Chapter-VI
DISCUSSION

The World Wide Web has grown phenomenally since its inception in 1990. B2C E-Commerce sales in Asia-Pacific region alone was $59.1 billion in 2006, which is expected to grow to $168.7 billion by 2011 (Appendix C). A survey conducted by Mastercard Worldwide reveals Indian customers shopped online more frequently in the fourth quarter of 2008 than in the same period the previous year, despite the bleaker economic climate. Not only did consumers shop online more frequently despite the economic climate, with the exception of Korea, Singapore and Hong Kong, all other markets surveyed showed an increased intention for future online shopping compared to a year earlier. Online shopping is growing in popularity in developing countries, as consumers realize the convenience and ease of shopping online. As businesses look to grow their online retail presence, they need to be aware of the preferences and concerns that drive online shoppers.

Researchers have conducted several studies to examine the relationship between perceived ease of use, perceived usefulness, attitudes towards using, and the actual behavior of other information technologies in recent years. The model frequently used in these research is TAM (Technology Acceptance Model) and the model has received wide acceptance. TAM posits that perceived ease of use and perceived usefulness can predict attitudes toward using technology that then can predict the usage of that technology. Several researchers have thus validated TAM using several different applications including primarily e-mail, voice mail, word processing, and spreadsheets. Other researchers have recommended the investigation of Web user behavior and online shopping.
But as mentioned in the research gaps section, the fact remains that not all the limitations (specified in a prior section) of these models and theories are seriously looked into for solutions making the models robust. First of all, there is a dearth academic research in developing countries specifically in Indian context exploring the acceptance of online shopping in India. As mentioned previously there seems to be a huge potential for growth in online shopping during next few years depending on the development of infrastructure. The exponential growth of internet penetration in India and increased e-commerce activity both on consumer side as well as corporate side during last few years provides the impetus to investigate this phenomenon among potential online shoppers. Therefore, the first purpose of this study was to explore the future adoption of online shopping in India. The discussion through the rest of this report touches findings in line with this objective through discussion of the results of other objectives of the study.

While demographic indicators such as age, gender, marital status, and income have been traditionally used in the study of consumer behavior and market segmentation, personality is not taken into consideration by the existing models and theories. Chen et al. (2003) included the compatibility construct of IDT in the TAM model for addressing the individual’s personality and his or her social context in which internet shopping takes place. Compatibility was evaluated by assessing the innovation’s compatibility with existing values and beliefs, previously introduced ideas and potential adopters’ needs as proposed by Rogers (1995). In these studies the measurement scale adapted from Moore and Benbasat (1991) for compatibility (Which is a three-item scale) seems to be quite an ordinary approach towards evaluating compatibility. For precisely evaluating compatibility, with the most aspects of shopping and product information seeking, lifestyles and shopping preferences, this study focused on validating the elaborated
shopping oriented scale, proposed by Vijayasarathy (2001) and identifying various shopping orientations in Indian context.

6.1 Shopping Orientations Scale
The scale was found to be scientifically reliable with cronbach’s alpha values above 0.70. Further, the scale was found to be acceptable on the validity front as well demonstrating both nomological and discriminant validity. The scale displayed theoretically supported relationships with other variables, demonstrating nomological validity. It was also distinguishable from the constructs of knowledge of online shopping demonstrating discriminant validity. Thus, it can be concluded that the present shopping orientation scale is sound and future researches should utilize the same especially for studying shopping profiles in the Indian context as well as to further establish its psychometric properties.

The attempt to identify various shopping orientations in Indian context resulted in four major shopping orientations, which were named Home, Economic, Mall-Socializing and Personalizing shopping orientation. The study of earlier research had revealed that Mall and Socializing shopping orientations should be different from each other but the factor analysis revealed only single shopping orientation encompassing both. The reason might be the very early stage of organized retailing in India (Refer to Parikh (2006)). Because of having less exposure to organized retailing, consumers may have found it difficult to associate themselves with a particular type of shopping-orientation. Once consumers will have enough opportunity to get exposed to mall shopping environment it might be easier for them to identify themselves with Mall vs. Socializing shopping orientation.
6.2 Shopping Orientations, Perceived Usefulness (PU) and Attitude Towards Using (A)

Based on the characteristics of each shopping orientations mentioned in earlier research and the nature of online shopping, the current study proposed relationship of each shopping orientation with Perceived Usefulness and Attitude towards using. The following section discusses the results of this objective in separate sections and gives introspection in line with the findings.

6.2.1 Home Shopping Orientation, Perceived Usefulness (PU) and Attitude Towards Using (A)

Home shopping orientation encompasses the dimensions of convenience, enjoyment, and/or necessity. Consumers may prefer in-home shopping modes on account of convenience and/or the lack of local shopping alternatives (Vijayasarathy, 2003). The positive and significant relationship between Home shopping orientation and Perceived Usefulness strongly suggests that consumers’ home shopping orientation could be a reliable predicator of Perceived Usefulness for online shopping. Further, the positive relationship between Home shopping orientation and Attitude towards using online shopping (A) indicates that patrons of direct/catalogue sales could be more easily persuaded to adopt online shopping. Similar findings were reported by Balabanis and Vassileiou (1999). This consumer group has a preference for in-home shopping modes and has experience and a level of comfort with shopping using non-store alternatives. Therefore, even though some among this group may be averse to technology or may not have the required equipment or resources to engage in electronic shopping, online retailers hoping to build their customer base should actively pursue this consumer segment.
6.2.2 Economic Shopping Orientation, Perceived Usefulness (PU) and Attitude Towards Using (A)

As the name indicates, an economic shopper would attempt to maximize her returns by carefully evaluating price, quality, and value. This type of shopper can be expected to spend a considerable amount of time collecting information about the available alternatives before making a purchase decision. Earlier studies (Korgaonkar, 1981, 1984) focused on studying patrons of catalog showrooms concluded that patrons of catalog showrooms were more likely to have an economic rather than Socializing or Home Shopping Orientation. The internet offers a number of benefits that may appeal to an economically oriented shopper. It can provide an abundance of product related information that can help a shopper make detailed comparisons among competing alternatives. Further, the availability of shopping agents such as mySimon.Com, which collate and present price and features information from multiple vendors for a given product, can save time and make the task of comparison shopping more efficient. In addition to comparison shopping, cost savings generated by disintermediation, virtual storefronts, and digital delivery may be passed on to consumers in the form of lower prices on products and services. For an economic shopper, the assistance with evaluating alternatives and the potential for maximizing value makes the internet an attractive shopping medium. Because of this, it was proposed that Economic shoppers should have a very high perceived usefulness and a positive attitude towards using online shopping. The analysis of data in this study indicates the same and the relationship is highly significant for both the attributes.
6.2.3 Mall-Socializing Shopping Orientation, Perceived Usefulness (PU) and Attitude Towards Using (A)

There is a significant negative relationship between Mall-Socializing shopping orientation and Perceived Usefulness (PU) and Attitude towards using (A). This means Mall-Socializing shopping orientation does help in predicting Perceived Usefulness of and Attitude towards online shopping but result into negative Perceived Usefulness and Attitude towards online shopping. Mall-oriented shoppers consider these shopping centers to be the best places to shop. They prefer to shop at physical stores and like the variety of stores that malls tend to offer (Bloch et al., 1994). Based on their preference for shopping at physical stores, this type of shopper may be less inclined to shop using the internet. A Socializing shopper tends to combine shopping with social activities. This type of shopper may use shopping as an occasion to meet with friends and/ or an opportunity to dine out. Since online shopping, in its present form is typically not geared for socializing, the Socializing shopper can be expected to have low intention to shop using the internet.

6.2.4 Personalizing Shopping Orientation, Perceived Usefulness (PU) and Attitude Towards Using (A)

The prospect of shopping for products and services from vendors who may not have any ties to the local community may be unacceptable for personalizing shoppers (Vijayasarathy, 2003). The personalizing shopper would be inclined to build close relationship with the store personnel and tend to make purchases close to home. For shoppers who fall under this category, shopping at stores where they can interact with salespeople and clerks on a personal level is important. They also make it a point to shop at stores in their immediate neighborhood with the objective of keeping the monies within the community. In order to preserve and build their community, this shopper would
feel obligated to patronize local stores. Based on these characteristics, Personalizing shoppers were also expected to be less enthusiastic about online shopping. The impersonal nature of most online transactions may turn-off personalizing shoppers, who would prefer to interact with a “live” salesperson or clerk with whom they have built a relationship. The findings of the study show that the Personalizing shopping orientation is significantly negatively related to Perceived usefulness and Attitude towards using online shopping which is in line with the expectations and characteristics of these kind of shoppers.

Overall, all four shopping orientations were found to be good predictors of Perceived Usefulness of and Attitude towards using online shopping and the directional causal relations were also found to be in line with expectations.

6.3 Knowledge (K), Perceived Usefulness (PU) and Perceived Ease of Use (PEOU)

The contribution of Knowledge (K) to the prediction of Perceived Usefulness (PU) was found to be insignificant when tested as a part of the variate including Shopping orientations and Perceived Ease of Use (PEOU). On the contrary, when Knowledge (K) alone was tested for its predictive power for Perceived Usefulness (PU), the relationship was significant. This indicates that Knowledge as a standalone construct has significant impact on perceived usefulness, but when treated as part of a model including Perceived Ease of Use (PEOU) and shopping orientations, the relative importance of Knowledge diminishes. When consumers make decision, all the personal and contextual characteristics play a role together and contribution of a characteristic as a totality should be given priority as compared to its stand alone effect. Therefore, it was
concluded that Knowledge (K) doesn’t contribute significantly in predicting Perceived Usefulness (PU).

Unlike Knowledge’s insignificant predictive power for Perceived Usefulness (PU), it was found to be significantly and positively related to Perceived Ease of Use (PEOU). This shows that consumers’ Prior product knowledge of online shopping can influence their Perceived Ease of Use (PEOU) for it. Customers with high product knowledge have often passed the interpretation phase of the buying process. Thus their judgment criteria are likely to be established (Bettman and Sujan, 1987). Furthermore, customers with high product knowledge are more likely to know where to look for relevant information (Selnes and Troye, 1989). It is also revealed by Brucks (1985) that prior product knowledge increases search efficiency. These findings from earlier research and from this research indicate that e-tailers should target the customers who are likely to have prior knowledge of online shopping. At the same time making the website more family oriented rather than individualistic would promote group shopping and it will further help in knowledge transfer from the knowledgeable buyers to new online buyers. This will ultimately help in changing their perception of Perceived Ease of Use (PEOU).

6.4 Validating the Technology Acceptance Model (TAM)

Once the predictors of Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) are established, it is important to study whether PU and PEOU will result into actual behavior of online shopping. TAM has been extensively used to study acceptance of internet and its applications, particularly for studying intentions and actions regarding internet shopping. (eg. Childers et al., 2001; Moon and Kim, 2001; Chen et al., 2002; Park and Jun, 2002; Chen at al., 2003; McCloskey, 2004; Leelayouthayotin and Lawley, 2004). Therefore, one of the important objectives of the current research was to validate
TAM (Technology Acceptance Model) for online shopping. Following section discusses findings from this research in line with testing the Technology Acceptance Model (TAM).

### 6.4.1 Perceived Ease of Use (PEOU) and Perceived Usefulness (PU)

Perceived Ease of Use (PEOU) was found to be significantly and positively related to Perceived Usefulness (PU). This is in line with the proposed hypothesis and findings from most of the earlier research. This indicates that if online buyers perceive online shopping easy, they will find it highly usefulness. Making websites informative, less complex and user friendly will help in increasing buyers’ perception about online shopping. At the same time keeping navigation easier and providing good help to facilitate shopping is also equally important.

### 6.4.2 Perceived Ease of Use (PEOU), Perceived Usefulness (PU) and Attitude towards using (A) online shopping

TAM posits that Perceived Ease of Use (PEOU) and Perceived Usefulness (PU) have positive relationship with Attitude Towards Using (A). When both of these constructs were regressed along with shopping orientations with Attitude Towards Using (A), both the constructs were found to be significantly positively related to Attitude towards using online shopping (Total $R^2 = 61\%$). These means that if e-tailers can demonstrate usefulness and ease of use for their website as compared to other channels of shopping, it is much more likely that it will result into positive attitude towards online shopping. Comparatively Perceived Usefulness (PU) had much more influence in terms of explaining variation in Attitude that Perceived Ease of Use (PEOU) ($\Delta R^2 = 25\%$). This indicates that buyers value usefulness more than ease of use. In terms of marketing strategy focus should be more on increasing value than improving shopping experience.
6.4.3 Perceived Usefulness (PU), Attitude Towards Using (A) and Behavioral Intention to Use (BI)

The significant positive relations found between Perceived Usefulness (PU) and Behavioral Intention to Use (BI) and Perceived Usefulness (PU) and Attitude towards using (A) were in line with original TAM model. The regression model established Perceived Usefulness (PU), and Attitude towards using (A) as antecedents of Behavioral Intention to Use (BI). Specifically Attitude had more explaining power ($R^2 = 65\%$) than Perceived Usefulness ($R^2 = 10\%$). This was not surprising as Perceived Usefulness (PU) is the primary antecedent of Attitude towards using. Behaviorally it means that a positive Perceived Usefulness does contribute to generate Behavioral Intention to Use, but if Perceived Usefulness fails in generating a positive attitude, the Behavioral Intention to Use out of only Perceived Usefulness will not be strong. This means to be a successful e-tailer, companies should definitely adopt long term sustainable strategies like loyalty programs, high quality service etc. to develop a positive attitude towards using online shopping. Once a positive attitude towards online shopping is developed there is more potential for that Attitude towards using to result into intention to do online shopping.

6.4.4 Behavioral Intention to Use (BI) and Actual Behavior (B)

Behavioral Intention to Use (BI), rather than Attitude towards using (A) has evolved as a predecessor of Actual Behavior (B) from past research (the same is proposed by TRA - Ajzen and Fishbein, 1980; TPB - Fishbein and Ajzen, 1975 and TAM – Davis, 1989). In line with earlier research, this research also proposed intention as a predecessor of action. And the analysis of the collected data indicate a strong relationship between Behavioral Intention to Use (BI) of doing online shopping and Actual Behavior (B). This indicates that if the marketer can generate an intention of online shopping within shoppers, there are significant chances that it will result in to actual use of online
shopping. Parikh (2006) also found a strong relationship between intention-Use within online shopping context in India. This shows that even if online shopping is in its early stages in India, there prevails a strong relation between Behavioral Intention to Use (BI) and Actual Behavior (B).

Overall, the Technology Acceptance Model (TAM) proposed by Davis (1989) was well supported by this research. Future research aiming at exploring behavioral aspects of other related technologies can use TAM for Indian context.

6.5 Security/Privacy (S) Concerns and Actual Behavior (B) of Online Shopping

Because online shopping is relatively a new phenomenon in India and internet infrastructure is still evolving in India, it was proposed that Security/Privacy concerns might play an important role in Actual Behavior (B) of online shopping and would have a negative impact on it. The results clearly support this hypothesis and it was found that there is a significant negative relation between Security/Privacy concerns and actual use of online shopping. The findings are same with earlier research on online shopping (Gauzente, 2004). This indicates that consumers are definitely concerned about the safety of their privacy and security of the monetary transactions while doing online shopping. Therefore, e-tailers should put emphasis on developing secured transaction over the web and put equal emphasis on communicating the Security/Privacy (S) policies of their online presence. In the absence of this, the marketing efforts spent on generating behavioral intention will not result into actual behavior of online shopping, which in turn will impact the potential adoption of e-tailing.