (2011) and Khare et al., (2012) have studied perceived risks in online buying context. Kiran et al., (2008) suggest that consumers’ perceived risks associated with online shopping have a critical effect on their decision making. Consumer risk perceptions regarding online shopping are mainly related to the aspects involving the privacy and security of personal information and security of online transaction systems. Mishra (2009) has created a framework of customer value in e-tailing in India. As per this framework, perceived risks during the search and pre-purchase as well as purchase stage will create negative value for the buyer in an online buying context.

Prasad and Aryasri (2009) report that web users are seriously concerned about the safety of their personal information, transaction security and misuse of private consumer data due to hacking, fraud, spam and online scams frequently raising security concerns as well as skepticism and mistrust. The physical distance, lack of personal contact and anonymity of the internet are also factors further increasing consumer’s anxiety and risk perceptions. They further mention that this financial risk leading to lack of trust will have a negative impact on willingness to buy online and patronage of online retail stores. Suresh and Shashikala (2011) have studied the perceived risks in internet buying. They mention that monetary risk which includes additional hidden costs; lack of protection for credit card information, difficulty in getting back money and chances of losing sensitive and proprietary information will have a negative impact on attitude for online buying.

Khare et al., (2012) report that perceived risks in online buying have a negative impact on customers to find it as enjoyable and convenient. Consumers are afraid to use online shopping Web sites, as they perceive the Web sites to be unauthentic or reliable. In India, poor information technology infrastructure aggravates security concerns and people are afraid of Internet fraud and hacking. They believe that personal confidential information will be divulged on Internet shopping Web sites and be misused (Khare et al., 2012). Therefore, the proposed hypothesis is:

**H5:** The fear of financial risk and lack of trust in online buying will have a negative effect on the attitude of an individual for online buying.

1. **Product as Perceived Risk in Online Buying**

Product risk consists of the risk associated with making a wrong or inappropriate purchase decision. The decision is typically made based on incomplete, irrelevant, obsolete information that was provided on the company‘s website. Product risk may also be the risk of purchasing an expensive product because of the inability to compare prices, being unable to easily return a product, or not receiving delivery on a purchased product (Jarvenpaa & Todd, 1997b; Vijayasarathy & Jones, 2000). It can also include the inability to touch, try and examine the products before buying. Poor product performance and shipping and handling charges in online buying are other types of product issues. Lewis (2006) found that higher shipping fees are associated with reduced ordering rates, and policies that charge more shipping fees to larger orders lead to reduced order size.

Studies in the Indian context include Kiran et al., (2008), Suresh and Shashikala (2011), Khare et al., (2012) among others. Kiran et al., (2008) report that uncertainty about product quality is a major risk as perceived by consumers in online retailing environments. Suresh and Shashikala (2011) mention product risk under two categories. The first one is ‘source risk’ consisting of products being defective and unsafe and products lost during shipment. The second one is ‘performance risk’ consisting of whether the product matches the web image and whether the product performs as expected or not. They conclude that these two risks have a significant negative impact on online buying in India. Therefore, the proposed hypothesis is:

**H6:** Product risk in online buying will have a negative effect on the attitude of an individual for online buying.

1. **Time and Convenience as Perceived Risk in Online Buying**

Time/convenience risk includes the inconvenience incurred during online transactions, often resulting from difficulty of navigation and/or submitting orders, or delays receiving products (GVU, 1998). Rajamma et al., (2009) have studied the reasons due to which online buyers abandon the shopping cart without closing sales. One important factor citied by that study is ‘transaction inconvenience’.

In the Indian context, Mishra (2009) and Suresh and Shashikala (2011) have discussed time and convenience as a perceived risk in online buying. Mishra (2009) mentions that effort during the transaction and purchase stage and cost, efforts and time taken to return a product during the post-purchase stage will create negative value for the online buyer in the Indian e-tailing context. Suresh and Shashikala (2011) report that time risk associated with risk of product delivery on time is a significant perceived risk in online buying context. This risk has a negative impact on the attitude for online buying. Therefore, the proposed hypothesis is:

**H7:** Time and inconvenience risk in online buying will have a negative effect on the attitude of an individual for online buying.

* 1. **Attitude Towards Online Buying**

Attitude has been discussed in a number of behavior studies. These studies include ‘The Theory of Reasoned Action’ (Fishbein & Ajzen, 1975; Ajzen & Fishbein, 1980), ‘Technology Acceptance Model’ (Davis, 1989), ‘Theory of Planned Behavior’ (Ajzen, 1985, 1991) and ‘Decomposed Theory of Planned Behavior’ (Taylor & Todd, 1995). Attitude of an individual refers to a mental state involving beliefs, feelings, values and dispositions that guide an individual to act in certain way. This act is either for or against something (Ajzen, 1985). In terms of online shopping it refers to a consumer‘s state of mind in terms of buying products or services on the Internet (Yang et al., 2003). The author assumes that the overall attitude of an individual towards online buying will be influenced by both the perceived benefits and perceived risks of online buying, which have been discussed above.

In the Indian context, Ravi, Carr and Vidyasagar (2006) and Agrawal, Rastogi and Mehrotra (2009) have studied attitude for online banking and Dash and Saji (2008) and Khare and Rakesh (2011) have studied attitude in online buying context. Ravi et al., (2006) have profiled internet banking users in India. Agrawal et al., (2009) have used attitude for studying behavioral intention to use online banking in India.

Dash and Saji (2008) have used usefulness of online shopping as a perceived benefit and trust as a perceived risk to determine attitude for online buying. More recently, Khare and Rakesh (2011) have used utilitarian and hedonic values along with attitude to study online purchase behavior in the Indian context.

* 1. **Normative Structure, Subjective Norms, Self Efficacy and Perceived Behavioral Control**

These factors are derived from the theory of planned behavior (TPB) (Ajzen, 1985, 1991) and Decomposed theory of planned behavior (Taylor & Todd, 1995). According to TPB, an individual’s performance of a certain behavior is determined by his or her intent to perform that behavior. Intent is itself informed by attitudes toward the behavior, subjective norms about engaging in the behavior, and perceptions about whether the individual will be able to successfully engage in the target behavior. According to Ajzen (1985), an attitude toward a behavior is a positive or negative evaluation of performing that behavior. Attitudes are informed by beliefs, norms (Subjective norms) are informed by normative beliefs and motivation to comply (normative structure), and perceived behavioral control is informed by beliefs about the individual’s possession of the opportunities and resources (self-efficacy) needed to engage in the behavior (Ajzen, 1991). TPB has been the basis for several studies of Internet purchasing behavior (Jarvenpaa & Todd, 1997a, b; Battacherjee, 2000; Song & Zahedi, 2001; George, 2002; Khalifa & Limayem, 2003; 2000; Pavlou, 2002; Suh & Han, 2003; George, 2004).

An individual’s normative structure, i.e. his or her beliefs about what important others think about the behavior in question, should directly influence his or her subjective norms, or perceptions of the social pressure to comply with expectations about engaging in the behavior. Subjective norms should in turn influence the individual’s proclivity to engage in the behavior. If social expectations are that people should engage is the behavior in question, then the individual should be more likely to do so. Again, if social expectations are that people should not engage in the behavior, then the individual should be less likely to engage in that particular behavior (Ajzen, 1985, 1991). In this case, if purchasing over the Internet is seen as socially desirable behavior, based on what important others think about it, then the individual is more likely to make Internet purchases (George, 2004; Coker, Ashill & Hope, 2011). Therefore, the proposed hypothesis is:

**H8:** Beliefs about what people important to an individual think i.e. his normative structure about online buying will have a positive influence on a person’s subjective norms about online buying.

According to TPB, an individual’s beliefs about his or her abilities to perform the behavior in question also influence whether or not he or she actually engages in the behavior. Given two individuals with the same intention to engage in a behavior, the one with the stronger beliefs about his or her abilities, or perceived behavioral control, is more likely to actually perform. One of the key antecedents to perceived behavioral control in most formulations of TPB is self efficacy, or the individual’s self-confidence in his or her ability to perform the behavior (Ajzen, 1985, 1991). In terms of Internet purchasing, if an individual is self confident about engaging in activities related to purchasing online, he or she should feel positively about his or her behavioral control over making Internet purchases. The more in control an individual feels about making Internet purchases, the more likely he or she will be to do so (George, 2004; Dash & Saji, 2008). Therefore, the proposed hypothesis is:

**H9:** Beliefs about self-efficacy of an individual for making online purchases will have a positive influence on perceived behavioral control over making online purchases.

* 1. **Intention to Buy Online in Future**

Intention refers to an indication about the willingness of a person to perform a behavior. Intention is being governed by attitude, subjective norm and perceived behavioral control (Ajzen, 1985). Intention to buy online in future is the final construct of the study. It relates to the intent or otherwise to shop online in future, based on the attitude for online shopping, subjective norms of the individual, perceived behavioral control and domain specific innovativeness of the individual. The first three factors are derived from Decomposed theory of planned behavior (Taylor & Todd, 1995); whereas domain specific innovativeness has been added as a new factor in this study. All these four factors have been explained in the preceding sections of this chapter. Intention to buy online has been a construct in several studies related to online buying (Miyazaki & Fernandez, 2001 Park & Kim, 2003; Bhatnagar & Ghose, 2004; Coker, Ashill & Hope, 2011). Following is a discussion of relationship between attitude for online buying, subjective norms and perceived behavioral control with intention to buy online in future.

Attitude for online buying affecting the intention to buy online has been studied Vijayasarathy (2002), O’Cass and Fenech (2003), George (2004), Amoroso and Hunsinger (2009), Celik and Yilmaz (2011), Wang and Tseng (2011) and Lim and Ting (2012). Khare and Rakesh (2011) have used attitude to study intention to buy online in future for Indian students and conclude that males have more positive attitude for online buying as compared to females. However, attitude has a positive impact on intention to buy online in future.

Therefore, the proposed hypothesis is:

**H10:** An individual’s positive attitude for online buying will have a significant positive influence on the intention of an individual to buy online in future.

In the Indian context, Ravi et al., (2006) and Singh, Srivastava and Srivastava (2010) have studied normative structure and subjective norms as variables affecting intention for online banking and Khare et al., (2012) has studied these variables for online buying. Khare et al., (2012) used subjective norms variable to study the convenience and enjoyment aspect of online shopping in the Indian context. They mention that the theory of interpersonal influence has been extended to online shopping environments. Group conformity and social acceptance are important as it minimizes consumers’ perception of risk and security. Social factors have been examined in predicting consumers’ online purchase behavior. ‘Social affiliation’ acts as an enduring belief in motivating customers to seek utilitarian and hedonic benefits from online shopping. Factors such as visual design, product assortment, information quality, and after-sales service, influence customers’ repurchase intentions in online shopping. Online Web sites are perceived to be risky as there is no face-to face interaction with service staff. Consumers feel insecure about financial transactions and reliability of the Web sites. Acceptance of online retail, therefore, would be influenced by its acceptance among social groups. Khare et al., (2012) report a significant positive relationship between subjective norms and online buying. However, the referent groups used in this study were not mentioned. Therefore, the proposed hypothesis is:

**H11:** Subjective norms about online buying will have a positive influence on the intention of an individual to buy online in future.

In the Indian context, Dash and Saji (2008) have studied self efficacy for online buying and Singh et al., (2010) have studied perceived behavioral control for online banking. Dash and Saji (2008) have used online self efficacy to study its relationship with perceived ease of use, perceived usefulness and perceived risk. This study concludes that on-line self efficacy of an individual has a positive relationship to perceived ease of use and perceived usefulness and a negative relationship to perceived risk. Singh et al., (2010) have developed a conceptual framework for customer acceptance of online banking in India and included self efficacy as a factor affecting intention to use online banking in India.

Therefore, proposed hypothesis is:

**H12:** Beliefs about perceived behavioral control will have a positive influence on the intention of an individual to buy online in future.

* 1. **Domain Specific Innovativeness**

In the opinion of Rogers and Shoemaker (1971), innovativeness is the degree to which an individual is relatively earlier in adopting new ideas as compared to other members of the society. Two specific measures of innovativeness are Open process innovativeness and Domain specific innovativeness. Domain or product category-specific innovation reflects the tendency of a person to learn about and adopt innovations within a specific domain of interest (Citrin, Spritt, Silverman & Stem, 2000). This implies that consumers who are likely to adopt the latest new product in one field may be laggards in another (Goldsmith, D’Hauteville & Flynn, 1998). Citrin et al.,(2000) adopted two measures of innovativeness- open processing and domain-specific- to explain consumer adoption of Internet shopping. Their findings indicate that domain-specific innovativeness is a moderator of the relationship between Internet usage and the adoption of Internet for shopping, but general innovativeness does not influence the use of Internet for shopping. Domain specific innovativeness has been used in internet shopping studies in niche areas such as influence of gender on innovativeness (Gupta & Handa, 2009) and the influence of domain specific innovativeness on impulse buying behavior (Goldsmith, 2001).

In the Indian context, Gupta and Handa (2009) and Khare, Singh and Khare (2010) have studied the relation between domain specific innovativeness and online buying behavior. However, both these studies have focused on Indian youth. Gupta and Handa (2009) studied the influence of gender on both open-processing and domain-specific innovativeness of young urban Indian shoppers in the context of online shopping. They conclude that as compared to open processing innovativeness, domain specific innovativeness trait is dominant in young urban Indian online shoppers. Khare et al., (2010) studied innovativeness as a determinant of online shopping behavior among Indian youth. Khare et al., (2010) report that Indian youth possess the domain specific innovativeness trait related to online buying. But they browse the online retail sites for information and not for actual buying. Therefore, the proposed hypothesis is:

**H13:** An individual’s inclination as early adopter of technology and products will have a significant positive influence on the intention of an individual to buy online in future.

**Table 1** *Reference for Study Constructs*

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| **Factor** | **Factor Definition** | **Major References** |
| Convenience | Convenience benefit is defined as ability to shop anytime from anywhere without the hassles of physical shopping experience. | Forsythe and others (2006); Forsythe and Shi (2003); Bhatnagar, Mishra and Rao (2000) |
| Product Selection | Product selection benefit is defined as reduction in cost of pre-purchase information and getting broader range of products. | Forsythe and others (2006); Swinyard and Smith (2003) |
| Shopping Comfort | Shopping comfort benefit is defined as avoiding embarrassment for not buying and taking as much time as required for online buying. | Forsythe and others (2006); Karayanni (2003) |
| Shopping Enjoyment | Shopping enjoyment benefit is defined as perceiving fun, enjoyment and attractiveness of online shopping experience. | Forsythe and others (2006); Karayanni (2003) |
| Lack of Trust or Financial Risk | Financial risk is defined as a net loss of money to a customer, and includes the possibility that one’s credit card Information may be misused. | Rajamma, Paswan and Hossain (2009); Dash and Saji (2008); Ranganathan and Jha (2007); Forsythe and others (2006);  Swinyard and Smith (2003); Forsythe and Shi (2003) |
| Product Risk | Product risk is defined as the loss incurred when a brand or product does not perform as expected | Lewis (2006); Forsythe and others (2006); Swinyard and Smith (2003);Forsythe and Shi (2003) |
| Time or convenience Risk | Time/convenience risk may refer to the loss of time and inconvenience incurred due to difficulty of navigation and/ or submitting order, finding appropriate Web sites, or delays receiving products. | Ranganathan and Jha (2007);Forsythe and others (2006);  Swinyard and Smith (2003); Forsythe and Shi (2003) |
| Attitude for Online Shopping | It refers to a consumer‘s state of mind in terms of buying products or services on the Internet | Coker, Ashill and Hope (2011); George (2004) adapted from  Taylor and Todd (1995) |
| Normative Structure | An individual’s beliefs about what important others think about the his or her behavior (Here in terms of online buying) | George (2004) adapted from Taylor and Todd (1995) |
| Subjective Norms | Perceptions of the social pressure to comply with expectations about engaging in the behavior.(Here in terms of online buying) | George (2004) adapted from Taylor and Todd (1995) |
| Self-Efficacy | An individual’s beliefs about his or her abilities to perform a particular behavior.(Here, ability for online purchases) | Dash and Saji (2008); George (2004) adapted from  Taylor and Todd (1995) |
| Perceived Behavioral Control | The more in control an individual feels about making Internet purchases, the more likely that he or she will do so. | Coker, Ashill and Hope (2011); George (2004) adapted from  Taylor and Todd (1995) |
| Domain Specific Innovativeness | Domain -specific innovativeness reflects the tendency of a person to learn about and adopt innovations within a specific domain of interest | Goldsmith and Hofacker(1991) |
| Intention to Buy Online in Future | Intention refers to an indication about the willingness of a person to perform a behavior. | Taylor and Todd(1995) |

1. **Proposed Research Model**

Summarizing the discussion in the preceding chapter, the proposed research model used for study is shown in Figure 1. The proposed model uses perceived benefits and perceived risks of internet buying to build the attitude for internet buying, which in turn can affect the intention of an individual to buy online in future. Further, based on the theory of planned behavior(TPB), it uses self-efficacy of an individual as a determinant of his perceived behavioral control for internet buying, and normative structure as a determinant of an individual’s subjective norms for internet buying. TPB model would include the intention to make internet purchases in future. Hence, the model uses an individual’s intention to buy online in future as the final dependent variable. Further, the relation between domain specific innovativeness of an individual and his online buying intention is also included in the study. The factors used for study, along with factor definition and major references used for the study are mentioned in Table 1.

H10

H12

H3

H1

H2

H4

H5

H6

H7

H8

H11

H9

H13

H6

**Figure 1** *The Research Model*

1. **Research Methodology**

A structured undisguised questionnaire was used as the instrument for data collection. It comprised of questions on respondent’s demographic details, internet experiences and online shopping experiences (through dichotomous and multiple choice questions) and questions to judge the respondents on the various study parameters (using a seven point Likert scale with 1 for strongly disagree to 7 for strongly agree). Table 1 show the major references used in the questionnaire for the study. The instrument was checked with two experts, one from marketing research field and the other from e-commerce field. This takes care of the content validity of the construct. A pilot survey of 50 questionnaires was filled by a mixed group of post graduate management students and professionals. Based on the comments of pilot survey respondents and experts, double – barreled and repetitive questions were dropped, and the sequence and word framework of some questions was changed.

For primary data collection, the population for this study is the four biggest cities of Gujarat state namely Ahmedabad, Baroda, Surat and Rajkot. According to the 2011 census study, data available from the socio-economic survey of Gujarat state 2011-12, these four cities have the highest internet penetration in Gujarat. Therefore, the unit selected for study is a household with an internet connection. According to data available, for every 100 households with internet connection, 50 are in Ahmedabad, 21 in Baroda, 21 in Surat and 8 in Rajkot. Hence, 300 questionnaires were distributed pro-rata in the four cities. Out of 300 questionnaires, 240 were returned from the respondents, which indicates 80% response rate. Out of 240 filled questionnaires, 215 were usable responses, which were almost in accordance with the pro-rata pattern of distribution. The other 25 were discarded as they were incomplete or erroneous. Snowball sampling was used to get contacts of respondents. The major advantage of snowball sampling is that it substantially increases the likelihood of locating the desired characteristics in the population. It also results in relative low sampling variance and costs (Malhotra, 2008). Respondents across all age, income, education, occupation and gender groups were contacted. The respondents, which included online shoppers as well as non-shoppers, had to fulfill two basic criteria – they should know what is online shopping and they should be having internet connectivity at home.

**Table 2** *Demographic Profile of Respondents*

|  |  |  |  |
| --- | --- | --- | --- |
| **Demographic**  **Characteristic** | **Number Of**  **Responses** | **Options** | **Percentage** |
| Age | 215 | Below 21  21-29  30-39  40-49  50-59  60 and above | 6  37  33  11  4  9 |
| Gender | 215 | Male  Female | 68  32 |
| Highest level  Of completed  Education | 215 | Schooling  Graduation  Post graduation  Professional degree  Others | 5  47  29  16  3 |
| Current  Occupational  Status | 215 | Student  Services  Profession  Business  Housewife  Retired  Others | 24  40  9  13  7  3  4 |
| Annual income  Of household  (INR.) | 215 | Less than 2,00,000  2,00,000-5,00,000  5,00,001-10,00,000  10,00,001-20,00,000  Above 20,00,000 | 7  31  38  17  7 |

**Table 3** *Internet and Online Buying Experience of Respondents*

|  |  |  |  |
| --- | --- | --- | --- |
| **Question** | **Single Or**  **Multiple Option** | **Options** | **Percentage** |
| Type of internet  Connection | Multiple option  267 responses | Dial-up  Data card  Lease line  Others | 56.4  30.6  11.4  1.6 |
| Internet used  By respondent  Since when | Single option  215 responses | Less than a year  1 to 5 years  5 to 10 years More  than 10 years | 11  20  25  44 |
| Came to know  About internet  Shopping from  Whom | Multiple option  329 responses | Family  Friends  Co-workers  Classmates  Internet  Others | 15  35.3  7.8  5.2  31.4  5.3 |
| Have credit  Card or not | Single option  215 responses | Yes  No | 61  39 |
| Use internet for  Shopping or not | Single option  215 responses | Yes  No | 73  27 |
| Internet shopping  Done since when | Single option  157 responses | Less than 1 year  1 to 5 years  5 to 10 years  More than 10 years | 26  34  31  9 |
| Number of times  Shopped through  Internet in  Last Six months | Single option  157 responses | 1 – 2 times  3 – 5 times  6 – 10 times  11 – 20 times  More than 20 times | 31.5  35.6  16.4  9.7  6.8 |
| Items  shopped  Through internet  Shopping | Multiple option  352 responses | Apparels  Electronic goods  Books  Cinema tickets  Travel tickets  Hotel  Financial services  Anything in deal  Unique items  Others | 5.4  11.3  12.8  18.7  19.8  13.2  5.4  8.6  3.2  1.6 |
| Approx spending  On internet  Shopping in last  Six months (In INR) | Single option  157 responses | Less than 500  500 – 2,000  2,001 – 5,000  5,001 – 10,000  More than 10,000 | 6.8  26.0  19.2  20.5  27.5 |
| Payment mechanism  For internet shopping | Multiple option  123 responses | Credit card  Bank transfer  Cash on delivery  Others | 41.1  17.8  37.8  3.3 |

As all the respondents knew what is online buying and also had household internet connectivity, these two questions were avoided. As can be seen from Table 3, 73% of the respondents were using internet purchasing, whereas the remaining 27% were not. Commonly purchased through the internet were travel tickets (19.8%) and cinema tickets (18.7%), followed by hotel accommodation (13.2%), books (12.8%) and electronic goods (11.3%). The online buying of financial services and apparels is relatively less but likely to pick up with a host of factors supporting the growth of internet purchasing in India. Credit card (41.1%) and cash on delivery (37.8%) are the most common payment methods. The first one is due to convenience and the second due to safety.

The demographic profile of the respondents is mentioned in Table 2. As can be observed, the table, an attempt is made to cover respondents across all varieties of demographics. The internet experience and online buying experience of the respondents was covered in the study and the classification is mentioned in Table 3. In Table 3, some questions were such that multiple responses were possible, whereas in some others, only single response was possible.

1. **Statistical Analysis and Results**

Reliability and validity measures for the construct were calculated using techniques such as Cronbach’s alpha and factor loadings, as shown in Table 4. In order to check the reliability of the research instrument, Cronbach’s alpha has been calculated. The Cronbach’s alpha values for all dimensions range from 0.651 to 0.910; which well exceeds the minimum alpha of 0.6 (Nunnally, 1967; Hair, Anderson, Tatham & Black, 1998). Further, as shown in Table 4, the Kaiser-Meyer-Oklin index of sampling adequacy was 0.711. It compares the sizes of observed correlation coefficients to the sizes of partial correlation coefficients for the sum of analysis variables as 71.1%, which is reliable (Kaiser, 1974). The Bartlett’s test of sphericity suggests an approximate Chi square of 2918.332, rejecting the hypothesis that all correlation coefficients are not quite far from zero at a significance level of p<0.0005. Thus, both suggest that data can proceed for factor analysis.

Principal component factor analysis with a varimax rotation with Kaiser Normalization was conducted. In order to validate this, the minimum factor loading of 0.6 on hypothesized constructs is proposed (Nunnally, 1994). Factor loading values shown in Table 5 were obtained using varimax rotation. All the factor loadings for each instrument exceeded 0.6, meeting the required level of convergent validity. Average Variance Extracted by each factor exceeds 0.50. Therefore, as shown in table 5, data meets the convergent validity criterion. Further, discriminant validity of the data has been established by calculating inter-construct correlation as shown in table 6. The diagonal elements in table 6 show square root of Average Variance Extracted, whereas off diagonal elements suggest correlation between the constructs. As can be seen from the table, the diagonal elements exceed the off-diagonal elements, establishing discriminant validity of the data set. Statistical techniques like mean, standard deviation, correlation and regression were applied through SPSS 16 to find out the relationships among constructs.

**Table 4** *KMO and Bartlett’s Test Results*

|  |  |
| --- | --- |
| **KMO index of Sampling Adequacy** | **0.711** |
| Bartlett’s test of sphericity Approx Chi square  df  p | 2918.332  851  0.000 |

**Table 5** *Cronbach’s Alpha and Factor Loadings Calculations*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Factor** | **Items** | **Factor Loading** | **Cronbach’s**  **Alpha** | **Average**  **Variance**  **Extracted** |
| CONVENIENCE | Can shop in privacy of my home  Do not have to leave the home  Can shop whenever I want  Can save the effort of visiting the stores | 0.791  0.894  0.872  0.832 | 0.910 | 0.880 |
| PRODUCT SELECTION | Items from everywhere are available  Can get good product information online  Broader selection of products  Access to many brands and retailers  Guidance from product reviews and recommendations | 0.672  0.842  0.745  0.798  0.805 | 0.881 | 0.818 |
| SHOPPING COMFORT | No embarrassment if nothing is bought  Can take as much time as I want to | 0.897  0.834 | 0.856 | 0.817 |
| SHOPPING ENJOYMENT | Trying a new experience  Exciting to receive a new package  Can buy on impulse in response to advertisements  Can get customized products  Shopping is a relaxing outdoor activity\* | 0.789  0.814  0.843  0.878  0.783 | 0.715 | 0.874 |
| LACK OF TRUST AND  FINANCIAL RISK | Cannot trust the online company  May not get the ordered product  May purchase something by accident  Personal information may not be secure  Credit card information may be misused  Prefer offline payment for online transactions  Might be overcharged in buying online  Tendency to abandon shopping cart if too much information is asked  Trust only established brands sold Online | 0.843  0.802  0.721  0.884  0.833  0.756  0.834  0.767  0.884 | 0.671 | 0.908 |
| PRODUCT RISK | Cannot examine the actual product  Inability to touch and feel the item before buying  Do not like to pay for shipping and handling charges  Have to wait for delivery of goods  Difficult to judge the quality of products  Do not like to purchase online if free return is unavailable | 0.810  0.812  0.858  0.718  0.813  0.892 | 0.712 | 0.890 |
| TIME AND INCONVENIENCE  RISK | Too complicated to place an order  Difficult to find proper websites and products  Dislike delivery problems in online buying  Inconvenient to cancel an online order  Like the help and friendliness of physical store\* | 0.719  0.721  0.883  0.813  0.746 | 0.651 | 0.823 |
| ATTITUDE FOR  ONLINE  BUYING | Online buying is a good idea  Online buying is a wise idea  I like the idea of online buying  Using internet to buy things would be pleasant | 0.892  0.798  0.825  0.896 | 0.758 | 0.886 |
| NORMATIVE  STRUCTURE | Influence of family on idea of online buying  Want to follow what family thinks  Influence of friends on idea of online buying  Want to follow what friends think  Influence of classmates and /or coworkers on idea of online buying  Want to follow what classmates and/or coworkers think | 0.867  0.832  0.861  0.773  0.830  0.818 | 0.728 | 0.901 |
| SUBJECTIVE  NORMS | My influences feel I should buy online  People important to me think I should buy online  If my influences buy online without any problem, I can do the same | 0.885  0.828  0.917 | 0.791 | 0.885 |
| SELF EFFICACY | Comfortable with computers, internet and IT  Comfortable buying online  Comfortable buying online without any help | 0.789  0.810  0.841 | 0.706 | 0.795 |
| PERCEIVED  BEHAVIORAL  CONTROL | Capable of buying online  Buying online is entirely within control  Have resources and knowledge to buy online | 0.826  0.769  0.859 | 0.712 | 0.803 |
| DOMAIN  SPECIFIC  INNOVATIVENESS | Early to try new technologies  Visit new sites before most people do  Visit new sites even without fixed shopping plans  Friends and family approach for help in online buying | 0.802  0.868  0.792  0.824 | 0.716 | 0.848 |
| INTENTION TO BUY ONLINE IN FUTURE | Will buy online in future  Will buy more varieties of products and services online  Will buy online for more amount in future  Will recommend online buying to important people | 0.894  0.799  0.782  0.827 | 0.722 | 0.854 |
| \*Statements are reverse coded | | | |  |

**Table 6** *Inter-construct Correlations*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **CON** | **PS** | **SC** | **SE** | **FR** | **PR** | **TCR** | **ATT** | **NS** | **SN** | **SEF** | **PCB** | **DSI** | **INT** |
| CON | 0.938 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| PS | 0.412 | 0.904 |  |  |  |  |  |  |  |  |  |  |  |  |
| SC | 0.876 | 0.332 | 0.903 |  |  |  |  |  |  |  |  |  |  |  |
| SE | 0.765 | 0.213 | 0.713 | 0.934 |  |  |  |  |  |  |  |  |  |  |
| FR | 0.412 | 0.176 | 0.224 | 0.141 | 0.952 |  |  |  |  |  |  |  |  |  |
| PR | 0.212 | -.323 | 0.402 | -0.012 | 0.215 | 0.943 |  |  |  |  |  |  |  |  |
| TCR | -.214 | 0.017 | 0.016 | 0.043 | 0.138 | 0.214 | 0.907 |  |  |  |  |  |  |  |
| ATT | 0.765 | 0.365 | 0.768 | 0.742 | -.320 | -.311 | 0.101 | 0.941 |  |  |  |  |  |  |
| NS | 0.145 | 0.127 | 0.241 | 0.417 | 0.326 | 0.392 | 0.147 | 0.139 | 0.949 |  |  |  |  |  |
| SN | 0.367 | 0.421 | 0.243 | 0.387 | 0.308 | 0.225 | 0.451 | 0.301 | 0.881 | 0.940 |  |  |  |  |
| SEF | 0.320 | 0.418 | 0.547 | 0.398 | 0.512 | 0.238 | 0.417 | 0.134 | 0.256 | 0.376 | 0.891 |  |  |  |
| PCB | 0.416 | 0.315 | 0.261 | 0.451 | 0.315 | 0.510 | 0.276 | 0.478 | 0.215 | 0.356 | 0.776 | 0.896 |  |  |
| DSI | 0.451 | 0.444 | 0.238 | 0.119 | 0.549 | 0.013 | 0.213 | 0.215 | 0.003 | 0.019 | 0.654 | 0.456 | 0.920 |  |
| INT | 0.452 | 0.298 | 0.387 | 0.367 | -0.248 | 0.019 | 0.025 | 0.489 | 0.015 | 0.039 | 0.167 | 0.007 | 0.654 | 0.924 |
| Acronyms include: CON (Convenience), PS (Product Selection), SC (Shopping Comfort), SE (Shopping Enjoyment), FR (Lack of trust and Financial Risk), PR (Product Risk), TCR (Time and Inconvenience Risk), ATT (Attitude for online shopping), NS (Normative Structure), SN (Subjective Norms), SEF (Self-Efficacy), PCB (Perceived Behavioral Control), DSI (Domain Specific Innovativeness), INT (Intention to buy online in future) | | | | | | | | | | | | | | |

After the reliability and validity of the constructs was established, the proposed hypotheses were tested. Regression has been calculated in order to establish the relation between constructs. The results of analysis are shown in Table 7. It shows dependent and independent variable for each hypothesis, the value of Beta, F, p-value and the result in terms of acceptance or rejection of the stated hypothesis. Towards the end of this chapter, the author has tried to compare the results of this research with the results of similar behavioral studies on online buying. This comparison highlights both the similarities as well as dissimilarities of the results.

**Table 7** *Hypothesis Testing Results (Regression Analysis – Bivariate Linear)*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Hypothesis** | **Independent to Dependent Factor** | **Beta** | **F** | **p-Value** | **Result** |
| H1 | Convenience to Attitude for online shopping | 0.094 | 2.348 | 0.000 | Hypothesis 1 Supported |
| H2 | Product Selection to Attitude for online shopping | 0.037 | 5.117 | 0.000 | Hypothesis 2 Supported |
| H3 | Shopping comfort to Attitude for online shopping | 0.123 | 1.941 | 0.002 | Hypothesis 3 Supported |
| H4 | Shopping enjoyment to Attitude for online shopping | 0.044 | 2.134 | 0.000 | Hypothesis 4 Supported |
| H5 | Trust and Financial risk to Attitude for online shopping | 0.162 | 3.251 | 0.043 | Hypothesis 5 Supported |
| H6 | Product risk to Attitude for online shopping | 0.152 | 0.241 | 0.119 | Hypothesis 6 Not Supported |
| H7 | Time and Convenience risk to Attitude for online shopping | 0.034 | 0.315 | 0.694 | Hypothesis 7 Not Supported |
| H8 | Normative structure to Subjective norms | 0.157 | 4.265 | 0.000 | Hypothesis 8 Supported |
| H9 | Self efficacy to Perceived behavioral control | 0.041 | 2.314 | 0.000 | Hypothesis 9 Supported |
| H10 | Attitude for online buying to Intention to buy online in future | 0,128 | 3.125 | 0.000 | Hypothesis 10 Supported |
| H11 | Subjective norms to Intention to buy online in future | 0.225 | 0.148 | 0.998 | Hypothesis 11 Not Supported |
| H12 | Perceived behavioral control to Intention to buy online in future | 0.357 | 0.471 | 0.117 | Hypothesis 12 Not supported |
| H13 | Domain specific innovativeness to Intention to buy online in future | 0.045 | 3.174 | 0.018 | Hypothesis 13 Supported |

As can be observed from Table 7, all the four perceived benefit factors namely convenience, product selection, shopping comfort and shopping enjoyment have a positive relation to the attitude for online buying (H1, H2, H3, H4). However, in perceived risks, it is only lack of trust and financial risk which emerges as a factor contributing negatively to the attitude for online buying (H5). The factors defined as product risk and time and inconvenience risk have no effect on the attitude for online shopping (H6, H7). Attitude for online shopping has a definite positive relation to the intention to buy online in future (H10).

Further, what people important to an individual think about online buying i.e. Normative Structure has a strong positive relation to his or her perceptions about social pressure to comply with online buying i.e. Subjective Norms (H8). However, the same subjective norms do not have any relation to his or her intention to buy online in future (H11). An individual’s self confidence about his or her ability i.e. self efficacy to shop online has a strong positive relation to his behavioral control i.e. Perceived Behavioral Control to shop online (H9). However, this behavioral control has no relation to his or her intention to buy online in future (H12). Nature of an individual to be an early adopter of technology i.e. Domain Specific Innovativeness has a positive relation to his intention to buy online in future (H13). This concludes that out of the four constructs, two namely attitude for online buying and domain specific innovativeness of an individual affect his intention to buy online in future, whereas the other two constructs namely subjective norms and perceived behavioral control do not affect an individual’s intention to buy online in future.

The negative relation between lack of trust and financial risk and attitude for online buying is similar to the Western studies of George (2004), Limayen et al., (2000) among others. The no relation between subjective norms and intention to buy online inspite of a strong relation between normative structure and subjective norms is also similar to George (2004). However, the no relation between perceived behavioral control and intention to buy online is similar to Coker, Ashill and Hope (2011), but different from George (2004). However, studies showing only self-efficacy contributing to online buying intention have shown a positive relation between the two (Ranganathan & Jha, 2007; Dash & Saji, 2008).

1. **Managerial Implications**

All the four perceived benefit factors namely convenience, product selection, shopping comfort and shopping enjoyment are positively related to the attitude for online shopping. Since internet retailing is still in an evolving stage in India, web retailers need to use features which give convenience in terms of navigation, ease of placing orders, comparison of price, ease of cancelling orders, and settling disputes in online buying. To provide convenience to online shoppers, it would be important to mention product availability, clear billing facilities and clarity about delivery time and return policy on online buying sites. Wide range of product availability and expert as well as user reviews can give product benefits to online buyers. As internet shopping enjoyment can build a positive attitude for online shopping, this in turn can lead to higher online shopping and higher customer satisfaction. Virtual reality images in 3D, music, use of good colors and fonts can help in enhancing enjoyment for online buyers. Convenience and shopping comfort for the new Indian online buyer can be enhanced by providing the ability to talk to someone who can become the face of online retailer. This can give an edge to the online retailer over the traditional retail formats, which always provide a face for their customers.

The only major risk in online buying for the Indian buyers is the fear of financial risk and lack of trust. Online retailers need to adopt mechanism to improve customers’ trust to protect their personal information and credit card information. The structure of cyber laws in India should also be made stringent in terms of establishment and application, to improve customer trust in online buying. Web retailers should try to improve their trustworthiness in order to generate a positive attitude for online buying. This can be achieved by forming groups of web merchants comprising of service providers, portals and business associations, and engaging into joint communications.

The instructions about how to conduct financial transactions should be easy to comprehend. The consumers should be provided guarantees about refunds if the transaction does not materialize. Many a time poor Internet connectivity or broken server links disrupts financial transactions. Toll free numbers and password protected accounts to check purchase history and order status can help in assuring the consumers about the credibility of online Web sites. Consumers fear that online transactions are unsafe. This is because there is no confirmation from the company that transaction has taken place or that the money transferred has been received. This can also be resolved by automated emailing of details of the transactions as soon as the transaction is complete. Some Web sites send out emails on receipt of order, on completing credit card transaction, and finally when the order is shipped. Online shopping is considered unsafe because products ordered and paid through Web sites many a times are not delivered on time or are damaged. These steps would help the online retailers in India to move from cash-on-delivery to electronic payments. Cash-on-delivery is very costly for the online retailers and therefore, they will be more economically viable if Indian online buyers move to electronic forms of payment.

Indian consumers’ online shopping behavior is influenced by social norms and its acceptance can be attributed to the social beliefs about online shopping. Consumers prefer to use Web sites for shopping if their social systems and groups have a positive opinion about its attributes. ‘Social affiliation’ is important for consumers’ in online shopping acceptance. Consumers appear to be comfortable with traditional shopping formats. This may be because traditional retail formats are not faceless and they can easily interact with service staff. Interaction with service staff improves consumers’ perceptions about service. Not all consumers are conversant with technology and online Web sites appear complex and difficult to understand. The acceptance of Internet is dependent on the quality of Internet connections, accessibility, technology related laws, and power failures. Poor technology infrastructure and lack of government support heightens consumers’ perception of risk toward online Web sites. The findings support earlier research that collectivist societies are less likely to adopt online shopping since they are influenced by groups, families, and friends in their purchase behavior. The normative influence may be understood to play an important role in instilling trust for online shopping Web sites. Indian consumers are guided by the social acceptability about security and risk concerns of online transactions. Online shopping Web sites should have offline system available for providing counseling, help, and support. The help desk option should be active and easily accessible. This would instill confidence among consumers and make online shopping socially acceptable and popular.

The study suggests domain specific innovativeness of an individual has a positive impact on his intention to buy online in future. Young urban Indian population is likely to have the highest inclination as an early adopter of technology and products. As the young urban Indian population continues to grow, online buying of goods and services is likely to accelerate at a faster rate. Television advertisements of online retailers in India will help the non-innovative traditional buyers also to catch up with the concept of online buying in India.

1. **Limitations and Directions for Future Research**

This study has its own set of limitations, which can provide directions for future research. Firstly, as snowball sampling has been used to collect the sample for the study, one limitation relates to the generalisability of the findings. Although the sample size is acceptable, it needs to be increased to the maximum to get an exact idea about the attitudes and behavioral intentions of Indians for online shopping. This will improve the generalisability aspect of the study. Secondly, multi-state or multi-country work can be undertaken to study the differences in shopper behavior online purchasing behavior along with the intention to purchase online. As intention relates to future behavior and actual purchasing belongs to the past behavior, a time lag will have to be maintained between when intention is measured and when behavior is measured (Davis et al., 1989). Studies related to the theory of planned behavior show a strong relation between intention and actual behavior (Ajzen, 1991). Web retailers would be more interested in the actual online purchase behavior of the Indian customers. Lastly, after actual purchasing behavior is studied, the study can be carried forward to customer satisfaction and loyalty in an online buying situation.

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