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The Diversified Online Shopper: Website Feature Preferences and Individual Characteristics

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THE DIVERSIFIED ONLINE SHOPPER:

WEBSITE FEATURE PREFERENCES AND INDIVIDUAL CHARACTERISTICS

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ABSTRACT

The current study examined the nature of diversified online shoppers with respect to existing differences in their level of website feature preferences, Internet experience (usage and shopping behaviors) and individual demographic characteristics. Using an online survey, 540 individuals residing within United States responded to questions concerning their demographics, extent of Internet usage, online visiting and purchasing behaviors and preference for website features. Individuals were categorized into different user groups- low, medium and high, depending on the extent of their self-reported diversified online shopping across the nine specific product categories. Since shopping referred to both browsing of online information and online purchasing, this categorization was done separately for both browsing and purchasing behaviors.

The study found that an individual's diversified online browsing behavior was different from one's diversified online purchasing behavior. With regard to their diversified online browsing, significant group differences were found between the three browser groups in their preference for website features and Internet experience. The typical diversified online browser was more likely to be affluent and male. With regard to the individuals' online purchasing behavior, the low, medium and high diversified purchasers were found to differ significantly from one another in their website feature preferences as well as Internet experience. And the typical diversified online purchaser was more likely to be highly educated, affluent and male. Implications of these results as well as limitations of the current study were discussed.

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CHAPTER I

INTRODUCTION AND RATIONALE

It is common sense knowledge that the World Wide Web has grown extensively over the past decade to become a gargantuan medium of communication, participation and transaction across the world. With it has come a plethora of changes in the ways people interact with each other, how they go about their everyday activities and conduct business with one another. In the world of commerce, Internet has impacted the retailing industry with full force and has accounted for over $100 billion of the total yearly online retail spending in 2006 (comScore network, 2007). With opportunities of growth and expansion like never before, businesses worldwide are aspiring to ride the Internet wave for greater success and cater to markets they thought were beyond their reach before. However, knowing that Internet is in a state of constant evolution and has reverberating effects on every entity it involves, one is goaded to deliberate how businesses deal with such dynamism and continue to uphold the consumers' interest from the marketing and consumer behavior points of view. To sustain and succeed in this virtual dynamic world,

businesses are inevitably required to understand the factors that underlie (potential) buyers' purchase decisions and how these interact with the different properties of Internet at all times. In particular, it calls for addressing a plethora of issues such as consumer web perceptions and preferences, user interface attractiveness, vendor trustworthiness, innovativeness, network security and privacy, etc.

In our current study, we aim to address in particular the issue of consumer perceptions & preferences and online shopping, by delving into how consumers' shopping on the Internet is effected by their preferences for website attributes, their Internet experience and certain demographic characteristics. Considering a website to be the first point of contact between the consumers and the company in most e-transactions, the attractiveness of the website (with its embedded features and applications) weighs heavily in deciding the fate of the transaction and their future relationship. The consumers' perception and preferences of features adorning a website (interface) play a large role in influencing consumers' online shopping behavior at that moment and their expectations from it in the future. In addition, the consumers' experience with the Internet in general, their attitudinal orientation towards the Internet as an innovative medium of commerce and other individual characteristics also affect the vicissitude of websites and the success of e-commerce in the big picture. Such information along with knowledge of the target market help businesses design futuristic web marketing strategies to augment their existing market share and to gain foothold in the world of e-commerce.

Though previous research has attempted to explore online shopping and its adoption among consumers, most of these web usability studies have limited themselves to either providing technological heuristics on designing sites or exploring consumer related factors that effect online purchase (intentions). Of these, a growing number of

studies has attempted to draw from an empirical standpoint and/or suggested some kind of a theoretical basis (Von Dran, Zhang & Small, 1999; Von Dran & Zhang, 2000; Zhang, Von Dran, Small & Barcellos, 1999, 2000a; Zhou, Dai & Zhang, 2007). In one of these pertinent studies, Zhou et al. (2007) explored factors that effected consumer's adoption of online shopping while reviewing the existing literature base. Similar to our conclusion, these researchers also asserted that most studies usually adopt one of the following two perspectives- first, a consumer oriented perspective that focus on aspects such as demographics, trust, innovativeness, Internet experience, attitudes, shopping orientations etc. ; or, second, a technological oriented perspective that focuses on website features, design etc. to explain consumer's decision to shop online. Intuitively knowing that consumers' adoption of online shopping is actually a product of all these factors and their interactions, irrespective of how they are grouped together previously, calls for empirical and theoretical investigations that attempt to mesh the two sides.

The current study may be thought of as an endeavor in this direction as it aimed to investigate consumers' *diversified online shopping* behaviors with regard to their preferences for website features, and to their Internet experience and demographic characteristics. The term "*diversified online shopping*" referred to both browsing of online information and online purchasing, and intended to point to their online browsing / purchasing behaviors for nine specific online shopping categories, viz. Clothing/ Accessories, Books/ Magazines, Health / Medical, Financial Services, Consumer Electronics, Entertainment, Computer Hardware or Software, Food / Beverage / Groceries, and Home Appliances. In addition, the term 'Internet experience' was a generic term used to include both the individuals' Internet usage and generic (non product class specific) online shopping behavior. Notice, an individual's diversified

online shopping behavior is different from his / her generic online shopping behavior with the latter referring to the individual's online shopping behavior *outside the context of any specific shopping category*. The highly diversified shopper can be referred to as the *real* shopper as it reflects both their breath and/or depth of magnitude of online shopping. In contrast, the individuals who are high on generic shopping may be limited in their breath and/or depth of shopping on the Internet.

Recognizing the fact that individuals' browsing a website for information is different from their purchasing from a website (Susskind, Bonn & Dev, 2003), the current study treated the respondents' online browsing and purchasing behavior as separate activities. The individuals were also categorized into different user (browsing/ purchasing) groups- *'low'*, *'medium'* and *'high'*, depending on the extent of their reported online browsing / purchasing frequencies on the nine specific product categories. These groups were then investigated for existing differences in their preferences for 18 website attributes garnered from previous literature and in the consumer characteristics of demographics and Internet experience.

While subsequent literature review in Chapter II will demonstrate the various inconsistencies in previous literature regarding the effects of consumer characteristics and web preferences on online shopping, the current study has broad implications. For researchers, the current study will contribute to the existing base of literature by intermeshing the consumer and technological aspects of online shopping across several product domains. For practitioners, the current study will provide valuable information regarding differences in diversified shopping tendencies between frequent, less frequent and non frequent browsers and purchasers. Such information, if applied in an effective

fashion, will assist in designing websites that will boost both traffic and sales figures, and have further marketing and evaluating implications.

CHAPTER II

LITERATURE REVIEW

The current endeavor may be thought of as a descriptive narration of a few of the many studies that the researcher came across while reviewing the existing literature on Internet shopping. It is thereby an attempt to provide the reader a feel of the literature that is currently available and pertinent to the topic in hand.

While no single universal paradigm exists to guide researchers and practitioners in their quest of understanding consumers' decision processes underlying online shopping and the various antecedents that drive these decisions, previous research works (Cao & Mokhtarian, 2005; Chang, Cheung & Lai, 2005; Monsuwe, Dellaert & Ruyter, 2004; Song & Zinkhan, 2003; Srinivasan, 1990; Zhou et al., 2007) have provided useful overviews of the existing studies and their implication on online shopping from both consumer related and technological points of view. The sections below report some of the studies that have made considerable contribution to online shopping literature.

2.1 Adoption of Online Shopping

As people all over the world rapidly embrace the reach and exploits of the World Wide Web, trade pundits expect 12 million households in the US itself, to be indulging in online trade by 2011. This is a remarkable 48% increase over the current index (Forrester Research, 2007). Forrester Research reported that the total US spending on online sales had increased from $3.2 billion in June, 2001 to $5.7 billion in December, 2001. By the same estimates, the number of households shopping online showed a leap from 13.1 million in June 2001 to 18.7 million in December 2001 (Forrester Research, 2001a, 2002).

In 2001, NUA Internet Surveys had reported similar findings with the United States alone having generated over $50 million. In the same year, Cyber Atlas (2000) estimated that more than one half of all Internet users shopped online and this figure was almost double of that had been reported in 1998. Research from the GfK Group (2002) showed that the number of online shoppers in six key European markets had risen to 31.4 percent from 27.7 percent in 2001, meaning that 59 million Europeans used the Internet regularly for shopping purposes.

With figures as staggering as these and prospects more lucrative than ever, organizations world wide find it imperative to support research directed towards knowing their potential markets, the current behavioral (read information searching, purchasing), psychographic and demographic orientations of these markets, products or product classes of interest, and ways of tapping into these markets to reap substantial profits.

2.2. Global Village: International Online Shopping Scenario

The advent of the Internet and the world subsequently tuning up to become a global village has led to dissolution of international boundaries of commerce. In 2005, ACNielsen conducted a large global study covering 38 markets and polling 21,000 respondents in these countries to find that North America and Europe had the highest number of online shoppers. In Europe, Germany, Austria and the UK topped the list with approximately 95% of Internet users purchasing online. South Korea and Taiwan ranked to be highest in the Asia- Pacific sector, with at least 90% of respondents claiming to have made an online purchase. In addition, the reported mentioned both an upward trend in global online shopping and a faster growth rate in less developed countries. In the long run, this implied opening of new markets, where the manufacturers would need minimal infrastructure requirements to reap huge profits. Moreover, as Internet begins to come of age and Internet literacy grows worldwide with more consumers showing higher levels of confidence using the Net and marketers growing confident by adapting websites to indigenous market sensibilities, the prospects for online shopping gets even more rosier.

However, there are considerations that the marketers need to make, especially in terms of individual behaviors, characteristics and attitudes that affect online shopping.

2.3. Behavioral Aspects and Online Shopping

While there are numerous variables that form the behavioral base of online shopping such as computer use, computer experience etc., ‘online browsing and shopping’ and ‘Internet usage / experience’ was reviewed in greater detail in the following sections as these were more pertinent to the areas of current interest and exploration.

2.3.1. Online Browsing and Shopping Behavior. With the pervasion of the Internet in everyday life, the World Wide Web has widely affected even the most mundane behaviors in individuals, as they stay hooked to this "wired" lifestyle. From the lens of e-commerce, these Internet users have been finely categorized into Internet shoppers- who make purchases on the Internet, and Internet browsers – who browse online for product/ service information but are yet to make a purchase of a given product on the Internet (Susskind, Bonn & Dev, 2003). Though Internet browsing may be intuitively discerned as an antecedent behavior and a crucial predictor of online purchasing decisions (Shim, Eastlick, Lotz & Warrington, 2001; Jeong & Lambert, 2001) such that the two overlap substantially, previous research have made it imperative to identify them as separate consumer e-behaviors. There exists compelling evidence in literature suggesting that many consumers search websites with purchase intentions, however to subsequently abandon this purpose. Blank (2000) estimated that businesses all over the world have lost approximately $6.1 billion due to failed purchase attempts in 2000. A study by Boston Consulting Group (Shop.org & Boston Consulting Group, 2000) found that the proportion of consumers who bought of those who visited a website ranged between 2.8% and 3.2% only, demonstrating a very low conversion rate. In 2001, BizRate.com conducted a survey on 9, 500 online shoppers to find that 55% of the shoppers abandoned their shopping cart prior to checkout and 32% abandoned them at the point of sale (Shop.org, 2001).

Interestingly however, Cyber Atlas (1999c) reported that the characteristics of the typical Internet shoppers were similar to the general Internet browsers. With such similarity and the intention to promote sales, both researchers and practitioners are

working towards exploring factors that stimulate consumers to adopt online shopping and thereby convert e-browsing traffic figures into real sales figures.

In one such recent study, Zhou, Dai and Zhang (2007) conducted an extensive literature review to capture a holistic consumer oriented view of online shopping. By synthesizing their findings into a reference model called the Online Shopping Acceptance Model (OSAM), the researchers organized a myriad of factors that influenced consumer's adoption of online shopping. In particular, the model identified nine types of consumer factors (demographics, Internet experience, normative beliefs, shopping orientation, shopping motivation, personal traits, online experience, psychological perception, and finally online shopping experience) that impacted online shopping and organized them along two dimensions - online and shopping, based on their similarities. For future implications, the researchers suggested OSAM to help in 'reconciling differences in conflicting findings', aid in 'discovering recent trends in online shopping research' and guide by 'shedding light on future research directions'.

Previously, Chang, Chueng and Lai (2005) engaged in an extensive survey of extant literature to identify 45 relevant empirical studies that aided the understanding of the dynamics underlying consumer's decision to shop online. In addition to identifying the major antecedent factors significant to online shopping, these researchers derived two reference models of online shopping adoption. In one of these reference models, they summarized the antecedents of online shopping using the Jarvenpaa and Todd's (1997a) scheme and classified the variables into three major categories - perceived characteristics of the web as a sale channel (with subcategories of perceived risk, relative advantage, online shopping experience, service quality and trust), characteristics of the customers (with sub categories of consumer shopping orientations, demographic variables,

computer/ Internet knowledge and usage, consumer innovativeness and psychological variables) and characteristics of the website or products (with subcategories of risk reduction measure, website features and product characteristics). The second reference model described the relationship amongst these antecedents of the determinants of online shopping (the discussion of the model falls beyond the scope of the present research and the reader is recommended to review the original article). In conclusion, the study greatly contributed in organizing the current empirical online shopping literature, by identifying aspects of online shopping had been investigated before and the effects they had on consumer's adoption of the same. For future implications, the study helped in identifying areas that have been neglected or required investigation to establish clear relationship amongst variables.

In 2004, Monsuwe, Dellaert and Ruyter conducted a review on the drivers that motivated consumers to shop online and proposed a framework to increase researchers' understanding of consumers' attitudes toward online shopping and their intention to shop on the Internet. Based on previous research (Avery, 1996; Brown, Challagalla & Ganesan, 2001; Burke, 2002; Childers, Carr, Peck & Carson, 2001; Dabholkar & Bagozzi, 2002; Davis, 1993; Eastin & LaRose, 2000; Eastlick & Lotz, 1999; Elliot & Fowell, 2000; Grewal, Iyer & Levy, 2002; Lee & Turban, 2001; O'Cass & Fenech, 2002; Shim, Eastlick, Lotz & Warrington, 2001; Wolfinbarger & Gilly, 2001; Yoon, 2002) and extending it further, the researchers propounded that online shopping and intentions to shop online were effected by consumers' perception of functional and utilitarian dimensions, emotional and hedonic dimension, and other exogenous factors. In particular, Monsuwe et al. (2004) identified ease of use, usefulness, enjoyment, consumer traits,

situational factors, product characteristics, previous online shopping experiences and trust in online shopping as the motivators of consumer online shopping.

On similar lines and with the basic premise that supporting customers' search behavior would lead to more satisfied customers and increased purchasing intention amongst visitors, Pedersen and Nysveen (2003) empirically examined the effect of website visitors' degree of goal-oriented search mode on purchase intention in online environments. They operationalized goal oriented search as the search where consumers looked for specific information and was of utilitarian and directive nature. Their study recruited 874 respondents from 13 different online shops that represented various product categories and customer segments. The researchers in this study found that the effect of visitors' degree of goal-oriented search mode on purchase intention was moderated by product risk (that is, the consumers' perception of the uncertainty and adverse consequences of buying a product or service). Furthermore, product involvement (concern with a product that the consumer brings into a purchase decision), product risk and Internet experience (knowledge of the web) were found to have positive effects on the degree of goal-oriented search mode of the visitors. Product knowledge, product risk and Internet experience were reported to have direct effects on purchase intention. These findings emphasized the need for understanding the characteristics of website visitors, and customizing the support and search services offered on the website to the characteristics and preferences of the individual visitor such that it would lead to increase in purchase intention, and eventually online sales.

In another empirical investigation, Chiang and Dholakia (2003) studied the factors that drive consumer intention to shop online during the information acquisition stage. The researchers incorporated three basic variables that were likely to influence

consumer intentions- convenience characteristic of shopping channels, product type characteristics, and perceived price of the product. The sample for this study consisted of 147 respondents and the questionnaire used was constructed to assess perceptions of the individual products as search or experience goods, the average price and willingness to purchase online, etc. The findings of this study indicated that consumer intention to engage in online shopping was influenced by product type and convenience. In specific, online shopping intention was higher when consumers perceived the product to be a search good (full information for dominant product attributes known prior to purchase) than an experience good (full information on dominant attribute known only with direct experience and information search). When consumers perceived offline shopping as inconvenient, their intention to shop online was greater.

In 1999, Li, Kuo and Russell gave a model of consumer online buying behavior. The researchers used an online survey of 999 U.S. Internet users that had been cross-validated with other similar national surveys before being used to test this model. According to the Li et al. (1999) model, demographics, channel knowledge, perceived channel utilities, and shopping orientations effected consumer online buying behavior. In particular, education, convenience orientation, experience orientation, channel knowledge, perceived distribution utility, and perceived accessibility were reported to be robust predictors of online buying status (i.e. frequent online buyer / occasional online buyer / non-online buyer) of Internet users.

Summarily, it may be said that a myriad of factors have been explored by various researchers to understand the dynamics underlying the consumer's adoption of online shopping. While these research works have empirically or otherwise organized the existing literature in the process, they were also useful in generating findings that may be

used by practitioners in designing online marketing strategies and principles to entice the online browsers into purchasing and to retain the existing e-purchaser base.

2.3.2 Internet Usage/ Experience. Understanding the very nature of online shoppers with regard to their Internet usage and experience have useful implications in terms of figuring out market segmentation schemas and thereby tracking online sales as a function of each segments' Internet shopping behavior. While the current review of Internet shopping literature had led to the obvious realization that Internet usage and experience have a positive impact on the online purchase intentions in consumers (Chang et al., 2005; Blake, Neuendorf & Valderserri, 2003a; Burroughs & Sabherwal, 2001; Citrin, Sprott, Silverman & Stem, 2000; Horrigan, 2000), the need is to understand how individuals with varying level of Internet experience and usage differ in their adoption of online shopping, and thereby come up with some kind of universal schema for segmenting the market.

Thinking along these lines, ComScore in 2007 presented a schema for online consumer behavior segmentation based on the frequency of Internet use known as the comScore Segment Metrix H/M/L that divided the audience into light, medium and heavy users of the Internet. Here, the heavy group was defined as "the top 20 percent of consumers, based on the time spent online at the category of sites". The medium group was the middle 30 percent and the light users are the lightest 50 percent (the H/M/L user segments is currently available in all 32 countries where comScore syndicated data are available and across all 110 comScore defined categories and sub-categories of sites). Marketing literature (eMetrics, 2001), previous to the comScore segmentation, had defined heavy users as those users of any product / brand / media etc. who exhibited a

different set of beliefs, attitudes, behavior and demographics compared to medium and light users. Specifically, heavy users were reported to demonstrate stronger beliefs and attitudes toward information seeking and the desire to purchase.

Korgaonkar and Wolin (2002) while examining the consumers' differences in Web usage, advertising and shopping behaviors used a similar group classification as described above. The researchers sampled 420 respondents from southeast US and surveyed them on their Web usage (overall surfing activity and stability of content / Website choice), beliefs about and attitudes toward Web advertising and Web shopping behaviors. Of our interest, the study found significant differences among the consumers and categorized them in the heavy, medium and light users. The heavy user was characterized as some one who spent up to five hours per day on the Web (mainly in the evenings and nights and often used the Web through out the week), searched for new and different Web sites, sometimes visited about three different sites per hour, and chose sites with either the same or different theme. In regard to the Web usage and Web shopping, the heavy user was the most prolific shopper, who spent the most amount of money, bought and tended to order goods and services most frequently from the Web. Demographically, the heavy user was more likely to be male, slightly less educated and earned slightly less than the others. In comparison, the medium user spent up to three hours per day on the Web (predominantly during the night and evening, often on weekends), visited the sites known and liked and often switched between two or three sites per hour with the same theme as the original site. The medium user was reported to be 8 percent less likely than the heavy user to purchase Web based merchandises and services. Such a user was more likely to be most educated and having the highest income as compared to the other users. The light user, in contrast to the heavy and medium user,

spent an hour per day (without any defining day time usage pattern and with lower usage level spread over the weekdays), preferred websites he/she liked and did not change to several sites. In comparison to the heavy user, the light user was 30 percent less likely to purchase from the Web. However, the medium and the light user were both found to be spending nearly the same amount of money on Web purchases.

In 1998, Napolie and Ewing had adopted a similar method of classifying the Internet users. According to these researchers, heavy users were those respondents who accessed the Internet at least once per day and spent more than three hours using it. Moderate users were those who accessed the Internet a few times per week for between one and three hours and light users were those who spent less than one hour on the Internet and accessed it less than a few times per month.

Acknowledging the fact that greater Internet experience and usage encourages greater online shopping (intentions) in individuals, it may be intuitively said there are more than one way to categorize the online shoppers based on their Internet usage behaviors. However as in the studies presented above, the current study also followed the heavy-medium-light user group classification for a finer distinction among the frequent, less frequent and non frequent users.

2.4. Demographics, Psychographics and Online Shopping

The research findings on Internet shoppers' characteristics are mixed and inconclusive. Gender, age, education and income being the most investigated demographic indices, some of the studies (Zhou et al., 2007, Chang et al., 2005, Blake et al., 2003a) reported the online shopper to be male, older, having higher (college level) education and high income levels. While other studies failed to replicate these findings,

such inconsistency has been explained by the dynamic nature of the Internet and the online shopper by other researchers (Raine, Fox & Horrigan, 2005; Card, Chen & Cole, 2003).

In 2003, Swinyard and Smith examined the life style characteristics of online US households to provide a perspective on the 'who' and 'why' of Internet shopping. The study was based on a sample of 1738 respondents and used a mail-in questionnaire. The findings from the study indicated that as compared to the non shoppers, the US online shoppers were younger, wealthier, better educated, had higher computer literacy, spent more time on their computer and the Internet, found on-line shopping to be easier and more entertaining, and were more fearful of financial loss from on-line shopping. Furthermore, the researchers identified and profiled different online shopper segments (i.e. shopping lovers, adventuresome explorers, suspicious learners and business users) and non shopper segments (i.e. fearful browsers, shopping avoiders, technology muddlers and fun seekers) based on their unique Internet related lifestyles. Describing each segment briefly, shopping lovers were competent computer users who frequently bought online and really enjoyed doing so. Internet explorers believed Internet shopping was fun and could be considered opinion leaders for online buying. Suspicious learners were not very computer literate, but were open-minded for learning new things and were suspicious of giving their credit card number. Business users did not often make personal online purchases. They mainly used the Internet for business purposes and looked at the Internet in terms of what it could do for their professional life. Fearful browsers were very computer literate and often practiced "Internet-window shopping". They did not buy online for the moment since they distrusted the security on the Internet, disliked shipping charges and were reluctant to buying things without seeing them in person. Shopping

avoiders were difficult to be turned into online shoppers since they did not want to wait for product delivery and wanted to see things in person before they buy. Technology muddlers did not spend much time online, were somewhat computer illiterate and were not interested in increasing their computer knowledge. Fun seekers valued the entertainment of the Internet, but were afraid of buying online. Furthermore, they had a relatively low education and income level leaving them not much spending power. Based on such distinctions, the researchers emphasized that such a segmentation schema had marketing implications and required recognition of the differences between the segments and the unique perceptions of each, for reaping benefits.

Kau, Tang and Ghose (2003) examined the online buying behavior among a group of 3700 Internet users in their effort to explore their information-seeking patterns as well as their motivations and concerns for online shopping. The researchers employed factor analysis and cluster analysis to classify the respondents into six types of online shoppers- on-off, comparative, traditional, dual, e-laggard and information surfer. The study used the respondents' demographic information and actual buying behavior to characterize them into distinct profiles for each of the segments. The researchers also conducted discriminant analysis to seek out the important attitudinal variables that differentiated the various clusters of online shoppers. These included Web advertisement, absence of salespersons, warranties, saving on cost, difficulty of locating products on the Web, and security concerns amongst others.

In their study, Vellido, Lisboa and Meehan (2000) explored demographic, socioeconomic and Web usage variables as a part of their endeavor to propose a quantitative framework for identifying latent factor descriptors of Internet users' opinions on Web vendors and on-line shopping. Based upon publicly available data from GVU's

ninth WWW user survey and, more specifically, it's Internet shopping (Part 1) questionnaire administered to 2,180 individuals, the researchers found that variables such as age, household income, and Web usage patterns did not predict Internet purchasing behavior. In addition, the study found nine latent factors underlying Web users' opinions with regard to online shopping which were control and convenience, consumer risk perceptions/ environmental control, customer service, affordability, ease of use, product perception, assurance and reliability, elitism, and vendors' performance. According to the researchers, the results had implications from a business perspective and suggested that management decision-making may focus on factors under in-house control (such as consumer risk perception, shopping experience, customer service, environmental control) as their ability to influence prospective customers outweighed the effects of demographic, socioeconomic, or Web usage variables.

Bellman, Lohse and Johnson (1999) in their study 'Predictors of Online Buying Behavior' recruited a panel of Web users from all over the world wherein 10,180 people completed a survey asking 62 questions about online behavior, attitudes about Internet communication and privacy issues, and routine demographic questions. Amongst other findings, the study reported that a very small percentage of people (3.1%) used Internet for shopping. These online buyers were reported to be living a 'wired and time starved' lifestyle, with having used the Internet for years, for both product information search and purchasing products and services. With respect to the demographics, the study found that higher the person's income, education, and age, the more likely that person was to buy online, and the higher a persons income, the more online transactions that person was likely to make. However, demographics predicted only 1.2% of the decisions to buy online or not and explained only 0.3% of the variance in the number of purchases made

by online buyers. The researchers explained this finding by advocating past behavior as being the most important information for predicting online and offline shopping habits over demographics. The study reported that security and privacy concerns were less important predictors of shopping behavior.

Donthu and Garcia (1999), in their article 'The Internet Shopper' reported that Internet shoppers were older and earned a higher income than Internet non- shoppers. Based on a telephone survey on 790 respondents, the findings of the study indicated that Internet shoppers sought convenience and variety, were innovative and impulsive, and less averse to risk than non shoppers. The other characteristics that characterized the Internet shopper included low brand and price consciousness and a more positive attitude toward advertising and direct marketing.

Previously, Crisp, Jarvenpaa and Todd (1997b) while exploring the effect of various individual difference factors on the consumers' beliefs, attitudes, and intentions toward Internet shopping found that affluent women, with advanced degrees, were as likely to develop favorable attitude and greater intention to shopping on the Web as their male counterparts. The study also reported that shoppers from larger households were more likely to develop a favorable intention to shop on the Web. For their sample, the study had 220 respondents drawn from affluent sections of a southwestern metropolitan area and from the university community, and the data collection involved an experiential survey. As for the other findings, the study found that prior Internet experience, attitudes towards computers and frequency of shopping via direct marketing channels positively effected intentions towards Internet shopping.

As seen in the studies above, there is not much consensus among most research works exploring demographics, psychographics and their effect on online shopping.

Various researchers have provided various paradigmatic frameworks for profiling consumers based on their psychographic and demographic characteristics. While divergent findings keep us short from reaching a common conclusion, it however provides the opportunity of further exploration of these variables and their effect on Internet shopping.

2.5. Online Shopping and Product Types

It is a known fact that a person's buying behavior varies across product categories. For decades, research studies have successfully provided theoretical foundations on product classification in general but are yet to empirically investigate whether the relationship between Internet browsing and purchasing varies across product categories.

Of the few studies that have been conducted, Yang, Lester and James (2007) while mainly investigating the British and American attitudes towards buying online as potential predictors of shopping online, found that the British respondents held less favorable attitudes toward online shopping. The Americans were more comfortable purchasing a greater variety of goods online (both search and experience products) in contrast to the British who felt more comfortable with buying only search products. Here, search products implied those goods that were characterized by relatively high proportion of search attributes that could be evaluated prior to purchase. Experience products pertained to those that could be evaluated after purchase. Specifically, the American respondents (n = 185) were found to be more likely to purchase books, computers, clothes and ticket for shows and concerts while the British respondents (n = 142) were more likely to purchase compact discs and car insurance. The researchers

conducted a factor analysis on the combined data of American and British subjects on attitudes toward shopping online at a B2C website in general. They identified five orthogonal factors underlying online shopping attitudes, namely- access to products free of time and space constraints (factor1), ability to make effective transactions (factor2), lack of security and privacy (factor3), lack of personal assistance and brand-name recognition (factor4), and inability to touch product and lack of after-sales assistance (factor5). These predictors of online shopping differed significantly by the specific product purchased and by country. For the Americans, positive attitudes (factor1 and factor2) were significant predictors for four products (books, computers, airline tickets and hotel rooms), while negative attitudes (factor3, factor4 and factor5) were significant predictors for five products (books, compact discs, computers, clothes, and gambling). Both positive and negative factors were significant predictors of purchasing books and computers online. For the British, positive attitudes were significant predictors for six products (books, compact discs, hotel rooms, groceries, show/concert seats and gambling), while negative attitudes were significant predictors for five products (books, compact discs, car insurance, groceries and gambling). Both positive and negative factors were significant predictors for purchasing books, compact discs, groceries and gambling.

Johnson, Moe, Fader, Bellman and Lohse (2004) examined consumers' search across competing e-commerce sites by analyzing panel data from over 10,000 Internet households and three commodity-like products (books, compact discs (CDs), and air travel services). They reported that on average, households visited only 1.2 book sites, 1.3 CD sites, and 1.8 travel sites during a typical active month in each category. Further, the researchers characterized individual search behavior as a function of depth of search, activity of search, and dynamics of search. In terms of their depth of search, individual

search behavior was reported as a logarithmic process wherein shoppers search was limited to very few sites in a given shopping month. While integrating and modeling the level of a household's shopping activity into the model, the researchers reported more-active online shopping was associated with search across more sites. When they extended the model to include time-varying dynamics that allowed for the consumer to evolve and learn to search over time, they found that for two product categories - books and music, search propensity did not change from month to month.

In their study, Ahuja, Gupta and Raman (2003) investigated the nature of online consumer purchasing behavior by examining the factors, relationships and demographic orientations that influence the browsing and purchasing behavior of individual consumers using the business-to-consumer sites. Their study involved surveying two samples: students (n=190, 84.6% of whom were full-time undergraduate students) who were considered to be Internet savvy and less concerned about privacy; and non students (n=75, 78.9% of whom were faculty or administrators) who exhibited greater variance in their level of comfort with Internet, and were more concerned about privacy. The questionnaire used in the study focused on online shopping behavior across eight categories to provide a good mix of products and services and were based on the Yahoo! Shopping portal. As per the findings, most of the people were not buying online and the same categories of products and services were popular across both the samples indicating that age, income and occupation did not account for online shopping behavior. Travel and audio-video were reported to be the most popular categories, followed by apparel and computer and computer accessories. The least purchased category was groceries. Travel was the most expensive of all the categories examined in the survey and accounted for the higher expenditures. With respect to future intentions to purchase, the responses

followed the pattern of current purchasing behavior with travel and audio-video topping the list, followed by computers and apparel and groceries at the bottom of the list. The study also found that across the board, the respondents reported visiting one to three before making a purchase (with the student sample having a higher percentage of people who indicated visiting more than three Website). In the non-student sample, travel was the only category that was visited for more than three Web sites. The study also found security and privacy concerns to be the single biggest barriers to online shopping.

In 2000, Phau and Poon investigated the factors that influence the types of products and services purchased over the Internet. Based on an empirical investigation of Internet shopping in 183 Singapore residents, the researchers compared Internet buying behavior between potential Internet buyers and non-Internet buyers. Using the median split approach, the researchers found that 70.5 per cent of the respondents were potential non-Internet buyers, while 29.5 per cent were classified as potential Internet buyers. The most likely purchased categories of products were CDs, online videos/music, online paid subscription to financial reports and stock market quotes and computer software. Some products that were found to be significantly more likely to be purchased by Internet buyers than non-Internet buyers included flowers, online paid subscription to newspapers and financial information, online videos/music, computer software, consultancy services, car loans and insurance. Conversely, some of the products that were found to be significantly more unlikely to be purchased by Internet buyers than non- Internet buyers included milk, eggs and vegetables. The results of the study further indicated that the classification of different types of products and services significantly influenced the consumer choice between a retail store and Internet shopping mall. In their effort to identify the types of products and services that were suitable for selling through the

Internet, the researchers found that in general, products and services that had low outlay, were frequently purchased, had intangible value proposition, and relatively high on differentiation were more likely to be purchased via the Internet.

Rosen and Howard (2000) examined the actual and projected sales figures of different product categories on the Internet and predicted travel, entertainment and financial services to be dominating the B2C e-commerce scenario. With regard to the goods sector, the researchers gave precedence to standardized (read homogenous) products such as books, music and video over differentiated or heterogeneous products. They finally proposed a 'product e-potential matrix' whereby the online retailing suitability of a product category could be scored on the dimensions of tactility, importance of customization, shipping costs, importance of instant gratification and information intensity.

Though some researchers (De Figueiredo, 2000) have attempted to advance concepts related to the fit or congruence between product and channel in order to assess the attractiveness of online shopping, most of the studies in this field have only succeeded in providing sales figures for different product types (Vijayasarathy, 2002) as seen above. Moreover, the studies that attempted exploring online shopping from theoretical standpoints limited themselves to considering only the generic metrics of consumers' Internet shopping rather than delving into product types. In addition, there is a need for more extensive verification for why the Internet is suited for marketing of certain product types and a serious dearth of empirical studies to explain why consumers prefer shopping online for some product types over others. In other words, the concept of diversified shopping, i.e., a dimension of online browsing / purchasing including both the depth and/or the breadth of these shopping behaviors in the various product types, is

completely lacking. Summarily, it can be said that more research is needed on online shopping in the backdrop of product classes, to reach a definite conclusion.

2.6. Website Quality, Feature Preferences and Online Shopping Behavior

Consumers' online shopping attitude and behavior are greatly influenced by a variety of factors related to the website quality. A good website directs the consumers to complete their visit and purchases in a smooth manner in addition to attracting and motivating them to revisit it. In contrast, website of poor quality may hinder online shopping attitude of its visitors. Of the studies reviewed, most of the studies used websites' information content and presentation, interaction features, navigation and search, media richness etc as the parameters to judging website quality.

One of the studies, especially pertinent to the current project, is that of Blake, Neuendorf and Valdiserri (2003a). In their study, 'Appealing to Those Most Likely to Shop New Websites', the researchers reviewed past studies to investigate what drew online shoppers to particular sites and organized them along different lines. First, they compiled those studies that identified a number of specific site actual / perceived features that impacted consumers' website appeal. In specific, they mentioned security (as discussed by Swaminathan, Lepkowska-White, & Rao, 1999; Szymanski & Hise, 2001), vividness (Coyle & Thorson, 2001) and its correlate riskiness (e.g., Bhatnagar, Misra & Rao, 2000; Van den Poel & Leunis, 1999), approval by referent others, like family or friends (e.g., Shim, Eastlick, Lotz, & Warrington, 2001), feature organization (Bucy, Lang, Potter, & Grabe, 1999), quality of content (Jarvenpaa & Todd, 1997b), price (e.g. Swaminathan et al., 1999), recognizability and/or desirability of brand (e.g., Degeratu, Rangaswamy, & Wu, 2000), and time delay/download speed (e.g., Yoo & Donthu, 2001).

Second, they compiled studies that analyzed the roles played by specific features in the process of contributing to website appeal. For example, Palmer's (2002) study suggesting specific features important for website success as they contribute to a site's media richness. Third, they included studies that assessed the dimensions individuals employed to evaluate a site's appeal. For instance, Chen and Wells (2002) work on evaluating websites along the dimensions of entertainment, information and organization. Fourth, they compiled studies of website appeal along the dimension of consumer motives or objectives (such as Keeney, 1999; Parsons, 2002). Blake et al (2003a) concluded their literature review by proposing their own framework of 20 'form' (i.e. how one gets) and 'substantive' (i.e. what one gets) website features, based on the works of Torzadeh and Dhillon (2002) and Rogers (1995). The features included in their framework were: wide selection & variety of products, good price incentives, customer feedback, reputation & credibility of the company on the web, easy order process, no language barrier, download speed of the page, short delivery time, family & friends happy shopping at the site, website is new & different, easy to find product, fast response for customer service, easy return policy, credit card safety, no tax, good place to find bargain, low/no charge for shipping & handling, product information, family & friends like to know opinions, hear it on TV, radio or newspapers. The researchers cautioned the readers against the non exhaustiveness and non mutual exclusivity of these features and empirically tested a group of 363 American and Canadian respondents on the attractiveness of these features across varying levels of consumers' Internet experience (high experience-low experience) and innovativeness (high innovativeness-low innovativeness) . Subsequently, they found that more experienced shoppers showed a stronger preference for substantive features and the more innovative shoppers showed a stronger preference for form features. The

researchers further discussed the theoretical and practical implications of the findings. The current study used the proposed set of website features given by Blake et al. (2003a).

In 2003, Song and Zinkhan explored the antecedents and consequences of consumers' perception of B2C Website quality and how these effected their online eventual purchase. In their paper, the researchers used marketing and system design models as their theoretical foundations to propose interface design, information access and fulfillment policy as the features that influenced consumers' perception. In addition, they identified seven major dimensions associated with Website quality - interactivity, usability, reliability, content quality, entertainment, privacy and security, and brand image. Further more, the researchers discussed that the role of consumer patronage as an evaluation of a website's success in addition to the objective measures (number of members, unique visitors, sales revenue and average spending time per visitor) used by most companies.

Park and Kim (2003) developed and empirically validated a model of consumers' online shopping behavior by investigating the relationship between various characteristics of online shopping and their purchase behavior. The study used a Korea based online survey conducted on 602 customers of online bookstores. The findings from the study indicated that factors such as user interface quality, product and service information quality, security perceptions and site awareness had considerable influence on consumers' commitment to a site and their actual purchase behavior.

Ranganathan and Ganapathy (2002) examined the key dimensions of a B2C website as perceived by online consumers. The researchers based their study on a survey questionnaire administered to 214 online shoppers and conducted exploratory factor analysis to find that information content, design, security and privacy were the four

essential dimensions of B2C websites. More specifically, their findings emphasized security and privacy as the best predictors of consumers' online purchasing intent.

On the whole, online shopping literature is yet to arrive at an exhaustive list or taxonomical framework of website features. The extant literature contains studies reporting considerable range of specific factors, the concepts that these represent, feature dimensions, and website features' effect on purchase (intentions), consumer satisfaction loyalty etc. While an exhaustive discussion is well beyond the scope of the current study, the above studies reflect some of the critical works that have played significant role in guiding later research. The current study uses Blake et al.'s (2003a) list of website features to investigate the consumers' adoption of online shopping.

Conclusively, the undertaken literature review points that as e-commerce gains foothold across economies worldwide with the many advantages that it offers over other retailing options(such as convenience, ease in information accessibility and time), it is essential for the e-service providers to constantly work in retaining this uphill interest and maintaining the current consumer base. In addition, efforts are also needed to convert the present group of e-browsers and/or non buyers to e-buyers. This, calls for understanding the dynamic psychographic and demographic composition of the particular market, handling broad behavioral issues such as website attribute preferences, and improving / customizing the current e-facilities (read web interfaces, with special attention to shopping categories and product types) as per consumers' desires. In specific, the current literature review has led to following conclusions- that the Internet is a powerful medium with ever increasing potentials worldwide and opportunities abound on multiple fronts; in the commercial world, this translates to online shopping which is becoming one of the

most popular global retail activities; that online shopping is a broad term for two separate online behaviors namely, online browsing and online purchasing; that browsing behavior can be highly predictive of consumers' online purchasing behavior if several motivating factors such as consumer Internet experience and usage, individual characteristics such as demographics & psychographics, innovativeness, website feature preferences etc. are taken into consideration; that some kind of framework or segmentation schema based on the consumers' level of Internet usage and/ or demographics etc. can help in designing Internet based marketing strategies that reach out to new consumer strata and retain the original base; that such strategies would need to pay close attention to the product classes and how they need to be modified or retained across different product types; and finally, that the primary vehicle of online shopping, the website, needs to have appropriate features and applications which are desired by the consumers to even initiate the state of affairs.

In light of these, the current study is an endeavor towards exploring the following research questions:

RQ1. Is individuals' online browsing behavior different from their online purchasing behaviors?

The current study anticipates the two behaviors – browsing and purchasing on the Internet are separate consumer e-behaviors. Such anticipation finds support in previous research studies (Susskind et al., 2003; Blank, 2000; Shop.org & Boston Consulting Group, 2000) that categorized online shopping into online browsing or information searching and purchasing online, and explained that

though one is a crucial predictor of the other, online browsing does not necessarily lead to purchase behavior in consumers.

RQ2. Do the frequent ('high'), less frequent ('medium') and non frequent ('low') diversified online *browsers* differ in their website feature preferences?

The current study anticipates each browser group to differ significantly from the others, with high diversified browsers showing higher preference for website feature in general than others. Such anticipation is in line with eMetrics (2001) description, according to which heavy users demonstrate stronger beliefs and attitudes toward information seeking and the desire to purchase online. As heavy use of Internet may also be associated with more time spent on the Internet (Korgaonkar and Wolin, 2002) and more comfort navigating online (Blake et al., 2003a), the heavy users may be thought of as being more demanding online and having stronger preferences for typical website features.

RQ3. Do the frequent ('high'), less frequent ('medium') and non frequent ('low') diversified online *purchasers* differ in their website feature preferences?

Similar to the individuals' online browsing behavior and line of reasoning, the current study anticipates each purchaser group to differ significantly from others, with high diversified purchasers showing higher preference for website feature in general than others.

RQ4. Do the high, medium and low diversified online *browsers* differ in their Internet experience (usage and generic online shopping behavior)?

The current study anticipates each browser group to differ significantly from the others, with high diversified browsers having greater experience than medium diversified browsers, who in turn are expected to be more experienced than low diversified browsers. Such anticipation is in line with previous research (comScore, 2007; Korgaonkar and Wolin, 2002; Napolie & Ewing, 1998) which propounded that high users spent more time online and were more frequent visitors to sites as compared to moderate and low user groups.

RQ5. Do the high, medium and low diversified online *purchasers* differ in their Internet experience (usage and generic online shopping behavior)?

Similar to the individuals' online browsing behavior and line of reasoning, the current study anticipates each purchaser group to differ significantly from others, with high diversified purchasers having greater Internet experience than medium and low diversified purchasers.

RQ6. Are the differences between low, medium and high diversified browsers same as the differences between low, medium and high diversified purchasers in regard to their website feature preferences and Internet experience?

In the absence of previous literature, the current study considers the above

question to be of investigative nature and anticipates the direction of differences in feature preferences and Internet experience between the diversified browsing and purchasing groups to be somewhat similar. As online browsing may be discerned as a crucial predictor of online purchasing in consumers (Shim, Eastlick, Lotz & Warrington, 2001; Jeong & Lambert, 2001), it may expected that an individual's level of browsing will reflect upon his/her purchasing behavior with respect to his/her website preferences and Internet experience.

RQ7. Does the magnitude of individuals' diversified online browsing and purchasing behaviors relate to their demographic characteristics?

The study anticipates some kind of association between individuals' diversified online browsing / purchasing behaviors and their demographic characteristics. It, however, is very difficult to anticipate each of the demographic variable's (age, gender, marital status, education level, full time employment status, household size and income) direction of association with the consumers' online behaviors as previous studies were very inconclusive in their findings (Zhou et al., 2007) to guide our current anticipation.

CHAPTER III

METHOD

3.1. Data Collection

The current study is based on a selected dataset (United States), collated as a part of an extensive multinational study investigating the Internet usage and online shopping behavior of people in five different nations. The sample was recruited using snowball sampling procedures and the data was collected using online surveying over a span of 5 months in 2003-2004. Adults known to the research team were individually emailed and, if possible, phoned with an invitation to visit the University site where the questionnaire was posted. The invitation included the site password, the description of the study, assurances of anonymity, as well as other details specified by the University's Institutional Review Board.

The original survey was designed to delve into the respondents' characteristics (read, demographics) and preferences for website features, as these interplayed with the individuals' Internet experience (Internet usage, and online browsing and purchasing

behaviors). Unless specified specifically, the study used the term 'online shopping' to refer to both visiting and purchasing from a website.

3.2. Questionnaire

Among all the items that comprised the questionnaire, the following items were of relevance for the current study:

1. Internet Use: Two items addressed the individual's use of the Internet. The first item, "*About how long have you been using the Internet?*" had five available responses viz. "*Less than 3 months*", "*4-12 months*", "*1-3 years*", "*4-6 years*", and "*7 years or more*". The second item, "*On average, how many hours per week, if any, do you use the Internet?*" had six available responses viz. "*0*", "*1 – 5*", "*6 – 10*", "*11 – 15*", "*16 – 20*", and "*21 - or more*".
2. Internet Shopping: The questionnaire addressed the respondents' extent of online shopping using two items. The first item asked, "*How often, if ever, do you go online to shop (look for information about products or make a purchase)?*". The six available responses included "*Never*", "*Less than once a month*", "*1-2 times a month*", "*3-5 times a month*", "*6-9 times a month*", "*10 or more times a month*". The second item asked, "*On average, how often do you shop (searching for product or service information, or making a purchase) on the Internet?*". The six available responses were "*Never*", "*Rarely*", "*Less than once a month*", "*About once a month*", "*About once a week*", and "*Daily*".
3. Shopping Categories: The magnitude of online shopping was gauged for different product types/ shopping categories. The categories of interest to this

study were: Clothing / Accessories, Books / Magazines, Health / Medical, Financial Services, Consumer Electronics (such as TV, VCR, stereo, cellular phone), Entertainment (such as CDs, videos, concert tickets), Computer hardware or software, Food / Beverage / Groceries, Home appliances (such as refrigerator, dishwasher), and Other. Individuals were asked two separate questions related to their visiting and purchasing tendencies- "*How often, if at all, do you VISIT each type of web site (WITHOUT purchasing) in order to help you to make a purchase decision?*" and "*How often, if at all, do you PURCHASE any of the following items/services (and not just look for information) online?*". Respondents responded along a 5-point scale, ranging from (1) "*Never*" through (3) "*Sometimes*" to (5) "*Regularly*". Excepting "Other" product categories, the current study examined the other shopping categories as subjects of its principal investigation.

4. Website Feature Preferences: On a list of 23 website attributes, respondents were asked, "*How much would the following encourage you to shop (visit or purchase) at a particular website?*" and were asked to indicate their responses along a 7-point scale ranging from (1) "*Strongly Discourages Me*" through (4) *"Neither Encourages nor Discourages me"* to (7) "*Strongly Encourages Me*". A subset of 18 items was selected for this study based on their pertinence to the current study and their recurring references in the existing online shopping literature.
5. Demographics: To inquire into the respondents' demographics, the questionnaire included questions regarding their age, gender, marital status, education, employment, income, and household size. The respondents were

asked, *"What is your gender?"* and were to indicate their responses as *"Male"* or *"Female"*. The question *"How old are you (in years)?"* inquired into their age and was open ended in nature. The respondents were asked, *"What is your marital status?"* and were given the four following responses to choose from- *"Single, never been married"*, *"Married"*, *"Separated / Divorced"* and *"Widowed"*. In order to address the issue of sample's education level , the respondents were asked, *"What was the last year of education you completed"* and were required to choose from the following responses: "*Some high school"*, *"High school"*, *"Technical School/Training (such as auto mechanic)"*, *"Some college/university"*, *"College/university graduate"* and *"Graduate or professional school"*. The question *"What is your current employment?"* inquired into the sample's level of employment and the respondents were asked to indicate their responses by choosing from the following categories- *"Employed-full time"*, *"Employed-part time"*, *"Self employed"*, *"Temporarily unemployed"*, *"Student"*, *"Homemaker / housewife"*, and *"Retired"*. The respondents were asked, *"Please indicate which of the following categories best represents your annual household income before taxes"* and the response categories included – *"$10,000 or less"*, *"$10,001 to $20,000"*, *"$20,001 to $30,000"*, *"$30,001 to $40,000"*, *"$40,001 to $50,000"*, *"$50,001 to $75,000"*, *"$75,001 to $100,000"* and *"more than $100,000"*. The question *"How many people live in your household, including yourself (please enter the number)?"* inquired into the sample's household size and was open ended in nature.

For more detailed review of each of the measure used in the study, the reader is directed to the results section in Chapter IV. A printer-friendly version of the entire questionnaire is also available in the Appendix section of the report.

3.3. Sample Description

3.3.1. Demographics. A total sample of 540 responses was gathered from the Midwest, Western and Eastern states of the US. Of these, only 372 were found to be complete and used for our current analyses. The sample (Table 3.1) was mainly comprised of women (65.3%) in the age group of 16 to 72 years, with a mean age of 35.98 years (median = 33 years, standard deviation = 13.09). Of the sample, a little over half were married (55.6%), college/professional school graduates (72.4%), had a mean household income of approximately $ 63,000/ year (median = 62,500/ year) and were employed full time (63.4%).

3.3.2. Electronics Ownership. The majority of the sample owned a personal computer and/or a DVD player; whereas only a quarter of the sample reported ownership of a high definition television (HDTV) and a one third owned a personal digital assistant (PDA) (see Table 3.2).

Table 3.1. *Sample Characteristics*

Sample characteristics			
Sample Size	372	Household Income	
Age: mean years (SD)	35.98 (13.09)	$10,000 or Less	7.3%
Less than 20 yrs.	2.2%	$10,001 - $20,000	5.6%
20 - 29 yrs.	40.1%	$20,001 - $30,000	8.9%
30 - 39 yrs.	18.8%	$30,001 - $40,000	12.1%
40 - 49 yrs.	18.0%	$40,001 - $50,000	10.2%
50 - 59 yrs.	18.3%	$50,001 - $75,000	18.0%
60 and above	2.7%	$75,001 - $100,000	12.6%
Gender (% Female)	65.3%	More than $100,000	22.0%
Marital Status		Occupation	
Married	55.6%	Full time	63.4%
Not married*	42.7%	Part time	14.8%
Education		Other**	20.2%
College Graduate	72.4%	Household Size	
- College/ University	*45.2%*	Single Member	16.9%
- Graduate/Professional	*27.2%*	Dual Members	32.5%
Not a College Graduate	26.3%	3 or more Members	48.9%

*The "not married" includes single (never married), separated / divorced, and widowed.
** The "other" category includes self employed, student, homemakers, retired and unemployed.

Table 3.2. *Electronics Ownership*

Ownership of Electronics (%own)	
Personal Computer	93.5%
DVD Player	79.3%
PDA	24.5%
HDTV	17.5%

3.3.3. Internet Behaviors. Of the individuals surveyed, a little over half the sample had used the Internet for seven years or more and reported that a majority of half the people they knew also used the Internet at least once a week. The time spent online per week (i.e. 1 to 21 or more hours) was evenly spread across the sample (see Table 3.3).

Table 3.3. *Internet Behaviors*

Internet Behaviors	
Length of Internet Use	
3 months or less	0%
4 - 12 months	2.2%
1 - 3 years	7.5%
4 - 6 years	37.6%
7 years or more	52.7%
Weekly Internet Use (Hours)	
1 – 5	23.7%
6 – 10	27.2%
11 – 15	16.9%
16 – 20	15.6%
21 or more	16.7%
% of others the respondent knows that use the Internet at least once a week	
1 - 25 %	4.3%
26 - 50 %	13.7%
51 - 75 %	35.2%
76 - 100 %	46.2%

3.3.4. Generic Online Shopping Behaviors. Excepting the categories of "never" shopping online and shopping online "10 or times a month", the sample was evenly distributed on their frequency of online shopping among the rest of the categories (i.e. less than once a month to 6-9 times a month). Approximately two-thirds (74.20%) of the sample reported that they shopped online less than once a month to about once a week. Regarding the percentage of others that the respondents knew that shopped online, 94.4% of the sample claimed that 1-75% of the people they knew shopped online (see Table 3.4).

Table 3.4. *Generic Online Shopping Behaviors*

Online Shopping Behaviors	
Frequency of Online Shopping	
Never	1.1%
Less than once a month	25.0%
1 - 2 times a month	25.5%
3 - 5 times a month	22.6%
6 - 9 times a month	25.5%
10 times or more a month	0%
Friends etc. shopping online (%)	
None	0.3%
1 - 25 %	32.3%
26 - 50 %	38.4%
51 - 75 %	23.7%
76 - 100 %	4.6%
How often do you shop on the Internet?	
Rarely	18.5%
Less than once a month	22.3%
About once a month	30.4%
About once a week	21.5%
Daily	6.2%

3.3.5. Domain Specific Online Shopping Magnitude. Each respondent was asked, "*How often, if at all, do you VISIT each type of web site (WITHOUT purchasing) in order to help you to make a purchase decision?*" and "*How often, if at all, do you PURCHASE any of the following items/services (and not just look for information) online?*", regarding their frequency of visiting and purchasing for 11 specific online shopping categories (Table 3.5) on a 5-point scale ranging from (1) *Never* through (3) *Sometimes* to (5) *Regularly*.

The current sample surveyed to have a low frequency of visiting (mean = 2.44) and of purchasing (mean = 1.83) of the 9 researched categories overall (see Table 3.6 for all the listing). For both browsing and purchase, the most popular category was

Entertainment. The least popular browsing product category was Food / Beverage / Groceries.

Table 3.5. *Online Shopping Behaviors by Product Categories*

Domain Specific Internet Shopping Behaviors										
	Browsing (%)					**Purchasing (%)**				
Categories	*Never*		*Some-times*		*Regular*	*Never*		*Some-times*		*Regular*
Clothing/ Accessories	19.4	14.2	36	14.8	15.6	28.2	20.4	34.7	10.2	4.6
Books/ Magazines	25	16.7	30.1	14	14.2	35.5	15.1	27.7	13.2	7.5
Health & Medical	40.9	19	24.5	10.2	5.4	73.1	14.2	8.9	2.4	0.5
Financial Services	46.5	21	15.3	9.4	6.5	72.3	13.2	5.6	4.3	2.7
Consumer Electronics	20.7	15.9	25.5	22.3	15.3	55	16.9	17.5	6.7	3.9
Entertainment	19.4	17.2	26.6	20.4	15.9	34.4	16.4	28.5	11.8	7.8
Computer Hard/Software	29	20.2	18.5	17.2	14.2	52.2	15.9	15.9	9.9	5.1
Food/Beverage/ Groceries	71.8	18	4.8	2.7	2.2	84.9	9.1	3.2	0.5	1.1
Home Appliances	53.8	17.5	15.8	8.3	4.6	83.6	8.6	5.9	0.8	0.3

Table 3.6. *Sample's Mean Frequency for Different Product Categories*

	Browsing		***Purchasing***	
Categories	***Mean***	***SD***	***Mean***	***SD***
Clothing / Accessories	2.93	1.299	2.41	1.144
Books / Magazines	2.76	1.350	2.42	1.299
Health / Medical	2.20	1.228	1.42	0.797
Financial Services	2.04	1.277	1.49	0.979
Consumer Electronics	2.95	1.360	1.85	1.118
Entertainment	2.95	1.355	2.42	1.286
Computer Hardware / Software	2.65	1.436	1.99	1.248
Food / Beverage / Groceries	1.44	0.880	1.22	0.632
Home Appliances	1.92	1.200	1.24	0.620

3.4. Group Development: The Diversified Online Shopper

The frameworks developed for operationalizing the individuals' diversified online shopping behavior took into consideration their shopping behaviors for the 9 specific product categories. Each respondent's Diversified Online Shopping Score was calculated individually and was an average of his/her responses on each of the above mentioned categories. The sample thus had two set of scores corresponding to their browsing and purchase behavior (i.e. Diversified Online Browsing Score and Diversified Online Purchasing Score). Based on their scores, the entire sample of 372 respondents was equally divided amongst three groups - "Low", "Medium", and "High" in ascending order of their scores, for both their visit and purchase behaviors. As expected, for both the groups, the high users had a greater average diversified score than the medium users, who in turn, reported a higher mean diversified score than low users (see Table 3.7)

Table 3.7.
Sample Characteristics of the Diversified Online Browsing and Purchasing Groups

Groups		***Mean***	***SD***
Diversified Online Browsing	*Low*	1.634	0.273
	Medium	2.386	0.210
	High	3.260	0.495
Diversified Online Purchasing	*Low*	1.201	0.246
	Medium	1.731	0.135
	High	2.484	0.401

CHAPTER IV

RESULTS

4.1. Initial Analyses of Measures

4.1.1. Website Attribute Preferences. With the objective of suggesting a taxonomy of website features, and thereby aiding practitioners in their efforts to boost ecommerce and sales figures, the present study explored online shoppers' preferences for 18 different website features. These eighteen features were a subset of the 23 website attributes that had been originally suggested by Blake and Neuendorf (2004) to provide readers a framework for website appeal and assessment across different nations. The present study chose these specific features among others as they seemed to pertain to several realms suggested in past studies to be important to consumers' preference for a B2C website. Later work by Blake, Neuendorf and Valderserri (2005) clearly pointed out the merit of charting a broad range of features as they existed across a wide range of websites. When a fundamental set of preferred website attributes is established, it often acts as a yardstick

for practitioners to gauge what consumers' value in a good website, and as a heuristic for researchers to guide them in their future investigative endeavors.

In the present study, individuals were asked to rate a set of 18 website attributes along a 7-point scale (1 = '*strongly discourages me'*, 4 = *'neither encourages nor discourages me'*, 7 = '*strongly encourages me*') to indicate the how much each attribute encourages/ discourages them to shop at a particular website. Table 4.1 provides a complete listing of 18 attributes and the mean rating to each.

Table 4.1 *Website Attributes*

Mean and Standard Deviations of 18 Researched Website Attributes		
List of Attributes	*Mean*	*SD*
The order process is easy to use	5.58	1.16
The products I am looking for are easy to find	5.85	1.15
The website is new and different	3.99	1.18
Product price	6.09	1.27
Provides customer feedback (that is, the site provides a place for you to learn about other customer's evaluation of the product)	4.89	1.40
My friends and family have been happy when they have shopped there	5.07	1.33
Reputation and credibility of the company on the web	5.60	1.33
It is enjoyable to visit	5.09	1.29
My friends and family will like to know my opinions of the site	3.68	1.36
Low or no charge for shipping and handling	6.08	1.30
It has entertaining graphics and displays	4.19	1.34
Provides product information, including FAQs – frequently asked questions	5.25	1.35
A good place to find a bargain	5.95	1.23
Fast response time from customer service	5.80	1.26
I hear about it on the radio, television or in newspapers	4.12	1.28
A return policy that is easy to understand and use	5.59	1.40
Price incentives (coupons, future sale items, frequent shopper program, etc.)	5.34	1.47
Interactive web design (try it on, design your product / services)	4.47	1.44

4.1.2. Internet Usage. The respondents were asked three questions to examine their Internet usage behavior. Of these, two items investigated the length of respondents' experience or use of the Internet in terms of years of use (variable 'InterL') and hours of use per week (variable 'InterU'). The remaining question pertained to estimating the percentage of people the respondent knew who used Internet at least once a week (variable 'Users'). Table 4.2 shows the wording of each Internet usage question and their inter-item correlations. The inter-item correlations were found to be low, although each of the correlations showed significance at $p <= 0.01$. A closer scrutiny of inter-item correlations demonstrated weak relationships between them, accounting for a range of variability (r^2) between 2.3% to 6.5% in the ascending strength of relationships. The Cronbach's alpha subsequently calculated was also found to be low (Cronbach's $\alpha = 0.379$), suggesting that each of these items represented different constructs and needed to be treated as separate measures.

Table 4.2. *Pearson product moment inter-item correlations for Internet Usage items*

Variables		InterL	InterU	Users
InterL	"About how long have you been using the Internet (*in years*)?" (*response categories*: Less than 3 months, 4-12 months, 1-3 years, 4-6 years, 7 years or more)	1.000	---	---
InterU	"On average, how many hours per week, if any, do you use the Internet?" (*response categories*: 0, 1-5, 6-10, 11-15, 16-20, 21or more)	0.201**	1.000	---
Users	"About what percentage of your friends, relatives, and acquaintances would you guess use the Internet at least once a week?" (*response categories*: 1-25%, 26-50%, 51-75%, 76-100%)	0.255**	0.152**	1.000

***Sig., p<0.01*

4.1.3. Generic Online Shopping Behaviors. The respondents were asked three questions to examine their generic online shopping behaviors. Of these, two items investigated the frequency of respondents' online shopping behavior (both browsing and purchasing) in a month (variable 'Inter1') and over a longer period of time (variable 'ShopF'). The remaining question pertained to estimating the percentage of people the respondent knew who shopped online (variable 'Shoppers'). Table 4.3 shows the wording of each generic online shopping behavior question and their inter-item correlations. Although each of the correlations showed significance at $p <= 0.01$, the inter-item correlation between Inter1 and ShopF was found to be moderately high in particular. The Cronbach's alpha subsequently calculated for Inter1 and ShopF was also found to be high (Cronbach's $\alpha = 0.747$), suggesting that both these items can be combined into a composite score.

Table 4.3.
Pearson product moment inter-item correlations for online shopping behavior items

Variables		Inter1	ShopF	Shoppers
Inter1	"How often, if ever, do you go online to shop (look for information about products or make a purchase)?" (*response categories*: Never, Less than once a month, 1-2 times a month, 3-5 times a month, 6-9 times a month, 10 or more times a month)	1.000	---	---
ShopF	"On average, how often do you shop (searching for product, service or information, or making a purchase) on the Internet?" (*response categories*: Never, Rarely, Less than once a month, About once a month, About once a week, Daily)	0.608**	1.000	---
Shoppers	"About what percentage of your friends, relatives, and acquaintances shop online?" (*response categories*: 1-25%, 26-50%, 51-75%, 76-100%)	0.395**	0.290**	1.000

**Sig., $p<0.01$

To obtain a composite score (variable 'CompositeShopOnline') for both these items for each individual respondent, each set of responses was standardized to z-scores (the response set for Inter1 and ShopF were measured in different units) followed by averaging these z-scores to get a new composite value.

Correlation of Internet Usage and Online Shopping Behaviors. Each Internet usage behavior variable was significantly correlated with each online shopping behavior variable (see Table 4.4).

In specific, the respondents' use of the Internet over years (InterL) was positively correlated with their composite shop online score ($p<0.002$; $r = 0.164$). Also, their Internet use per week (InterU) showed a positive correlation with their composite shop online score ($p<0.000$; $r = 0.337$). Further, the percentage of people the respondents knew to be using the Internet (Users) was related positively to their composite shop online score (($p<0.000$; $r = 0.201$).

All the three Internet usage items were also significantly correlated with the percentage of people they knew to be shopping online (Shoppers). Specifically, the number of years an individual had been using the Internet (InterL) showed a positive correlation with Shoppers (($p<0.032$; $r = 0.112$). The number of hours spent online per week (InterU) was positively related to the percentage of people the respondents knew to be shopping online ($p<0.027$; $r = 0.115$). Also, the percentage of people they respondents knew to be using the Internet (Users) was also positively correlated to the percentage of people they knew to be shopping online ($p<0.000$; $r = 0.308$)

Table 4.4.
Pearson product moment inter-item correlations for Internet Usage and Online Shopping Behavior items

Correlations						
Variables		InterL	InterU	Users	Shoppers	Composite Shop Online Score
InterL	"About how long have you been using the Internet (*in years*)?"	1.000	---	---	---	---
InterU	"On average, how many hours per week, if any, do you use the Internet?"	0.201**	1.000	---	---	---
Users	"About what percentage of your friends, relatives, and acquaintances would you guess use the Internet at least once a week?"	0.255**	0.152**	1.000	---	---
Shoppers	"About what percentage of your friends, relatives, and acquaintances shop online?"	0.112*	0.115*	0.308**	1.000	---
Composite Shop Online Score	*Combination of Inter1 and ShopF*	0.164**	0.337**	0.201**	0.376**	1.000

*Sig., $p < 0.05$
**Sig., $p < 0.01$

Correlation of Composite Shop Online Score and Diversified Online Browsing/ Purchasing Scores. In the present study, an individual's diversified online browsing/ purchasing score was operationalized as his/ her online browsing/ purchasing behavior in reference to nine specific shopping categories (viz. Clothing/ Accessories, Books/ Magazines, Health / Medical, Financial Services, Consumer Electronics, Entertainment, Computer Hardware or Software, Food / Beverage / Groceries, and Home Appliances) and were calculated by taking an average of their reported frequency of browsing/ purchasing (frequency recorded along a 5-point scale where 1 = *'Never'*, 3 = *'Sometimes'*, 5 = *'Regularly'*) for these different product types. Whereas, an individual's composite shop online score quantified his/her generic online shopping (both browsing and purchasing) behavior *outside the context of any specific shopping category*. In order for ascertain that the two constructs represented different concepts, correlation coefficients for individual's diversified online browsing/purchasing scores and composite shop online score were calculated (please see Table 4.5).

Table 4.5.
Pearson product moment correlations for Composite Shop Online Score and Diversified Online Browsing & Purchasing Scores

	Diversified Online Browsing Score	Diversified Online Purchasing Score
Composite Shop Online Score	0.501**	0.432**

** Sig., $p < 0.01$

The respondents' composite shop online significantly correlated with their diversified online browsing & purchasing scores. In particular, it was found to be

positively related to individuals' diversified online browsing score ($p<0.000$; $r = 0.501$) and diversified online purchasing score ($p<0.000$; $r = 0.432$).

Although these relationships were significant, only 25% of variance in the individuals' diversified online browsing behavior was accounted for by their composite shop online score. Similarly, the individuals' composite shop online score only accounted for 18.7% of variance in their diversified online purchasing behavior. Such low percentages of variance indicate that there is a very limited level of overlap between these constructs and each of them needs to be treated as individual measure of their respective behaviors.

4.2. Initial Analyses of Online Shopping for Different Domains

4.2.1. Relation between Different Shopping Categories. Respondents answered a 5-point scale of frequency (1 = *'Never'*, 3 = *'Sometimes',* 5 = *'Regularly'*) of shopping for each of 9 product classes (e.g. electronics, entertainment), once for browsing and once for purchasing. In order to ascertain the interrelationships amongst these product categories, correlation coefficients (Pearson's r) were calculated between these classes for both browsing and purchasing.

For Browsing, original rating correlations varied from non-significant to moderately positive, ranging from $r = 0.081$ to $r = 0.594$, with a median r of 0.236. Although most of the correlations were significant, the inter-relationships between the categories were found to be weak or moderate in nature. Please refer to Table 4.6 for complete listing of correlation values for online browsing behavior.

Table 4.6.

Pearson product moment correlations between shopping categories for Browsing behavior

Correlations

	Clothing / Accessories	Books / Magazines	Health / Medical	Financial Services	Consumer Electronics	Entertainment	Computer Hardware / Software	Food / Beverage / Groceries	Home Appliances
Clothing / Accessories	1.000	---	---	---	---	---	---	---	---
Books / Magazines	0.301**	1.000	---	---	---	---	---	---	---
Health / Medical	0.196**	0.220**	1.000	---	---	---	---	---	---
Financial Services	0.181**	0.169**	0.401**	1.000	---	---	---	---	---
Consumer Electronics	0.245**	0.226**	0.241**	0.359**	1.000	---	---	---	---
Entertainment	0.259**	0.287**	0.127*	0.157**	0.560**	1.000	---	---	---
Computer Hardware / Software	0.081	0.230**	0.340**	0.341**	0.594**	0.380**	1.000	---	---
Food / Beverage / Groceries	0.138**	0.150**	0.291**	0.203**	0.232**	0.203**	0.186**	1.000	---
Home Appliances	0.095	0.109*	0.330**	0.321**	0.462**	0.276**	0.439**	0.321**	1.000

* Sig., $p < 0.05$
** Sig., $p < 0.01$

Table 4.7.
Pearson product moment correlations between shopping categories for Purchasing behavior

Correlations

	Clothing / Accessories	Books / Magazines	Health / Medical	Financial Services	Consumer Electronics	Entertainment	Computer Hardware / Software	Food / Beverage / Groceries	Home Appliances
Clothing / Accessories	1.000	---	---	---	---	---	---	---	---
Books / Magazines	0.198**	1.000	---	---	---	---	---	---	---
Health / Medical	0.184**	0.147**	1.000	---	---	---	---	---	---
Financial Services	0.078	0.155**	0.244**	1.000	---	---	---	---	---
Consumer Electronics	0.245**	0.226**	0.265**	0.409**	1.000	---	---	---	---
Entertainment	0.240**	0.317**	0.096	0.178**	0.451**	1.000	---	---	---
Computer Hardware / Software	0.129*	0.268**	0.263**	0.328**	0.639**	0.346**	1.000	---	---
Food / Beverage / Groceries	0.106*	0.080	0.193**	0.067	0.133*	0.044	0.046	1.000	---
Home Appliances	0.141**	0.088	0.263**	0.236**	0.407**	0.177**	0.344**	0.229**	1.000

* Sig., $p < 0.05$
** Sig., $p < 0.01$

For Purchasing, original rating correlations varied from non-significant to moderately positive, ranging from r = 0.044 to r = 0.639, with a median r of 0.195. Although most of the correlations were significant, the inter-relationships between the categories were found to be weak or moderate in nature. Please refer to Table 4.7 for complete listing of correlation values for online purchasing behavior.

4.2.2. Browsing versus Purchasing. Respondents' diversified online browsing and purchasing scores were calculated as an average of their reported frequency of browsing and purchasing, respectively, for 9 different product types. On correlating, it was found that respondents' diversified online browsing and purchasing scores were positively and moderately correlated ($p<0.01$; $r = 0.563$). Although the correlation was positive, only 31.7% of the variance in the online purchasing behavior was explained by the respondents' online browsing behavior, indicating that the two need to be considered as two separate markets.

Table 4.8.
Pearson product moment correlations between Diversified Online Browsing and Purchasing Scores

Correlations		
	Diversified Online Browsing Score	Diversified Online Purchasing Score
Diversified Online Browsing Score	1.000	---
Diversified Online Purchasing Score	0.563**	1.000

** Sig., $p < 0.01$

4.2.3. Category Specific Online Shopping Behaviors. For each of the shopping categories, the association between individuals' online browsing and purchasing behavior was investigated using Pearson (r) correlation, chi-square and contingency coefficient techniques. Cross tabulations between individuals' online browsing and purchasing behavior were calculated to review the frequency distribution of original ratings.

4.2.3.1. Clothing / Accessories. An inspection of the main diagonal of the cross tabulation for Clothing / Accessories indicated that the respondents' online browsing and purchasing behaviors in this category were mostly similar with exceptions in '4' point browsers and 'regular' browsers (see Table 4.9 for details). A review of the chi-square [$\chi^2 = 239.515^a$ (^{a} 4 cells (16.0%) had an expected count less than 5; the minimum expected count was 2.38); $p < 0.000$], the contingency coefficient ($C = 0.629$, $p < 0.000$) and Pearson's r ($r = 0.579$; $p < 0.000$) showed that a moderate and positive relationship existed between the online browsing and purchasing behavior for the Clothing / Accessories shopping category.

Table 4.9.
Cross Tabulation of Online Browsing and Purchasing Behavior for Clothing / Accessories

Cross Tabulation of Online Browsing and Purchasing Behavior for Clothing / Accessories							
		Purchase					
		Never	2	Sometimes	4	Regularly	Total
Browsing	Never	55	8	8	0	0	71
	% within Browsing	77.5 %	11.3 %	11.3 %	0.0 %	0.0 %	100 %
	2	19	23	7	1	1	51
	% within Browsing	37.3 %	45.1 %	13.7 %	2 %	2 %	100 %
	Sometimes	18	29	73	11	1	132
	% within Browsing	13.6 %	22 %	55.3 %	8.3 %	0.8 %	100 %
	4	7	9	21	17	0	54
	% within Browsing	13 %	16.7 %	38.9 %	31.5 %	0 %	100 %
	Regularly	6	7	20	9	15	57
	% within Browsing	10.5 %	12.3 %	35.1 %	15.8 %	26.3 %	100 %
	Total	105	76	129	38	17	365
	% within Browsing	28.8 %	20.8 %	35.3 %	10.4 %	4.7 %	100 %

4.2.3.2. Books / Magazines. An inspection of the main diagonal of the cross tabulation for Books / Magazines indicated that the respondents' online browsing and purchasing behaviors in this category were mostly similar with exceptions in '2' point browsers and 'regular' browsers (please refer to Table 4.10 for details). A review of the chi-square [$\chi^2 = 341.785^a$ (^{a} 3 cells (12 %) had an expected count less than 5; the minimum expected count was 3.88); $p < 0.000$], the contingency coefficient ($C = 0.694$, $p < 0.000$) and Pearson's r ($r = 0.707$; $p < 0.000$) showed that a strong positive relationship existed between the online browsing and purchasing behavior for the Books / Magazines shopping category.

Table 4.10.
Cross Tabulation of Online Browsing and Purchasing Behavior for Books / Magazines

Cross Tabulation of Online Browsing and Purchasing Behavior for Books / Magazines

		Purchase					
		Never	2	Sometimes	4	Regularly	Total
Browsing	Never	82	7	3	0	1	93
	% within Browsing	88.2 %	7.5 %	3.2 %	0 %	1.1 %	100 %
	2	25	21	12	1	1	60
	% within Browsing	41.7 %	35.0 %	20.0 %	1.7 %	1.7 %	100 %
	Sometimes	16	20	66	8	2	112
	% within Browsing	14.3 %	17.9 %	58.9 %	7.1 %	1.8 %	100 %
	4	3	6	13	24	5	51
	% within Browsing	5.9 %	11.8 %	25.5 %	47.1 %	9.8 %	100 %
	Regularly	6	2	9	16	19	52
	% within Browsing	11.5 %	3.8 %	17.3 %	30.8 %	36.5 %	100 %
	Total	132	56	103	49	28	368
	% within Browsing	35.9 %	15.2 %	28.0 %	13.3 %	7.6 %	100 %

4.2.3.3. Health / Medical. An inspection of the main diagonal of the cross tabulation for Health / Medical indicated that the respondents' online browsing and purchasing behaviors in this category were not similar. With 40.9% of the respondents recording that they never browsed for products in this category and 73.7% of the respondents recording that they never purchased products in this category, it may be said that health/ medical was not a popular online shopping category (please refer to Table 4.11 for details). A further review of the chi-square [$\chi^2 = 117.179^a$ (^{a} 13 cells (52 %) had an expected count less than 5; the minimum expected count was 0.11); $p < 0.000$], the contingency coefficient ($C = 0.491$, $p < 0.000$) and Pearson's r ($r = 0.426$; $p < 0.000$) showed that a weak relationship existed between the online browsing and purchasing behavior for the Health / Medical shopping category.

Table 4.11.
Cross Tabulation of Online Browsing and Purchasing Behavior for Health / Medical

Cross Tabulation of Online Browsing and Purchasing Behavior for Health / Medical

		Purchase					
		Never	2	Sometimes	4	Regularly	Total
Browsing	Never	145	5	1	0	0	151
	% within Browsing	96 %	3.3 %	0.7 %	0 %	0 %	100 %
	2	51	14	6	0	0	71
	% within Browsing	71.8 %	19.7 %	8.5 %	0 %	0 %	100 %
	Sometimes	42	27	17	4	1	91
	% within Browsing	46.2 %	29.7 %	18.7 %	4.4 %	1.1 %	100 %
	4	25	4	6	1	0	36
	% within Browsing	69.4 %	11.1 %	16.7 %	2.8 %	0 %	100 %
	Regularly	9	3	3	4	1	20
	% within Browsing	45 %	15 %	15 %	20 %	5 %	100 %
	Total	272	53	33	9	2	369
	% within Browsing	73.7 %	14.4 %	8.9 %	2.4 %	0.5 %	100 %

4.2.3.4. Financial Services. An inspection of the main diagonal of the cross tabulation for Financial Services indicated that the respondents' online browsing and purchasing behaviors in this category were not very similar. With 47.2% of the respondents recording that they never browsed for products in this category and 73.9% of the respondents recording that they never purchased products in this category, it may be said that financial services was not a popular online shopping category (please refer to Table 4.12 for details). However, a review of the chi-square [$\chi^2 = 270.362^a$ (^{a} 15 cells (60%) had an expected count less than 5; the minimum expected count was 0.60); $p < 0.000$], the contingency coefficient ($C = 0.655$, $p < 0.000$) and Pearson's r ($r = 0.647$; $p < 0.000$) showed that a relationship existed between the online browsing and purchasing behavior for the Financial Services shopping category.

Table 4.12.
Cross Tabulation of Online Browsing and Purchasing Behavior for Financial Services

Cross Tabulation of Online Browsing and Purchasing Behavior for Financial Services

		Purchase					
		Never	2	Sometimes	4	Regularly	Total
Browsing	Never	166	3	1	0	0	170
	% within Browsing	97.6 %	1.8 %	0.6 %	0 %	0 %	100 %
	2	56	19	1	0	0	76
	% within Browsing	73.7 %	25 %	1.3 %	0 %	0 %	100 %
	Sometimes	28	16	8	4	0	56
	% within Browsing	50 %	28.6 %	14.3 %	7.1 %	0 %	100 %
	4	7	9	10	7	1	34
	% within Browsing	20.6 %	26.5 %	29.4 %	20.6 %	2.9 %	100 %
	Regularly	9	1	1	5	8	24
	% within Browsing	37.5 %	4.2 %	4.2 %	20.8 %	33.3 %	100 %
	Total	266	48	21	16	9	360
	% within Browsing	73.9 %	13.3 %	5.8 %	4.4 %	2.5 %	100 %

4.2.3.5. Consumer Electronics. An inspection of the main diagonal of the cross tabulation for Consumer Electronics indicated a mixed conclusion about the respondents' online browsing and purchasing behaviors in this category. While the respondents were more or less evenly distributed across the range of responses ('Never' to 'Regularly') with regard to their online browsing behavior, more than half (55.4%) of the respondents recorded that they never purchased products in this category (please refer to Table 4.13 for details). A review of the chi-square [$\chi^2 = 166.798^a$ (^{a} 7 cells (28%) had an expected count less than 5; the minimum expected count was 1.70); $p < 0.000$], the contingency coefficient ($C = 0.558$, $p < 0.000$) and Pearson's r ($r = 0.537$; $p < 0.000$) showed that a moderately positive relationship existed between the online browsing and purchasing behavior for the Consumer Electronics shopping category.

Table 4.13.
Cross Tabulation of Online Browsing and Purchasing Behavior for Consumer Electronics

Cross Tabulation of Online Browsing and Purchasing Behavior for Consumer Electronics

		Purchase					
		Never	2	Sometimes	4	Regularly	Total
Browsing	Never	72	3	2	0	0	77
	% within Browsing	93.5 %	3.9 %	2.6 %	0 %	0 %	100 %
	2	39	17	3	0	0	59
	% within Browsing	66.1 %	28.8 %	5.1 %	0 %	0 %	100 %
	Sometimes	47	22	24	0	1	94
	% within Browsing	50 %	23.4 %	25.5 %	0 %	1.1 %	100 %
	4	34	12	22	13	0	81
	% within Browsing	42 %	14.8 %	27.2 %	16 %	0 %	100 %
	Regularly	12	9	14	12	10	57
	% within Browsing	21.1 %	15.8 %	24.6 %	21.1 %	17.5 %	100 %
	Total	204	63	65	25	11	368
	% within Browsing	55.4 %	17.1 %	17.7 %	6.8 %	3 %	100 %

4.2.2.6 Entertainment. An inspection of the main diagonal of the cross tabulation for Entertainment indicated that the respondents' online browsing and purchasing behaviors in this category were mostly similar with exceptions in '2' point browsers and '4' point browsers (please refer to Table 4.14 for details). A review of the chi-square [$\chi^2 = 295.600^a$ (^{a} 1 cell (4%) had an expected count less than 5; the minimum expected count was 4.58); $p < 0.000$], the contingency coefficient ($C = 0.668$, $p < 0.000$) and Pearson's r ($r = 0.645$; $p < 0.000$) showed that a strong positive relationship existed between the online browsing and purchasing behavior for the Entertainment shopping category.

Table 4.14.
Cross Tabulation of Online Browsing and Purchasing Behavior for Entertainment

Cross Tabulation of Online Browsing and Purchasing Behavior for Entertainment

		Purchase					
		Never	2	Sometimes	4	Regularly	Total
Browsing	Never	60	6	6	0	0	72
	% within Browsing	83.3 %	8.3 %	8.3 %	0 %	0 %	100 %
	2	28	23	12	1	0	64
	% within Browsing	43.8 %	35.9 %	18.8 %	1.6 %	0 %	100 %
	Sometimes	19	20	52	4	3	98
	% within Browsing	19.4 %	20.4 %	53.1 %	4.1 %	3.1 %	100 %
	4	18	7	23	26	1	75
	% within Browsing	24 %	9.3 %	30.7 %	34.7 %	1.3 %	100 %
	Regularly	3	5	13	12	25	58
	% within Browsing	5.2 %	8.6 %	22.4 %	20.7 %	43.1 %	100 %
	Total	128	61	106	43	29	367
	% within Browsing	34.9 %	16.6 %	28.9 %	11.7 %	7.9 %	100 %

4.2.2.7 Computer Hardware / Software. An inspection of the main diagonal of the cross tabulation for Computer Hardware / Software indicated that the respondents' online browsing and purchasing behaviors in this category were not very similar and showed mixed trends. Around 30 % of the respondents reported that they never browsed online for this category and more than half (52.9%) of the respondents reported that they never purchased products in this category (please refer to Table 4.15 for details). However, a review of the chi-square [$\chi^2 = 284.460^a$ (^{a} 4 cells (16 %) had an expected count less than 5; the minimum expected count was 2.76); $p < 0.000$], the contingency coefficient ($C = 0.662$, $p < 0.000$) and Pearson's r ($r = 0.713$; $p < 0.000$) showed that a strong positive relationship existed between the online browsing and purchasing behavior for the Computer Hardware / Software shopping category.

Table 4.15.
Cross Tabulation of Online Browsing and Purchasing Behavior for Computer Hardware/ Software

Cross Tabulation of Online Browsing and Purchasing Behavior for Computer Hardware / Software

		Purchase					
		Never	2	Sometimes	4	Regularly	Total
Browsing	Never	102	3	2	1	0	108
	% within Browsing	94.4 %	2.8 %	1.9 %	0.9 %	0 %	100 %
	2	44	26	5	0	0	75
	% within Browsing	58.7 %	34.7 %	6.7 %	0 %	0 %	100 %
	Sometimes	31	11	23	3	0	68
	% within Browsing	45.6 %	16.2 %	33.8 %	4.4 %	0 %	100 %
	4	12	14	20	10	5	61
	% within Browsing	19.7 %	23 %	32.8 %	16.4 %	8.2 %	100 %
	Regularly	4	3	9	23	14	53
	% within Browsing	7.5 %	5.7 %	17 %	43.4 %	26.4 %	100 %
	Total	193	57	59	37	19	365
	% within Browsing	52.9 %	15.6 %	16.2 %	10.1 %	5.2 %	100 %

4.2.2.8 Food / Beverage / Groceries. An inspection of the main diagonal of the cross tabulation for Food / Beverage / Groceries indicated that the respondents' online browsing and purchasing behaviors in this category were not very similar. With 72.4% of the respondents recorded that they never browsed for products in this category and 85.8% of the respondents recorded that they never purchased products in this category, it may be said that Food / Beverage / Groceries was the one of the unpopular online shopping category (please refer to Table 4.16 for details). However, a review of the chi-square [$\chi^2 = 249.082^a$ (^{a} 17 cells (68 %) had an expected count less than 5; the minimum expected count was 0.04); $p < 0.000$], the contingency coefficient ($C = 0.636$, $p < 0.000$) and Pearson's r ($r = 0.498$; $p < 0.000$) showed that a moderate positive relationship existed between the online browsing and purchasing behavior for the Food / Beverage / Groceries shopping category.

Table 4.16.
Cross Tabulation of Online Browsing and Purchasing Behavior for Food / Beverage / Groceries

Cross Tabulation of Online Browsing and Purchasing Behavior for Food / Beverage / Groceries							
		Purchase					
		Never	2	Sometimes	4	Regularly	Total
Browsing	Never	259	3	1	0	2	265
	% within Browsing	97.7 %	1.1 %	0.4 %	0 %	0.8 %	100 %
	2	39	24	2	0	0	65
	% within Browsing	60 %	36.9 %	3.1 %	0 %	0 %	100 %
	Sometimes	8	5	5	0	0	18
	% within Browsing	44.4 %	27.8 %	27.8 %	0 %	0 %	100 %
	4	3	1	3	2	1	10
	% within Browsing	30 %	10 %	30 %	20 %	10 %	100 %
	Regularly	5	1	1	0	1	8
	% within Browsing	62.5 %	12.5 %	12.5 %	0 %	12.5 %	100 %
	Total	314	34	12	2	4	366
	% within Browsing	85.8 %	9.3 %	3.3 %	0.5 %	1.1 %	100 %

4.2.2.9 Home Appliances. An inspection of the main diagonal of the cross tabulation for Home Appliances indicated that the respondents' online browsing and purchasing behaviors in this category were not very similar. With 53.9% of the respondents recorded that they never browsed for products in this category and 84.3% of the respondents recorded that they never purchased products in this category, it may be said that Home Appliances was the one of the unpopular online shopping category (please refer to Table 4.17 for details). However, a review of the chi-square [χ^2 = 116.587[a] ([a] 16 cells (64 %) had an expected count less than 5; the minimum expected count was 0.05); p< 0.000], the contingency coefficient (C = 0.490, p < 0.000) and Pearson's r (r = 0.391; p < 0.000) showed that a weak relationship existed between the online browsing and purchasing behavior for the Home Appliances shopping category.

Table 4.17.
Cross Tabulation of Online Browsing and Purchasing Behavior for Home Appliances

Cross Tabulation of Online Browsing and Purchasing Behavior for Home Appliances

		Purchase					
		Never	2	Sometimes	4	Regularly	Total
Browsing	Never	194	3	2	0	0	199
	% within Browsing	97.5 %	1.5 %	1 %	0 %	0 %	100 %
	2	44	17	1	1	0	63
	% within Browsing	69.8 %	27 %	1.6 %	1.6 %	0 %	100 %
	Sometimes	42	7	10	0	0	59
	% within Browsing	71.2 %	11.9 %	16.9 %	0 %	0 %	100 %
	4	20	5	5	1	0	31
	% within Browsing	64.5 %	16.1 %	16.1 %	3.2 %	0 %	100 %
	Regularly	11	0	4	1	1	17
	% within Browsing	64.7 %	0 %	23.5 %	5.9 %	5.9 %	100 %
	Total	311	32	22	3	1	369
	% within Browsing	84.3 %	8.7 %	6 %	0.8 %	0.3 %	100 %

4.3. Group Classification: High, Medium and Low Users

Each respondent had two set of scores corresponding to their browsing and purchase behavior (i.e. Diversified Online Browsing Score and Diversified Online Purchasing Score). Based on their scores, the entire sample of 372 respondents was equally divided among three groups - "Low", "Medium", and "High" in ascending order of their scores, for both their visit and purchase behaviors. The frequency breakdown of the sample with regard to the overlap of their browsing and purchasing behavior (Table 4.18) indicated that approximately 21% of the respondents were low diversified browserss and purchasers, 13.7% were medium diversified browsers and purchasers and 22% were high diversified browsers and purchasers.

Table 4.18. *Frequency Breakdown of Sample's Browse and Purchase Classification*

Cross tabulation: Browse * Purchase					
		Purchase (n)			
		Low	Medium	High	Total
Browse (n)	Low	78	41	5	124
	Medium	35	51	38	124
	High	11	32	81	124
	Total	124	124	124	372

4.4. Detailed Analyses of Website Features

A set of 18 website attributes was selected (please see Table 4.1) and MANOVA was conducted to determine whether the three groups, viz. the frequent ('high' group), less frequent ('medium' group) and non frequent ('low' group) shoppers, significantly

differed in their preferences for these attributes. The analyses proceeded with conducting separate ANOVAs for each of the attributes, wherein the data were scanned for outliers and normal distribution and confirmed for meeting the assumptions for univariate ANOVA. Levene's test of the equality of variance was used to determine each model's equality of variance. For post-hoc analyses, Bonferroni correction or Tamhane's T2 method (when equal variance was not assumed) were used to ensure that the combined Type I error probability, when performing multiple tests, was 0.05. In addition to these tests, MANCOVA and univariate ANCOVAs were conducted on the 18 website attributes to check for group differences associated with covariates (obtained as a part of regression analyses; see section 4.7 for details) such that more statistical control on variability could be obtained by reducing the error or effect of the extraneous variable(s).

4.4.1. Diversified Online Browsing Behavior and Website Attribute Preferences. With regard to respondents' online browsing behavior, a one-way MANOVA was conducted to investigate the group differences in website attribute preferences and the results revealed that a significant difference existed among the high, medium and low diversified browserss on these preferences (Pillai's Trace = 0.174, Wilks' $\Lambda = 0.833$, Hotelling's Trace = 0.192, Roy's Largest Root = 0.125, $p < 0.01$). A one-way MANCOVA test was also performed to control for gender and income effects (covariates as found in regression analysis; see section 4.7 and Table 4.25 for details) and the result found was in line with the MANOVA, showing that there were significant group differences for website feature preferences (Pillai's Trace = 0.176, Wilks' $\Lambda = 0.830$, Hotelling's Trace = 0.196, Roy's Largest Root = 0.134, $p < 0.01$). Analysis of Variance (ANOVA) was conducted on each attribute as a follow-up test to MANOVA. As per the

ANOVA findings, the groups differed significantly on five attributes viz. Easy to Find Products ($F_{(2, 369)} = 3.807$, $p < 0.05$, partial $\eta^2 = 0.020$), Website is New and Different ($F_{(2, 369)} = 3.204$, $p< 0.05$, partial $\eta^2 = 0.017$), Provides Customer Feedback ($F_{(2, 369)} = 8.169$, $p < 0.01$, partial $\eta^2 = 0.042$), Family and Friends Happy Shopping at the Website ($F_{(2, 369)} = 4.255$, $p < 0.05$, partial $\eta^2 = 0.023$), and Enjoyable to Visit ($F_{(2, 369)} = 3.159$, $p < 0.05$, partial $\eta^2 = 0.017$) (please refer to Table 4.19 for a summary table and Appendix C2 for information regarding ANOVA and ANCOVA summary information).

More specifically, for attribute '*Easy to Find Products*', the assumption of equality of variances could not be assumed as indicated by Levene's test and Tamhane's T2 post-hoc correction was used. Tamhane's T2 correction revealed that the medium diversified browser demonstrated significantly more preference than did the low diversified browser group. For all the other four significant attributes, Levene's test showed that these models assumed equal variances and hence, Bonferroni's correction was used for post-hoc analyses. The following results were found after Bonferroni's correction: for attribute '*Website is New and Different*', the high diversified browsers were found have significantly greater preference than did the medium diversified browsers; for attribute '*Provides Customer Feedback*', the high diversified browsers showed significantly more preference than did the medium diversified browsers and low diversified browsers; and finally for attribute '*Family and Friends Happy Shopping at the Website*', the high diversified browsers demonstrated significantly greater preference than did the medium diversified browsers and low diversified browsers. This meant that overall, as compared to other browsers, high diversified browsers preferred those websites that were new and different, had a customer feedback section and were

positively reviewed by family and friends. (Please see Appendix C1, Table 1a for browsing groups' means and SDs).

Table 4.19.
Summary of Univariate ANOVA Results of Website Attributes for the Diversified Online Browsing Classification

Attributes	F	Sig.	η^2	Post-Hocs
Order process is Easy to Use	2.183	NS	0.012	
Easy to Find Product	3.807	Sig*	0.020	Medium > Low
Website is New and Different	3.204	Sig*	0.017	High > Medium
Product Price	2.317	NS	0.012	
Provides Customer Feedback	8.169	Sig**	0.042	High > Medium, Low
Family and Friends Happy Shopping at the Website	4.255	Sig*	0.023	High > Medium, Low
Reputation and Credibility of the Company on the Web	1.513	NS	0.008	
Enjoyable to Visit	3.159	Sig*	0.017	
Family and Family will Like to Know My Opinion	2.466	NS	0.013	
Low or No Charge for Shipping & Handling	1.650	NS	0.009	
Entertaining Graphics and Displays	0.523	NS	0.003	
Provides Product Info including FAQ	2.382	NS	0.013	
Good Place to Find a Bargain	0.438	NS	0.002	
Fast Response from Customer Service	0.842	NS	0.005	
Hear about it on Radio / TV / Newspapers	1.852	NS	0.010	
Return Policy is Easy	1.162	NS	0.006	
Offers Good Price Incentives	1.863	NS	0.010	
Interactive Web Design	1.582	NS	0.009	

* Sig., $p < 0.05$; ** Sig., $p < 0.01$

4.4.2. Diversified Online Purchasing Behavior and Website Attribute Preferences.

With regard to respondents' online purchasing behavior, a one-way MANOVA was conducted to investigate the group differences in website attribute preferences and the results revealed that a significant difference existed among the high, medium and low diversified purchasers on these preferences (Pillai's Trace = 0.167, Wilks' $\Lambda = 0.839$, Hotelling's Trace = 0.186, Roy's Largest Root = 0.140, $p < 0.01$). A one-way MANCOVA test was also performed to control for income effects (covariate as found in regression analysis; see section 4.7 and Table 4.25 for details) and the MANCOVA result was found to be in line with the MANOVA result, showing that there were significant group differences for the website feature preferences (Pillai's Trace = 0.181, Wilks' $\Lambda = 0.826$, Hotelling's Trace = 0.203, Roy's Largest Root = 0.150, $p < 0.01$). Analysis of Variance (ANOVA) was conducted on each attribute as a follow-up test to MANOVA. As per the ANOVA findings, the groups differed significantly on eight attributes viz. Order Process is Easy to Use ($F_{(2, 369)} = 9.838$, $p < 0.01$, partial $\eta^2 = 0.051$), Easy to Find Products ($F_{(2, 369)} = 8.652$, $p < 0.01$, partial $\eta^2 = 0.045$), Website is New and Different ($F_{(2, 369)} = 3.763$, $p< 0.05$, partial $\eta^2 = 0.020$), Product Price ($F_{(2, 369)} = 3.881$, $p < 0.05$, partial $\eta^2 = 0.021$), Provides Customer Feedback ($F_{(2, 369)} = 4.751$, $p < 0.01$, partial $\eta^2 = 0.025$), Reputation and Credibility of the Company on the Web ($F_{(2, 369)} = 4.751$, $p < 0.05$, partial $\eta^2 = 0.024$), Provides Product Info including FAQ ($F_{(2, 369)} = 6.055$, $p < 0.01$, partial $\eta^2 = 0.032$), and Interactive Web Design ($F_{(2, 369)} = 4.208$, $p < 0.05$, partial $\eta^2 = 0.022$) (please refer to Table 4.20 for a summary table and Appendix C4 for ANOVA and ANCOVA summary information).

Table 4.20.
Summary of Univariate ANOVA Results of Website Attributes for the Diversified Online Purchasing Classification

Attributes	F	Sig.	η^2	Post-Hocs
Order process is Easy to Use	9.838	Sig.**	0.051	Low < Medium, High
Easy to Find Product	8.652	Sig.**	0.045	Low < Medium, High
Website is New and Different	3.763	Sig.*	0.020	High > Low
Product Price	3.881	Sig.*	0.021	Medium > Low
Provides Customer Feedback	4.751	Sig.**	0.025	High > Low
Family and Friends Happy Shopping at the Website	0.944	NS	0.005	
Reputation and Credibility of the Company on the Web	4.482	Sig.*	0.024	Low < Medium, High
Enjoyable to Visit	2.780	NS	0.015	
Family and Family will Like to Know My Opinion	1.355	NS	0.007	
Low or No Charge for Shipping & Handling	2.177	NS	0.012	
Entertaining Graphics and Displays	1.008	NS	0.005	
Provides Product Info including FAQ	6.055	Sig.**	0.032	High > Low
Good Place to Find a Bargain	1.253	NS	0.007	
Fast Response from Customer Service	1.699	NS	0.009	
Hear about it on Radio / TV / Newspapers	0.647	NS	0.003	
Return Policy is Easy	0.666	NS	0.004	
Offers Good Price Incentives	0.880	NS	0.005	
Interactive Web Design	4.208	Sig.*	0.022	High > Low

* Sig., $p < 0.05$
** Sig., $p < 0.01$

For attribute '*Easy to Find Product*', the assumption of equality of variances could not be assumed as indicated by Levene's test and Tamhane's T2 post-hoc correction was used. Tamhane's T2 correction revealed that the low diversified purchaser group showed significantly greater preference than did the medium diversified purchaser and high diversified purchaser group. For all the other four significant attributes, Levene's test showed that these models assumed equal variances and hence, Bonferroni's correction was used for post-hoc analyses. The following results were found after Bonferroni's correction: for attribute '*Order Process is Easy to Use*', the low diversified purchasers demonstrated significantly less preference than did the medium diversified purchasers and high diversified purchasers; for attribute '*Website is New and Different*', the high diversified purchasers were found to be significantly higher in their preference than the low diversified purchasers; for '*Product Price*', the medium diversified purchasers showed significantly more preference than did the low diversified purchasers; for attribute '*Provides Customer Feedback*', the high diversified purchasers demonstrated significantly greater preference than did the low diversified purchasers; for attribute '*Reputation and Credibility of the Company on the Web*', the low diversified purchasers showed significantly less preference than did the medium and high diversified purchasers; for attribute '*Provides Product Info including FAQ*', the high diversified purchasers were found to be significantly higher in their preference than the low diversified purchasers; and finally for attribute '*Interactive Web Design*', the high diversified browsers showed significantly greater preference than did the low diversified purchasers.

This meant that overall, high diversified purchasers preferred those websites that were new and different, had interactive designs and/or belonged to companies that were

reputable and credible over the Internet over other purchasers. This group also desired websites where it was easy to find products, which provided product information and had FAQs and customer feedback sections, and/or wherein the order process was easy to use. (Please see Appendix C3, Table 1a for purchasing groups' means and SDs).

4.5. Detailed Analyses of Internet Experience.

Under the broad umbrella of 'Internet Experience', two constructs namely Internet usage and generic online shopping, were explored. In specific, two variables *InterL* and *InterU* (see section 4.1.2 for details) were used to typify the Internet usage behavior of the respondents while the generic online shopping behavior was typified by variable *CompositeShopOnline* (see section 4.1.3 for details). A one-way MANOVA was conducted on the three variables followed by separate ANOVAs to test for groups for differences in their Internet experience. The original data had been previously scanned for outliers and normal distribution, and confirmed for meeting the assumptions for univariate ANOVA. Levene's test of the equality of variance was used to determine each model's equality of variance. For post-hoc analyses, Bonferroni correction or Tamhane's T2 method (when equal variance was not assumed) were used to ensure that the combined Type I error probability, when performing multiple tests, was 0.05. In addition to these tests, MANCOVA and univariate ANCOVAs were conducted on the Internet experience variables to check for group differences associated with covariates (obtained as a part of regression analyses; see section 4.7 for details) such that more statistical control on variability could be obtained by reducing the error or effect of the extraneous variable(s).

4.5.1. Diversified Online Browsing Behavior and Internet Experience. With regard to respondents' online browsing behavior, a one-way MANOVA was conducted to investigate the group differences in their Internet experience (variables *InterL*, *InterU* and *CompositeShopOnline*) and the results revealed that significant differences existed between the high, medium and low diversified browsers in their experience (Pillai's Trace = 0.257, Wilks' $\Lambda = 0.747$, Hotelling's Trace = 0.334, Roy's Largest Root = 0.319, $p < 0.01$). A one-way MANCOVA test was also performed to control for gender and income effects (covariates as found in regression analysis, see section 4.7 and Table 4.25 for details) and the results found were in line with the MANOVA results, showing that there were significant group differences in their Internet experience (Pillai's Trace = 0.241, Wilks' $\Lambda = 0.762$, Hotelling's Trace = 0.308, Roy's Largest Root = 0.294, $p < 0.01$). Analysis of Variance (ANOVA) was also conducted on each variable as a follow-up test to MANOVA. As per the ANOVA findings, the groups differed significantly on all the three variables viz. *InterL* ($F_{(2, 364)} = 7.441$, $p < 0.01$, partial $\eta^2 = 0.039$), *InterU* ($F_{(2, 364)} = 18.925$, $p < 0.01$, partial $\eta^2 = 0.094$) and *CompositeShopOnline* ($F_{(2, 364)} = 48.804$, $p < 0.01$, partial $\eta^2 = 0.211$) (please refer to Table 4.21 for a summary table and Appendix D2 for information regarding ANOVA and ANCOVA summary information).

For all variables, Levene's test showed that these models displayed equal variances and hence, Bonferroni's correction was used for post-hoc analyses. The following results were found after Bonferroni's correction: for variable '*InterL*', the low diversified browsers significantly less experience than did the medium and high diversified browsers; for variable '*InterU*', the high diversified browsers showed significantly more Internet usage than did the medium and low diversified browsers and finally for variable '*CompositeShopOnline*', the high diversified browsers were found to

be significantly higher from the medium diversified browsers; and low diversified browsers. Also, the medium diversified browsers showed significantly scores than the low diversified browsers. (See Appendix D, Table D1.1a for means and SDs)

Table 4.21.
Summary of Univariate ANOVA Results of Internet Experience Variables for the Diversified Online Browsing Classification

Variables		F	Sig.	η^2	Post-Hocs
InterL	"About how long have you been using the Internet (*in years*)?"	7.441	Sig.**	0.039	Low < Medium, High
InterU	"On average, how many hours per week, if any, do you use the Internet?"	18.925	Sig.**	0.094	High >Medium, Low
CompositeShopOnline	*Combination of Inter1 and ShopF*	48.804	Sig.**	0.211	High > Medium > Low

**Sig., p< 0.01

These results suggested that the low diversified browsers reported to having used the Internet for a significantly fewer number of years than the medium and high diversified browsers. The high diversified browsers, in turn, reported using the Internet greater number of hours per week than the medium and low diversified browsers. And the high diversified browsers shopped more often on the Internet than did the medium diversified browsers, who in turn were more frequent Internet shoppers than were the low diversified browsers.

4.5.2. Diversified Online Purchasing Behavior and Internet Experience. With regard to respondents' online purchasing behavior, a one-way MANOVA was conducted to investigate the group differences in their Internet experience (variables *InterL*, *InterU* and *CompositeShopOnline*) and the results revealed that a significant difference existed among the high, medium and low diversified purchasers in their experience (Pillai's Trace = 0.247, Wilks' $\Lambda = 0.759$, Hotelling's Trace = 0.311, Roy's Largest Root = 0.285, $p < 0.01$). A one-way MANCOVA test was also performed to control for income effects (covariate as found in regression analysis, see section 4.7 and Table 4.25 for details) and the results were found to be in line with the MANOVA results, showing that there were significant group differences in their Internet experience (Pillai's Trace = 0.235, Wilks' $\Lambda = 0.769$, Hotelling's Trace = 0.294, Roy's Largest Root = 0.273, $p < 0.01$). Analysis of Variance (ANOVA) was conducted on each variable as a follow-up test to MANOVA. As per the ANOVA findings, the groups differed significantly on all the three variables viz. *InterL* ($F_{(2, 364)} = 17.993$, $p < 0.01$, partial $\eta^2 = 0.090$), *InterU* ($F_{(2, 364)} = 11.408$, $p < 0.01$, partial $\eta^2 = 0.059$) and *CompositeShopOnline* ($F_{(2, 364)} = 39.288$, $p < 0.01$, partial $\eta^2 = 0.178$) (please refer to Table 4.22 for a summary table and Appendix D4 for information regarding ANOVA and ANCOVA summary information).

For all variables, Levene's test showed that these models displayed equal variances and hence, Bonferroni's correction was used for post-hoc analyses. The following results were found after Bonferroni's correction: for variable '*InterL*', the low diversified purchasers showed significantly less experience than did the medium and high diversified purchasers; for variable '*InterU*', the high diversified purchasers demonstrated significantly more Internet usage per week than did the medium and low diversified purchasers; and finally for variable '*CompositeShopOnline*', the high diversified

purchasers were found to be significantly high than the medium and low diversified purchasers. Also, the medium diversified purchasers showed significantly higher scores than did the low diversified purchasers. (Please see Appendix D3, Table 1a for means and SDs).

Table 4.22.
Summary of Univariate ANOVA Results of Internet Experience Variables for the Diversified Online Purchasing Classification

Variables		F	Sig.	η^2	Post-Hocs
InterL	"About how long have you been using the Internet (*in years*)?"	17.993	Sig.**	0.090	Low < Medium, High
InterU	"On average, how many hours per week, if any, do you use the Internet?"	11.408	Sig.**	0.059	High >Medium, Low
CompositeShopOnline	*Combination of Inter1 and ShopF*	39.288	Sig.**	0.178	High > Medium > Low

**Sig., p< 0.01

These results were similar to the findings for the respondents' Internet experience and their online browsing behavior, and suggested that the low diversified purchasers reported to having used the Internet for significantly fewer number of years than the medium and high diversified purchasers. The high diversified purchasers, in turn, reported using the Internet greater number of hours per week than the medium and low diversified purchasers. And the high diversified purchasers shopped more often on the Internet than the medium diversified purchasers, who in turn were more frequent Internet shoppers than the low diversified purchasers.

4.6. Congruency in Website Preferences and Internet Experience between Online Diversified Browser and Purchaser groups.

As seen in the table below (Table 4.23), both the diversified online browser and purchaser groups were found to differ significantly in their preference of only three website features – '*Easy to Find Product*', '*Website is New and Different*', '*Provides Customer Feedback*'. On closer scrutiny, the groups did not show much similarity in their trend of differences in these preferences for the varying levels of browsing and purchasing (read, low, medium and high). However, there was absolute similarity in the trend of differences between the browser and purchaser groups at the various levels (read, low, medium and high) for all the three Internet experience variables. For both browsing and purchasing, the low diversified groups reported to having used the Internet for significantly less number of years than the medium and high diversified groups. The high diversified groups, in turn, reported using the Internet greater number of hours per week than the medium and low diversified groups. And the high diversified groups shopped more often on the Internet than the medium diversified groups, who in turn were more frequent Internet shoppers than the low diversified groups.

Table 4.23.
Summary Table: Website Preferences and Internet Experience for the Online Diversified Browser and Purchaser Groups

		BROWSE		***PURCHASE***	
		Sig. & Post Hocs		Sig. & Post Hocs	
ATTRIBUTES	Order process is Easy to Use	NS		Sig.**	Low < Medium, High
	Easy to Find Product	Sig.*	Medium > Low	Sig.**	Low < Medium, High
	Website is New and Different	Sig.*	High > Medium	Sig.*	High > Low
	Product Price	NS		Sig.*	Medium > Low
	Provides Customer Feedback	Sig.**	High > Medium, Low	Sig.**	High > Low
	Family and Friends Happy Shopping at the Website	Sig.*	High > Medium, Low	NS	
	Reputation and Credibility of the Company on the Web	NS		Sig.*	Low < Medium, High
	Enjoyable to Visit	Sig. [a]		NS	
	Family and Family will Like to Know My Opinion	NS		NS	
	Low or No Charge for Shipping & Handling	NS		NS	
	Entertaining Graphics and Displays	NS		NS	
	Provides Product Info including FAQ	NS		Sig.**	High > Low
	Good Place to Find a Bargain	NS		NS	
	Fast Response from Customer Service	NS		NS	
	Hear about it on Radio / TV / Newspapers	NS		NS	
	Return Policy is Easy	NS		NS	
	Offers Good Price Incentives	NS		NS	
	Interactive Web Design	NS		Sig.*	High > Low
INTERNET EXPERIENCE	InterL	Sig.**	Low < Medium, High	Sig.**	Low < Medium, High
	InterU	Sig.**	High > Medium, Low	Sig.**	High > Medium, Low
	CompositeShopOnline	Sig.**	High > Medium > Low	Sig.**	High > Medium > Low

* Sig., $p < 0.05$; ** Sig., $p < 0.01$;
[a] Sig. at $p < 0.05$, but ANCOVA indicated that the effect was due to the covariate rather than the independent variable.

4.7. Multiple Regressions

4.7.1. Demographics Predicting Online Browsing and Purchasing Frequency Scores. Before regressions were performed, the demographic variables that were selected as predictors were modified to suit the meet the protocols of the multiple regression analyses. This involved recoding the variables and the following schema was adopted: For gender, females were coded as '0' and males as '1'. For marital status, 'married' were coded as '0' and the remaining responses (included single/ never married, separated/divorced, and widowed) were combined into one group labeled as 'not married' (to ensure adequate group size) and coded as '1'. For education, the original responses of 'some high school', 'high school', technical school' and 'some college' were combined under the single label called 'not a college graduate' (to ensure adequate group size) and coded as '0'; while responses of 'college graduate' and 'graduate / professional' were also combined into one group (to ensure adequate group size) and coded as '1'. For employment, 'full time' workers were coded as '1' and individuals who were not working full time were coded as '0'. Finally, income response categories were recoded using the midpoint of the category range and then treated as a continuous variable. Both age and household size were treated as continuous variables.

Overall, seven demographic variables were entered simultaneously into a linear multiple regression analysis to predict individuals' magnitude of diversified online browsing and purchasing at separate instances. The complete set of predictors used in the regression analyses included age, gender, marital status, education, (full time) employment, income and household size. On performing multiple regression analyses, it was found that the tolerance values were well over 0.1 indicating that the data set was free of multicollinearity. (Please see Table 4.24 for details).

Table 4.24.
Multicollinearity statistics for Demographic Variables used in Multiple Regression Analyses

Independent Variable	Tolerance	VIF
Gender[a]	0.934	1.071
Age[a]	0.658	1.519
Marital Status[a]	0.546	1.831
Education[a]	0.907	1.103
Employed- full time[a]	0.956	1.046
Income	0.703	1.422
House hold size	0.834	1.200

[a] Independent Variable is Dummy Coded

Online Browsing Behavior. The regression results indicated that the model including the seven demographic variables successfully and significantly predicted an individual's frequency of online browsing (read diversified online browsing behavior) ($R = 0.225$; $R^2 = 0.050$, $R^2_{adjusted} = 0.032$, $F_{(7, 364)} = 2.761$, $p < 0.01$). The model accounted for 5% of the variance in individuals' diversified online browsing behavior. A closer review of the regression coefficients revealed that only two predictors (gender and income) significantly contributed to the model. (See Appendix E, Table E.2 for a summary of the regression coefficients and zero-order correlations).

Online Purchasing Behavior. The regression results indicated that the model including the seven demographic variables successfully and significantly predicted an individual's frequency of online purchasing (read diversified online purchasing behavior)

($R = 0.263$, $R^2 = 0.069$, $R^2_{adjusted} = 0.051$, $F_{(7, 364)} = 3.855$, $p < 0.01$). The model accounted for 6.9% of the variance in individuals' diversified online purchasing behavior. A closer review of the regression coefficients revealed that only income significantly contributed to the model. Closer inspection of the zero-order or bivariate correlations revealed that education and gender may have had predictive potential as well. (See Appendix E, Table E.4 for a summary of the regression coefficients and zero-order correlations).

Overall, it may be said that income was able to predict an individual's diversified online browsing and purchasing behavior for all the nine shopping categories. And gender was a significant predictor of individual's diversified online browsing behavior for the nine shopping categories (please refer to Table 4.25 for regression summary).

Table 4.25.
Standardized Beta Weights of the Predictors, a Summary from the Multiple Regressions of Demographics and Diversified Online Shopping Scores

Variables	Online Browsing	Online Purchasing
Gender	0.106**	0.071
Age	-0.106	-0.117
Marital Status	0.041	-0.055
Education	0.024	0.085
Employed- full time	-0.031	0.028
Income	0.176**	0.196**
House hold size	-0.084	-0.090

* Sig., $p < 0.05$; ** Sig., $p < 0.01$
Diversified Online Browsing: $R = 0.225$; $R^2 = 0.050$, $R^2_{adjusted} = 0.032$, $F_{(7, 364)} = 2.761$, $p < 0.01$
Diversified Online Purchasing: $R = 0.263$, $R2 = 0.069$, $R^2_{adjusted} = 0.051$, $F(7, 364) = 3.855$, $p < 0.01$

In conclusion, the current study found that the individuals' diversified online browsing behavior was different from their purchasing behavior. With regard to their diversified online browsing across the nine specific product categories, significant group differences were found between the low, medium and high diversified browsers in their preference for 18 specific website features and their Internet experience. In addition, it

was found that the typical diversified online browser was more likely to be a male and earning a high income. With regard to the individuals' diversified online purchasing behavior, the low, medium and high diversified purchasers were found to differ significantly from one another in their website feature preferences as well as Internet experience. And the typical diversified online purchaser was more likely to be a highly educated, affluent and male.

CHAPTER V

DISCUSSION

The current study examined the nature of diversified online shoppers with respect to existing differences in their level of website feature preferences, Internet experience (usage and shopping behaviors) and individual characteristics. In this study, the term 'diversified online shopper' referred to both browsers of online information and online purchasers, and intended to point toward their online browsing / purchasing behaviors for nine specific online shopping categories, viz. Clothing/ Accessories, Books/ Magazines, Health / Medical, Financial Services, Consumer Electronics, Entertainment, Computer Hardware or Software, Food / Beverage / Groceries, and Home Appliances. It is important to keep in mind that, an individual's diversified online shopping behavior is used differently from one's overall magnitude or frequency of online shopping with the latter referring to the individual's online shopping behavior *outside the context of any specific shopping category.*

5.1. Volume of Shopping.

While it is not formally a research question, we should consider the issue, "*What is the individuals' volume of shopping for each shopping category*?". While the study found that *Entertainment* was the most popular category and products related to it were more often browsed for and purchased, *Food/ Beverage/ Groceries* was the most unpopular shopping category amongst online shoppers (please refer to Table 3.5 & 3.6 for complete listing of category specific shopping frequency). These findings were in line with previous research (Phau & Phoon, 2000; Ahuja, et al., 2003; White & Manning, 1998) which pointed to the overall constraint of the Internet being restricted to only two of our senses (namely sight and sound), thereby limiting an individual's overall product experience and making certain products less-sellable on the Internet. The findings may further be explained using Peterson, Balasubramanian & Bronnenberg's (1997) classification of goods and services along the three dimensions of cost and frequency of purchase, value proposition and degree of differentiation. Elaborating on it, according to this classification system, along the cost-frequency dimension (especially when products require physical delivery to complete purchase fulfillment), the more frequently the product is purchased and the more inexpensive it is (as in the case of most food/ beverage/ grocery products), the less it is suited for Internet based marketing. Along the dimension of their value proposition (tangibility), the more the products are intangible or service related (such as digital entertainment) and the greater is the frequency of their purchase or use, the greater the advantage of using Internet based marketing. Along the dimension of differentiation (i.e. seller is able to create a sustainable competitive advantage as product or service is differentiable), the more the products are differentiable, the more capable is Internet based marketing (by acting as an effective

segmentation mechanism) in helping consumers to buy their ideal product. Following this framework, since food/ beverage/ grocery related products (such as egg, milk, vegetables etc) have low outlay, are frequently purchased, tangible and non-differentiable, they are non suitable for selling through the Internet. In addition, online grocery shopping requires very little search for pre-purchase information and occurs when the need arises. Other factors, such as fewer online grocery companies operating in all the regions of the country, online grocery store deliveries are still not widely available, and grocery products being more easily available at lower prices in neighborhood stores make this category unpopular amongst online shoppers. In comparison, entertainment and consumer electronics related products or services are high differentiation goods, and searching for these on the Internet provides consumers to obtain information on various competing products and helps in choosing the ones that match their ideal. Also, products such as digital entertainment, consumer electronics, apparel etc. have been purchased through catalogs etc., and online shopping may be perceived as just another distribution channel by potential buyers (Ahuja et al., 2003). Also, there are well-established sites for product categories like digital entertainment (e.g. youtube.com), consumer electronics (e.g. circuitcity.com), clothing / accessories (e.g. landsend.com) that ease shopping online as compared to online grocery sites, thereby making these more popular categories to shop from on the Internet.

5.2. Browsing versus Purchasing.

The first research question, "*Is individuals' online browsing behavior different from their online purchasing behaviors?*", investigated whether diversified online browsers and purchasers make two separate markets. The results of this study confirmed the distinctiveness of the two as the extent of individuals' diversified online browsing accounted for only approximately one third of the variance in their diversified online purchasing across the nine product categories. Such a finding is consistent with the existing literature, which indicated that Internet users may be categorized into Internet shoppers and Internet browsers and that online information searching or browsing may be thought of as an antecedent to consumers' future online purchasing behavior. Ahuja et al. (2003) elaborated on this, "information gathering aspects of e-commerce serve to educate the consumer, which is ultimately in the interest of the online shopping industry" (p.1, 2). While these two markets are overlapping subsets of the Internet consumption population, researchers (such as Li, et al., 1999; Chiang & Dholakia, 2003; Monsuwe, et al., 2004) are working towards exploring factors that can augment the common ground and motivate browsers to buy online.

5.3. Website Feature Preferences.

As shopping at online stores is devoid of one's sense of smell and touch, the promise of online shopping greatly lies on the attractiveness of user interfaces and how consumers interact with computers. The success of e-commerce is dependent largely on the cyberspace appearance of websites, on their features (such as information presentation, navigation, quality of pictures and images, etc.) in addition to the quality of subsequent order fulfillment and consumer feedback provisions. While previous studies

(Park & Kim, 2003; Jarvenpaa & Todd, 1997; Szymanski & Hise, 2000; Griffith, Krampf & Palmer, 2000) explored consumers' shopping experience (and satisfaction) and their evaluations of online shopping websites, the current study examined the individuals' website feature preferences with respect to their online browsing and purchasing across nine specific product categories. It included two research questions "*Do the frequent ('high'), less frequent ('medium') and non frequent ('low') diversified online browsers differ in their website feature preferences?*" and "*Do the frequent ('high'), less frequent ('medium') and non frequent ('low') diversified online purchasers differ in their website feature preferences?*" for investigating the same.

A set of 18 website attributes was selected to investigate the individuals' level of diversified online shopping and attribute preferences. The selection of these attributes was governed by their pertinence to the current study and by their recurring appearance in the existing online shopping literature (see Chapter IV, Table 4.1 for complete listing).

It was found that the high, the medium and the low diversified online *browsers* did differ in their preferences for website attributes. The high diversified browsers showed significantly greater preference for the following attributes- '*Website is New and Different*', '*Provides Customer Feedback*' and '*Family and Friends Happy Shopping at the Website*' as compared to the other browsers. More specifically, for the attribute '*Website is New and Different*', the study found high diversified browsers to desire this attribute more than the low diversified browsers, who in turn desired it more than the medium diversified browsers (with none of these differences being significant on a pair wise basis). Overall, the high and medium diversified browser groups were the groups that showed significant difference in their preference for this attribute. The attribute '*Provides Customer Feedback*' was more preferred by high diversified browsers,

followed by medium diversified browsers and then by low diversified browsers. A similar trend was observed for the attribute '*Family and Friends Happy Shopping at the Website*', with the high diversified group significantly preferring it over the medium and low diversified browsers. The attribute '*Easy to Find Products*' was more preferred by medium diversified browsers than by low diversified browsers.

The study revealed significant differences in website feature preferences between the high, the medium and the low diversified online *purchasers* as well. Specifically, both the medium and high diversified purchasers desired '*Order Process is Easy to Use*', '*Easy to Find Product*' and '*Reputation and Credibility of the Company on the Web*' features significantly more than did the low diversified purchasers. For each of these three attributes, the high diversified purchasers showed more preference than did the medium diversified purchaser group, though the differences were not significant. In addition, the high diversified purchasers showed significantly greater preference for '*Website is New and Different*', '*Provides Customer Feedback*', '*Provides Product Info including FAQ*' and '*Interactive Web Design*' than did the low diversified purchasers (the medium diversified purchaser group desired these attributes more than did the low diversified group, but less than did the high diversified group, though the differences were not significant) . The attribute '*Product Price*' was most preferred by medium diversified purchasers, followed by high diversified purchasers and then by low diversified purchasers. The medium and low diversified purchasing groups were the groups that showed significant difference in their preference for this attribute.

Although these findings make sense intuitively, they further find confirmation in previous research. As found in the study, the preference of the more diversified shoppers for '*Easy to Find Product*', '*Order Process is Easy to Use*' and '*Provides Product Info*

including FAQ' web attributes, may be explained as them looking for more convenient, time and effort saving mechanisms on the websites as they go along searching and buying products or services on the Internet. Bakos (1997) insisted that the primary role of online stores was to help reduce consumers' search cost by providing high quality information so that the consumers are able to easily find products. In fact, Lohse and Spiller (1998) found that one of the areas in which big online stores lost out to smaller online stores at converting their traffic into sales was related to consumers' difficulty in finding the product they sought. In addition, when websites ensure good customer service by including features such as FAQs and customer feedback sections, they add to consumers' satisfaction and aid subsequent buying decisions. Hence it comes as no surprise that the shoppers in the study desired '*Provides Customer Feedback*' web feature while browsing or purchasing online. With the glut of websites that mushroom on the Internet everyday, it is common sense that online shoppers look for websites that are novel, different and have high quality interactive features embedded in them to amuse these shoppers as they search for information and/ or shop online. This line of thought goes hand in hand with the study's findings that more diversified shoppers preferred '*Website is New and Different*' and '*Interactive Web Design*' than non shoppers. Lastly, the study found that attributes '*Family and Friends Happy Shopping at the Website*' and '*Reputation and Credibility of the Company on the Web*', were preferred by diversified shoppers more than by others, which may be seen as an indication of a trust issue in consumers. Greater levels of trust in consumers have been associated with greater purchase intentions or actual purchases (Chang et al., 2005). When individuals find affirmation of their trust in a particular website from people they know, as well the deep seated assurance from the

company, it adds to their loyalty to the site and encourages frequent visit or purchase intentions.

5.4. Internet Experience.

Two research questions are pertinent here: a) "*Do the high, medium and low diversified online browsers differ in their Internet experience (usage and generic online shopping behavior)?*", and b) "*Do the high, medium and low diversified online purchasers differ in their Internet experience (usage and generic online shopping behavior)?*". Notice, here Internet experience was a generic broad term used to include both individuals' Internet usage and generic online shopping behaviors.

In regard to individuals' online *browsing* behavior, the study revealed significant differences in the individual's Internet experience with his/her level of online browsing tendencies. In particular, the higher the individual's level of online browsing behavior across the nine specific product categories, the more frequently he/she shopped online in general. It is important to keep in mind that, even when these shopping behaviors correlated positively and significantly with each other, they could not be treated as representing the same construct since the individuals' generic online shopping tendency accounted for only one fourth of the variance in their online browsing tendencies across the nine product categories. With respect to Internet usage, as expected and confirmed, the high diversified browsers spent significantly more hours per week using the Internet than the medium or the low diversified browsers; the medium diversified browsers reported using the Internet more frequently per week than did the low diversified browsers though the difference was not significant. In addition, both the frequent and

less frequent browsers reported using the Internet for a significantly longer number of years than did the non frequent browsers.

While considering individuals' diversified online *purchasing* behavior, significant group differences in Internet experience were found. As a matter of fact, the direction of Internet experience differences in low of the varying level of diversified online purchasing exactly corresponded with the direction of differences reported for the varying level of individuals' online browsing behavior. That is, the higher the individual's level of online purchasing behavior across the nine specific product categories, the more frequently he/she shopped online in general. Though both these behaviors correlated significantly and positively with each other, they represented the different constructs as the individuals' generic online shopping tendency accounted for less than one fifth of the variance in their online purchasing tendencies across the nine product categories. Similar to their browsing behavior and Internet usage, the high diversified purchasers reported spending significantly more hours per week on the Internet than did the medium or the low diversified purchasers; the medium diversified purchasers used the Internet more frequently per week than did the low diversified purchasers though the difference was not significant. With regard to their years of Internet usage, both high and medium diversified purchasers reported using the Internet for a significantly longer time as compared to low diversified purchasers. Though the difference was not significant, medium diversified purchasers reported using the Internet for more years than did the low diversified purchasers.

Overall, it may be said that these findings are in line with previous research (Bellman, et al., 1999; Lohse, et al., 2000; Blake et al., 2003b; Cao & Mokhtarian, 2005; Chang, et al., 2005; Citrin, et al., 2000; Horrigan & Rainie, 2002) that suggested that

individuals spending more time on the Internet were more likely to shop online and their frequency of Internet usage and their Internet experience in years were positively associated with their online purchasing behaviors. These findings have future implications in terms of generating online shopping research that take into consideration finer domain specific and/ or diversified shopping tendencies (and/or distinctions) in consumers and not just their general online shopping behavior gauged by generic e-shopping frequency metrics. For practitioners, such knowledge would pave way for detailed market segmentation strategies leading to greater penetration into target markets.

5.5. Website Feature Preferences and Internet Experience: Trend Congruity in Diversified Online Browsing and Purchasing Groups at Different Levels

The sixth research question "*Are the differences between low, medium and high diversified browsers same as the differences between low, medium and high diversified purchasers in regard to their website feature preferences and Internet experience?*" was an investigative question aimed at exploring trend in differences for feature preferences and Internet experience between the different diversified online browsing and purchasing groups.

While answering this question leads to a summarizing point for website feature preferences and Internet usage for the different groups in the current project, the findings may be considered as a stepping stone for future research. The trend (dis)similarity for differences between the low, medium and high online diversified browsing and purchasing groups with regard to their feature preferences and Internet experience, was a novel concept drawn from the premise that online browsing is a crucial predictor of online purchasing in consumers (Shim, Eastlick, Lotz & Warrington, 2001; Jeong &

Lambert, 2001). Extending this line of thought, it was expected that an individual's level of browsing would reflect upon his/her purchasing behavior with respect to his/her website preferences and Internet experience.

While the results found an absolute similarity in the trend of differences between the browser and purchaser groups at the various levels (read, low, medium and high) of browsing and/or purchasing for Internet experience, no such similarity was found for individuals' website feature preferences. The current research stops short from drawing more definite conclusion, going by the infancy of the concept altogether, and urges for more investigative and empirical works to explore it further.

5.6. Demographics.

The study investigated the association of individuals' demographic characteristics with their diversified online browsing and purchasing behaviors in its final research question.

Of the seven demographic variables studied, two (gender and income) emerged as important predictors of individuals' frequency of online *browsing* across nine specific product categories. Income positively predicted individuals' diversified online browsing behavior, whereas gender was found to be a significant negative predictor of this browsing behavior. With regard to individuals' frequency of online *purchasing* across these nine specific product categories, only income emerged to be the (positive) predictor of individuals' diversified online purchasing behavior.

Overall, it comes as no surprise that income emerged out to be a significant predictor of an individuals' diversified online shopping behavior. As previous studies (Chang et al., 2005; Zhou et al., 2007; Bellman et al., 1999) suggested, the higher the

individual's or household's income, the more that is spent online as the individual has greater accessibility to disposable money. The reader should keep in mind that the term 'higher income' is relative and is in context of the current surveyed sample. The current sample reported a mean yearly household income of $ 63,000 (median = $ 62,500/ year), which comes close to the national U.S. average income of $ 65,556 (U.S. Census, 2006).

Gender emerged as a significant predictor of diversified online browsing behavior but not of diversified online purchasing behavior, suggesting that males were more likely to browse websites across these nine product categories than their female counterparts. Such a finding was in line with most research works that found the traditional online shopper to be more likely to be a male (Chang et al., 2005, Slyke, Comunale & Belanger, 2002; Burroughs & Sabherwal, 2002; Li et al., 1999; Blake et al., 2003b). While none of these studies differentiated the individual's online browsing behavior from one's purchasing behavior, greater browsing tendencies in males as seen in the current study may be explained as their future intentions to shop online. Another line of reasoning may suggest that these websites did not provide these male browsers' enough satisfaction to proceed further with purchase. Overall, the current finding in league with the previous finding suggest that males are more likely to browse online though more empirical research is imperative to provide conclusion to the issue of gender with respect to online browsing versus purchasing tendencies.

On the whole, the current study suggested that the typical diversified online browser may be profiled as male and earning a higher income. Whereas the typical diversified online purchaser may be profiled as highly educated, male and earning a higher income. Here, all descriptors such as "highly educated", "higher income" etc. are relative to the current sample's average values in these categories.

5.7. Limitations.

First, the data used for the study is self-reported data, which is often subject to fallibility of personal memory, idiosyncratic scale use and deliberation towards socially desirable responses. Future studies can tackle these issues by using metrics of actual Internet use as compared to self reported behavior.

Second, the sample lacked true representativeness as the women formed a majority of the current sample. In addition, the current study took into consideration only the responses of United States population, thereby limiting the generalization of results to the U.S.

Third, certain anchors (such "*sometimes", "neither encourages me nor discourages me"* etc.) that have been used at different places in the questionnaire used to survey the current sample may be seen as vague. Quantifiers such as "sometimes" etc. can have different interpretations for different individuals and need to be replaced by more precise estimates if possible.

Fourth, the different product categories investigated in the current study were not mutually exclusive of each other. Since there were no definite boundaries as to which product belonged to what category, individuals might have adopted different ways of product classification. This is particularly true for the *"Entertainment"* product category which can hold very different meanings for different individuals. Future studies can handle such categorization issues by having finer subcategories of product types and allowing for an open ended response option to aid the individual responses.

Fifth, the study was limited in its scope of exploration due to limited cell frequencies across individuals' online browsing- purchasing behaviors for different product categories. A larger and more diverse sample can resolve the issue in the future

and can be of further help, by allowing researchers to delve deeper into the concept of online shopping especially in low of the interaction between individuals' browsing and purchasing behavior at various levels.

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APPENDICES

APPENDIX A

INTERNATIONAL STUDY OF INTERNET USAGE AND ONLINE SHOPPING

QUESTIONNAIRE

SECTION I: INTERNET USAGE

1 About how long have you been using the Internet?

O Less than 3 months
O 4-12 months
O 1-3 years
O 4-6 years
O 7 years or more

2 On average, how many hours per week, if any, do you use the Internet?

O 0
O 1 - 5
O 6 - 10
O 11 – 15
O 16 - 20
O 21 - or more

3 About what percentage of your friends, relatives, and acquaintances would you guess use the Internet at least once a week?

O None
O 1 – 25%
O 26 – 50%
O 51 – 75%
O 76 – 100%

4 How often, if ever, do you go online to shop (look for information about products or make a purchase)?

O Never
O Less than once a month
O 1-2 times a month
O 3-5 times a month
O 6-9 times a month
O 10 or more times a month

5 As far as you know, how many years has online shopping been available to people in the United States?

O 1 year
O 2 years
O 3 years
O 4 years
O 5 years
O 6 years
O 7 years
O 8 years
O 9 years or more

6 What was the first year that people around you could find products of interest to them for sale through the Internet?

O Before 1990
O 1991
O 1992
O 1993
O 1994
O 1995
O 1996
O 1997
O 1998
O 1999
O 2000
O 2001 or later

7 About how long ago did your friends, family, or neighbors learn that they could shop for products through the Internet?

O 9 years ago or more
O 8 years ago
O 7 years ago
O 6 years ago
O 5 years ago
O 4 years ago
O 3 years ago
O 2 years ago
O 1 year ago
O This current year

8 About what percentage of your friends, relatives, and acquaintances shop online?

O None
O 1 – 25%
O 26 – 50%
O 51 – 75%
O 76 – 100%

9 Compared to other ways of shopping, how unusual or novel do you personally find online shopping to be? Use a scale of 1-7, where 1 means *not at all novel or unusual* and 7 means *very novel or unusual*.

Not at all Novel or Unusual						**Very Novel or Unusual**
1 O	2 O	3 O	4 O	5 O	6 O	7 O

10 In general, how different is shopping online compared to shopping in traditional stores? Use a scale of 1-7, where 1 means *not at all different* and 7 means *very different*.

Not at all Different						**Very Different**
1 O	2 O	3 O	4 O	5 O	6 O	7 O

11 In general, how unique is shopping online compared to shopping at a traditional store? Use a scale of 1-7, where 1 means *not at all unique* and 7 means *very unique*.

Not at all Unique						**Very Unique**
1 O	2 O	3 O	4 O	5 O	6 O	7 O

12 In general, how innovative is shopping online compared to shopping at a traditional store? Use a scale of 1-7, where 1 means *not at all innovative* and 7 means *very innovative*.

Not at all Innovative						**Very Innovative**
1 O	2 O	3 O	4 O	5 O	6 O	7 O

13 Please indicate how much you agree or disagree with the following statements about your reactions to online shopping for those particular products/services of interest to you personally. Please indicate one answer for each statement, and react to all of the statements.

		Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
A	In general, I am among the last in my circle of friends to visit a shopping website when it appears.	O	O	O	O	O
B	If I heard that a new website was available for online shopping, I would be interested enough to visit it.	O	O	O	O	O
C	Compared to my friends, I have visited few online shopping websites.	O	O	O	O	O
D	I will visit an online shopping website even if I know practically nothing about it.	O	O	O	O	O
E	I know the names of new online shopping sites before other people do.	O	O	O	O	O
F	In general, I am the last in my circle of friends to know about new websites.	O	O	O	O	O

14 On average, how often do you shop (*searching for product or service information, or making a purchase*) on the Internet?

O Never **[IF NEVER, CLICK THE BUTTON AND THEN CLICK HERE TO SKIP TO QUESTION #19]**
O Rarely
O Less than once a month
O About once a month
O About once a week
O Daily

15 Please indicate how much you agree or disagree with the following statements about your reactions to online shopping for those particular products/services of interest to you personally. Please indicate one answer for each statement, and react to all of the statements.

		Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
A	My opinion on online shopping seems not to count with other people.	O	O	O	O	O
B	When I consider online shopping, I ask other people for advice.	O	O	O	O	O
C	People that I know pick shopping sites based on what I have told them.	O	O	O	O	O
D	I don't need to talk to others before I do online shopping.	O	O	O	O	O
E	When they choose to do online shopping, other people do not turn to me for advice.	O	O	O	O	O
F	I rarely ask other people what online websites to shop.	O	O	O	O	O
G	I often persuade people to try the online websites that I look at.	O	O	O	O	O
H	I like to get other's opinions before I shop at an online site.	O	O	O	O	O
I	I often influence people’s opinions about online shopping.	O	O	O	O	O
J	I feel more comfortable shopping at an online website after I have gotten other people’s opinions on it.	O	O	O	O	O
K	Other people rarely come to me for advice about using an online shopping site.	O	O	O	O	O
L	When choosing an online shopping site, other people's opinions are not important to me.	O	O	O	O	O

16 How often, if at all, do you VISIT each type of web site (*WITHOUT purchasing*) in order to help you to make a purchase decision? Use any number from 1 (never) to 5 (regularly). [INDICATE ONE RESPONSE FOR EACH ITEM]

		Never		Sometimes		Regularly
A	Clothing / Accessories.	1O	2O	3O	4O	5O
B	Books / Magazines.	1O	2O	3O	4O	5O
C	Travel.	1O	2O	3O	4O	5O
D	Health & Medical.	1O	2O	3O	4O	5O
E	Financial Services.	1O	2O	3O	4O	5O
F	Consumer electronics (TV, VCR, stereo, cellular phone)	1O	2O	3O	4O	5O
G	Entertainment (compact disks, videos, concert tickets).	1O	2O	3O	4O	5O
H	Computer hardware or software.	1O	2O	3O	4O	5O
I	Food / Beverage / Groceries.	1O	2O	3O	4O	5O
J	Home Appliances (refrigerator, dishwasher).	1O	2O	3O	4O	5O
K	Other.	1O	2O	3O	4O	5O

17 How often, if at all, do you PURCHASE any of the following items/services (*and not just look for information*) online? Use any number from 1 (never) to 5 (regularly). [INDICATE ONE RESPONSE FOR EACH ITEM]

		Never		Sometimes		Regularly
A	Clothing / Accessories.	1O	2O	3O	4O	5O
B	Books / Magazines.	1O	2O	3O	4O	5O
C	Travel.	1O	2O	3O	4O	5O
D	Health & Medical.	1O	2O	3O	4O	5O
E	Financial Services.	1O	2O	3O	4O	5O
F	Consumer electronics (TV, VCR, stereo, cellular phone).	1O	2O	3O	4O	5O
G	Entertainment (compact disks, videos, concert tickets).	1O	2O	3O	4O	5O
H	Computer hardware or software.	1O	2O	3O	4O	5O
I	Food / Beverage / Groceries.	1O	2O	3O	4O	5O
J	Home Appliances (refrigerator, dishwasher).	1O	2O	3O	4O	5O
K	Other.	1O	2O	3O	4O	5O

18 How much would the following encourage you to shop (*visit or purchase*) at a particular website? Use any number from 1 (*strongly discourages me*) to 7 (*strongly encourages me*). [INDICATE ONE RESPONSE FOR EACH ITEM]

		1 = Strongly Discourages Me			4 = Neither Encourages Nor Discourages Me			7 = Strongly Encourages Me
A	The order process is easy to use.	1O	2O	3O	4O	5O	6O	7O
B	The products I am looking for are easy to find	1O	2O	3O	4O	5O	6O	7O
C	The website is new and different	1O	2O	3O	4O	5O	6O	7O
D	Product price	1O	2O	3O	4O	5O	6O	7O
E	Provides customer feedback (that is, the site provides a place for you to learn about other customer's evaluation of the product)	1O	2O	3O	4O	5O	6O	7O
F	My friends and family have been happy when they have shopped there	1O	2O	3O	4O	5O	6O	7O
G	Reputation and credibility of the company on the web	1O	2O	3O	4O	5O	6O	7O
H	It is enjoyable to visit	1O	2O	3O	4O	5O	6O	7O
I	The delivery time is short	1O	2O	3O	4O	5O	6O	7O
J	The site is in my primary language	1O	2O	3O	4O	5O	6O	7O
K	My friends and family will like to know my opinions of the site	1O	2O	3O	4O	5O	6O	7O
L	A wide selection and variety of products	1O	2O	3O	4O	5O	6O	7O
M	Low or no charge for shipping and handling	1O	2O	3O	4O	5O	6O	7O
N	It has entertaining graphics and displays	1O	2O	3O	4O	5O	6O	7O
O	Provides product information, including FAQs – frequently asked questions	1O	2O	3O	4O	5O	6O	7O
P	A good place to find a bargain	1O	2O	3O	4O	5O	6O	7O
Q	Providing credit card safety	1O	2O	3O	4O	5O	6O	7O
R	Fast response time from customer service	1O	2O	3O	4O	5O	6O	7O
S	I hear about it on the radio, television or in newspapers	1O	2O	3O	4O	5O	6O	7O
T	The download speed of the page	1O	2O	3O	4O	5O	6O	7O
U	A return policy that is easy to understand and use	1O	2O	3O	4O	5O	6O	7O
V	Price incentives (coupons, future sale items, frequent shopper program, etc.)	1O	2O	3O	4O	5O	6O	7O
W	Interactive web design (try it on, design your product / services)	1O	2O	3O	4O	5O	6O	7O

YOU ARE HALF WAY THROUGH THE SURVEY, THANK YOU FOR YOUR PATIENCE.

SECTION II: OPINIONS AND BELIEFS

18 Please indicate whether the following statements are true or false of you.

		True	False
a	I sometimes litter.	T O	F O
b	I always admit my mistakes openly and face the potential negative consequences.	T O	F O
c	In traffic I am always polite and considerate of others.	T O	F O
d	I always accept others' opinions, even when they don't agree with my own.	T O	F O
e	I take out my bad moods on others now and then.	T O	F O
f	There has been an occasion when I took advantage of someone else.	T O	F O
g	In conversations I always listen attentively and let others finish their sentences.	T O	F O
h	I never hesitate to help someone in case of emergency.	T O	F O
i	When I have made a promise, I keep it – no ifs, ands, or buts.	T O	F O
j	I occasionally speak badly of others behind their backs.	T O	F O
k	I would never live off/at other people's expense.	T O	F O
l	I always stay friendly and courteous with other people, even when I am stressed out.	T O	F O
m	During arguments I always stay objective and matter-of-fact.	T O	F O
n	There has been at least one occasion when I failed to return an item that I borrowed.	T O	F O
o	I always eat a healthy diet.	T O	F O
p	Sometimes I only help because I expect something in return.	T O	F O

20 Please indicate how much you agree or disagree with the following statements.

		Strongly Disagree			Neither Agree nor Disagree			Strongly Agree
A	I am suspicious of new inventions and ways of thinking.	O	O	O	O	O	O	O
B	I am reluctant about adopting new ways of doing things until I see them working for people around me.	O	O	O	O	O	O	O
C	I rarely trust new ideas until I can see whether the vast majority of people around me accept them.	O	O	O	O	O	O	O
D	I am generally cautious about accepting new ideas.	O	O	O	O	O	O	O
E	I must see other people using new innovations before I will consider them.	O	O	O	O	O	O	O
F	I often find myself skeptical of new ideas.	O	O	O	O	O	O	O
G	I am aware that I am usually one of the last people in my group to accept something new.	O	O	O	O	O	O	O
H	I tend to feel that the traditional way of living and doing things is the best way.	O	O	O	O	O	O	O
I	I consider myself to be creative and original in my thinking and behavior.	O	O	O	O	O	O	O
J	I am an inventive kind of person.	O	O	O	O	O	O	O
K	I seek out new ways to do things.	O	O	O	O	O	O	O
L	I enjoy trying out new things.	O	O	O	O	O	O	O
M	I find it stimulating to be original in my thinking and behavior.	O	O	O	O	O	O	O
N	I am receptive to new ideas.	O	O	O	O	O	O	O
O	I frequently improvise methods for solving a problem when an answer is not apparent.	O	O	O	O	O	O	O
P	I feel that I am an influential member of my peer group.	O	O	O	O	O	O	O
Q	My peers often ask me for advice or information.	O	O	O	O	O	O	O
R	I enjoy taking part in the leadership responsibilities of the groups I belong to.	O	O	O	O	O	O	O
S	I am challenged by unanswered questions.	O	O	O	O	O	O	O
T	I am challenged by ambiguities and unsolved problems.	O	O	O	O	O	O	O

SECTION III: VALUES

21 The following items deal with what values YOU THINK are important. Please rate each value as a guiding principle IN YOUR LIFE, using a scale from –1 to 7, where –1 means "*opposed to my values*" and 7 means "*of supreme importance*". Please indicate one number for each value concept.

		-1 = opposed to my values							**7 = of supreme importance**
a	Equality (equal opportunity for all)	-1 O	0O	1 O	2O	3O	4 O	5O	6 O	7O
b	Inner Harmony (at peace with myself)	-1 O	0O	1 O	2O	3O	4 O	5O	6 O	7O
c	Social Power (control over others, dominance)	-1 O	0O	1 O	2O	3O	4 O	5O	6 O	7O
d	Pleasure (gratification of desires)	-1 O	0O	1 O	2O	3O	4 O	5O	6 O	7O
e	Freedom (freedom of action and thought)	-1O	0O	1 O	2O	3O	4 O	5O	6O	7O
f	A Spiritual Life (emphasis on spiritual not material matters)	-1O	0O	1 O	2O	3O	4 O	5O	6O	7O
g	Sense of Belonging (feeling that others care about me)	-1O	0O	1 O	2O	3O	4 O	5O	6O	7O
h	Social Order (stability of society)	-1O	0O	1 O	2O	3O	4 O	5O	6O	7O
i	An Exciting Life (stimulating experiences)	-1O	0O	1 O	2O	3O	4 O	5O	6O	7O
j	Meaning in Life (a purpose in life)	-1O	0O	1O	2O	3O	4O	5O	6O	7O
k	Politeness (courtesy, good manners)	-1O	0O	1O	2O	3O	4O	5O	6O	7O
l	Wealth (material possessions, money)	-1O	0O	1O	2O	3O	4O	5O	6O	7O
m	National Security (protection of my nation from enemies)	-1O	0O	1O	2O	3O	4O	5O	6O	7O
n	Self-Respect (belief in one's own worth)	-1O	0O	1O	2O	3O	4O	5O	6O	7O
o	Reciprocation of Favors (avoidance of indebtedness)	-1O	0O	1O	2O	3O	4O	5O	6O	7O
p	Creativity (uniqueness, imagination)	-1O	0O	1O	2O	3O	4O	5O	6O	7O
q	A World at Peace (free of war and conflict)	-1O	0O	1O	2O	3O	4O	5O	6O	7O
r	Respect for Tradition (preservation of time-honored customs)	-1O	0O	1O	2O	3O	4O	5O	6O	7O
s	Mature Love (deep emotional and spiritual intimacy)	-1O	0O	1O	2O	3O	4O	5O	6O	7O
t	Self-Discipline (self-restraint, resistance to temptation)	-1O	0O	1O	2O	3O	4O	5O	6O	7O

		-1 = opposed to my values								**7 = of supreme importance**
u	Privacy (the right to have a private sphere)	-1O	0O	1O	2O	3O	4O	5O	6O	7O
v	Family Security (safety for loved ones)	-1O	0O	1O	2O	3O	4O	5O	6O	7O
w	Social Recognition (respect, approval by others)	-1O	0O	1O	2O	3O	4O	5O	6O	7O
x	Unity with Nature (fitting into nature)	-1O	0O	1O	2O	3O	4O	5O	6O	7O
y	A Varied Life (filled with challenge, novelty, and change)	-1O	0O	1O	2O	3O	4O	5O	6O	7O
z	Wisdom (a mature understanding of life)	-1O	0O	1O	2O	3O	4O	5O	6O	7O
aa	Authority (the right to lead or command)	-1O	0O	1O	2O	3O	4O	5O	6O	7O
bb	True Friendship (close, supportive friends)	-1O	0O	1O	2O	3O	4O	5O	6O	7O
cc	A World of Beauty (beauty of nature and the arts)	-1O	0O	1O	2O	3O	4O	5O	6O	7O
dd	Social Justice (correcting injustice, care for the weak)	-1O	0O	1O	2O	3O	4O	5O	6O	7O
ee	Independent (self-reliant, self-sufficient)	-1O	0O	1O	2O	3O	4O	5O	6O	7O
ff	Moderate (avoiding extremes of feeling and action)	-1O	0O	1O	2O	3O	4O	5O	6O	7O
gg	Loyal (faithful to my friends, group)	-1O	0O	1O	2O	3O	4O	5O	6O	7O
hh	Ambitious (hardworking, aspiring)	-1O	0O	1O	2O	3O	4O	5O	6O	7O
ii	Broad-minded (tolerant of different ideas and beliefs)	-1O	0O	1O	2O	3O	4O	5O	6O	7O
jj	Humble (modest, self-effacing)	-1O	0O	1O	2O	3O	4O	5O	6O	7O
kk	Daring (seeking adventure, risk)	-1O	0O	1O	2O	3O	4O	5O	6O	7O
ll	Protecting the Environment (preserving nature)	-1O	0O	1O	2O	3O	4O	5O	6O	7O
mm	Influential (having an impact on people and events)	-1O	0O	1O	2O	3O	4O	5O	6O	7O
nn	Honoring of Parent and Elders (showing respect)	-1O	0O	1O	2O	3O	4O	5O	6O	7O
oo	Choosing Own Goals (selecting own purpose)	-1O	0O	1O	2O	3O	4O	5O	6O	7O
pp	Healthy (not being sick physically or mentally)	-1O	0O	1O	2O	3O	4O	5O	6O	7O
qq	Capable (competent, effective, efficient)	-1O	0O	1O	2O	3O	4O	5O	6O	7O
rr	Accepting my Portion in Life (submitting to life's circumstances)	-1O	0O	1O	2O	3O	4O	5O	6O	7O
ss	Honest (genuine, sincere)	-1O	0O	1O	2O	3O	4O	5O	6O	7O

		1 = opposed to my values							7 = of supreme importance
tt	Preserving my Public Image (protecting my "face")	-1O	0 O	1O	2O	3O	4O	5O	6O	7 O
uu	Obedient (dutiful, meeting obligations)	-1O	0 O	1O	2O	3O	4O	5O	6O	7 O
xx	Enjoying Life (enjoying food, sex, leisure, etc.)	-1O	0 O	1O	2O	3O	4O	5O	6O	7 O
yy	Devout (holding to religious faith and belief)	-1O	0 O	1O	2O	3O	4O	5O	6O	7 O
zz	. Responsible (dependable, reliable)	-1O	0 O	1O	2O	3O	4O	5O	6O	7 O
aaa	Curious (interested in everything, exploring)	-1O	0 O	1O	2O	3O	4O	5O	6O	7 O
bbb	Forgiving (willing to pardon others)	-1O	0 O	1O	2O	3O	4O	5O	6O	7 O
ccc	Successful (achieving goals)	-1O	0 O	1O	2O	3O	4O	5O	6O	7 O
ddd	Clean (neat, tidy)	-1O	0 O	1O	2O	3O	4O	5O	6O	7 O
eee	Self-Indulgent (doing pleasant things)	-1O	0 O	1O	2O	3O	4O	5O	6O	7 O

JUST A FEW MORE QUESTIONS, YOU ARE ALMOST FINISHED.

SECTION IV: BACKGROUND INFORMATION

22 What is your gender?

O Male
O Female

23 How old are you (in years)?

_____

24 What is your marital status?

O Single, never been married
O Married
O Separated/Divorced
O Widowed

25 In what state is your permanent address at this current time?

26 Were your grandparents born in the U.S.A.?

O Yes, all four of them
O Yes, 1, 2, or 3 of them
O None of them
O Don't know

27 Were your parents born in the U.S.A.?

O Neither
O My mother
O My father
O Both
O Don't know

28 Were you born in the U.S.A.?

O Yes
O No
O Don't know

29 Would you describe your family as mainly:

O African American
O Taiwanese American
O Chinese (mainland) American
O Iranian American
O Palestinian American
O German/Austrian American
O Hispanic American
O Polish American
O Greek American
O Romanian American
O Canadian
O Other (please specify) _____

30 What was the last year of education you completed?

O Some high school
O High school
O Technical School/Training (such as auto mechanic)
O Some college/university
O College/university graduate
O Graduate or professional school

31 What is your current employment? [CHECK ALL THAT APPLY]

O Employed-full time **[GO TO Q36]**
O Employed-part time **[GO TO Q36]**
O Self employed **[GO TO Q36]**
O Temporarily unemployed **[GO TO Q37]**
O Student **[GO TO Q37]**
O Homemaker/housewife **[GO TO Q37]**
O Retired **[GO TO Q37]**

32 (IF EMPLOYED) What is your occupation?

O Professional
O Managerial/Executive
O Sales
O Clerical
O Labor with technical training
O Labor without technical training
O Other (please specify) _____

33 Please indicate which of the following categories best represents your annual household income before taxes.

O $10,000 or less
O $10,001 to $20,000
O $20,001 to $30,000
O $30,001 to $40,000
O $40,001 to $50,000
O $50,001 to $75,000
O $75,001 to $100,000
O more than $100,000

34 How many people live in your household, including yourself (please enter the number)?

_____

35 Please indicate whether you own each of the following items. [INDICATE ONE RESPONSE FOR EACH]

		Yes	No	Don't Know
a	A personal computer	O	O	O
b	A DVD player	O	O	O
c	A high-definition TV (HDTV)	O	O	O
d	A Personal Digital Assistant (PDA)	O	O	O

APPENDIX B
Demographic Breakdown by Group Classification

Table B4.

Participant Characteristics by Browsing and Purchasing Group Classification in percentages

	Browsing			*Purchasing*		
Demographics	Low	Medium	High	Low	Medium	High
Sample Size (n)	124	124	124	124	124	124
Age: mean years	36.98	36.15	34.81	36.96	35.44	35.54
(SD)	14.205	12.408	12.582	14.253	13.471	11.417
Less than 20 yrs.	2.4	0.8	3.2	2.4	1.6	2.4
20-64 yrs.	96	98.4	96.8	96.8	96.8	97.6
65 and above	1.6	0.8	..	0.8	1.6	..
Gender (% female)	73.4	63.7	59.3	72.6	65.3	58.1
Education						
College Graduate	68.5	75.8	72.6	68.6	69.3	71
-*College Graduate*	42.7	47.6	45.2	45.2	39.5	50.8
-*Graduate/Professional*	25.8	28.2	27.4	23.4	29.8	28.2
Not a College Graduate	29	22.6	27.4	30.6	28.2	20.8
Employment						
Full time	62.1	64.5	65.3	63.7	58.1	68.5
Part time	18.5	13.7	11.3	19.4	14.5	10.5
Other*	17.7	20.2	21.8	16.1	25	20.2
Income						
0 - $ 10,000	11.3	6.4	4.8	10.5	10.5	1.6
$ 10,001 - $ 20,000	8.1	4.8	4	5.6	6.5	4.8
$ 20,001 - $ 30,000	6.5	10.5	9.7	11.3	6.5	8.9
$ 30,001 - $ 40,000	11.3	12.9	12.1	12.9	10.5	12.9
$ 40,001 - $ 50,000	9.7	9.7	11.3	8.9	13.7	8.1
$ 50,001 - $ 75,000	18.5	16.9	18.5	18.5	20.2	15.3
$ 75,001 - $ 100,000	15.3	10.5	12.1	14.5	11.3	12.1
$ 100,001 and more	16.1	25.8	24.2	15.3	16.9	33.9
Marital Status						
Married	59.7	51.6	55.6	43.5	51.6	60.5
Not Married	38.7	46.8	42.7	54.8	46.8	37.9
Household Size						
Single Member	18.5	12.1	19.4	16.9	16.9	16.1
Dual Member	28.2	40.3	29	29.8	34.7	33.1
Three or more Member	52.4	46	50	52.4	46	50

* The “other” category includes the unemployed, homemakers, retired, self-employed.

APPENDIX C
Website Feature Preferences

Appendix C1. Browsing: Website Feature Preferences

Table C1. 1a.
Participant Characteristics by Browsing Group Classification for Website Attributes

Attributes	*Browsing Classification*	*Mean*	*SD*	*SE*	*95% Confidence Interval*	
					Lower Bound	*Upper Bound*
Order process is easy to use	*Low*	5.43	1.308	0.104	5.223	5.631
	Medium	5.59	1.020	0.104	5.385	5.793
	High	5.73	1.120	0.104	5.530	5.938
	Total	5.58	1.159	0.060	5.466	5.701
Easy to find product	*Low*	5.62	1.193	0.103	5.419	5.823
	Medium	5.98	0.892	0.103	5.781	6.186
	High	5.95	1.312	0.103	5.749	6.154
	Total	5.85	1.155	0.059	5.735	5.969
Website is new and different	*Low*	3.93	1.184	0.106	3.720	4.135
	Medium	3.84	1.070	0.106	3.631	4.047
	High	4.20	1.269	0.106	3.994	4.409
	Total	3.99	1.184	0.061	3.869	4.109
Product price	*Low*	5.92	1.412	0.114	5.695	6.144
	Medium	6.08	1.086	0.114	5.856	6.305
	High	6.27	1.289	0.114	6.042	6.490
	Total	6.09	1.274	0.066	5.959	6.218
Provides customer feedback	*Low*	4.68	1.365	0.123	4.435	4.919
	Medium	4.70	1.454	0.123	4.460	4.944
	High	5.30	1.288	0.123	5.056	5.540
	Total	4.89	1.397	0.071	4.753	5.032
Family and friends happy shopping at site	*Low*	4.92	1.310	0.119	4.686	5.153
	Medium	4.94	1.357	0.119	4.710	5.177
	High	5.35	1.295	0.119	5.122	5.588
	Total	5.07	1.333	0.069	4.938	5.207
Reputation & credibility of the company on web	*Low*	5.44	1.398	0.119	5.202	5.669
	Medium	5.71	1.261	0.119	5.476	5.944
	High	5.66	1.312	0.119	5.427	5.895
	Total	5.60	1.327	0.069	5.467	5.737

Attributes	Browsing Classification	Mean	SD	SE	95% Confidence Interval	
					Lower Bound	Upper Bound
Enjoyable to visit	*Low*	4.85	1.418	0.115	4.629	5.081
	Medium	5.18	1.097	0.115	4.951	5.404
	High	5.23	1.307	0.115	5.008	5.460
	Total	5.09	1.289	0.066	4.958	5.219
Family and friends will like to know my opinion	*Low*	3.58	1.344	0.122	3.341	3.820
	Medium	3.56	1.345	0.122	3.325	3.804
	High	3.90	1.376	0.122	3.664	4.143
	Total	3.68	1.360	0.070	3.545	3.821
Low or no charge for shipping & handling	*Low*	6.00	1.349	0.116	5.772	6.228
	Medium	5.98	1.210	0.116	5.755	6.212
	High	6.25	1.317	0.116	6.022	6.478
	Total	6.08	1.296	0.067	5.946	6.210
Entertaining graphics and displays	*Low*	4.29	1.274	0.121	4.053	4.528
	Medium	4.17	1.131	0.121	3.932	4.407
	High	4.12	1.585	0.121	3.884	4.358
	Total	4.19	1.342	0.070	4.057	4.331
Provides product info., inc. FAQ	*Low*	5.06	1.345	0.121	4.819	5.294
	Medium	5.27	1.352	0.121	5.037	5.512
	High	5.43	1.338	0.121	5.190	5.665
	Total	5.25	1.350	0.070	5.116	5.390
Good place to find a bargain	*Low*	5.89	1.218	0.111	5.670	6.104
	Medium	5.94	1.150	0.111	5.726	6.161
	High	6.03	1.319	0.111	5.815	6.250
	Total	5.95	1.229	0.064	5.829	6.080
Fast response time from customer service	*Low*	5.73	1.284	0.113	5.504	5.948
	Medium	5.76	1.271	0.113	5.536	5.980
	High	5.92	1.220	0.113	5.697	6.142
	Total	5.80	1.258	0.065	5.673	5.929
I hear about in on radio / TV / Newspapers	*Low*	4.30	1.236	0.115	4.072	4.524
	Medium	4.04	1.226	0.115	3.814	4.266
	High	4.02	1.373	0.115	3.790	4.242
	Total	4.12	1.283	0.066	3.988	4.249

Attributes	*Browsing Classification*	*Mean*	*SD*	*SE*	*95% Confidence Interval*	
					Lower Bound	*Upper Bound*
Return policy is easy	*Low*	5.48	1.564	0.126	5.229	5.723
	Medium	5.56	1.257	0.126	5.317	5.812
	High	5.74	1.361	0.126	5.495	5.989
	Total	5.59	1.401	0.073	5.451	5.737
Offers good price incentives	*Low*	5.28	1.474	0.132	5.023	5.542
	Medium	5.19	1.452	0.132	4.934	5.453
	High	5.54	1.484	0.132	5.281	5.800
	Total	5.34	1.473	0.076	5.189	5.489
Interactive web design	*Low*	4.28	1.353	0.129	4.029	4.535
	Medium	4.54	1.370	0.129	4.287	4.793
	High	4.58	1.567	0.129	4.328	4.834
	Total	4.47	1.436	0.074	4.322	4.614

Table C1. 1b.

Browsing Behavior: MANOVA summary table for Website Attributes

		Value	F	Hyp df	Error df	Sig.	Partial ES
Browsing Behavior	Pillai's Trace	0.174	1.865	36	706	0.002	0.087
	Wilks' Lambda	0.833	1.868(a)	36	704	0.002	0.087
	Hotelling's Trace	0.192	1.870	36	702	0.002	0.087
	Roy's Largest Root	0.125	2.453(b)	18	353	0.001	0.111

a. Exact statistic

b. The statistic is an upper bound on F that yields a lower bound on the significance level.

Table C1. 1c.

Browsing Behavior after controlling for Gender and Income: MANCOVA summary table for Website Attributes

Effect		Value	F	Hyp df	Error df	Sig.	Partial ES
Gender	Pillai's Trace	0.095	1.975	18	338	0.011	0.095
	Wilks' Lambda	0.905	1.975	18	338	0.011	0.095
	Hotelling's Trace	0.105	1.975	18	338	0.011	0.095
	Roy's Largest Root	0.105	1.975	18	338	0.011	0.095
Income	Pillai's Trace	0.048	0.950	18	338	0.518	0.048
	Wilks' Lambda	0.952	0.950	18	338	0.518	0.048
	Hotelling's Trace	0.051	0.950	18	338	0.518	0.048
	Roy's Largest Root	0.051	0.950	18	338	0.518	0.048
Browse	Pillai's Trace	0.176	1.821	36	678	0.003	0.088
	Wilks' Lambda	0.830	1.827	36	676	0.003	0.089
	Hotelling's Trace	0.196	1.833	36	674	0.002	0.089
	Roy's Largest Root	0.134	2.530	18	339	0.001	0.118

Appendix C2. ANOVAs and ANCOVAs: Browsing and Individual Website Attribute

Table C2. 1a.
Descriptive Statistics for Dependent Variable: Order Process is Easy to Use

Browse Classification	***Mean***	***SD***	***N***
Low	5.43	1.31	124
Medium	5.59	1.02	124
High	5.73	1.12	124
Total	5.58	1.16	372

Table C2. 1b.
Browsing Behavior - Univariate ANOVA summary table for attribute 'Order Process Easy to Use'

Source	***SS***	***df***	***MS***	***F***	***P***
Corrected Model	5.828 [a]	2	2.914	2.183	0.114
Intercept	11596.583	1	11596.583	8687.043	0.000
Browse	5.828	2	2.914	2.183	0.114
Error	492.589	369	1.335		
Total	12095.000	372			
Corrected Total	498.417	371			

[a] R Squared = .012 (Adjusted R Squared = .006); partial η^2 (Browse) = 0.012

Table C5. 1c.
Browsing Behavior - Univariate ANCOVA summary table for attribute 'Order Process Easy to Use'

Source	***SS***	***Df***	***MS***	***F***	***p***
Corrected Model	10.170 [a]	4	2.543	1.940	0.103
Intercept	2753.791	1	2753.791	2101.631	0.000
Gender	3.211	1	3.211	2.450	0.118
Income	2.096	1	2.096	1.600	0.207
Browse	6.000	2	3.000	2.290	0.103
Error	465.161	355	1.310		
Total	11709.000	360			
Corrected Total	475.331	359			

[a] R Squared = .021 (Adjusted R Squared = .010); partial η^2 (Browse) = 0.013

Table C2. 2a.
Descriptive Statistics for Dependent Variable: Easy to Find Product

Browse Classification	***Mean***	***SD***	***N***
Low	5.62	1.19	124
Medium	5.98	0.89	124
High	5.95	1.31	124
Total	5.85	1.15	372

Table C2. 2b.
Browsing Behavior - Univariate ANOVA summary table for attribute 'Easy to Find Product'

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	10.005 [a]	2	5.003	3.807	0.023
Intercept	12740.132	1	12740.132	9695.748	0.000
Browse	10.005	2	5.003	3.807	0.023
Error	484.863	369	1.314		
Total	13235.000	372			
Corrected Total	494.868	371			

[a] R Squared = .020 (Adjusted R Squared = .015); partial η^2 (Browse) = 0.020

Table C2. 2c.
Browsing Behavior - Univariate ANCOVA summary table for attribute 'Easy to Find Product'

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	13.317 [a]	4	3.329	2.571	0.038
Intercept	2947.658	1	2947.658	2276.118	0.000
Gender	1.020	1	1.020	0.788	0.375
Income	4.147	1	4.147	3.202	0.074
Browse	8.195	2	4.097	3.164	0.043
Error	459.738	355	1.295		
Total	12840.000	360			
Corrected Total	473.056	359			

[a] R Squared = .028 (Adjusted R Squared = .017); partial η^2 (Browse) = 0.018

Table C2. 3a.
Descriptive Statistics for Dependent Variable: Website is New and Different

Browse Classification	***Mean***	***SD***	***N***
Low	3.93	1.18	124
Medium	3.84	1.07	124
High	4.2	1.27	124
Total	3.99	1.18	372

Table C2. 3b.
Browsing Behavior - Univariate ANOVA summary table for attribute 'Website is New and Different'

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	8.876 [a]	2	4.438	3.204	0.042
Intercept	5920.043	1	5920.043	4274.268	0.000
Browse	8.876	2	4.438	3.204	0.042
Error	511.081	369	1.385		
Total	6440.000	372			
Corrected Total	519.957	371			

[a] R Squared = .017 (Adjusted R Squared = .012); partial η^2 (Browse) = 0.017

Table C2. 3c.
Browsing Behavior - Univariate ANCOVA summary table for attribute 'Website is New and Different'

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	22.858 [a]	4	5.715	4.156	0.003
Intercept	1498.565	1	1498.565	1089.983	0.000
Gender	14.106	1	14.106	10.260	0.001
Income	0.409	1	0.409	0.297	0.586
Browse	10.299	2	5.149	3.745	0.025
Error	488.072	355	1.375		
Total	6231.000	360			
Corrected Total	510.931	359			

[a] R Squared = .045 (Adjusted R Squared = .034); partial η^2 (Browse) = 0.021

Table C2. 4a.
Descriptive Statistics for Dependent Variable: Product Price

Browse Classification	***Mean***	***SD***	***N***
Low	5.92	1.41	124
Medium	6.08	1.09	124
High	6.27	1.29	124
Total	6.09	1.27	372

Table C2. 4b.
Browsing Behavior - Univariate ANOVA summary table for attribute 'Product Price'

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	7.468 [a]	2	3.734	2.317	0.100
Intercept	13790.927	1	13790.927	8558.377	0.000
Browse	7.468	2	3.734	2.317	0.100
Error	594.605	369	1.611		
Total	14393.000	372			
Corrected Total	602.073	371			

[a] R Squared = .012 (Adjusted R Squared = .017); partial η^2 (Browse) = 0.012

Table C2. 4c.
Browsing Behavior - Univariate ANCOVA summary table for attribute 'Product Price'

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	6.524 [a]	4	1.631	1.018	0.398
Intercept	3304.293	1	3304.293	2062.889	0.000
Gender	1.327	1	1.327	0.829	0.363
Income	0.017	1	0.017	0.010	0.919
Browse	4.488	2	2.244	1.401	0.248
Error	568.632	355	1.602		
Total	13922.000	360			
Corrected Total	575.156	359			

[a] R Squared = .011 (Adjusted R Squared = .000); partial η^2 (Browse) = 0.008

Table C2. 5a.
Descriptive Statistics for Dependent Variable: Provides Customer Feedback

Browse Classification	***Mean***	***SD***	***N***
Low	4.68	1.36	124
Medium	4.70	1.45	124
High	5.3	1.29	124
Total	4.89	1.40	372

Table C2. 5b.
Browsing Behavior - Univariate ANOVA summary table for attribute 'Provides Customer Feedback'

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	30.683 [a]	2	15.341	8.169	0.000
Intercept	8904.301	1	8904.301	4741.141	0.000
Browse	30.683	2	15.341	8.169	0.000
Error	693.016	369	1.878		
Total	9628.000	372			
Corrected Total	723.699	371			

[a] R Squared = .042 (Adjusted R Squared = .037); partial η^2 (Browse) = 0.042

Table C2. 5c.
Browsing Behavior - Univariate ANCOVA summary table for attribute 'Provides Customer Feedback'

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	30.435 [a]	4	7.609	4.085	0.003
Intercept	2118.942	1	2118.942	1137.731	0.000
Gender	2.137	1	2.137	1.147	0.285
Income	1.602	1	1.602	0.860	0.354
Browse	27.590	2	13.795	7.407	0.001
Error	661.162	355	1.862		
Total	9345.000	360			
Corrected Total	691.597	359			

[a] R Squared = .044 (Adjusted R Squared = .033); partial η^2 (Browse) = 0.040

Table C2. 6a.
Descriptive Statistics for Dependent Variable: Family and Friends Happy to Shop at Website

Browse Classification	***Mean***	***SD***	***N***
Low	4.92	1.31	124
Medium	4.94	1.36	124
High	5.35	1.3	124
Total	5.07	1.33	372

Table C2. 6b.
Browsing Behavior - Univariate ANOVA summary table for attribute 'Family and Friends Happy to Shop at Website'

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	14.855 [a]	2	7.427	4.255	0.015
Intercept	9571.960	1	9571.960	5482.975	0.000
Browse	14.855	2	7.427	4.255	0.015
Error	644.185	369	1.746		
Total	10231.000	372			
Corrected Total	659.040	371			

[a] R Squared = .023 (Adjusted R Squared = .017); partial η^2 (Browse) = 0.023

Table C2. 6c.
Browsing Behavior - Univariate ANCOVA summary table for attribute 'Family and Friends Happy to Shop at Website'

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	39.489 [a]	4	9.872	5.980	0.000
Intercept	2259.413	1	2259.413	1368.730	0.000
Gender	20.322	1	20.322	12.311	0.001
Income	8.170	1	8.170	4.949	0.027
Browse	16.482	2	8.241	4.992	0.007
Error	586.011	355	1.651		
Total	9928.000	360			
Corrected Total	625.500	359			

[a] R Squared = .063 (Adjusted R Squared = .053); partial η^2 (Browse) = 0.027

Table C2. 7a.
Descriptive Statistics for Dependent Variable: Reputation and Credibility of the Company on the Web

Browse Classification	***Mean***	***SD***	***N***
Low	5.44	1.40	124
Medium	5.71	1.26	124
High	5.66	1.31	124
Total	5.60	1.33	372

Table C2. 7b.
Browsing Behavior - Univariate ANOVA summary table for attribute 'Reputation and Credibility of the Company on the Web'

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	5.312 [a]	2	2.656	1.513	0.222
Intercept	11674.882	1	11674.882	6650.183	0.000
Browse	5.312	2	2.656	1.513	0.222
Error	647.806	369	1.756		
Total	12328.000	372			
Corrected Total	653.118	371			

[a] R Squared = .008 (Adjusted R Squared = .003); partial η^2 (Browse) = 0.008

Table C2. 7c.
Browsing Behavior - Univariate ANCOVA summary table for attribute 'Reputation and Credibility of the Company on the Web'

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	6.104 [a]	4	1.526	0.873	0.480
Intercept	2737.127	1	2737.127	1566.477	0.000
Gender	0.838	1	0.838	0.480	0.489
Income	1.956	1	1.956	1.120	0.291
Browse	3.554	2	1.777	1.017	0.363
Error	620.296	355	1.747		
Total	11916.000	360			
Corrected Total	626.400	359			

[a] R Squared = .010 (Adjusted R Squared = - .001); partial η^2 (Browse) = 0.006

Table C2. 8a.
Descriptive Statistics for Dependent Variable: Enjoyable to Visit

Browse Classification	***Mean***	***SD***	***N***
Low	4.85	1.42	124
Medium	5.18	1.10	124
High	5.23	1.31	124
Total	5.09	1.29	372

Table C2. 8b.
Browsing Behavior - Univariate ANOVA summary table for attribute 'Enjoyable to Visit'

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	10.371 [a]	2	5.185	3.159	0.044
Intercept	9632.927	1	9632.927	5868.484	0.000
Browse	10.371	2	5.185	3.159	0.044
Error	605.702	369	1.641		
Total	10249.000	372			
Corrected Total	616.073	371			

[a] R Squared = .017 (Adjusted R Squared = .012); partial η^2 (Browse) = 0.017

Table C2. 8c.
Browsing Behavior - Univariate ANCOVA summary table for attribute 'Enjoyable to Visit'

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	11.691 [a]	4	2.923	1.822	0.124
Intercept	2375.746	1	2375.746	1480.914	0.000
Gender	4.850	1	4.850	3.023	0.083
Income	0.383	1	0.383	0.238	0.626
Browse	7.937	2	3.968	2.474	0.086
Error	569.506	355	1.604		
Total	9955.000	360			
Corrected Total	581.197	359			

[a] R Squared = .020 (Adjusted R Squared = .009); partial η^2 (Browse) = 0.014

Table C2. 9a.
Descriptive Statistics for Dependent Variable: Family and Friends would like to Know my Opinion

Browse Classification	***Mean***	***SD***	***N***
Low	3.58	1.34	124
Medium	3.56	1.34	124
High	3.9	1.38	124
Total	3.68	1.36	372

Table C2. 9b.
Browsing Behavior - Univariate ANOVA summary table for attribute 'Family and Friends would like to know my Opinion'

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	9.054 [a]	2	4.527	2.466	0.086
Intercept	5045.430	1	5045.430	2747.925	0.000
Browse	9.054	2	4.527	2.466	0.086
Error	677.516	369	1.836		
Total	5732.000	372			
Corrected Total	686.570	371			

[a] R Squared = .013 (Adjusted R Squared = .008); partial η^2 (Browse) = 0.013

Table C2. 9c.
Browsing Behavior - Univariate ANCOVA summary table for attribute 'Family and Friends would like to know my Opinion'

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	9.049 [a]	4	2.262	1.241	0.293
Intercept	1266.376	1	1266.376	694.612	0.000
Gender	0.033	1	0.033	0.018	0.894
Income	0.457	1	0.457	0.251	0.617
Browse	8.760	2	4.380	2.402	0.092
Error	647.215	355	1.823		
Total	5533.000	360			
Corrected Total	656.264	359			

[a] R Squared = .014 (Adjusted R Squared = .003); partial η^2 (Browse) = 0.013

Table C2. 10a.
Descriptive Statistics for Dependent Variable: Low or No Charge for Shipping and Handling

Browse Classification	***Mean***	***SD***	***N***
Low	6.00	1.35	124
Medium	5.98	1.21	124
High	6.25	1.32	124
Total	6.08	1.30	372

Table C2. 10b.
Browsing Behavior - Univariate ANOVA summary table for attribute 'Low or No Charge for Shipping and Handling'

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	5.522 [a]	2	2.761	1.650	0.193
Intercept	13742.261	1	13742.261	8215.730	0.000
Browse	5.522	2	2.761	1.650	0.193
Error	617.218	369	1.673		
Total	14365.000	372			
Corrected Total	622.739	371			

[a] R Squared = .009 (Adjusted R Squared = .003); partial η^2 (Browse) = 0.009

Table C2. 10c.
Browsing Behavior - Univariate ANCOVA summary table for attribute 'Low or No Charge for Shipping and Handling'

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	8.982 [a]	4	2.246	1.408	0.231
Intercept	3230.392	1	3230.392	2025.508	0.000
Gender	0.640	1	0.640	0.401	0.527
Income	2.257	1	2.257	1.415	0.235
Browse	6.313	2	3.157	1.979	0.140
Error	566.173	355	1.595		
Total	13922.000	360			
Corrected Total	575.156	359			

[a] R Squared = .016 (Adjusted R Squared = .005); partial η^2 (Browse) = 0.011

Table C2. 11a.
Descriptive Statistics for Dependent Variable: Entertaining Graphics and Displays

Browse Classification	***Mean***	***SD***	***N***
Low	4.29	1.27	124
Medium	4.17	1.13	124
High	4.12	1.59	124
Total	4.19	1.34	372

Table C2. 11b.
Browsing Behavior - Univariate ANOVA summary table for attribute 'Entertaining Graphics and Displays'

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	5.522 [a]	2	2.761	1.650	0.193
Intercept	13742.261	1	13742.261	8215.730	0.000
Browse	5.522	2	2.761	1.650	0.193
Error	617.218	369	1.673		
Total	14365.000	372			
Corrected Total	622.739	371			

[a] R Squared = .009 (Adjusted R Squared = .003); partial η^2 (Browse) = 0.003

Table C6. 11c.
Browsing Behavior - Univariate ANCOVA summary table for attribute 'Entertaining Graphics and Displays'

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	4.494 [a]	4	1.123	0.614	0.653
Intercept	1601.842	1	1601.842	874.993	0.000
Gender	2.043	1	2.043	1.116	0.291
Income	0.149	1	0.149	0.082	0.775
Browse	1.903	2	0.952	0.520	0.595
Error	649.895	355	1.831		
Total	6988.000	360			
Corrected Total	654.389	359			

[a] R Squared = .007 (Adjusted R Squared = -.004); partial η^2 (Browse) = 0.003

Table C2. 12a.
Descriptive Statistics for Dependent Variable: Provides Product Information, including FAQs

Browse Classification	***Mean***	***SD***	***N***
Low	5.06	1.35	124
Medium	5.27	1.35	124
High	5.43	1.34	124
Total	5.25	1.35	372

Table C2. 12b.
Browsing Behavior - Univariate ANOVA summary table for attribute 'Provides Product Information, including FAQs'

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	8.618 [a]	2	4.309	2.382	0.094
Intercept	10263.753	1	10263.753	5672.798	0.000
Browse	8.618	2	4.309	2.382	0.094
Error	667.629	369	1.809		
Total	10940.000	372			
Corrected Total	676.247	371			

[a] R Squared = .013 (Adjusted R Squared = .007); partial η^2 (Browse) = 0.013

Table C2. 12c.
Browsing Behavior - Univariate ANCOVA summary table for attribute 'Provides Product Information, including FAQs'

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	13.119 [a]	4	3.280	1.891	0.111
Intercept	2356.580	1	2356.580	1358.656	0.000
Gender	0.670	1	0.670	0.387	0.535
Income	4.460	1	4.460	2.572	0.110
Browse	7.756	2	3.878	2.236	0.108
Error	615.745	355	1.734		
Total	10625.000	360			
Corrected Total	628.864	359			

[a] R Squared = .021 (Adjusted R Squared = .010); partial η^2 (Browse) = 0.012

Table C2. 13a.
Descriptive Statistics for Dependent Variable: Good Place to Find a Bargain

Browse Classification	***Mean***	***SD***	***N***
Low	5.89	1.22	124
Medium	5.94	1.15	124
High	6.03	1.32	124
Total	5.95	1.23	372

Table C2. 13b.
Browsing Behavior - Univariate ANOVA summary table for attribute 'Good Place to Find a Bargain'

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	1.328 [a]	2	0.664	0.438	0.645
Intercept	13188.777	1	13188.777	8707.641	0.000
Browse	1.328	2	0.664	0.438	0.645
Error	558.895	369	1.515		
Total	13749.000	372			
Corrected Total	560.223	371			

[a] R Squared = .002 (Adjusted R Squared = -.003); partial η^2 (Browse) = 0.002

Table C2. 13c.
Browsing Behavior - Univariate ANCOVA summary table for attribute 'Good Place to Find a Bargain'

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	1.912 [a]	4	0.478	0.315	0.868
Intercept	3122.637	1	3122.637	2055.217	0.000
Gender	0.010	1	0.010	0.007	0.934
Income	0.674	1	0.674	0.444	0.506
Browse	1.096	2	0.548	0.361	0.697
Error	539.377	355	1.519		
Total	13310.000	360			
Corrected Total	541.289	359			

[a] R Squared = .004 (Adjusted R Squared = -.008); partial η^2 (Browse) = 0.002

Table C2. 14a.
Descriptive Statistics for Dependent Variable: Fast Response Time from Customer Service

Browse Classification	***Mean***	***SD***	***N***
Low	5.73	1.28	124
Medium	5.76	1.27	124
High	5.92	1.22	124
Total	5.80	1.26	372

Table C2. 14b.
Browsing Behavior - Univariate ANOVA summary table for attribute 'Fast Response Time from Customer Service'

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	2.667 [a]	2	1.333	0.842	0.432
Intercept	12518.720	1	12518.720	7901.652	0.000
Browse	2.667	2	1.333	0.842	0.432
Error	584.613	369	1.584		
Total	13106.000	372			
Corrected Total	587.280	371			

[a] R Squared = .005 (Adjusted R Squared = -.001); partial η^2 (Browse) = 0.005

Table C2. 14c.
Browsing Behavior - Univariate ANCOVA summary table for attribute 'Fast Response Time from Customer Service'

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	6.384 [a]	4	1.596	1.035	0.389
Intercept	2859.558	1	2859.558	1854.087	0.000
Gender	0.003	1	0.003	0.002	0.962
Income	4.153	1	4.153	2.692	0.102
Browse	1.692	2	0.846	0.548	0.578
Error	547.516	355	1.542		
Total	12734.000	360			
Corrected Total	553.900	359			

[a] R Squared = .012 (Adjusted R Squared = .000); partial η^2 (Browse) = 0.003

Table C2. 15a.
Descriptive Statistics for Dependent Variable: I hear about it on Radio / TV / Newspapers

Browse Classification	***Mean***	***SD***	***N***
Low	4.30	1.24	124
Medium	4.04	1.23	124
High	4.02	1.37	124
Total	4.12	1.28	372

Table C2. 15b.
Browsing Behavior - Univariate ANOVA summary table for attribute 'I hear about it on Radio / TV / Newspapers'

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	6.070 [a]	2	3.035	1.852	0.158
Intercept	6309.204	1	6309.204	3849.838	0.000
Browse	6.070	2	3.035	1.852	0.158
Error	604.726	369	1.639		
Total	6920.000	372			
Corrected Total	610.796	371			

[a] R Squared = .010 (Adjusted R Squared = .005); partial η^2 (Browse) = 0.010

Table C2. 15c.
Browsing Behavior - Univariate ANCOVA summary table for attribute 'I hear about it on Radio / TV / Newspapers'

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	17.917 [a]	4	4.479	2.769	0.027
Intercept	1651.277	1	1651.277	1020.896	0.000
Gender	8.739	1	8.739	5.403	0.021
Income	0.170	1	0.170	0.105	0.746
Browse	5.816	2	2.908	1.798	0.167
Error	574.205	355	1.617		
Total	6726.000	360			
Corrected Total	592.122	359			

[a] R Squared = .030 (Adjusted R Squared = .019); partial η^2 (Browse) = 0.010

Table C2. 16a.
Descriptive Statistics for Dependent Variable: Return Policy is Easy

Browse Classification	***Mean***	***SD***	***N***
Low	5.48	1.56	124
Medium	5.56	1.26	124
High	5.74	1.36	124
Total	5.59	1.40	372

Table C2. 16b.
Browsing Behavior - Univariate ANOVA summary table for attribute 'Return Policy is Easy'

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	4.554 [a]	2	2.277	1.162	0.314
Intercept	11641.293	1	11641.293	5940.148	0.000
Browse	4.554	2	2.277	1.162	0.314
Error	723.153	369	1.960		
Total	12369.000	372			
Corrected Total	727.707	371			

[a] R Squared = .006 (Adjusted R Squared = .001); partial η^2 (Browse) = 0.006

Table C7. 16c.
Browsing Behavior - Univariate ANCOVA summary table for attribute 'Return Policy is Easy'

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	4.756 [a]	4	1.189	0.607	0.658
Intercept	2779.832	1	2779.832	1418.198	0.000
Gender	0.934	1	0.934	0.476	0.490
Income	0.839	1	0.839	0.428	0.513
Browse	3.337	2	1.669	0.851	0.428
Error	695.841	355	1.960		
Total	11979.000	360			
Corrected Total	700.597	359			

[a] R Squared = .007 (Adjusted R Squared = -.004); partial η^2 (Browse) = 0.005

Table C2. 17a.
Descriptive Statistics for Dependent Variable: Offers Good Price Incentives

Browse Classification	***Mean***	***SD***	***N***
Low	5.28	1.47	124
Medium	5.19	1.45	124
High	5.54	1.48	124
Total	5.34	1.47	372

Table C2. 17b.
Browsing Behavior - Univariate ANOVA summary table for attribute 'Offers Good Price Incentives'

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	8.048 [a]	2	4.024	1.863	0.157
Intercept	10602.677	1	10602.677	4907.205	0.000
Browse	8.048	2	4.024	1.863	0.157
Error	797.274	369	2.161		
Total	11408.000	372			
Corrected Total	805.323	371			

[a] R Squared = .010 (Adjusted R Squared = .005); partial η^2 (Browse) = 0.010

Table C2. 17c.
Browsing Behavior - Univariate ANCOVA summary table for attribute 'Offers Good Price Incentives'

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	17.746 [a]	4	4.437	2.088	0.082
Intercept	2685.525	1	2685.525	1264.147	0.000
Gender	11.732	1	11.732	5.523	0.019
Income	0.089	1	0.089	0.042	0.838
Browse	6.767	2	3.383	1.593	0.205
Error	754.154	355	2.124		
Total	11076.000	360			
Corrected Total	771.900	359			

[a] R Squared = .023 (Adjusted R Squared = .012); partial η^2 (Browse) = 0.009

Table C2. 18a.
Descriptive Statistics for Dependent Variable: Interactive Web Design

Browse Classification	***Mean***	***SD***	***N***
Low	4.28	1.35	124
Medium	4.54	1.37	124
High	4.58	1.57	124
Total	4.47	1.44	372

Table C2. 18b.
Browsing Behavior - Univariate ANOVA summary table for attribute 'Interactive Web Design'

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	6.500 [a]	2	3.250	1.582	0.207
Intercept	7425.387	1	7425.387	3614.195	0.000
Browse	6.500	2	3.250	1.582	0.207
Error	758.113	369	2.055		
Total	8190.000	372			
Corrected Total	764.613	371			

[a] R Squared = .009 (Adjusted R Squared = .003); partial η^2 (Browse) = 0.009

Table C2. 18c.
Browsing Behavior - Univariate ANCOVA summary table for attribute 'Interactive Web Design'

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	12.431 [a]	4	3.108	1.526	0.194
Intercept	1993.394	1	1993.394	979.093	0.000
Gender	2.330	1	2.330	1.144	0.285
Income	4.568	1	4.568	2.244	0.135
Browse	5.953	2	2.977	1.462	0.233
Error	722.766	355	2.036		
Total	7873.000	360			
Corrected Total	735.197	359			

[a] R Squared = .017 (Adjusted R Squared = .006); partial η^2 (Browse) = 0.008

Appendix C3. Purchasing: Website Attribute Preferences

Table C3. 1a.

Participant Characteristics by Purchasing Group Classification for Website Attributes

Attributes	*Purchasing Classification*	*Mean*	*SD*	*SE*	*95% Confidence Interval*	
					Lower Bound	*Upper Bound*
Order process is easy to use	*Low*	5.23	1.261	0.102	5.026	5.426
	Medium	5.69	1.092	0.102	5.486	5.885
	High	5.84	1.031	0.102	5.639	6.039
	Total	5.58	1.159	0.059	5.468	5.699
Easy to find product	*Low*	5.52	1.253	0.102	5.316	5.716
	Medium	5.95	0.995	0.102	5.752	6.151
	High	6.09	1.133	0.102	5.889	6.289
	Total	5.85	1.155	0.059	5.737	5.968
Website is new and different	*Low*	3.82	1.210	0.106	3.615	4.030
	Medium	3.93	1.163	0.106	3.720	4.135
	High	4.22	1.152	0.106	4.010	4.425
	Total	3.99	1.184	0.061	3.869	4.109
Product price	*Low*	5.83	1.507	0.114	5.607	6.054
	Medium	6.23	1.081	0.114	6.003	6.449
	High	6.21	1.164	0.114	5.986	6.433
	Total	6.09	1.274	0.066	5.960	6.218
Provides customer feedback	*Low*	4.67	1.447	0.124	4.425	4.914
	Medium	4.81	1.393	0.124	4.570	5.059
	High	5.19	1.305	0.124	4.949	5.438
	Total	4.89	1.397	0.072	4.751	5.033
Family and friends happy shopping at site	*Low*	4.98	1.405	0.120	4.740	5.211
	Medium	5.04	1.185	0.120	4.805	5.276
	High	5.20	1.397	0.120	4.966	5.437
	Total	5.07	1.333	0.069	4.937	5.208
Reputation & credibility of the company on web	*Low*	5.31	1.467	0.118	5.082	5.547
	Medium	5.73	1.303	0.118	5.494	5.958
	High	5.77	1.155	0.118	5.534	5.998
	Total	5.60	1.327	0.068	5.468	5.736

Attributes	*Purchasing Classification*	*Mean*	*SD*	*SE*	*95% Confidence Interval*	
					Lower Bound	*Upper Bound*
Enjoyable to visit	*Low*	4.94	1.357	0.115	4.717	5.170
	Medium	5.02	1.269	0.115	4.790	5.243
	High	5.31	1.218	0.115	5.080	5.533
	Total	5.09	1.289	0.066	4.958	5.219
Family and friends will like to know my opinion	*Low*	3.52	1.382	0.122	3.284	3.764
	Medium	3.73	1.239	0.122	3.486	3.966
	High	3.80	1.448	0.122	3.558	4.038
	Total	3.68	1.360	0.070	3.544	3.821
Low or no charge for shipping & handling	*Low*	5.89	1.438	0.116	5.659	6.115
	Medium	6.22	1.056	0.116	5.990	6.446
	High	6.13	1.349	0.116	5.901	6.357
	Total	6.08	1.296	0.067	5.946	6.210
Entertaining graphics and displays	*Low*	4.19	1.305	0.121	3.957	4.431
	Medium	4.07	1.270	0.121	3.836	4.310
	High	4.31	1.445	0.121	4.078	4.551
	Total	4.19	1.342	0.070	4.057	4.330
Provides product info., inc. FAQ	*Low*	4.96	1.376	0.120	4.724	5.195
	Medium	5.25	1.383	0.120	5.015	5.485
	High	5.55	1.232	0.120	5.313	5.784
	Total	5.25	1.350	0.069	5.117	5.388
Good place to find a bargain	*Low*	5.81	1.284	0.110	5.598	6.031
	Medium	6.00	0.979	0.110	5.783	6.217
	High	6.05	1.384	0.110	5.832	6.265
	Total	5.95	1.229	0.064	5.829	6.080
Fast response time from customer service	*Low*	5.67	1.299	0.113	5.448	5.891
	Medium	5.77	1.361	0.113	5.552	5.996
	High	5.96	1.092	0.113	5.738	6.181
	Total	5.80	1.258	0.065	5.673	5.929
I hear about in on radio / TV / Newspapers	*Low*	4.21	1.333	0.115	3.983	4.436
	Medium	4.12	1.207	0.115	3.894	4.348
	High	4.02	1.310	0.115	3.797	4.251
	Total	4.12	1.283	0.067	3.987	4.249

Attributes	*Purchasing Classification*	*Mean*	*SD*	*SE*	*95% Confidence Interval*	
					Lower Bound	*Upper Bound*
Return policy is easy	*Low*	5.48	1.468	0.126	5.228	5.723
	Medium	5.65	1.339	0.126	5.398	5.893
	High	5.66	1.396	0.126	5.414	5.909
	Total	5.59	1.401	0.073	5.451	5.737
Offers good price incentives	*Low*	5.20	1.509	0.132	4.941	5.462
	Medium	5.37	1.388	0.132	5.111	5.631
	High	5.44	1.521	0.132	5.183	5.704
	Total	5.34	1.473	0.076	5.188	5.489
Interactive web design	*Low*	4.27	1.410	0.128	4.023	4.526
	Medium	4.36	1.387	0.128	4.112	4.614
	High	4.77	1.471	0.128	4.515	5.017
	Total	4.47	1.436	0.074	4.323	4.613

Table C3. 1b.
Purchasing Behavior: MANOVA summary table for Website Attributes

		Value	F	Hyp df	Error df	Sig.	ES
Purchasing Behavior	Pillai's Trace	0.167	1.781	36	706	0.004	0.083
	Wilks' Lambda	0.839	1.796	36	704	0.003	0.084
	Hotelling's Trace	0.186	1.810	36	702	0.003	0.085
	Roy's Largest Root	0.140	2.739	18	353	0.000	0.123

Table C3. 1c.
Purchasing Behavior after controlling for Income: MANCOVA summary table for Website Attributes

Effect		Value	F	Hyp df	Error df	Sig.	Partial ES
Income	Pillai's Trace	0.046	0.915	18	340	0.561	0.046
	Wilks' Lambda	0.954	0.915	18	340	0.561	0.046
	Hotelling's Trace	0.048	0.915	18	340	0.561	0.046
	Roy's Largest Root	0.048	0.915	18	340	0.561	0.046
Purchase	Pillai's Trace	0.181	1.883	36	682	0.002	0.090
	Wilks' Lambda	0.826	1.898	36	680	0.001	0.091
	Hotelling's Trace	0.203	1.912	36	678	0.001	0.092
	Roy's Largest Root	0.150	2.840	18	341	0.000	0.130

Appendix C4. ANOVAs and ANCOVAs: Purchasing and Individual Website Attribute

Table C4. 1a.
Descriptive Statistics for Dependent Variable: Order Process is Easy to Use

Browse Classification	***Mean***	***SD***	***N***
Low	5.23	1.26	124
Medium	5.69	1.09	124
High	5.84	1.03	124
Total	5.58	1.16	372

Table C4. 1b.
Purchasing Behavior - Univariate ANOVA summary table for attribute 'Order Process Easy to Use'

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	25.231 [a]	2	12.616	9.838	0.000
Intercept	11596.583	1	11596.583	9043.260	0.000
Purchase	25.231	2	12.616	9.838	0.000
Error	473.185	369	1.282		
Total	12095.000	372			
Corrected Total	498.417	371			

[a] R Squared = .051 (Adjusted R Squared = .045); partial η^2 (Purchase) = 0.051

Table C4. 1c.
Purchasing Behavior - Univariate ANCOVA summary table for attribute 'Order Process Easy to Use'

Source	***SS***	***df***	***MS***	***F***	***Sig.***
Corrected Model	27.733 [a]	3	9.244	7.370	0.000
Intercept	2872.258	1	2872.258	2290.015	0.000
Income	0.369	1	0.369	0.294	0.588
Purchase	25.937	2	12.969	10.340	0.000
Error	447.768	357	1.254		
Total	11745.000	361			
Corrected Total	475.501	360			

[a] R Squared = .058 (Adjusted R Squared = .050); partial η^2 (Purchase) = 0.055

Table C4. 2a.

Descriptive Statistics for Dependent Variable: Easy to Find Product

Browse Classification	***Mean***	***SD***	***N***
Low	5.52	1.25	124
Medium	5.95	0.99	124
High	6.09	1.13	124
Total	5.85	1.15	372

Table C4. 2b.

Purchasing Behavior - Univariate ANOVA summary table for attribute 'Easy to Find Product'

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	22.167 [a]	2	11.083	8.652	0.000
Intercept	12740.132	1	12740.132	9945.193	0.000
Purchase	22.167	2	11.083	8.652	0.000
Error	472.702	369	1.281		
Total	13235.000	372			
Corrected Total	494.868	371			

[a] R Squared = .045 (Adjusted R Squared = .040); partial η^2 (Purchase) = 0.045

Table C4. 2c.

Purchasing Behavior - Univariate ANCOVA summary table for attribute 'Easy to Find Product'

Source	***SS***	***df***	***MS***	***F***	***Sig.***
Corrected Model	25.304 [a]	3	8.435	6.725	0.000
Intercept	3079.838	1	3079.838	2455.502	0.000
Income	2.195	1	2.195	1.750	0.187
Purchase	20.711	2	10.355	8.256	0.000
Error	447.771	357	1.254		
Total	12876.000	361			
Corrected Total	473.075	360			

[a] R Squared = .053 (Adjusted R Squared = .046); partial η^2 (Purchase) = 0.044

Table C4. 3a.
Descriptive Statistics for Dependent Variable: Website is New and Different

Browse Classification	***Mean***	***SD***	***N***
Low	3.82	1.21	124
Medium	3.93	1.16	124
High	4.22	1.15	124
Total	3.99	1.18	372

Table C4. 3b.
Purchasing Behavior - Univariate ANOVA summary table for attribute 'Website is New and Different'

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	10.392 [a]	2	5.196	3.763	0.024
Intercept	5920.043	1	5920.043	4286.986	0.000
Purchase	10.392	2	5.196	3.763	0.024
Error	509.565	369	1.381		
Total	6440.000	372			
Corrected Total	519.957	371			

[a] R Squared = .020 (Adjusted R Squared = .015); partial η^2 (Purchase) = 0.020

Table C4. 3c.
Purchasing Behavior - Univariate ANCOVA summary table for attribute 'Website is New and Different'

Source	***SS***	***df***	***MS***	***F***	***Sig.***
Corrected Model	10.946 [a]	3	3.649	2.605	0.052
Intercept	1523.843	1	1523.843	1088.057	0.000
Income	0.256	1	0.256	0.183	0.669
Purchase	10.927	2	5.464	3.901	0.021
Error	499.985	357	1.401		
Total	6247.000	361			
Corrected Total	510.931	360			

[a] R Squared = .021 (Adjusted R Squared = .013); partial η^2 (Purchase) = 0.021

Table C4. 4a.
Descriptive Statistics for Dependent Variable: Product Price

Browse Classification	***Mean***	***SD***	***N***
Low	5.83	1.51	124
Medium	6.23	1.08	124
High	6.21	1.16	124
Total	6.09	1.27	372

Table C4. 4b.
Purchasing Behavior - Univariate ANOVA summary table for attribute 'Product Price'

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	12.403 [a]	2	6.202	3.881	0.021
Intercept	13790.927	1	13790.927	8630.010	0.000
Purchase	12.403	2	6.202	3.881	0.021
Error	589.669	369	1.598		
Total	14393.000	372			
Corrected Total	602.073	371			

[a] R Squared = .021 (Adjusted R Squared = .015); partial η^2 (Purchase) = 0.021

Table C4. 4c.
Purchasing Behavior - Univariate ANCOVA summary table for attribute 'Product Price'

Source	***SS***	***df***	***MS***	***F***	***Sig.***
Corrected Model	15.677 [a]	3	5.226	3.329	0.020
Intercept	3496.000	1	3496.000	2227.480	0.000
Income	0.021	1	0.021	0.014	0.907
Purchase	15.638	2	7.819	4.982	0.007
Error	560.307	357	1.569		
Total	13971.000	361			
Corrected Total	575.983	360			

[a] R Squared = .027 (Adjusted R Squared = .019); partial η^2 (Purchase) = 0.027

Table C4. 5a.
Descriptive Statistics for Dependent Variable: Provides Customer Feedback

Browse Classification	***Mean***	***SD***	***N***
Low	4.67	1.45	124
Medium	4.81	1.39	124
High	5.19	1.30	124
Total	4.89	1.40	372

Table C4. 5b.
Purchasing Behavior - Univariate ANOVA summary table for attribute 'Provides Customer Feedback'

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	18.167 [a]	2	9.083	4.751	0.009
Intercept	8904.301	1	8904.301	4657.033	0.000
Purchase	18.167	2	9.083	4.751	0.009
Error	705.532	369	1.912		
Total	9628.000	372			
Corrected Total	723.699	371			

[a] R Squared = .025 (Adjusted R Squared = .020); partial η^2 (Purchase) = 0.025

Table C4. 5c.
Purchasing Behavior - Univariate ANCOVA summary table for attribute 'Provides Customer Feedback'

Source	***SS***	***df***	***MS***	***F***	***Sig.***
Corrected Model	17.458 [a]	3	5.819	3.076	0.028
Intercept	2216.729	1	2216.729	1171.813	0.000
Income	0.244	1	0.244	0.129	0.719
Purchase	15.837	2	7.919	4.186	0.016
Error	675.340	357	1.892		
Total	9381.000	361			
Corrected Total	692.798	360			

[a] R Squared = .025 (Adjusted R Squared = .017); partial η^2 (Purchase) = 0.023

Table C4. 6a.
Descriptive Statistics for Dependent Variable: Family and Friends Happy to Shop at Website

Browse Classification	***Mean***	***SD***	***N***
Low	4.98	1.41	124
Medium	5.04	1.19	124
High	5.20	1.40	124
Total	5.07	1.33	372

Table C4. 6b.
Purchasing Behavior - Univariate ANOVA summary table for attribute 'Family and Friends Happy to Shop at Website'

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	3.355 [a]	2	1.677	0.944	0.390
Intercept	9571.960	1	9571.960	5386.810	0.000
Purchase	3.355	2	1.677	0.944	0.390
Error	655.685	369	1.777		
Total	10231.000	372			
Corrected Total	659.040	371			

[a] R Squared = .005 (Adjusted R Squared = .000); partial η^2 (Purchase) = 0.005

Table C4. 6c.
Purchasing Behavior - Univariate ANCOVA summary table for attribute 'Family and Friends Happy to Shop at Website'

Source	***SS***	***df***	***MS***	***F***	***Sig.***
Corrected Model	7.518 [a]	3	2.506	1.448	0.229
Intercept	2251.230	1	2251.230	1300.491	0.000
Income	4.278	1	4.278	2.471	0.117
Purchase	1.996	2	0.998	0.576	0.562
Error	617.989	357	1.731		
Total	9953.000	361			
Corrected Total	625.507	360			

[a] R Squared = .012 (Adjusted R Squared = .004); partial η^2 (Purchase) = 0.003

Table C4. 7a.
Descriptive Statistics for Dependent Variable: Reputation and Credibility of the Company on the Web

Browse Classification	***Mean***	***SD***	***N***
Low	5.31	1.47	124
Medium	5.73	1.30	124
High	5.77	1.16	124
Total	5.60	1.33	372

Table C4. 7b.
Purchasing Behavior - Univariate ANOVA summary table for attribute 'Reputation and Credibility of the Company on the Web'

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	15.489 [a]	2	7.745	4.482	0.012
Intercept	11674.882	1	11674.882	6756.329	0.000
Purchase	15.489	2	7.745	4.482	0.012
Error	637.629	369	1.728		
Total	12328.000	372			
Corrected Total	653.118	371			

[a] R Squared = .024 (Adjusted R Squared = .018); partial η^2 (Purchase) = 0.024

Table C4. 7c.
Purchasing Behavior - Univariate ANCOVA summary table for attribute 'Reputation and Credibility of the Company on the Web'

Source	***SS***	***df***	***MS***	***F***	***Sig.***
Corrected Model	17.672 [a]	3	5.891	3.454	0.017
Intercept	2857.862	1	2857.862	1675.607	0.000
Income	0.846	1	0.846	0.496	0.482
Purchase	15.707	2	7.854	4.605	0.011
Error	608.888	357	1.706		
Total	11952.000	361			
Corrected Total	626.560	360			

[a] R Squared = .028 (Adjusted R Squared = .020); partial η^2 (Purchase) = 0.025

Table C4. 8a.
Descriptive Statistics for Dependent Variable: Enjoyable to Visit

Browse Classification	***Mean***	***SD***	***N***
Low	4.94	1.36	124
Medium	5.02	1.27	124
High	5.31	1.22	124
Total	5.09	1.29	372

Table C4. 8b.
Purchasing Behavior - Univariate ANOVA summary table for attribute 'Enjoyable to Visit'

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	9.145 [a]	2	4.573	2.780	0.063
Intercept	9632.927	1	9632.927	5856.631	0.000
Purchase	9.145	2	4.573	2.780	0.063
Error	606.927	369	1.645		
Total	10249.000	372			
Corrected Total	616.073	371			

[a] R Squared = .015 (Adjusted R Squared = .010); partial η^2 (Purchase) = 0.015

Table C4. 8c.
Purchasing Behavior - Univariate ANCOVA summary table for attribute 'Enjoyable to Visit'

Source	***SS***	***df***	***MS***	***F***	***Sig.***
Corrected Model	7.941 [a]	3	2.647	1.648	0.178
Intercept	2446.033	1	2446.033	1523.260	0.000
Income	0.003	1	0.003	0.002	0.966
Purchase	7.687	2	3.843	2.394	0.093
Error	573.266	357	1.606		
Total	9980.000	361			
Corrected Total	581.208	360			

[a] R Squared = .014 (Adjusted R Squared = .005); partial η^2 (Purchase) = 0.013

Table C4. 9a.

Descriptive Statistics for Dependent Variable: Family and Friends would Like to Know my Opinion

Browse Classification	***Mean***	***SD***	***N***
Low	3.52	1.38	124
Medium	3.73	1.24	124
High	3.80	1.45	124
Total	3.68	1.36	372

Table C4. 9b.

Purchasing Behavior - Univariate ANOVA summary table for attribute 'Family and Friends would Like to Know my Opinion'

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	5.005 [a]	2	2.503	1.355	0.259
Intercept	5045.430	1	5045.430	2731.603	0.000
Purchase	5.005	2	2.503	1.355	0.259
Error	681.565	369	1.847		
Total	5732.000	372			
Corrected Total	686.570	371			

[a] R Squared = .007 (Adjusted R Squared = .002); partial η^2 (Purchase) = 0.007

Table C4. 9c.

Purchasing Behavior - Univariate ANCOVA summary table for attribute 'Family and Friends would Like to Know my Opinion'

Source	***SS***	***df***	***MS***	***F***	***Sig.***
Corrected Model	6.176 [a]	3	2.059	1.130	0.337
Intercept	1326.811	1	1326.811	728.513	0.000
Income	0.801	1	0.801	0.440	0.508
Purchase	5.874	2	2.937	1.613	0.201
Error	650.190	357	1.821		
Total	5549.000	361			
Corrected Total	656.366	360			

[a] R Squared = .009 (Adjusted R Squared = .001); partial η^2 (Purchase) = 0.009

Table C4. 10a.

Descriptive Statistics for Dependent Variable: Low or No Charge for Shipping and Handling

Browse Classification	***Mean***	***SD***	***N***
Low	5.89	1.44	124
Medium	6.22	1.06	124
High	6.13	1.35	124
Total	6.08	1.30	372

Table C4. 10b.

Purchasing Behavior - Univariate ANOVA summary table for attribute 'Low or No Charge for Shipping and Handling '

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	7.263 [a]	2	3.632	2.177	0.115
Intercept	13742.261	1	13742.261	8238.982	0.000
Purchase	7.263	2	3.632	2.177	0.115
Error	615.476	369	1.668		
Total	14365.000	372			
Corrected Total	622.739	371			

[a] R Squared = .012 (Adjusted R Squared = .006); partial η^2 (Purchase) = 0.012

Table C4. 10c.

Purchasing Behavior - Univariate ANCOVA summary table for attribute 'Low or No Charge for Shipping and Handling '

Source	***SS***	***df***	***MS***	***F***	***Sig.***
Corrected Model	11.820 [a]	3	3.940	2.497	0.060
Intercept	3345.978	1	3345.978	2120.401	0.000
Income	1.722	1	1.722	1.091	0.297
Purchase	9.530	2	4.765	3.020	0.050
Error	563.343	357	1.578		
Total	13958.000	361			
Corrected Total	575.163	360			

[a] R Squared = .021 (Adjusted R Squared = .012; partial η^2 (Purchase) = 0.017

Table C4. 11a.
Descriptive Statistics for Dependent Variable: Entertaining Graphics and Displays

Browse Classification	***Mean***	***SD***	***N***
Low	4.19	1.30	124
Medium	4.07	1.27	124
High	4.31	1.44	124
Total	4.19	1.34	372

Table C2. 11b.
Purchasing Behavior - Univariate ANOVA summary table for attribute 'Entertaining Graphics and Displays'

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	3.629 [a]	2	1.815	1.008	0.366
Intercept	6541.935	1	6541.935	3633.121	0.000
Purchase	3.629	2	1.815	1.008	0.366
Error	664.435	369	1.801		
Total	7210.000	372			
Corrected Total	668.065	371			

[a] R Squared = .005 (Adjusted R Squared = .000); partial η^2 (Purchase) = 0.005

Table C4. 11c.
Purchasing Behavior - Univariate ANCOVA summary table for attribute 'Entertaining Graphics and Displays'

Source	***SS***	***df***	***MS***	***F***	***Sig.***
Corrected Model	3.226 [a]	3	1.075	0.588	0.623
Intercept	1662.246	1	1662.246	909.340	0.000
Income	0.048	1	0.048	0.026	0.871
Purchase	3.219	2	1.610	0.881	0.415
Error	652.585	357	1.828		
Total	6997.000	361			
Corrected Total	655.812	360			

[a] R Squared = .005 (Adjusted R Squared = -.003); partial η^2 (Purchase) = 0.005

Table C4. 12a.
Descriptive Statistics for Dependent Variable: Provides Product Information, including FAQs

Browse Classification	***Mean***	***SD***	***N***
Low	4.96	1.38	124
Medium	5.25	1.38	124
High	5.55	1.23	124
Total	5.25	1.35	372

Table C4. 12b.
Purchasing Behavior - Univariate ANOVA summary table for attribute 'Provides Product Information, including FAQs'

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	21.489 [a]	2	10.745	6.055	0.003
Intercept	10263.753	1	10263.753	5784.312	0.000
Purchase	21.489	2	10.745	6.055	0.003
Error	654.758	369	1.774		
Total	10940.000	372			
Corrected Total	676.247	371			

[a] R Squared = .032 (Adjusted R Squared = .027); partial η^2 (Purchase) = 0.032

Table C4. 12c.
Purchasing Behavior - Univariate ANCOVA summary table for attribute 'Provides Product Information, including FAQs'

Source	***SS***	***df***	***MS***	***F***	***Sig.***
Corrected Model	26.274 [a]	3	8.758	5.184	0.002
Intercept	2483.694	1	2483.694	1470.149	0.000
Income	2.000	1	2.000	1.184	0.277
Purchase	21.385	2	10.693	6.329	0.002
Error	603.122	357	1.689		
Total	10661.000	361			
Corrected Total	629.396	360			

[a] R Squared = .042 (Adjusted R Squared = .034); partial η^2 (Purchase) = 0.034

Table C4. 13a.
Descriptive Statistics for Dependent Variable: Good Place to Find a Bargain

Browse Classification	***Mean***	***SD***	***N***
Low	5.81	1.28	124
Medium	6.00	0.98	124
High	6.05	1.38	124
Total	5.95	1.23	372

Table C4. 13b.
Purchasing Behavior - Univariate ANOVA summary table for attribute 'Good Place to Find a Bargain'

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	3.780 [a]	2	1.890	1.253	0.287
Intercept	13188.777	1	13188.777	8746.006	0.000
Purchase	3.780	2	1.890	1.253	0.287
Error	556.444	369	1.508		
Total	13749.000	372			
Corrected Total	560.223	371			

[a] R Squared = .007 (Adjusted R Squared = .001); partial η^2 (Purchase) = 0.007

Table C4. 13c.
Purchasing Behavior - Univariate ANCOVA summary table for attribute 'Good Place to Find a Bargain'

Source	***SS***	***df***	***MS***	***F***	***Sig.***
Corrected Model	5.729 [a]	3	1.910	1.273	0.283
Intercept	3266.910	1	3266.910	2177.687	0.000
Income	0.371	1	0.371	0.247	0.619
Purchase	4.922	2	2.461	1.640	0.195
Error	535.562	357	1.500		
Total	13346.000	361			
Corrected Total	541.291	360			

[a] R Squared = .011 (Adjusted R Squared = .002); partial η^2 (Purchase) = 0.009

Table C4. 14a.
Descriptive Statistics for Dependent Variable: Fast Response Time from Customer Service

Browse Classification	***Mean***	***SD***	***N***
Low	5.67	1.30	124
Medium	5.77	1.36	124
High	5.96	1.09	124
Total	5.80	1.26	372

Table C4. 14b.
Purchasing Behavior - Univariate ANOVA summary table for attribute 'Fast Response Time from Customer Service'

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	5.360 [a]	2	2.680	1.699	0.184
Intercept	12518.720	1	12518.720	7938.227	0.000
Purchase	5.360	2	2.680	1.699	0.184
Error	581.919	369	1.577		
Total	13106.000	372			
Corrected Total	587.280	371			

[a] R Squared = .009 (Adjusted R Squared = .004); partial η^2 (Purchase) = 0.009

Table C4. 14c.
Purchasing Behavior - Univariate ANCOVA summary table for attribute 'Fast Response Time from Customer Service'

Source	***SS***	***df***	***MS***	***F***	***Sig.***
Corrected Model	8.978 [a]	3	2.993	1.961	0.120
Intercept	3007.718	1	3007.718	1970.356	0.000
Income	3.011	1	3.011	1.972	0.161
Purchase	4.386	2	2.193	1.437	0.239
Error	544.955	357	1.526		
Total	12770.000	361			
Corrected Total	553.934	360			

[a] R Squared = .016 (Adjusted R Squared = .008); partial η^2 (Purchase) = 0.008

Table C4. 15a.
Descriptive Statistics for Dependent Variable: I hear about it on Radio / TV / Newspapers

Browse Classification	***Mean***	***SD***	***N***
Low	4.21	1.33	124
Medium	4.12	1.21	124
High	4.02	1.31	124
Total	4.12	1.28	372

Table C4. 15b.
Purchasing Behavior - Univariate ANOVA summary table for attribute 'I hear about it on Radio / TV / Newspapers'

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	2.134 [a]	2	1.067	0.647	0.524
Intercept	6309.204	1	6309.204	3824.946	0.000
Purchase	2.134	2	1.067	0.647	0.524
Error	608.661	369	1.649		
Total	6920.000	372			
Corrected Total	610.796	371			

[a] R Squared = .003 (Adjusted R Squared = -.002); partial η^2 (Purchase) = 0.003

Table C4. 15c.
Purchasing Behavior - Univariate ANCOVA summary table for attribute 'I hear about it on Radio / TV / Newspapers'

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	3.407 [a]	3	1.136	0.689	0.559
Intercept	1659.204	1	1659.204	1006.123	0.000
Income	0.783	1	0.783	0.475	0.491
Purchase	2.028	2	1.014	0.615	0.541
Error	588.731	357	1.649		
Total	6742.000	361			
Corrected Total	592.139	360			

[a] R Squared = .006 (Adjusted R Squared = -.003); partial η^2 (Purchase) = 0.003

Table C4. 16a.
Descriptive Statistics for Dependent Variable: Return Policy is Easy

Browse Classification	***Mean***	***SD***	***N***
Low	5.48	1.47	124
Medium	5.65	1.34	124
High	5.66	1.40	124
Total	5.59	1.40	372

Table C4. 16b.
Purchasing Behavior - Univariate ANOVA summary table for attribute 'Return Policy is Easy'

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	2.618 [a]	2	1.309	0.666	0.514
Intercept	11641.293	1	11641.293	5924.292	0.000
Purchase	2.618	2	1.309	0.666	0.514
Error	725.089	369	1.965		
Total	12369.000	372			
Corrected Total	727.707	371			

[a] R Squared = .004 (Adjusted R Squared = -.002); partial η^2 (Purchase) = 0.004

Table C4. 16c.
Purchasing Behavior - Univariate ANCOVA summary table for attribute 'Return Policy is Easy'

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	3.046 [a]	3	1.015	0.519	0.669
Intercept	2876.365	1	2876.365	1471.754	0.000
Income	0.466	1	0.466	0.239	0.625
Purchase	2.310	2	1.155	0.591	0.554
Error	697.713	357	1.954		
Total	12015.000	361			
Corrected Total	700.759	360			

[a] R Squared = .004 (Adjusted R Squared = -.004); partial η^2 (Purchase) = 0.003

Table C4. 17a.
Descriptive Statistics for Dependent Variable: Offers Good Price Incentives

Browse Classification	***Mean***	***SD***	***N***
Low	5.20	1.51	124
Medium	5.37	1.39	124
High	5.44	1.52	124
Total	5.34	1.47	372

Table C4. 17b.
Purchasing Behavior - Univariate ANOVA summary table for attribute 'Offers Good Price Incentives'

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	3.823 [a]	2	1.911	0.880	0.416
Intercept	10602.677	1	10602.677	4881.332	0.000
Purchase	3.823	2	1.911	0.880	0.416
Error	801.500	369	2.172		
Total	11408.000	372			
Corrected Total	805.323	371			

[a] R Squared = .005 (Adjusted R Squared = -.001); partial η^2 (Purchase) = 0.005

Table C4. 17c.
Purchasing Behavior - Univariate ANCOVA summary table for attribute 'Offers Good Price Incentives'

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	3.691 [a]	3	1.230	0.571	0.634
Intercept	2732.170	1	2732.170	1268.991	0.000
Income	0.259	1	0.259	0.120	0.729
Purchase	3.620	2	1.810	0.841	0.432
Error	768.630	357	2.153		
Total	11112.000	361			
Corrected Total	772.321	360			

[a] R Squared = .005 (Adjusted R Squared = -.004); partial η^2 (Purchase) = 0.005

Table C4. 18a.
Descriptive Statistics for Dependent Variable: Interactive Web Design

Browse Classification	***Mean***	***SD***	***N***
Low	4.27	1.41	124
Medium	4.36	1.39	124
High	4.77	1.47	124
Total	4.47	1.44	372

Table C4. 18b.
Purchasing Behavior - Univariate ANOVA summary table for attribute 'Interactive Web Design'

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	17.048 [a]	2	8.524	4.208	0.016
Intercept	7425.387	1	7425.387	3665.192	0.000
Browse	17.048	2	8.524	4.208	0.016
Error	747.565	369	2.026		
Total	8190.000	372			
Corrected Total	764.613	371			

[a] R Squared = .022 (Adjusted R Squared = .017); partial η^2 (Purchase) = 0.022

Table C4. 18c.
Purchasing Behavior - Univariate ANCOVA summary table for attribute 'Offers Good Price Incentives'

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	27.152 [a]	3	9.051	4.548	0.004
Intercept	2108.249	1	2108.249	1059.419	0.000
Income	10.282	1	10.282	5.167	0.024
Purchase	21.774	2	10.887	5.471	0.005
Error	710.432	357	1.990		
Total	7909.000	361			
Corrected Total	737.584	360			

[a] R Squared = .037 (Adjusted R Squared = .029); partial η^2 (Purchase) = 0.030

APPENDIX D
Internet Experience

Appendix D1. Browsing: Internet Experience

Table D1. 1a.
Participant Characteristics by Browsing Group Classification for Internet Experience

Variables		***Browsing Classification***	***Mean***	***SD***	***N***
InterL	How long have you been using the Internet	Low	4.20	0.80	122
		Medium	4.48	0.69	123
		High	4.53	0.63	122
		Total	4.41	0.73	367
InterU	How many hours per week do you use the Internet	Low	3.32	1.39	122
		Medium	3.60	1.34	123
		High	4.34	1.31	122
		Total	3.75	1.41	367
CompositeShopOnline	Combination of Inter1 and ShopF	Low	-0.51	0.71	122
		Medium	0.02	0.83	123
		High	0.49	0.84	122
		Total	0.00	0.90	367

Table D1. 1b.
Browsing Behavior: MANOVA summary table for Internet Experience

Effect		***Value***	***F***	***Hyp df***	***Error df***	***Sig.***	***Partial ES***
Browsing Behavior	Pillai's Trace	0.257	17.838	6	726	0.000	0.128
	Wilks' Lambda	0.747	18.974	6	724	0.000	0.136
	Hotelling's Trace	0.334	20.114	6	722	0.000	0.143
	Roy's Largest Root	0.319	38.587	3	363	0.000	0.242

Table D1. 1c.

Browsing Behavior after controlling for Gender and Income: MANCOVA summary table for Internet Experience

Effect		***Value***	***F***	***Hyp df***	***Error df***	***Sig.***	***Partial ES***
Gender	Pillai's Trace	0.004	0.434	3	348	0.729	0.004
	Wilks' Lambda	0.996	0.434	3	348	0.729	0.004
	Hotelling's Trace	0.004	0.434	3	348	0.729	0.004
	Roy's Largest Root	0.004	0.434	3	348	0.729	0.004
Income	Pillai's Trace	0.006	0.662	3	348	0.576	0.006
	Wilks' Lambda	0.994	0.662	3	348	0.576	0.006
	Hotelling's Trace	0.006	0.662	3	348	0.576	0.006
	Roy's Largest Root	0.006	0.662	3	348	0.576	0.006
Browse	Pillai's Trace	0.241	15.963	6	698	0.000	0.121
	Wilks' Lambda	0.762	16.891	6	696	0.000	0.127
	Hotelling's Trace	0.308	17.821	6	694	0.000	0.134
	Roy's Largest Root	0.294	34.151	3	349	0.000	0.227

Appendix D2. ANOVAs and ANCOVAs: Browsing and Individual Internet Experience Variables

Table D2. 1a.
Descriptive Statistics for Dependent Variable: InterL

Browse Classification	***Mean***	***SD***	***N***
Low	4.21	0.80	124
Medium	4.48	0.69	124
High	4.54	0.63	124
Total	4.41	0.72	372

Table D2. 1b.
Browsing Behavior - Univariate ANOVA summary table for InterL

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	7.618 [a]	2	3.809	7.546	0.001
Intercept	7230.108	1	7230.108	14322.487	0.000
Browse	7.618	2	3.809	7.546	0.001
Error	186.274	369	0.505		
Total	7424.000	372			
Corrected Total	193.892	371			

[a] R Squared = .039 (Adjusted R Squared = .034); partial η^2 (Browse) = 0.039

Table D2. 1c.
Browsing Behavior - Univariate ANCOVA summary table for InterL

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	8.321 [a]	4	2.080	4.092	0.003
Intercept	1713.632	1	1713.632	3370.898	0.000
Gender	0.235	1	0.235	0.462	0.497
Income	0.084	1	0.084	0.166	0.684
Browse	7.239	2	3.620	7.120	0.001
Error	180.468	355	0.508		
Total	7176.000	360			
Corrected Total	188.789	359			

[a] R Squared = .044 (Adjusted R Squared = .033); partial η^2 (Browse) = 0.039

Table D2. 2a.
Descriptive Statistics for Dependent Variable: InterU

Browse Classification	***Mean***	***SD***	***N***
Low	3.31	1.38	124
Medium	3.60	1.33	124
High	4.33	1.32	124
Total	3.74	1.41	372

Table D2. 2b.
Browsing Behavior - Univariate ANOVA summary table for InterU

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	69.102 [a]	2	34.551	19.154	0.000
Intercept	5216.261	1	5216.261	2891.666	0.000
Browse	69.102	2	34.551	19.154	0.000
Error	665.637	369	1.804		
Total	5951.000	372			
Corrected Total	734.739	371			

[a] R Squared = .094 (Adjusted R Squared = .089); partial η^2 (Browse) = 0.094

Table D2. 2c.
Browsing Behavior - Univariate ANCOVA summary table for InterU

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	66.847 [a]	4	16.712	9.189	0.000
Intercept	1325.343	1	1325.343	728.727	0.000
Gender	0.333	1	0.333	0.183	0.669
Income	1.560	1	1.560	0.858	0.355
Browse	64.485	2	32.242	17.728	0.000
Error	645.642	355	1.819		
Total	5760.000	360			
Corrected Total	712.489	359			

[a] R Squared = .094 (Adjusted R Squared = .084); partial η^2 (Browse) = 0.091

Table D2. 3a.
Descriptive Statistics for Dependent Variable: CompositeShopOnline

Browse Classification	***Mean***	***SD***	***N***
Low	-0.51	0.71	122
Medium	0.02	0.83	123
High	0.49	0.84	122
Total	0.00	0.90	367

Table D2. 3b.
Browsing Behavior - Univariate ANOVA summary table for CompositeShopOnline

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	62.068 [a]	2	31.034	48.804	0.000
Intercept	0.000	1	0.000	0.000	1.000
Browse	62.068	2	31.034	48.804	0.000
Error	231.466	364	0.636		
Total	293.534	367			
Corrected Total	293.534	366			

[a] R Squared = .221 (Adjusted R Squared = .207); partial η^2 (Browse) = 0.211

Table D2. 3c.
Browsing Behavior - Univariate ANCOVA summary table for CompositeShopOnline

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	59.552 [a]	4	14.888	22.863	0.000
Intercept	0.382	1	0.382	0.587	0.444
Gender	0.570	1	0.570	0.876	0.350
Income	0.220	1	0.220	0.337	0.562
Browse	55.462	2	27.731	42.585	0.000
Error	227.915	350	0.651		
Total	287.476	355			
Corrected Total	510.931	359			

[a] R Squared = .207 (Adjusted R Squared = .198); partial η^2 (Browse) = 0.196

Appendix D3. Purchasing: Internet Experience

Table D3. 1a.

Participant Characteristics by Purchasing Group Classification for Internet Experience

Variables		***Purchasing Classification***	***Mean***	***SD***	***N***
InterL	How long have you been using the Internet	Low	4.10	0.81	122
		Medium	4.57	0.59	123
		High	4.55	0.67	122
		Total	4.41	0.73	367
InterU	How many hours per week do you use the Internet	Low	3.35	1.36	122
		Medium	3.72	1.36	123
		High	4.19	1.39	122
		Total	3.75	1.41	367
CompositeShopOnline	Combination of Inter1 and ShopF	Low	-0.46	0.77	122
		Medium	-0.01	0.84	123
		High	0.47	0.84	122
		Total	0.00	0.90	367

Table D3. 1b.

Purchasing Behavior: MANOVA summary table for Internet Experience

Effect		***Value***	***F***	***Hyp df***	***Error df***	***Sig.***	***Partial ES***
Purchasing Behavior	Pillai's Trace	0.247	17.044	6	726	0.000	0.123
	Wilks' Lambda	0.759	17.873	6	724	0.000	0.129
	Hotelling's Trace	0.311	18.702	6	722	0.000	0.135
	Roy's Largest Root	0.285	34.500	3	363	0.000	0.222

Table D3. 1c.

Purchasing Behavior after controlling for Income: MANCOVA summary table for Internet Experience

Effect		***Value***	***F***	***Hyp df***	***Error df***	***Sig.***	***Partial ES***
Income	Pillai's Trace	0.006	0.662	3	350	0.576	0.006
	Wilks' Lambda	0.994	0.662	3	350	0.576	0.006
	Hotelling's Trace	0.006	0.662	3	350	0.576	0.006
	Roy's Largest Root	0.006	0.662	3	350	0.576	0.006
Purchase	Pillai's Trace	0.235	15.594	6	702	0.000	0.118
	Wilks' Lambda	0.769	16.357	6	700	0.000	0.123
	Hotelling's Trace	0.294	17.121	6	698	0.000	0.128
	Roy's Largest Root	0.273	31.990	3	351	0.000	0.215

Appendix D4. ANOVAs and ANCOVAs: Purchasing and Individual Internet Experience Variables

Table D4. 1a.
Descriptive Statistics for Dependent Variable: InterL

Purchase Classification	***Mean***	***SD***	***N***
Low	4.10	0.80	124
Medium	4.57	0.59	124
High	4.55	0.67	124
Total	4.41	0.72	372

Table D4. 1b.
Purchasing Behavior - Univariate ANOVA summary table for InterL

Source	***SS***	***Df***	***MS***	***F***	***p***
Corrected Model	17.199 [a]	2	8.599	17.959	0.000
Intercept	7230.108	1	7230.108	15099.078	0.000
Purchase	17.199	2	8.599	17.959	0.000
Error	176.694	369	0.479		
Total	7424.000	372			
Corrected Total	193.892	371			

[a] R Squared = .089 (Adjusted R Squared = .084); partial η^2 (Purchase) = 0.089

Table D4. 1c.
Purchasing Behavior - Univariate ANCOVA summary table for InterL

Source	***SS***	***Df***	***MS***	***F***	***p***
Corrected Model	17.287 [a]	3	5.762	11.970	0.000
Intercept	1812.511	1	1812.511	3765.204	0.000
Income	0.018	1	0.018	0.038	0.846
Purchase	16.927	2	8.463	17.581	0.000
Error	171.854	357	0.481		
Total	7201.000	361			
Corrected Total	189.141	360			

[a] R Squared = .091 (Adjusted R Squared = .084); partial η^2 (Purchase) = 0.090

Table D4. 2a.
Descriptive Statistics for Dependent Variable: InterU

Purchase Classification	***Mean***	***SD***	***N***
Low	3.33	1.36	124
Medium	3.72	1.36	124
High	4.19	1.38	124
Total	3.74	1.41	372

Table D4. 2b.
Purchasing Behavior - Univariate ANOVA summary table for InterU

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	45.441 [a]	2	22.720	12.163	0.000
Intercept	5216.261	1	5216.261	2792.405	0.000
Purchase	45.441	2	22.720	12.163	0.000
Error	689.298	369	1.868		
Total	5951.000	372			
Corrected Total	734.739	371			

[a] R Squared = .062 (Adjusted R Squared = .057); partial η^2 (Purchase) = 0.062

Table D4. 2c.
Purchasing Behavior - Univariate ANCOVA summary table for InterU

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	43.265 [a]	3	14.422	7.687	0.000
Intercept	1419.184	1	1419.184	756.445	0.000
Income	2.760	1	2.760	1.471	0.226
Purchase	43.029	2	21.514	11.467	0.000
Error	669.777	357	1.876		
Total	5769.000	361			
Corrected Total	713.042	360			

[a] R Squared = .061 (Adjusted R Squared = .053); partial η^2 (Purchase) = 0.060

Table D4. 3a.
Descriptive Statistics for Dependent Variable: CompositeShopOnline

Purchase Classification	***Mean***	***SD***	***N***
Low	-0.46	0.77	122
Medium	-0.01	0.84	123
High	0.47	0.84	122
Total	0.00	0.90	367

Table D4. 3b.
Purchasing Behavior - Univariate ANOVA summary table for CompositeShopOnline

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	52.115 [a]	2	26.057	39.288	0.000
Intercept	0.000	1	0.000	0.000	0.998
Purchase	52.115	2	26.057	39.288	0.000
Error	241.419	364	0.663		
Total	293.534	367			
Corrected Total	293.534	366			

[a] R Squared = .178 (Adjusted R Squared = .173); partial η^2 (Purchase) = 0.178

Table D4. 3c.
Purchasing Behavior - Univariate ANCOVA summary table for CompositeShopOnline

Source	***SS***	***df***	***MS***	***F***	***p***
Corrected Model	49.241 [a]	3	16.414	24.251	0.000
Intercept	0.003	1	0.003	0.005	0.946
Income	0.000	1	0.000	0.000	0.987
Browse	47.776	2	23.888	35.294	0.000
Error	238.242	352	0.677		
Total	287.490	356			
Corrected Total	287.483	355			

[a] R Squared = .171 (Adjusted R Squared = .164); partial η^2 (Purchase) = 0.167

APPENDIX E
Multiple Regressions

Table E.1. *Inter correlations: Diversified Online Browsing Behavior and Demographics*

Correlations								
	Diversified Online Browsing	Gender	Age	Marital status	Education level	Employed full time	Income	House hold size
Diversified Online Browsing	1.000	---	---	---	---	---	---	---
Gender	0.127**	1.000	---	---	---	---	---	---
Age	-0.078	0.016	1.000	---	---	---	---	---
Marital status	0.038	-0.013	-0.573**	1.000	---	---	---	---
Educational level	0.072	0.129**	-0.022	0.007	1.000	---	---	---
Employed full time	-0.002	0.011	0.054	-0.060	0.116*	1.000	---	---
Income	0.120**	0.175**	0.327**	-0.483**	0.100*	0.138**	1.000	---
House hold size	-0.051	0.124**	0.071	-0.254**	-0.209**	-0.104*	0.225**	1.000

* Sig., $p < 0.05$; ** Sig., $p < 0.01$

Table E.2.
Summary of single block multiple linear regression for selected demographics predicting magnitude of diversified online browsing behavior

Variables	***B***	***Std. Error***	***Beta***	***t-value***	***Sig.***	***Zero-order r***	***Partial r***
(Constant)	2.468	0.224	---	10.998	0.000	---	---
Gender	0.167	0.084	0.106	1.998	0.046	0.127	0.104
Age	-0.063	0.037	-0.106	-1.681	0.094	-0.078	-0.088
Marital status	0.062	0.105	0.041	0.592	0.554	0.038	0.031
Educational level	0.041	0.091	0.024	0.449	0.654	0.072	0.024
Employed full time	-0.056	0.094	-0.031	-0.594	0.553	-0.002	-0.031
Income	0.000	0.000	0.176	2.896	0.004	0.120	0.150
House hold size	-0.050	0.033	-0.084	-1.505	0.133	-0.051	-0.079

Table E.3. *Inter correlations: Diversified Online Purchasing Behavior & Demographics*

Correlations								
	Diversified Online Purchasing	Gender	Age	Marital status	Education level	Employed full time	Income	House hold size
Diversified Online Purchasing	1.000	---	---	---	---	---	---	---
Gender	0.104*	1.000	---	---	---	---	---	---
Age	-0.027	0.016	1.000	---	---	---	---	---
Marital status	-0.062	-0.013	-0.573**	1.000	---	---	---	---
Educational level	0.138**	0.129**	-0.022	0.007	1.000	---	---	---
Employed full time	0.072	0.011	0.054	-0.060	0.116*	1.000	---	---
Income	0.188**	0.175**	0.327**	-0.483**	0.100*	0.138**	1.000	---
House hold size	-0.052	0.124**	0.071	-0.254**	-0.209**	-0.104*	0.225**	1.000

* Sig., $p < 0.05$; ** Sig., $p < 0.01$

Table E.4.
Summary of single block multiple linear regression for selected demographics predicting magnitude of diversified online purchasing behavior

Variables	***B***	***Std. Error***	***Beta***	***t-value***	***Sig.***	***Zero-order r***	***Partial r***
(Constant)	1.786	0.177	---	10.095	0.000	---	---
Gender	0.089	0.066	0.071	1.354	0.177	0.104	0.071
Age	-0.055	0.029	-0.117	-1.871	0.062	-0.027	-0.098
Marital status	-0.067	0.083	-0.055	-0.801	0.424	-0.062	-0.042
Educational level	0.115	0.072	0.085	1.593	0.112	0.138	0.083
Employed full time	0.040	0.074	0.028	0.533	0.594	0.072	0.028
Income	0.000	0.000	0.196	3.243	0.001	0.188	0.168
House hold size	-0.042	0.026	-0.090	-1.624	0.105	-0.052	-0.085