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## AN EMPIRICAL STUDY ON FACTORS INFLUENCING SHOPPERS' ONLINE BUYING BEHAVIOR

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### ABSTRACT

Buying on the Internet is one of the most rapidly growing modes of shopping demonstrating a double-digit annual increase in sales in recent years. Reasons for such growth seem to arise from its advantages such as convenience, the ability to be seen as a leisure activity, savings of time and effort, and its 24 hours a day and 7 days a week access. Although Internet buying has shown rapid growth, it also has been hampered by the real or perceived perceptions of consumers that it lacks privacy and security while also suffering from issues in product delivery and returns and tactility.

The primary purpose of the study is to explore the profile of Internet buyers and compare them to the non-buyers in terms of demographic characteristics, technology experiences, and his or her attitudes towards consumer and marketing issues. Such information will help e-tailers as they work to develop more effective and efficient online retail outlets.

**KEY WORDS:** Buying Behavior, Consumer Factors, Marketing Factors, Technology Factors, Experience Goods, Search Goods

## **1. INTRODUCTION**

The Internet and its applications have been rapidly growing in India over the last decade. Recent data shows that India has 302 million Internet users. The YOY growth of Internet usage in India is at present about 32 percent. What is more enthralling about India is the acceleration of Internet growth, while it took 10 years to move from 10 million to 100 million Internet users, and 3 years from 100 to 200 million, the next 100 million milestone was achieved in just an year. And if this pace of growth continues, India will reach 500 million users by the end of 2016. Of the 302 million Internet users, about 67 percent (190 million) are urban and 33 percent (112 million) rural Internet users. The frequency of usage of Internet in India has 61 percent of daily users. About 18 percent access Internet several times a day, 10 percent users' at least once a day and 33 percent access on all days of a week [1]. This large base of Internet users has phenomenal influence on online retail business which has seen an unrecorded growth in past few years.

Internet represents a new era in which many of the traditional marketing conventions are broken (Chaston, 2000). Coupled with that, the digital revolution has brought about a paradigmatic shift in the manner in which consumers perform business transactions (Hsiao, 2009). As such, the online platform is nearly a perfect market for performing dealings because information is instantaneous and buyers can easily compare the offerings of a variety of sellers globally (Huang, 2000). For businesses, the key to survival in the future depends on how well they can integrate this medium in their business models today. In order to sell anything over the Internet, firms have to take into account that who their customers are, what their spending habits are like, as well as the products and services they prefer, while shopping along electronic platforms (Dahiya, R. 2012). Online shopping may be considered a dynamically continuous innovation because it has had a significant effect on consumption patterns by modifying and improving the existing shopping Behavior (Molesworth & Suortti 2001). It appears then that Internet-based shopping has reshaped consumers' habits and has caused far-reaching vicissitudes to the distribution channel.

Online shopping may be defined as the process whereby consumers directly buy goods or services from a seller in real-time (the level of Internet responsiveness that is judged as sufficiently immediate) without the use of a traditional intermediary service (Hsiao, 2009). Generally, merchants sell products and services directly to consumers while in e-commerce or electronic retailing (e-tailing), the web channel is used to conduct business and also to sell products and services (Shelly & Vermaat, 2011). The idea is not only just about disseminating information, but also about building customer relationships and realizing company profits (Falk, Sockel, & Chen 2005).

An online shop evokes the physical analogy of buying products or services at a brick-and-mortar retailer or in a shopping centre. Therefore, business-to-consumer (B2C) based e-commerce capacitates the consumer to purchase products and services online using Internet technologies and associated infrastructure (Pavlou, 2003). In some cases, consumers may use online shopping parallel to alternative retail channels such as retail stores, catalogues, mail order or TV shopping, often termed multi-channel shopping (Ward, 2008).

In India, online shopping has seen an unprecedented growth since 2014. The growth was driven by rapid technology adoption led by the increasing use of devices such as smart phones and tablets, and access to the internet through broadband, 3G, etc., which led to an increased online consumer base. Favoured demographics and growing Internet user base helped aid this growth. Local players such as Flipkart and Snapdeal have demonstrated huge potential and with entry of global players having specific industry exposure and know-how and deep resources like Amazon and Alibaba, the competition in online business appears substantial. The players aim to strengthen seller's base and selection on their platforms, innovating on multiple customer touch points, and providing seamless and rapid delivery services and introducing innovative means to increase customers and increase online traffic. India's overall retail opportunity is substantial, and coupled with a demographic dividend (young population, rising standards of living and upwardly mobile middle class) and rising internet penetration, strong growth in online shopping is expected [2].

## **2. LITERATURE REVIEW**

Internet represents everything from just another distribution channel to being the organizations' sole sales outlet (Van Tassel & Weitz, 1997). It can attract new customers, penetrate new markets, promote company brands and improve customer retention (Ernst & Young, 2001).

From the customer's point of view, the Internet (Mehta & Sivadas, 1995) offers the potential advantages of reducing shopping time and money spent. It allows twenty-four hours a day access, provided perhaps better service, and gave the consumer a perception of control over the shopping experience (Alba, Lynch, Weitz, Janiszewski, Lutz, Sawyer, & Wood, 1997; Benjamin & Wigand, 1999; Cronin, 1996; Hoffman & Novak, 1996; Hoffman, Novak & Chatterjee, 1996; Maignan & Lukas, 1997; Poel & Leunis, 1999; Then & DeLong, 1999).

The acceptance of the Internet as a retail outlet for the consumer has been the focus of much research (Auger & Gallagher, 1997; Cockburn & Wilson, 1996; Hoffman & Novak, 1996; Jones & Biasiotto, 1999; O'Keefe, O'Connor, & Kung, 1998; Palmer & Markus, 2000; Spiller & Lohse, 1997). Some studies have focused on the consumers' attitudes towards Internet shopping (Cowles, Little & Kiecker, 2002; Harden, 1996; Kunz, 1997; Poel & Leunis, 1999). Poel and Leunis (1999)

suggested that the consumer's adoption of the Internet for retail purchases focused on three attributes, money back guarantees, price reductions, and well-known brands. Regan (2002) examined that the factors that would most strongly increase online shopping would be: (a) an increase in major catalog retailers taking steps to convert customers into web buyers, and (b) overcoming the tactile need of online shoppers to become more comfortable with buying clothing without first touching or trying on the garment.

### **2.1. THE INTERNET SHOPPER: A PROFILE**

Research of the Internet shopper has typically included demographic questions of age, education and household income (Fram & Grandy, 1995; Gupta, 1995; Hypersondage, 1996; Mehta & Sivadas, 1995). Over time the Internet buyer, once considered the innovator or early adopter, has changed. While once young, professional males with higher educational levels, incomes, tolerance for risk, social status and a lower dependence on the mass media or the need to patronize established retail channels (Citrin, Sprott, Silverman & Stem, Jr., 2000; Mahajan, Muller & Bass, 1990; Palmer & Markus, 2000; Rogers, 1995; Sultan & Henrichs, 2000), today's Internet buyer shows a diversity of income and education.

For Internet buyers, gender, marital status, residential location, age, education, and household income were frequently found to be important predictors of Internet purchasing (Fram & Grady, 1997; Kunz, 1997; Mehta & Sivadas, 1995; Sultan & Henrichs, 2000). Sultan and Henrichs (2000) reported that the consumer's willingness to and preference for adopting the Internet as his or her shopping medium was also positively related to income, household size, and innovativeness. In 2000, women represented the major online holiday season buyer (Rainne, 2002; Sultan & Henrichs, 2000). According to a report by the Pew Research Center (2001), the number of women (58%) who bought online exceeded the number of men (42%) by 16%. Among the woman who bought, 37% reported enjoying the experience 'a lot' compared to only 17% of male shoppers who enjoyed the experience 'a lot'. O'Cass and Fenech (2002) found that Internet buyers were more often opinion leaders, impulsive, and efficient Internet users. They trusted web security, were satisfied with existing web sites and had a positive shopping orientation. Eastlick and Lotz (1999) found that potential adopters of the interactive electronic shopping medium perceived a relative advantage of using the Internet over other shopping format. They also found the Internet users to be innovators or early adopters.

### **2.2. CONSUMER BEHAVIOR**

Consumer behavior is the study of the processes involved when an individual selects, purchases, uses or disposes of products, services, ideas, or experiences to satisfy needs and desires (Solomon, 1998). In order for the Internet to expand as a retail channel, it is important to

understand the consumer's attitude, intent and behavior in light of the online buying experience: i.e., why they use or hesitate to use it for purchasing? Consumer attitudes seem to have a significant influence on this decision (Schiffman, Scherman, & Long, 2003) yet individual attitudes do not, by themselves, influence one's intention and/or behavior. Instead that intention or behavior is a result of a variety of attitudes that the consumer has about a variety of issues relevant to the situation at hand, in this case online buying. In the following pages we will study consumer factors, marketing and technology issues and how they shape online shopping attitudes.

### **2.2.1. CONSUMER FACTOR**

The consumer factor was suggested as important to online shopping and items included were privacy, security, time saving, ease of use, convenience, enjoyment, previous experience, company reputation and tactility (Udo, 2001).

**Privacy.** Privacy in a communications system or network is defined as a protection given to information to conceal it from others' access by the system or network (Komiak & Benbasat, 2004). Privacy concerns were the most frequent reason cited by consumers for not making online purchases (Byford, 1998; Furger, 1999; George, 2002; Milne, 2000; Miyazaki & Fernandez, 2001; Miyazaki & Krishnamurthy, 2002; Udo, 2001). The majority of studies suggested that respondents were concerned that information might be used to send them unwanted offers by this or other companies or accessed by a third party for non-authorized activity (George, 2002; Lenhart, 2000; Wang, Lee & Wang, 1998).

**Security.** Security is defined as that which secures or makes safe; protection; guard; defense (Komiak, & Benbasat, 2004). In this study, the term security was used in terms of financial security while privacy was the protection of personal information (Bhianmani, 1996; Burroughs & Sabherwal, 2002; Komiak & Benbasat, 2004; Moda, 1997; Salisbury, Pearson, Pearson & Miller, 2001; Udo, 2001). Online retailing has greater perceived security risks by consumers than does traditional brick and mortar retailing (Houston, 1998; Kuczarski, 1996). Research suggested that most consumers fear the risk of misused credit card information (Bhimani, 1996; Fram & Grady, 1995; Gupta & Chatterjee, 1996; Houston, 1998; Kuczarski, 1996; Poel & Leunis, 1996). To increase online shopping, merchants need to take the proactive steps to minimize the consumer's feeling of risk (Houston, 1998; Salisbury et al., 2001). One method of doing that includes building of consumer's trust in the online store (Cheskin Research, 1999; Komiak & Benbasat, 2004; Quelch & Klein, 1996). In the area of financial security, this meant proving the merchant's ability to safeguard personal data (Cheskin Research, 1999; Jarvenpaa, Tractinsky, & Vitale, 2000; Quelch & Klein, 1996; Singh & Sirdeshmukh, 2000). Garbarino and Johnson (1999) have proposed a

satisfaction-trust-commitment-repurchase intention model and found that consumers' satisfaction would build trust which led him or her to repeat the purchases.

**Time.** Becker (1965) noted that the efficient use of time was a critical issue for the modern time-scarce consumer. Internet shopping can be viewed as a time saver for the shopper and the buyer (Alreck & Settle, 1995; Lohse, Bellman, & Johnson, 2000; Then & DeLong, 1999). As such, time positively influences Internet shopping as it can eliminate trips to the store and the long lines and delays when at the store (Alreck & Settle, 2002; Bhatnagar, Misra & Rao, 2000; Donthu & Garcia, 1999; Eastlick & Feinberg, 1999).

**Ease of Use.** According to Kunz (1997) and Taylor and Cosenza (1999), ease in using the Internet as a means of shopping positively impacted the consumer's online shopping behavior. A similar finding was noted by Segars and Grover (1993) and in Rogers's adoption innovation model (1995).

**Convenience.** One such attitude that influenced the non-store shoppers has been that of convenience (Berkowitz, Walton & Walker, 1979; Eastlick & Feinberg, 1999; Gehrt & Carter, 1992; Settle, Alreck & McCorkle, 1994; Shim & Drake, 1990; Shim & Mahoney, 1991). The non-consumer's primary motivation was to save time, money, and hassles associated with in-store shopping. Non-store shoppers sought to solve these issues by utilizing catalogs, cable television shopping, Internet, and other shopping formats (Stell & Paden, 1999). The same attitude of convenience carried over to the consumer's Internet shopping's behavior.

Convenience has been noted as positively influencing online purchasing behavior as it eliminated the necessity of having to travel to one or more stores (Anderson, 1971; Eastlick & Feinberg, 1993; Gehrt & Carter, 1992; Settle et al., 1994; Stell & Paden, 1999). Internet shoppers more highly value convenience than did non-Internet shoppers (Bellman Lohse, & Johnson, 1999; Donthu & Garcia, 1999).

**Enjoyment.** Enjoyment in shopping can be two-fold: enjoyment from the product purchased as well as the process of shopping itself. Online shopping as in a store shopping provides both types of enjoyment. Such enjoyment can positively or negatively influence online shopping (Eastlick & Liu, 1997; Forsythe & Bailey, 1996; Kunz, 1997; Taylor & Cosenza, 1999).

**Previous Experience.** Studies have found that more years of computer experience and use had a positive, direct effect on the user's acceptance of information technology (Balabanis & Reynolds, 2001; Bear, Richards, & Lancaster, 1987; Burroughs & Sabherwal, 2002; Citrin, Sprott, Silverman & Stem, Jr., 2000; Jarvenpaa & Todd, 1997; Kay, 1993; Klein, 1998; Liang & Huang, 1998; Lohse, et al., 2000; Salisbury, et al., 2001). This suggests that consumers with more years of computer use would be more likely to adopt the Internet for purchasing. Related technology variables identified

by O'Keefe et al. (1998) included technology skill and the technology anxiety as significant elements that predicted online buying behavior.

**Company Reputation.** Having a positive company reputation can reduce the consumer's perceived risk of trying a new means of distribution (Srinivasan, Anderson, & Ponnayolu, 2002). Such a reputation is developed over time through long-term relationships with the consumer. A retailer's reputation is partially built on the customer's ability to have direct face-to-face contact with the store and its management (Schiffman & Sherman, 2003; Stephen, Hill & Bergman, 1996). Online stores, by not having direct contact with the consumer, may have a more difficult time of establishing a reputation, thus decreasing the likelihood of online buying.

**Tactility.** The last consumer issue is the ability to test, in terms of touch and sight, a product before buying. Consumers express apprehension when buying a product without a tactile examination (Bhatnagar, Misra, & Rao, 2000).

### **2.2.2. MARKETING FACTOR**

**Product Quality and Variety.** When shopping, consumers want a broad range of quality, price, and variety in products. The online market allows for such diversity thus potentially increasing online sales (Eastlick & Liu, 1996; Kunz, 1997; Taylor & Cosenza, 1999).

**Product Promotion.** Product promotions attempt to influence the consumers' purchasing behavior (Blattberg & Wisniewsk, 1989; Bolton, 1989; Mulhern & Leone, 1991; Walters & Jamil, 2000; Woodside & Waddle, 1975). Like other retail methods, online channels have various promotional tools such as corporate logos, banners, pop-up messages, e-mail messages, and text based hyperlinks to web sites. These types of promotions have positively affected Internet buying (Ducoffe, 1996; Gallagher, Foster & Parsons, 2001; Hirschman & Tompson, 1997; Korgaonkar, Karson & Akaah, 1997).

**Delivery Methods.** Online purchasing typically involves the use of a delivery service because of the physical separation between the buyer and seller. For the consumer, this separation brings a concern about the time lag between when a product is ordered and when it is received as well as the potential added cost of delivery. These concerns had a negative effect on online shopping (Eastlick & Feinberg, 1994; Klassen & Gylinn, 1992; Tedeschi, 1999; Yrjola, 2001).

**Return Policy.** The separation of buyer and seller noted above also plays a role in the consumer's level of comfort in regard to product returns. Today, businesses often respond to a customer's request to return a product by offering to repair, substitute, or refund the customer's money. In the case of online shopping, where the majority of products have been delivered through some third-part means, the customer is now faced with utilizing a similar service in their turn process, an additional inconvenience and potential expense. These issues negatively affected online

shopping behavior (Kunz, 1997; Taylor & Cosenza, 1999). It is important to note that since online shopping does not allow a consumer to examine the product before purchasing, online shopping has experienced higher return rates when compared to traditional retailing (Bhatnagar, et al., 2000). By the year 2005, it is estimated that 90 million items bought online will be returned (Forrester Research, 2002). By offering an easy and cheaper way to return items, customers would be more likely to buy from an online store (Kunz, 1997).

**Customer Service.** Walsh and Godfrey (2000) suggested that e-tailors might have an advantage over brick and mortar counterparts in the area of customer service with their use of personalized web sites, product customization, and value-added work. Similarly, Kunz (1997) asserted that individuals who sought customer service were likely to purchase at the online store.

On the other hand, the product delivery and product return issues may negate the perception of personal service (Schneider & Bowen, 1999). Modern consumers put a premium on personal service (Scott, 2000). The lack of face-to-face service is certainly a limitation for Internet shopping and may negatively affect it (Schneider & Bowen, 1999).

### **2.3. TECHNOLOGY FACTOR**

To a degree, online buying will depend on the efficiency and availability of the technology (Bell & Gemmell, 1996; Hoffman, Kalsbeek & Novak, 1996). Three main technological factors were suggested as important to online shopping: the availability of personal computers and Internet access, download time and representativeness of pictures and colors (Eroglu, Machleit, & Davis, 2003; Seckler, 1998).

**Internet access.** For online shopping to expand, the potential customer must first have access to an Internet connection (Cho, Byun, & Sung, 2003). In India, about 20 percent household have either a personal computer or a laptop, of which 15 percent is among urban households and about 5 percent in rural ones. And Internet connectivity is available in 8.3 percent household in urban and 0.7 percent in rural (National Census – India: 2011).

**Downloading Time.** When a shopper visits a website, the visit involves time for the web page to be transmitted to the monitor. This time lag is of concern for e-tailors as users show little patience for slow downloads. Excessive download time negatively affects online shoppers' behavior and frustrated users left the site, abandoning their shopping carts and building negative opinions about that site and the company's reputation (Bank, 1997; Bell & Gemmell, 1996; Cho, Byun, & Sung, 2003; Fram & Grady, 1997; Hoffman, Kalsbeek & Novak, 1998; Iacobucci, 1998; Internet Shopping, 1998; Katz, Larson, & Larson, 1991; Larson, 1987; Peterson, Balasubramanian & Ronnenberg, 1997; Powell, 2001; Rebello, 1999; Weinberg, 2000). Powell (2001) maintained that a



typical consumer will only allow eight seconds or less for download time creating a design and technology issue.

**Representativeness of Pictures and Colors.** Consumer behavior is also impacted by the accuracy of the product/s displayed. Varying technology may make it difficult to represent the true colors or dimensions of a product. This distortion made consumers uneasy about making an online purchase therefore, negatively affecting online shopping behavior (Eroglu, Machleit & Davis, 2003).

The final broad area of online shopping research studied has been the evaluation of what products are best suited to the online retail model (Liang & Huang, 1998). Researchers reported that certain product categories sell online better than others (Alba, et al., 1997; Klein, 1998; Peterson, Balasubramanian & Bronnenberg, 1997; Vijayasarathy, 2002). Rosen and Howard (2000) found that services such as travel, airline tickets, and financial services dominated business to consumer online sales. In the area of products, those products that were standardized or might be considered homogeneous, such as books, music and videos had an advantage over differentiated or heterogeneous products (Liang & Huang, 1998). Another way to classify products is based on their tangibility, homogeneity, and differentiability. Search goods require less direct examination (such as books, computer software, etc.) and are therefore perceived as less risky to buy online as opposed to experience goods where customers want some assurance of quality, color, and construction (Klein, 1998; Liang & Huang, 1998; Vijayasarathy, 2002). Internet buyers of experience goods had the highest amount of consumer dissatisfaction than did other product categories (Engel, Blackwell & Miniard, 1995; Klein, 1998; Liang & Huang, 1998; Rosen & Howard, 2000).

### **3. STUDY FRAMEWORK**

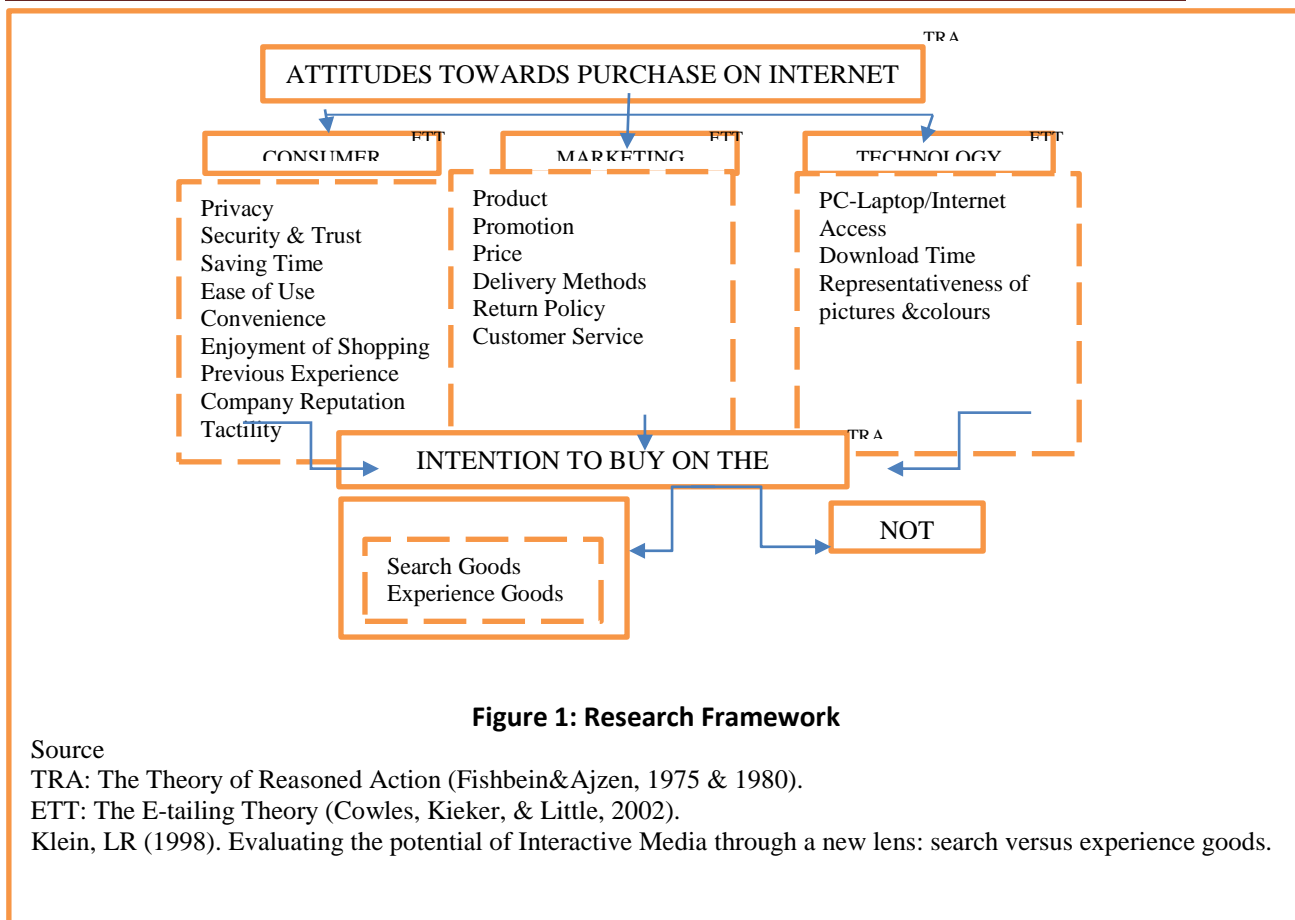
To date, the majority of online consumer behavior studies have focused on the consumers' intent to buy online and what variables influenced that intent (Yoh, 1999). Research has shown that significant numbers of consumers who intend to buy never actually complete the purchase (Shim, et al., 2001). Little research has evaluated the consumer who follows through on his or her intent and makes an online purchase. Such information is important to retailers who are interested in using the Internet as a marketing channel. Two theoretical models, Theory of Reasoned Action (Fishbein & Ajzen, 1975), and the Diffusion of Innovations Theory (Rogers, 1995) offer guidance in formulating a research framework that can be used to explore the research questions. Additionally, Cowles, Kieker & Little (2002)'s e-Retailing model provided some additional structure in the research framework development.

Fishbein and Ajzen (1975) provide a behavior explanation of the importance of attitudes on a prospective buyer's decision-making process. Fishbein and Ajzen's Theory of Reasoned Action (TRA) suggests that human beings behave in a reasoned manner trying to obtain favorable outcomes while meeting the expectations of others. TRA attempts to explain how attitudes are formed and how and why such attitudes affect the way people act. Fishbein and Ajzen (1975) propose that a person's behavior is determined by his/her intention to perform that behavior. Intentions are a function of his or her attitude towards the behavior and the resultant outcome. Ajzen (1991) later defined attitudes as an individual's feeling, either positive or negative, that performance of the potential behavior will lead to the desired outcome. Intentions are assumed to capture the motivational factors that influence a behavior and can measure the amount of effort someone is willing to exert when performing a behavior. When applying TRA to consumer behavior, consumers are believed to have a certain level of intention for each alternative selection. The alternative selected will be that which has the highest perceived reward value. TRA (Fishbein & Ajzen, 1975) is the most frequently applied theory to explain consumers' belief-attitude-behavior continuum (Mowen & Minor, 1998) and continues as the basis for related information systems research (Venkatesh, 2000). In this study Fishbein and Ajzen's (1975) TRA was used to examine the individual's as a predictor of intention and then intention as a predictor of behavior. While Fishbein and Ajzen (1975) provide a behavioral explanation of attitudes on the decision-making process, Rogers (1995) provides a sociological approach to innovation and adoption. Rogers (1995)'s diffusion of innovations theory states that innovation is a process communicated through formal and informal channels over time between members in social systems. When a new product or innovative technology is introduced in the market, consumers learn about it and then decide whether or not to adopt it. Adoption implies that a consumer accepts the new technology and uses it on a regular basis. Innovations are diffused in the market as individual consumers make their decisions to adopt them at different times (Dickerson & Gentry, 1983). In the case of Internet purchasing the use of the Internet as shopping tool is serving such a phased adoption of use or adoption (Agarwal & Prasad, 1997, 1999). Consumers who were in the same category, such as non-web user, web-store visitor, Internet browser, and Internet buyer have some common characteristics (i.e. demographics) (Rogers, 1995). Rogers' theory suggests how an innovation's benefit interacts with the potential adopter's characteristics and needs to influence the individual's decision to adopt or not to adopt an innovation. Rogers (1995) divides the adoption process into five stages; knowledge, persuasion, decision-making, implementation and confirmation. In the knowledge stage, an individual builds his or her understanding of the innovation and its function. Previous experiences with similar

technology and personal characteristics of the individual mediate the potential for acquiring new knowledge. In the persuasion stage, an individual develops his or her beliefs and attitudes toward the innovation. During the decision-making stage, the potential adopter makes a decision either to adopt the innovation or not. If the decision is made to adopt, the consumer moves into the implementation stage. Finally in the confirmation stage, the consumer reevaluates the adoption decision based on his or her level of satisfaction and then decides whether or not to continue to use the innovation.

Rogers' diffusion of innovations theory has been applied to research on consumer behavior (Gatignon & Robertson, 1985; Mahajan, et al., 1990; Wright & Charitt, 1995) as an explanation of the movement of new ideas, practices and products through a social system (Gatignon & Robertson, 1985; Wright & Charitt, 1998). When transferring Roger's model to this study's research questions, previous research has only addressed the consumer's intent to buy, by definition the first two or three stages of the model (Mahajan, et al., 1990; Shim, Eastlick, Lotz & Warrington, 2001; Sultan, 2000). This study attempts to evaluate the last three stages of the adoption process, decision-making, implementation and confirmation in analyzing the consumers Internet buying behavior.

According to Lee and Johnson (2002), Internet purchasers and Internet non-purchasers had different attitudes about Internet shopping. Among them were different levels of comfort in providing financial information over the Internet. Other research has suggested that the current Internet store browsers were likely to be future buyers because of their familiarity with the Internet as a shopping tool (Shim, et al., 2001). Research has also noted that Internet browsers were also more aware of a product before going online, tended to have a greater level of confidence in their online shopping ability and had higher satisfaction for a product researched and purchased (Fram & Grady, 1995; Lee & Johnson, 2002; Seckler, 1998).



As attitudinal differences vary between the non-web shopper, the Internet store visitor, and the Internet store browser, it might be assumed that the Internet buyer will probably have different attitudes also in four main areas defined by the literature; consumer issues, marketing issues, technology issues and product type (Cowles, Kieker, & Little, 2002).

Using Fishbein and Ajzen (1975)'s Theory of Reasoned Action that online buying behavior is a function of attitude and Cowles, Kieker, and Little's (2002) exploratory e-retailing theory, the various parts of one's overall attitudes based on previous research can be put into a hypothesized model of Internet buying. Figure 1 illustrates the framework for this research to predict online buying behavior.

#### 4. RESEARCH HYPOTHESIS

Based on review of literature, following research alternative hypotheses are developed...

H<sub>1</sub>: There will be internal consistency among the items used to comprise the theoretical factors.

H<sub>1a</sub>: Consumer factor; H<sub>1b</sub>: Marketing factor; H<sub>1c</sub>: Technology factor

H<sub>2</sub>: There will be significant differences in demographic and technology experiences between Internet non-buyers and Internet buyers.

H<sub>3</sub>: There will be significant differences in attitudes towards the theoretical factors between the combined Internet non-buyer group and Internet buyers.

H<sub>3a</sub>: Consumer factor; H<sub>3b</sub>: Marketing factor; H<sub>3c</sub>: Technology factor

H<sub>4</sub>: There will be significant differences in intention to purchase on the Internet between the two groups of consumers (Internet buyers and Internet non buyers).

H<sub>5</sub>: There will be significant differences in attitudes between the three groups of consumers (web-store visitors, Internet browsers, and Internet buyers) for the theoretical factors.

H<sub>5a</sub>: Consumer factor; H<sub>5b</sub>: Marketing factor; H<sub>5c</sub>: Technology factor

H<sub>6</sub>: There will be significant differences in one's intention to purchase on the Internet between the three groups of consumers (web-store visitors, Internet browsers, and Internet buyers).

H<sub>7</sub>: The respondents' attitude towards the consumer factor and marketing factor as well as differences in demographic and technology experience can predict who is more likely to be an Internet buyer.

H<sub>8</sub>: Among Internet buyers, there will be differences in the demographic background and technology experience between the consumers who had purchased experience goods as opposed to those buying search goods.

H<sub>9</sub>: There will be significant differences in Internet shopping experiences between the two groups of consumers (Search and experience goods buyers).

H<sub>10</sub>: The attitude towards the consumer factor, marketing factor, technology factor along with demographics and technology experiences will be able to predict which buyer will repeat a purchase.

## **5. RESEARCH METHODOLOGY**

The **purpose of the study** was to explore the attitudes of respondents toward purchasing products on the internet. Three groups were examined including: The visitor (WV) - no intent to purchase online; the browser (BR) - has intention but has never purchased; and the online buyer (BY). Differences in the respondent's attitudes and behaviors based on their level of online shopping involvement were explored. The consumers' attitudes and demographics were then used to predict future Internet buying intention.

### **5.1. SAMPLING DESIGN**

The steps in the sampling design were as follows:

Target Population

Elements: Male and Female Buyers;

Sampling Unit: Urban Buyer;

Extent: Dehradun and Haridwar districts of Uttarakhand

Time: Jan - Feb, 2017.

Sampling Frame: Map of Dehradun and Haridwar districts;

Sampling Technique: Multistage Sampling;

Sample Size: 500

To confirm the sample size of 500 was adequate, calculations for sample size(n) determination by proportion were made as follows, using the maximum possible population variation ( $\pi=0.5$ ). The precision of D in the present study was  $\pm 0.05$  for a 95 %confidence level ( $z=1.96$ ).  $n=\pi(1-\pi)z^2/D^2$  ,  $n=(0.5)(1-0.5)(1.96)^2/(0.05)^2 =384.16$  or 385 rounded to the next higher integer. Therefore, the 500 sample size may be considered more than sufficient (Malhotra and Dash, 2011).

## 5.2. QUESTIONNAIRE DESIGN

A research instrument was developed based on a review of the literature (Chung, 2001; Fram & Grady, 1995; Lee & Johnson, 2002; Reynolds, 1974; Zymansk & Hise, 2000). Most of the items on the instrument were based on questions used in previous research. Some questions were used in their original form while others were modified slightly to address the specific nature of this study. Finally some of the questions were developed solely for this survey to address important concepts not previously addressed by previous studies. These questions were part of the pretest to examine their readability and that they captured the construct in question. The survey was administered online. A list of about 500 online buyers along with their e-mail ID was identified and survey was administered thru 'e-survey'. Personal e-mail was also made to the prospective respondents to describe the survey and persuade them to participate.

## 6. DATA ANALYSIS

### 6.1. RELIABILITY OF THEORETICAL CONCEPTS ( $H_1$ )

Cronbach's alpha coefficients for the theoretical concepts are provided in Table 1. The consumer factor score marketing factor scale score was 0.787 and 0.736 respectively, exceeding the standard level of 0.7 (Stevens, 2002), while the technology factor had a marginally acceptable alpha value of 0.610 (Tseng et al., 2000).

**Table 1: Cronbach's  $\alpha$  Coefficients for Theoretical Concepts**

<b>Theoretical Concepts</b>	<b>Cronbach's <math>\alpha</math> (<math>0 &lt; \alpha &lt; 1</math>)</b>
<b>Consumer factor scale score</b> (Privacy, Security, Time saving, Ease of use, Convenience, Enjoyment, Company reputation, Tactility)	0.787
<b>Marketing factor scale score</b> (Price, Product, Promotion, Delivery, Return, Customer service,	0.736
<b>Technology factor scale score</b> (Access to Internet, Download time, Representativeness)	0.610

**6.2. COMPARISONS OF INTERNET BUYERS VS. NON-BUYERS**

Demographic data for the sample are provided in Table 2.

**Demographic Differences between Internet Buyers and Non-Buyers (H<sub>2</sub>)****Table 2: Demographic Differences between Internet Buyers and Non-Buyers**

Demographics	Category	Online				$\chi^2$
		Non-buyers		Buyers		
		f	%	f	%	
Age (in years)	18 – 24	128	48.5	64	28.6	42.34**
	25 – 34	80	30.3	96	42.9	
	35 – 44	32	12.1	56	25.0	
	45 – 54	16	6.1	8	3.6	
	55 – 64	8	3.0	-----	-----	
	65 & above	-----	-----	-----	-----	
	<b>TOTAL</b>	<b>264</b>	<b>100.0</b>	<b>224</b>	<b>100.0</b>	
Gender	Female	83	31.4	53	23.7	3.65 <sup>#</sup>
	Male	181	68.6	171	76.3	
	<b>TOTAL</b>	<b>264</b>	<b>100.0</b>	<b>224</b>	<b>100.0</b>	
Family Size (# of family members)	Up to 2	56	21.2	40	18.5	22.63**
	3-4	120	45.5	120	55.6	
	5-6	64	24.2	56	25.9	
	6 plus	24	9.1	-----	-----	
	<b>TOTAL</b>	<b>264</b>	<b>100.0</b>	<b>216</b>	<b>100.0</b>	
Family Life Stage	Bachelor	192	72.7	80	35.7	75.75**
	Married	24	9.1	64	28.6	
	Married with youngest child < 6 years old	32	12.1	40	17.9	
	Married with youngest child > 6 years of age	16	6.1	32	14.3	
	Married with independent children	-----	-----	8	3.6	
	<b>TOTAL</b>	<b>264</b>	<b>100.0</b>	<b>224</b>	<b>100.0</b>	
Education	Some School	-----	-----	-----	-----	41.84**
	Senior School	24	9.1	16	7.1	
	Graduate	104	39.4	32	14.3	
	Post Graduate	136	51.5	176	78.6	
	<b>TOTAL</b>	<b>264</b>	<b>100.0</b>	<b>224</b>	<b>100.0</b>	
Income	Up to INR 50,000	112	42.4	72	32.1	17.95*
	INR 50,001 – INR 100,000	56	21.2	64	28.6	
	INR 100,001 – INR 150,000	32	12.1	24	10.7	
	INR 150,000 – INR 300,000	24	9.1	32	14.3	
	INR 300,001 – INR 500,000	24	9.1	8	3.6	
	INR 500,000 plus	16	6.1	24	10.7	
	<b>TOTAL</b>	<b>264</b>	<b>100.0</b>	<b>224</b>	<b>100.0</b>	
Occupation	Student	96	36.4	72	32.1	24.63**
	Government Service	48	18.2	48	21.4	
	Private Sector Employee	96	36.4	104	46.4	
	Self Employed Professional	16	6.1	-----	-----	
	Own Business	8	3.0	-----	-----	
	<b>TOTAL</b>	<b>264</b>	<b>100.0</b>	<b>224</b>	<b>100.0</b>	

\*\*p<0.01, \*p<0.05, #0.05<p>0.01

INR- Indian National Rupee

Demographic differences between Internet Buyers and Non-Buyers are highly significant for Age, Family Size, Family Life Stage, Education, and Occupation. Income differences between Internet Buyers and Non-Buyers are significant. An indicative significance exists among Internet buyers and non-buyers and their gender.

Technological Differences between Internet Buyers and Non-Buyers

**Table 3: Consumers’ Computer and Internet Use Experience Comparison for Internet Buyers and Non-Buyers**

Demographics	Category	Online				χ <sup>2</sup>
		Non-buyers		Buyers		
		f	%	f	%	
Computer Usage	Less than 1 year	0	-----	16	6.1	21.05**
	1 – 3 years	16	7.1	32	12.1	
	4 – 6 years	34	17.9	56	21.2	
	7 years +	168	75	160	60.6	
	<b>TOTAL</b>	<b>224</b>	<b>100.0</b>	<b>264</b>	<b>100.0</b>	
Internet Usage Ability	Not skillful	8	3.0	-----	-----	13.95**
	Somewhat skillful	72	27.3	40	17.9	
	Skillful	104	39.4	104	46.4	
	Very skillful	80	30.3	80	35.7	
	<b>TOTAL</b>	<b>264</b>	<b>100.0</b>	<b>224</b>	<b>100.0</b>	
Internet Access	In your home/ Apartment	48	18.2	24	10.7	19.36**
	At Work Office	96	36.4	80	35.7	
	Public Facility (library/ Computer Lab, etc.)	-----	-----	8	3.6	
	Other	120	45.5	112	50.0	
	<b>TOTAL</b>	<b>264</b>	<b>100.0</b>	<b>216</b>	<b>100.0</b>	
Mode of Access	Dial-up (modem)	192	72.7	80	35.7	14.55**
	Broad Band (DSL/ Cable)	24	9.1	64	28.6	
	Satellite Internet	32	12.1	40	17.9	
	Wireless (Wi-Fi/Cellular)	16	6.1	32	14.3	
	<b>TOTAL</b>	<b>264</b>	<b>100.0</b>	<b>224</b>	<b>100.0</b>	
Weekly Internet usage (in hours)	Less than 3 hours	80	30.3	32	14.3	18.99**
	3 – 10 hours	72	27.3	80	35.7	
	11 – 20 hours	48	18.2	56	25.0	
	21 hours +	64	24.2	56	25.0	
	<b>TOTAL</b>	<b>264</b>	<b>100.0</b>	<b>224</b>	<b>100.0</b>	
Primary usage of Internet	Information and product search	64	24.2	80	35.7	14.77**
	Purchasing	96	36.4	64	28.6	
	E-mail / Chatting etc.	8	3.0	-----	-----	
	Game/Music/Downloading/ Entertainment	80	30.3	64	28.6	
	On-line banking/ Pay bills	16	6.1	16	7.1	
	<b>TOTAL</b>	<b>264</b>	<b>100.0</b>	<b>224</b>	<b>100.0</b>	

\*\*p<0.01, \*p<0.05, #0.05<p>0.01



Significant differences appear among buyers and non-buyers and in their computer usage, Internet ability usage, Internet Access, Mode of Access, weekly and primary usage of Internet.

**Attitudinal Differences toward Internet Shopping Between Internet Buyers and Non-Buyers (H<sub>3</sub>)**

Internet buyers had more positive attitudes than non-buyers towards consumer, marketing and technological factors. However significant results appear for consumer factors (t=2.879, p<0.01) (Table 4).

**Table 4: Attitude Differences between Internets Buyer and Non-Buyers**

Factor	Online				t
	Non-buyers (n=264)		Buyers (n=224)		
	μ	σ	μ	σ	
Consumer Variables	71.7	9.0	74.26	10.05	2.879**
Marketing Variables	49.7	7.1	48.82	6.30	1.512
Technological Variables	15.3	2.4	15.14	2.43	1.692

\*\*p<0.01

**Intention toward Internet Shopping of Buyers and Non-Buyers (H<sub>4</sub>)**

Internet buyers more strongly agreed that they would make a purchase on the Internet (Table 5) than did Internet non-buyers. However, the differences were not significant enough to deduce any significant relationship.

**Table 5: Intention Differences between Internets Buyer and Non-Buyers**

Factor	Online				t
	Non-buyers (n=224)		Buyers (n=264)		
	μ	σ	μ	σ	
Willingness to purchase on Internet	4.03	0.83	4.10	0.98	0.936

**6.3. EXAMINATION OF 3 GROUPS OF INTERNET SHOPPERS**

**Attitudinal Differences for Three Groups (H<sub>5</sub>)**

Internet buyers have more positive attitude towards Internet shopping than the one who simply browser or the ones who simply visit. This is highly significant for consumer variables (F=4.151, p<0.01) and significant for marketing variables (F=3.675, p<0.05) (Table 6).

**Table 6: Attitude Differences between 3 Groups of Internet Shoppers**

Factor	Visitor (n=104)		Browser (n=160)		Buyer(n=224)		F
	μ	σ	μ	σ	μ	σ	
Consumer Variables	71.6	9.9	71.8	7.4	74.3	9.5	4.151**
Marketing Variables	44.8	5.6	45.0	7.0	46.7	6.1	3.675*
Technological Variables	19.1	3.1	19.1	2.9	19.6	3.4	0.916

\*\*p<0.01, \*p<0.05

**Differences in Intention to Purchase on the Internet for Three Groups (H<sub>6</sub>)**

Intention to purchase shows no significant differences among the three groups (Table 7)

**Table 7: Intention Differences between 3 Groups of Internet Shoppers**

Factor	Visitor (n=104)		Browser (n=160)		Buyer(n=224)		F
	μ	σ	μ	σ	μ	σ	
Willingness to purchase on Internet	3.9	0.7	4.1	0.9	4.1	1.0	1.650

**6.4. PREDICTION OF INTERNET PURCHASING INTENTION**

**Prediction of Online Purchasing Intention (H<sub>7</sub>)**

To identify the variables significant in predicting online buying intention, a linear regression analysis was conducted. The demographic characteristics, technology experiences, consumer, marketing and technology factors were used as predictors in the regression equation. The regression equation accounted for 66.2% of the variance explained in Internet purchasing behavior. The results of the linear regression are presented in Table 8. Six variables were found to be significant ( $p \leq 0.05$ ) and positive predictors of online shopping behavior, gender, family size, family life stage, Internet usage ability, Primary usage of Internet and the consumer factor score. Occupation has an indicative significance ( $0.05 < p > 0.01$ ) on online shopping Behavior.

**Table 8: Prediction of Online Purchase Intention**

Predictor		β	ρ
Demographic Variables	Age	.106	0.142
	Gender	-.308	0.000**
	Family Size	.247	0.000**
	Family Lifecycle Stage	-.254	0.000**
	Education	.027	0.643
	Income	-.017	0.738
	Occupation	.080	0.091 <sup>#</sup>
Technology Experiences	Internet Usage Ability	-.128	.027*
	Primary access to the Internet	.079	.140
	Mode of access to the Internet	.016	.726
	Usage Duration of Internet	-.027	.502
	Primary Usage of Internet	.178	.000**
Consumer Factor Variables		.325	.000**
Marketing Factor Variables		-.028	.656
Technological Factor Variables		-.006	.917

R<sup>2</sup> = 0.438

F = 21.762

\*\*p<0.01, \*p<0.05, #0.05<p>0.01

The beta values shown represent the regression coefficient or the slope of the regression line. It indicates the amount of change in the dependent variable associated with one-unit change in a predictor variable. When  $\beta$  is positive, it indicates a positive or direct relationship between the predictor and dependent variable.

### 6.5. EXAMINATION OF ONLINE BUYERS

#### Attitudinal Differences for Buyers Group ( $H_8$ )

Significant attitudinal differences appear for Consumer Factor Variables ( $t=5.126$ ,  $p<0.01$ ) and Technological Factor variables ( $t=5.048$ ,  $p<0.01$ ) (Table 9) among search goods and experience goods buyers. Experienced goods buyers are more positive in outlook for Internet shopping than the search goods buyers.

**Table 9: Attitude Differences for Search Goods and Experienced Goods Buyers**

Factor	Buyers				t
	Search (n=136)		Experience (n=64)		
	$\mu$	$\sigma$	$\mu$	$\sigma$	
Consumer Variables	72.8	11.3	79.2	5.7	5.126**
Marketing Variables	44.7	6.2	45.8	4.6	1.330
Technological Variables	18.8	3.1	20.9	2.5	5.048**

\*\* $p<0.01$

#### Internet Buyers' Online Shopping Experiences Comparison ( $H_9$ )

Table 10 and 11 compare Internet purchasing experience between experience and search goods buyers. The differences are significant for repeat purchase ( $t=2.574$ ,  $p<0.01$ ) and intention to continue shopping in Internet ( $t=6.108$ ,  $p<0.01$ ).

**Table 10: Internet Purchasing Experience Comparisons between Experience and Search Goods**

**Buyers**

Experiences	Category	Buyers			
		Search		Experience	
		f	%	f	%
# of products purchased in last 6 months	One	16	11.8	8	12.5
	Two to four	56	41.2	40	62.5
	Five to seven	40	29.4	-----	-----
	Eight to ten	16	11.8	-----	-----
	More than ten	8	5.9	16	25.0
	<b>TOTAL</b>	<b>136</b>	<b>100.0</b>	<b>64</b>	<b>100.0</b>
Repeat the same purchase intention	Very unlikely	16	11.8	8	12.5
	Unlikely	8	5.9	-----	-----
	Neutral	56	41.2	8	12.5
	Likely	56	41.2	48	75.0
	<b>TOTAL</b>	<b>136</b>	<b>100.0</b>	<b>64</b>	<b>100.0</b>
Amount of money spent for last purchase	Less than Rs.1,000	32	23.5	16	25.0
	Rs.1,001 - Rs.5,000	64	47.1	24	37.5
	Rs.5,001 - Rs.10,000	16	11.8	16	25.0
	Rs.10,001 - Rs.25,000	24	17.6	8	12.5
	<b>TOTAL</b>	<b>136</b>	<b>100.0</b>	<b>64</b>	<b>100.0</b>
Intention to continue shop in Internet	Very unlikely	16	11.8	-----	-----
	Unlikely	16	11.8	-----	-----
	Neutral	40	29.4	16	25.0
	Likely	64	47.1	48	75.0
	<b>TOTAL</b>	<b>136</b>	<b>100.0</b>	<b>64</b>	<b>100.0</b>

**Table 11: Internet Purchasing Experience Comparisons Hypothesis Testing between Experience and Search Goods Buyers**

Experiences	Buyers				t
	Search		Experience		
	μ	σ	μ	σ	
# of products purchased in last 6 months	2.6	1.03	2.6	1.4	0.185
Repeat the same purchase intention	4.1	0.97	4.5	1.0	2.574**
Amount of money spent for last purchase	2.2	1.0	2.3	0.9	0.97
Intention to continue shop in Internet	4.1	1.0	4.7	0.4	6.108**

\*\*p<0.01

**Prediction of Buyers' Repurchase Intention on the Internet by Attitudinal Factors (H<sub>10</sub>)**

Linear regression was used to predict the buyers' intent to repeat the same purchase on the Internet, using the demographic characteristics, technology experiences, consumer, marketing and technology factors were used as predictors in the regression equation. The regression equation accounted for 85.9% of the variance explained in repeat intention of Internet buyer. The results of the linear regression are presented in Table 12. Nine variables were found to be significant (p ≤ 0.05) and positive predictors of online shopping behavior age, gender, family size,

family life stage, Primary usage, mode of Internet usage, duration, primary usage and the consumer factor score. Occupation has an indicative significance ( $0.05 < p < 0.01$ ) on repeat purchase intention.

**Table 12: Prediction of Intention to repurchase the same Purchase Online**

Predictor		$\beta$	$\rho$
Demographic Variables	Age	.899	.000**
	Gender	-.423	.000**
	Family Size	.499	.000**
	Family Lifecycle Stage	-.980	.000**
	Education	.016	.798
	Income	-.027	.643
	Occupation	.004	.973
Technology Experiences	Internet Usage Ability	-.014	.850
	Primary access to the Internet	.201	.001**
	Mode of access to the Internet	-.236	.000**
	Usage Duration of Internet	.230	.002**
	Primary Usage of Internet	-.710	.000**
Consumer Factor Variables		.446	.000**
Marketing Factor Variables		-.176	.056 <sup>#</sup>
Technological Factor Variables		.049	.577

$R^2 = 0.739$

$F = 33.747$

\*\* $p < 0.01$ , \* $p < 0.05$ , <sup>#</sup> $0.05 < p < 0.01$

## 7. FINDINGS

In general, the study findings indicated that it is possible to collectively measure respondents' consumer, marketing, technological attitudes as a single factor. This offers greater parsimony in model building, thus, improving statistical testing. Not only do the items hold together as a scale but they also moderately correlate with each other. One score can replace the twenty individual items found within the consumer area or the fourteen items in the marketing area or four items in the technological area. It is important to note, however, that while the composite score offers a gain in data analysis, there is a corresponding loss in the specificity as to which variable most specifically influences one's attitude.

Overall, the consumer factor showed a strong relationship in predicting online purchase intention and marketing and technology factors showing no relationship. The consumer factor was not only significant between the three groups but was also significant throughout the study in terms of predicting who intends to buy online and who actually does buy online. As a single factor, it represents individual issues found important by other studies (Fram & Grady, 1997; Then &

Delong, 1999). In the study findings, the respondent's consumer attitude factors was a more significant predictor of Internet purchasing than were demographic characteristics such as gender, family size and family life stage. Occupation showed indicative significance only. The marketing factor showed little predictive ability in this study. This may have been influenced by the weak relationship identified by the moderate alpha coefficient. Among technology items, only 'primary usage of internet' and 'internet usage ability' showed significance.

### **7.1. ONLINE BUYER GROUPS**

Internet browsers were the consumers who shopped through the Internet with an intention to purchase a product but had not yet completed an online transaction. Internet browsers have positive attitudes toward the use of the Internet as an alternative shopping tool; there may be several things the e-tailer can try. First the e-tailer can build trust. Trust develops over time and becomes an antecedent to commitment, the initial step in converting an online shopper into a buyer (Quelch & Klein, 1996; Singh & Sirdeshmukh, 2000). Based on the finding that respondents who stayed longer online were more likely to make a purchase. The merchant might also find ways to encourage the browser to stay longer for searching and shopping on the Internet. This may mean making the online store entertaining and dynamic. If the web site can encourage people to stay around, one might expect to see more browsers become buyers.

It also may be that, even though the literature suggests that Internet browsers agree with the relative advantages of Internet shopping, they still prefer to make the purchase at the brick and mortar stores or they couldn't finalize the transaction. For the first reason, a substantial discount for buying online may encourage them to make that first purchase. The second reason could be a result of several technology issues. If this is the case, the merchant must first obtain more data regarding the problem. Setting up an easy email site to report such technology problems might be a good first step. The browsers might also hesitate to purchase products online because of their financial security concern (Udo, 2001). Continued marketing around this issue might be the answer. Another reason could be the tactility-related, or the ability to examine by see and touch a product before purchasing (Bhatnagar, et al., 2000; Komiak & Benbasat, 2004). Perhaps this issue can be overcome with liberal return policies. Such return, and the corresponding delivery problems, might be overcome by incentives, building an alliance with a delivery service company, shortening the shipping time and lowering or eliminating both the delivery and return shipping charges or to set a certain amount of purchase for free delivery thus also bolstering the e-tailers' sales.

The goal of marketing is to increase sales and profits. Marketing professionals know that the ability to increase sales is often most easily done by focusing on the current buyers. It is the

analyzing and understanding of the current buyers' purchasing behaviors where marketers and e-tailers should perhaps make their first move towards the development of a more fully integrated marketing and communication plan. The Internet buyers were the consumers who had purchased a product through the Internet. Based on these findings, the Internet buyers were mostly single with some income and lived off-campus. They had a computer and Internet access, considered their Internet skills as good, and had more years of Internet using experience as opposed to any of the groups who had not made an online purchase. Internet buyers had a positive attitude toward the consumer and marketing factors of Internet purchasing and they also showed a higher intention for future online shopping than Internet non-buyers. They already see Internet shopping as a convenient, easy to use, and a time and effort saving activity. Internet buyers considered Internet shopping safe with privacy protection and secure financial payment processing. They trusted the merchants thus minimizing the tactility issue and believed Internet shopping has reasonable delivery and return policies.

To encourage this group to buy more may be as simple as encouraging them to spend more time at the store web site based on the connection between length of time that consumers spent on the computer and the likelihood of being a buyer. Marketers and e-tailers should try to make their online stores more entertaining by using up-to-date technology, such as apps, 3-D, animation, or video clips. By doing so consumers may spend more time surfing the store, thus staying at the site longer and perhaps leading to more purchases. The merchant could consider discounts for online buying and may tie the discounts to the amount of goods already purchased online. As both Internet buyers and non-buyers used the Internet for communication, marketers and e-tailers should also be in regular communication with the buyers through such things as promotional emails advertising their specials or a buyer's chat room where previous buyers can discuss topics related to the store. It also may be possible to offer the online buyer special or unique services.

## **7.2. EXPERIENCE GOODS BUYERS VS. SEARCH GOODS BUYERS**

For the respondents who were Internet buyers, the study offers additional information based on the most commonly purchased item, experience goods or search goods.

Consumer and technological factors are significantly higher for experience goods buyer than search goods buyers.

On intention to repeat the existing purchases and intention to continue Internet shopping, experience goods buyers have significantly higher scores to their search good buyer counterparts. The positive feelings and attitudes toward Internet shopping were influenced by the Internet buyers' previous online experiences and encouraged them to make future purchases. This finding is supported by other research (Eastlick & Lotz, 1999; Liang & Huang, 1998). It is therefore

important that the e-tailer make every effort to ensure that the buyers' experiences are as positive as possible.

In summary, overall consumers' issues were a significant indicator for future online purchase intention and behavior. Another global issue in increasing online buying would seem to be increasing the amount of time spent online. The study also supports the idea of classifying where the consumer is in terms of making an online purchase. From such classification, more specific recommendations are offered such as to offer online demonstrations in the store for the non-web shoppers or to focus on creating a site that attracted the web visitors to spend some time. For Internet browsers, discounts may be a key. For existing buyers, understanding what they buy and then making the online purchase quicker for the search good buyers or offering more information for the experience good buyers may be possible tactics.

## **8. MANAGERIAL IMPLICATIONS**

Despite the remarkable growth in Internet sales, there is evidence to suggest that there are many consumers shopping with intent to buy at retail web sites who for some reason do not complete the transaction. The purpose of this study was to examine those individuals that completed an Internet purchase and to compare them to those who just shop and brows. The study examined three consumer groups, web-store visitors with no intention of purchasing, Internet browsers with an intention to purchase and Internet buyers, using an empirical model based partially on Fishbein and Ajzen's 'Theory of Reasoned Action' (1975) and Cowles, Kieker, and Little's 'E-tailing Theory' (2002).

As hypothesized by the framework, the research identified three factors, a consumer, marketing and technological factors, among the three groups. Differences in demographics and technology use were also noted between the groups. Based on the findings such as the relationship between time spent online and online buying and the significant of the consumer factor overall, suggestions were offered to retailers interested in selling via the Internet.

There are several limitations to the study. First, Internet retailers must consider the results of this study carefully since it represented only a small sample. Also the nature of the sample, data collection methods, and research structure must be taken into account. The study was cross-sectional in nature and represented a one-time data collection. For future research, a longitudinal study would be helpful to avoid such disadvantages. Further research might try to examine the consumers' Internet shopping by repeating the same survey periodically. Then the results of the study can examine how respondents' attitudes change before and after purchase and /or how those changes may differ on a first- time purchase or a later purchase.



In order to be effective, an Internet shopping environment must focus on the consumer and marketing factors of Internet shopping. In order to facilitate Internet purchasing, e-tailers should acknowledge both of the consumer and marketing factors collectively and improve the quality of service at their Internet stores. Today's consumers are savvy, regarding information, technology, and shopping both from hedonic and utilitarian points of view. All groups studied, have their own beliefs, attitudes, decision-making strategies, and experiences.

To attract all groups of consumers to Internet buying, e-tailers will need to tailor specific parts of his or her marketing campaign to meet the specific demands and needs of each group. They need to understand that just as in brick and mortar retailing the Internet customer is not a homogeneous group. It represents a variety of individuals with different attitudes and online shopping intentions. E-tailers need to focus on what the consumers want in exchange for their money, time, and effort not only in terms of product and customer service but also Internet experience.

**REFERENCES**

- Agarwal, R., & Prasad, J. (1997). The role of innovation characteristics and perceived voluntariness in the acceptance of information technologies. *Decision Sciences* 28(3), 557-582.
- Agarwal, R., & Prasad, J. (1999). Are individual differences germane to the acceptance of new information technologies? *Decision sciences* 30(2), 361- 391.
- Ajzen, I. (1991). The theory of planned behavior: Some unresolved issues. *Organizational Behavior and Human Decision process*, 50, 179-211.
- Alba, J., Lynch, J., Weitz, B., Janiszewski, C., Lutz, R., Sawyer, A., & Wood, S. (1997). Interactive home shopping: Consumer, retailer, and manufacturer incentives to participate in electronic marketplace. *Journal of marketing*, 61, 38-53.
- Anderson, Jr. W.T. (1971). Identifying the convenience-oriented consumer. *Journal of Marketing Research*, 8, 179-184.
- Auger, P., &Gallaughier, J. M. (1997). Factors affecting the adoption of the Internet–based sales presence for small businesses. *Information Society*, 13(1), 55-74.
- Balabanis, G., & Reynolds, N. (2001). Consumer attitudes towards multichannel retailers' web sites: The role of involvement, brand attitude, Internet knowledge and visit duration. *Journal of Business Strategies*, 18(2), 105-132.
- Bear, G.G., Richards, H.C. & Lancaster, P. (1987). Attitude toward computer: Validation of computer attitude scale. *Journal of Educational Computer Research*, 13, 207-218.
- Bell, G., &Gemmell, J. (1996). On ramp prospects for the information super highway dream. *Communications of the ACM*, 39(6), 37.
- Bellman, S., Lohse, G., & Johnson, E.J. (1999). Predictors of online buying behavior. *Association for Computing Machinery. Communications of the ACM*, 42(12), 32-38.
- Benjamin, R., & Wigand, R. (1999). Electronic market and virtual value chains on the information superhighway. *Sloan Management Review*, 36, 62-72.
- Berkowitz, E.N., Walton, J.R., & Walker, O.C. (1979, Summer). In–home shoppers: The market for innovative distribution systems. *Journal of Retailing*, 55, 15-33.
- Bhatnagar, A., Misra, S., & Rao, H.R. (2000). On risk, convenience, and Internet shopping behavior. *Communications of ACM*, 43(1), 98-105.
- Bhianmani, A. (1996). Securing the commercial Internet. *Communications of the ACM*, 39(6), 29-36.
- Blattberg, R., &Wisniewsk, K. (1989). Price-induced patterns of competition. *Marketing Science*, 8(4), 291-309.
-

- Bolton, R. (1989). Relationship between market characteristics and promotional price elastics. *Marketing Science*, 8(2), 153-169.
- Burroughs, R. E., & Sabherwal, R. (2002). Determinants of retail electronic purchasing: A multi-period investigation, *INFOR*, 40(1), 35-56.
- Byford, K. S. (1998). Privacy in cyberspace: Constructing a model of privacy for the electronic communications environment. *Rutgers Computer and Technology Law Journal*, 24, 1-74.
- Chaston, I. (2000). *Entrepreneurial marketing; competing by challenging conventions*. London: Macmillan Business Press.
- Cheskin Research and Studio Archetype/Sapient (1999). *E-Commerce Trust Study*. January
- Cho, S., Byun, J., & Sung, M. (2003). Impact of the high-speed Internet on user behaviors: case study in Korea. *Internet Research* 13(1), 49-60.
- Chung, E. (2001). *Factors influencing purchase decisions of online apparel shoppers*. Unpublished doctoral dissertation, University of California, Davis.
- Citrin, A.V., Sprott, D.E., Silverman, S.N., & Stem, D.E. (2000). Adoption of Internet shopping: the role of consumer innovativeness. *Industrial Management & Data Systems*, 100(7), 294-300.
- Cockburn, C., & Wilson, T. D. (1996). Business use of the World Wide Web. *International Journal of Information Management* 16(2), 82-102.
- Cowles, D. L., Kieker, P., & Little, M. (2002). Using key information insights as a foundation for e-tailing theory development. *Journal of Business Research*, 55(8), 629-636.
- Cowles, D. L., Kieker, P., & Little, M. (2002). Using key information insights as a foundation for e-tailing theory development. *Journal of Business Research*, 55(8), 629-636.
- Dahiya, R. (2012). The impact of demographic factors of consumers on online shopping Behavior: a study of consumers in India. *International Journal of Engineering and Management Sciences*, 3(1), 43-52.
- Dickerson, M.D., & Gentry, J.W. (1983). Characteristics of adopter and non-adopters of home computers. *Journal of Consumer Research*, 10, 225-235.
- Dillman, D.A. (1991). The design and administration of mail surveys. *Annual Review of Sociology*, 17, 225-249.
- Donthu, N., & Garcia, A. (1999). The Internet shopper. *Journal of Advertising Research*, 39(2), 52-58.
- Ducoffe, R. H. (1996). Advertising value and advertising on the web. *Journal of Advertising Research*, 36(5), 21-35.

Eastlick, M.A., & Lotz, S. (1999). Profiling potential adopters and non-adopters of an interactive electronic shopping medium. *International Journal of Retail and Distribution Management*, 27(6), 209-223.

Engel, J.F., Blackwell, R.D., & Miniard, P.W. (1995). *Consumer behavior* (8th edition). Orlando, FL: The Dryden Press.

Eroglu, S., Machleit, K., & Davis, L. (2003, February). Empirical testing of a model of online store atmospherics and shopper responses. *Psychology and Marketing*, 20(2), 139-150.

Eroglu, S., Machleit, K., & Davis, L. (2003, February). E-satisfaction and e loyalty: A contingency framework. *Psychology and Marketing*, 20(2), 123-138.

Falk, L. K., Sockel, H. & Chen, K. (2005). E-commerce and consumer's expectations: what makes a website work. *Journal of Website Promotion*, 1(1), 65-75.

Fishbein, M. A., & Ajzen, I. (1975). *Belief, attitude, intention and behavior: An introduction to theory and research*. Reading, MA: Addison-Wesley.

Fram, E. H., & Grandy, D.B. (1995). Internet buyers: Will the surfers become buyers? *Direct Marketing*, 57(10), 63-65.

Furger, R. (1999). On the Web you have no secret. *PC World*.17 (7), 29.

Gallagher, K., Foster, K., & Parsons, J. (2001). The medium is not message: Advertising effectiveness and content evaluation in print and on the Web. *Journal of Advertising Research*, 41(4). 57-70.

Garbarino, E., & Johnson, M.S. (1999). The different roles of satisfaction, trust, and commitment in customer relationships. *Journal of Marketing*, 63(2), 70-88.

Gatignon, H., & Robertson, T. S. (1985, August). A prepositional inventory for new product forecasting. *Journal of Marketing Research*, 10, 308-311.

Gehrt, K.C., & Carter, K. (1992). An exploratory assessment of catalog shopping orientations: the existence of convenience and recreation segments. *Journal of Direct Marketing*, 6(1), 20-39.

George, J. F. (2002). Influences on the Internet to make Internet purchases. *Internet Research: Electronic Networking Application and Policy*, 12(2), 165-180.

Gupta, S., & Chatterjee, R. (1996). Consumer and cooperate adoption of the World Wide Web as a commercial medium. In R.A. Peterson (Edition), *Electronic Marketing and the Consumer*, pp123-138.

Harden, A.J. (1996). TV shopping: A summary of women's attitudes gained through focus group discussions. *Journal of Family and Consumer Sciences*, 88(4), 58-62.

Hirschman, E. C., & Tompson, C. J. (1997). Why media matter: Toward a richer understanding of consumers' relationships with advertising and mass media. *Journal of Advertising*, 26(1), 43-60.

---

Hoffman, D. L., & Novak, T. P. (1996). Marketing in hypermedia computer mediated environments: Conceptual foundation. *Journal of Marketing*, 60, 50-68

Hoffman, D. L., Novak, T.P., & Chatterjee, C. (1996). Commercial scenarios for the Web: Opportunities and challenges, *Journal of Computer Mediated Communication*. 1(3). [Online], Available: <http://www.usc.edu/dept/annenberg/journal.html>

Hoffman, D.L., Kalsbeek, L., & Novak, T.P. (1996, December). Internet and Web use in the USA. *Communications of the ACM*, 39, 36-46.

Houston, P. (1998). Banks have what Web wants-trust. [Online]. The ZDNET News Channel. <http://www.zdnet.com/zdnet/content/zdnet/0130/280952.html> [02/02/1998].

Hsiao, M. H. (2009). Shopping mode choice: physical store shopping versus e-shopping. *Transportation Research Part E: Logistics and Transportation Review*, 45(1), 86-95.

Huang, M. (2000). Information load: its relationship to online exploratory and shopping Behavior. *International Journal of Information Management*, 20(1), 337-347.

Iacobucci, D. (1998). Services: What do we know and where shall we go? A view from marketing. In R.E. Swartz, D.E. Bowen, & D. Iacobucci (Eds.), *Advances in Services Marketing and Management*, 7, pp. 1-96. Greenwich, CT: JAI Press.

Jarvenpaa, S. L., & Tractinsky, N. (1999). Consumer Trust in an Internet Store: A Cross-Cultural Validation. *Journal of Computer Mediated Communication*, 5(2).

Jones, K., & Biasiotto, M. (1999). Internet retailing: current hype or future reality? *The International Journal of Retailing Distribution & Consumer Research*, 9(1), 69-79.

Katz, K. L., Larson, B. M., & Larson, R. C. (1991, Winter) Prescription for the waiting-in-line blues: Entertain, enlighten, and engage. *Sloan Management Review*, 32, 44-53.

Kay, R.H. (1993). An exploration of the theoretical and practical foundations for assessing attitudes toward computers: The computer attitude measure (CAM). *Computers in Human Behavior*, 9, 371-386.

Klassen, M.L., & Gylmn, K.A. (1992, Summer). Catalog loyalty: Variables that discriminate between repeat and non-repeat customers. *Journal of Direct Marketing*, 6, 60-67.

Klein, L. R. (1998). Evaluating the potential of interactive media through anew lens: Search versus experience goods. *Journal of Business Research*, 41,195-203.

Komiak, S.X., & Benbasat, I. (2004). Understanding customer trust in agent-mediated electronic commerce, web mediated electronic commerce and traditional commerce. *Information Technology and Management*, 5(1/2), 181-207.

Korgaonkar, P. K., Karson, E.J., & Akaah, I. (1997). Direct marketing advertising: The assents, the dissents, and the ambivalent. *Journal of Advertising Research*, 37(5), 41-55.

---

Kuczmariski, T. D. (1996). What is innovation? The art of welcoming risk. *Journal of Consumer Marketing*, 13(5), 7-11.

Kunz, M.B. (1997). On-line customers: identifying store, product and consumer attributes which influences shopping on the Internet. Unpublished doctoral dissertation. The University of Tennessee, Knoxville.

Lee, M., & Johnson, K. K. P. (2002). Exploring differences between Internet apparel purchasers, browsers and non-purchasers. *Journal of Fashion Marketing and Management*, 6(2), 146-157.

Lenhart, A., (2000). Who's not online: 57 percent of those without Internet access say they do not plan to log on. Pew Internet and American life project.[Online]. Available: <http://www.pewinternet.org>.

Liang, T. P., & Huang, J. S. (1998). An empirical study on consumer acceptance of products in electronic markets: A transaction cost model. *Decision Support Systems*, 24, 29-43.

Lohse, G.L., Bellman, S., & Johnson, E.J. (2000). Consumer buying behavior on the Internet. *Journal of Interactive Marketing*, 14(1), 15-29.

Mahajan, V., Muller, E., & Bass, F.M. (1990). New product diffusion models in marketing: A review and directions for research. *Journal of Marketing*, 54, 1-26.

Maignan, I., & Lukas, B.A. (1997). The nature and social uses of Internet: a qualitative investigation. *Journal of Consumer Affairs*, 31(2), 345-371.

Malhotra, N. & Dash, S. (2011). *Marketing Research – An Applied Orientation* (6<sup>th</sup> edition). Dorling Kindersley

Mehta, R., & Sivadas, E. (1995). Direct marketing on the Internet: An empirical assessment of consumer attitudes. *Journal of Direct Marketing*, 9(3), 21-32.

Milne, G. (2000). Privacy and ethical issues in database/Interactive marketing and public policy: a research framework and overview of the special issue. *Journal of Public Policy & Marketing*, 19(1), 1-6.

Miyazaki, A. D., & Krishnamurthy, S. (2002). Internet seals of approval: Effects on online privacy policies and consumer perceptions. Working paper.

Miyazaki, A. D., & Fernandez, A. (2001). Consumer perceptions of privacy and security risks for online shopping. *The Journal of Consumer Affairs*, 35(1), 24-44.

Moda, J. (1997, October). Privacy issues surrounding the Internet. *PC Week*, 83.

Molesworth, M. & Suortti, J. P. (2001). Buying cars online: the adoption of the Web for high involvement, high cost purchases. *Journal of Consumer Behavior*, 2(2), 155-168.

Mowen, J.C., & Minor, M. (1998). *Consumer behavior* (5th edition). Upper Saddle River, NJ: Prentice-Hall.

---

Mulhern, F. J. (1997). Retail marketing: From distribution to integration. *International Journal of Research in Marketing*, 14, 103-124.

O’Cass, A., & Fenech, T. (2002). Web retailing adoption: Exploring the nature of Internet users Web retailing behavior. *Journal of retailing and consumer services*, 10(2), 81-94.

O’Keefe, R. M., O’Connor, G., & Kung, H. J. (1998). Early adopters of the Web as a retail medium: Small company winners and losers. *European Journal of Marketing*, 25(1), 38-43.

Palmer, J. W. & Markus, M. L. (2000). The performance impacts of quick response and strategic alignment in specialty retailing. *Information Systems Research*, 11(3).

Pavlou, P. A. (2003). Consumer acceptance of electronic commerce: integrating trust and risk with the technology acceptance model. *International Journal of Electronic Commerce*, 7(3), 69-103.

Peterson, R. A., Balasubramanian, S., & Bronnenberg, B. J. (1997). Exploring the implications of the Internet for consumer marketing. *Journal of Academy of Marketing Science*, 24(4), 329-346.

Poel, D.V., & Leunis, J. (1996). Perceived risk and risk reduction strategies in mail-order versus retail store buying. *The International Review of retail, Distribution and Consumer Research*, 6(4), 351-371.

Quelch, J.A., & Klein, L. R. (1996, Spring). The Internet and international marketing, *Sloan Management Review*, 37, 60-75.

Rainne, L. (2002). *Internet and American life*. Washington, D. C.: Pew Internet and American Life Project.

Rogers, E. M. (1995). *Diffusion of innovations* (4th edition). New York: The Free Press.

Rosen, K.T., & Howard, A.L. (2000). E-retail: gold rush or fool’s gold? *California Management Review*, 42(3), 72-100.

Salisbury, W.D., Pearson, R.A., Pearson, A.W., & Miller, D.W. (2001). Perceived security and World Wide Web: Purchase intention. *Industrial Management and Data Systems*, 101(3/4), 165-177.

Schiffman, L.G., Sherman, E., & Long, M.M. (2003). Toward a better understanding of the interplay of personal values and the Internet. *Psychology & Marketing*, 20(2), 169-186.

Schneider, B., & Bowen, D. E. (1999). Understanding customer delight and outrage. *Sloan Management Review*, 41(1), 35-46.

Scott, J.T. (2000). Clicks and mortar: the future of e-commerce. *Office Solutions*, 17(4), 35-39.

Seckler, V. (1998, October). Apparel marketers getting online. *Women ‘swear Daily*, 14, 1-14.

Segars, A.H., & Grover, V. (1993). Re-examining perceived ease of use and usefulness: A confirmatory factor analysis. *MIS Quarterly*, 517-525.

Settle, R.B., Alreck, P.L., & McCorkle, D.E. (1994). Consumer perceptions of mail/phone order shopping media. *Journal of Direct Marketing*, 8(3), 30-45.

---

Shim, S., & Drake, M.F. (1990). Consumer intention to utilize electronic shopping. *Journal of Direct Marketing*, 4(3), 22-52.

Shim, S., & Mahoney, M.Y. (1991). Electronic shoppers and non-shoppers among videotext users. *Journal of Direct Marketing*, 5(3), 29-38.

Shim, S., Eastlick, M. A., Lotz, S. L., & Warrington, P. (2001). An online pre-purchase intentions model: The role of intention to search. *Journal of Retailing*, 77, 397- 416.

Singh, J., & Sirdeshmukh, D. (2000). Agency and trust mechanisms in consumer satisfaction and loyalty judgments. *Academy of Marketing Science Journal*, 28(1), 150-168.

Solomon, M. R. (1998). *Consumer behavior*. New York, NY: Prentice Hall.

Spiller, P., & Lohse, G.L. (1997). A classification of Internet retail stores. *International Journal of Electronic Commerce*, 2(2), 29-56.

Srinivasan, S.S., Anderson, R., & Ponnaveolu, K. (2002). Customer loyalty in e-commerce: an exploration of its antecedents and consequences. *Journal of Retailing*, 78, 41-50.

Stell, R., & Paden, N. (1999). Vicarious exploration and catalog shopping: a preliminary investigation. *The Journal of Consumer Marketing*, 16(4), 332-346.

Stephen, D. L., Hill, R.P., & Bergman, K. (1996). Enhancing the consumer-product relationship: Lessons from the QVC home shopping channel. *Journal of Business Research*, 37(3), 193-201.

Stevens, J. (2002). *Applied Multivariate Statistic for Social Sciences*. 4<sup>th</sup> edition. Lawrence Erlbaum Associates. Mahwah, NJ

Sultan, F., & Henrichs, R.B. (2000). Consumer preferences for Internet services over time: initial explorations. *The Journal of Consumer Marketing*, 17(5), 386-403.

Taylor, S. L., & Cosenza, R. M. (1999). A conceptual choice model for hospital services. *Journal of Marketing theory and Practice*, 7(4), 20-33.

Tedeschi, B. (1999, March). Internet retailers are attracting lots of window shoppers. Now the push is on to turn those shoppers into buyer. *New York Times*, New York, 4.

Then, N., & DeLong, M. (1999). Apparel shopping on the Web. *Journal of Family and Consumer Sciences*, 91(3).

Tseng, M., DeVellis, R. F., Kohlmeier, L., Khare, M., Maurer, K. R., Everhart, J. E., & Sandler, R. S. (2000). Patterns of food intake and gallbladder disease in Mexican Americans. *Public Health Nutrition*, 3, 233-243.

Udo, G. (2001). Privacy and security concerns as major barriers for ecommerce: A survey study. *Information Management & Computer Security*, 9(4).

Van Tassel, S., & Weitz, B.A. (1997). Interactive home shopping: all the comforts of home. *Direct Marketing*, 59(10), 40.

---



Venkatesh, V. (2000). Determinants of perceived ease of use: integrating control, intrinsic motivation, and emotion into the technology acceptance model. *Information System Research*, 11(4), 342-365.

Vijayarathy, L.R. (2002). Product characteristics and Internet shopping intentions. *Internet Research: Electronic Networking Applications and Policy*, 12(2), 411-426.

Vogt, W.P. (1998). *Dictionary of Statistics & Methodology* (2nd edition). Sage publication: Thousand Oaks, CA.

Walters, R.G., & Jamil, M. (2000). Exploring the relationship between shopping trip type, purchases of products on promotion, and shopping basket profit. *Journal of Business Research*, 56, 17-29.

Wang, H., Lee, M.K.O., & Wang, C. (1998). Consumer privacy concerns about Internet marketing. *Communications of the ACM*, 41(3), 63-70.

Ward, S. J. (2008). The consumer-perceived risk associated with the intention to purchase online. Dissertation submitted in partial fulfillment of the degree Master of Commerce. Cape Town: Stellenbosch University.

Windsor, R., Baranowski, T., Clark, N., & Cutter, G. (1994). Evaluation of health promotion, health education, and disease prevention programs. 2, 234-239. Mountain View, CA, Mayfield Publishing Company.

Woodside, A.G., & Waddle, G.L. (1975, June). Sales effects of in-store advertising and price specials. *Journal of Advertising Research*, 15, 29-34.

Wright, M., & Charitt, D. (1995). New product diffusion models in marketing: an assessment of two approaches. *Marketing Bulletin*, 6, 32-41.

Yoh, E. (1999). Consumer Adoption of the Internet for apparel shopping. Unpublished doctoral dissertation, Iowa State University, Ames. 125

Yrjola, H (2001). Physical distribution considerations for electronic grocery shopping. *International Journal of Physical Distribution & Logistics Management*, 31(9/10).