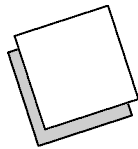


An executive summary for managers and executive readers can be found at the end of this article



E-shopping in a multiple channel environment

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Abstract *In the present study, the authors propose a segmentation schema based on patterns of e-browsing and e-purchasing. We examine self-reports of browsing and purchasing using five specific non-store channels: the Internet, television infomercials, advertising that accompanies regular television programming, television shopping channels, and print catalogs. Our findings indicate that shoppers who browse and/or purchase on the Internet differ in their use of multi-channel options related to their perceptions of convenience. Some shoppers clearly want to purchase in the store setting and reject multiple forms of non-store shopping. Others like to browse various non-store media and have extended their browsing to the Internet, yet maintain their loyalty to in-store purchases. Retailers who attempt to “convert” such shoppers to Internet-only purchasing may alienate the shoppers who rely on the Internet solely for information.*

Introduction

The explosive growth of the Internet has revolutionized many aspects of daily life (Fetto, 1999; Rutledge, 2000). Recent statistics tell us that people the world over are using the Internet in ever-increasing numbers, with estimates ranging from 505 million (Global Reach, 2001) to 513.41 million people online throughout the world (NUA Ltd, 2001). There is much to be learned about how the Internet fits in people’s lives, how they use it as part of a set of choices, and what deters them from using it for certain purposes, such as making purchases.

Despite increased use of the Web, recent industry studies have documented problems such as an ongoing trend in online shopping cart “abandonment” in which apparent planned purchases are never completed online (Hurwicz, 1999). In fact, substantial numbers of online shoppers return to physical stores after experiencing problems with slow load times, an inability to locate items, incomplete information, lack of human interaction, and missed or late deliveries (Mardesich, 1999; McCarthy, 2000). Failures with account setups and confusing error messages also caused about 40 percent of shoppers to have problems during checkout (Enos, 2000). While consumers have verified these reasons, we argue that another reason may explain the apparent abandonment that takes place. That is, some Internet browsers may have never intended to complete their purchases online, preferring to shop in a bricks and mortar setting. Perhaps the notion of “abandonment” is an oversimplification. Some consumers may simply use shopping carts to investigate and tally possible future purchases, with no intent to purchase at the specific time that they are online.

Explosive growth

Failure to complete purchases



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Segmentation schema

The purpose of the present study is to empirically investigate the connections among Internet “use” and other non-store media options in a multi-channel environment. In the present study, the authors propose a segmentation schema based on patterns of e-browsing and e-purchasing, including browsing on the Internet with planned purchasing in an offline channel. Using that schema, our study examines the self-reports of browsing and purchasing of 250 Internet users with respect to five specific non-store media: the Internet, television infomercials, advertising that accompanies regular television programming, television shopping channels, and print catalogs. Our findings indicate that shoppers who browse and/or purchase on the Internet differ in their use of multi-channel options related to their perceptions of convenience. Some shoppers clearly want to purchase in the store setting and reject multiple forms of non-store shopping. Others like to browse various non-store media and have extended their browsing to the Internet, yet maintain their loyalty to in-store purchases.

Background

The growth and potential of the Internet

There is a need for a “better understanding of the Web user” and e-shopping (Korgaonkar and Wolin, 1999). Current studies vary in predicting the characteristics of Web users, ranging from male, well-educated, middle income and middle-aged or younger (Emmanouilides and Hammond, 2000; Korgaonkar and Wolin, 1999; Wilson, 2000), to substantial increases among women and the elderly (Harris, 1998; Rosen and Howard, 2000; Rosen and Weil, 1995). Recent studies by Media Metrix and Jupiter Communications indicate that more women are online than men, with the greatest increases among teenaged girls and women over 55 (Hamilton, 2000).

Convenience and time management

Many studies have found that typical online buyers have used the Web for several years, and because of their familiarity, they search online for product information and purchase options (Bellman *et al.*, 1999). In many cases, convenience and time-management are the key drivers among e-shoppers (Chang and McFarland, 1999), while some “wired but wary” use the Internet for e-mail, but do not shop online. Still others have no regular Internet access at all.

Many studies examine Internet shopping exclusively in determining consumer usage and satisfaction (Szymanski and Hise, 2000; VanTassel and Weitz, 1997). However, it is not likely that shoppers view the Internet as separate and distinct from other more familiar forms of shopping. We argue that it is more realistic to examine e-shopping in the context of multi-channel alternatives that are also available to shoppers (Grant, 2000; Greco, 1996). The interrelationships among various types of non-store methods are not well understood, nor are their impacts on “bricks and mortar” retail outlets (Achenbaum, 1999). We also contend that insights can be gained by organizing the study of e-shopping based on sound theoretical relationships that have been used to describe other components of the multiple channel environment. We turn to the literature on recreational shopping and convenience in order to build a foundation for the study.

Browsing and purchasing

Some studies have attempted to understand whether browsing on the Internet is correlated with purchasing on the Internet (Lindquist and Kaufman-Scarborough, 2000). It is questionable whether a perfect match is possible, since some shoppers enjoy browsing as a separate activity, while others buy without browsing if their choice is clear and determined in advance. Because of problems like security fears, lack of skill with computers, slow response time by e-tailers, and confusing Web sites, studies report that numerous

Numerous motives for shopping

shoppers use non-store methods to search and compare, while going to the “bricks and mortar” setting to make their purchases (Koprowski, 2000; Levy and Nilson, 1999).

Earlier pre-Internet studies investigated why people shop, why they go to the store, and why they look but do not buy. For instance, Tauber (1972, 1995) went beyond retail patronage and demonstrated that people have numerous motives for shopping that are unrelated to the actual purchasing of products. The shoppers in his sample reported that their shopping trips included carrying out expected roles, diversion from daily routine, self-gratification and response to moods, learning about new trends, physical activity, sensory stimulation, meeting others with similar interests, interaction with peer groups, and the pleasure of bargaining. Such motives are likely to result in browsing that does not necessarily lead to purchasing.

Other studies have identified persons as “recreational shoppers”, who enjoy shopping as a leisure activity and tend to browse in retail outlets “without an upcoming purchase in mind” (Bellinger and Korgaonkar, 1980; Ohanian and Tashchian, 1992). Such shoppers report being interested in gaining knowledge about specific product classes and actively seek information about topics such as merchandise, prices, and quality. Such shoppers do not generally gather such information in preparation for an upcoming purchase, but instead appear to enjoy gathering information for its own sake. They engage in word-of-mouth activities more than other shoppers (Bloch and Richins, 1983), and enjoy giving advice and influencing other consumers.

Recreational e-shoppers

These earlier researchers explicitly considered browsing and shopping behaviors in the “bricks and mortar” setting. We suggest that “recreational e-shoppers” are also likely to virtually “stroll” through online shopping sites for learning, social, or diversion-related purposes. Recreational e-shoppers may also enjoy gathering online information and share their knowledge through online chat rooms and buyer forums. If a comparable pattern of information gathering and sharing exists, browsers who do not “convert” to purchasers may be found to exhibit similar characteristics to in-store recreational shoppers who may be lonely, bored, or simply curious.

Browsing convenience versus purchasing convenience

Surveys of customers indicate their frustration with the lack of convenience provided by “bricks and mortar” stores. They report problems with crowded store conditions, out of stock merchandise, and poorly-trained salespersons, prompting shoppers to search for more favorable ways to browse and to purchase. In fact, retailers have been criticized for developing in-store strategies based on their own convenience, rather than that of their customers (Seiders *et al.*, 2000).

Different types of convenience

Convenience is a more complex notion than simply providing quick checkouts or locations close to home. In fact, shoppers are thought to clearly differentiate among various dimensions of convenience or retailer attractiveness (Alba *et al.*, 1997). Several types of convenience can be considered throughout the shopping process. For instance, products that are easy to reach possess “access convenience”, while products that are easy to find and to compare exhibit “search convenience” (Seiders *et al.*, 2000). “Possession convenience” occurs when products are easy to obtain, while ease of purchase and return enable shoppers to have “transaction convenience”. In addition, shopping that is quick and without delays embodies “time convenience”. Shopping close to home, home delivery, and shopping through non-store methods at home are all ways of gaining “place convenience”.

Advantages of e-shopping

E-shopping offers a similar set of conveniences, and also introduces some new conveniences for shopping. For instance, while e-shopping attempts to be quick and efficient, its round the clock availability adds a dimension of “schedule convenience” that allows the shopper to access merchandise and make comparisons regardless of the time of day (Bellman *et al.*, 1999). E-shopping can be fit into one’s schedule, and can be started, paused, and resumed when interruptions occur.

In addition, “shopping bots” or search engines, such as mysimon.com, are computer-engineered Web sites that search for specific product categories, tailored to a consumer’s specific tastes. These screening agents create a list of Internet sites that carry the category, plus prices, attribute information, and evaluations by experts and novice users, expanding “search convenience” to include comparisons. Such “comparison convenience” allows the e-shopper to go beyond their self-defined consideration set, as the shopping “robot” assembles a broader consideration set that is likely to include unfamiliar brands and retailers that may be acceptable once they are identified (Alba *et al.*, 1997).

Since e-shopping can be carried out from one’s home, work, school, or other location, it also provides “energy convenience”. That is, since travel to the store is not required, and all comparisons can be done online, it is thought to reduce the mental and physical energy required to identify and evaluate alternatives. There is no need to travel to multiple stores, or carry merchandise through a store, into one’s car, and into one’s home.

Many structural barriers eliminated

Finally, e-shopping is available to all those who use a computer. While there are limitations in terms of vision, hearing, and other disabilities, it can be argued that e-shopping eliminates many of the structural barriers that disabled shoppers have encountered in the bricks and mortar setting. This is another aspect of “access convenience” – the merchandise offered online can be inspected, compared, evaluated, and purchased without regard to many disabling conditions.

Conceptual framework

Our point of departure seeks to consider browsing and purchasing as distinct but related forms of Internet use. Rather than investigate Internet “use” as a general categorizing variable, we have chosen to examine the relationships within browsing and purchasing using several non-store media, assuming that they represent alternative methods of shopping that may or may not include a related visit to a “bricks and mortar” setting. We anticipate that people who never use the Internet are likely to differ from those who use it with varying levels of frequency.

Browsing and purchasing in multiple non-store settings

For purposes of comparison, our non-store set includes the following options: catalog browsing and ordering, television browsing and purchasing based on advertising seen during regular programming, television browsing and purchasing using infomercials, television browsing or purchasing using a shopping channel (like QVC), and browsing or purchasing on Web sites on the Internet while at home.

Five categories

In order to categorize respondents by their patterns of e-browsing and e-purchasing, we propose five logically bounded categories suggested from other industry studies of Web users described in our review. We anticipate that persons who use the Internet may or may not use it to investigate retail Web sites. If they choose to investigate retail sites, they may or may not make online purchases. If they do report making online purchases, we anticipate that such online purchases may be made with varying degrees of

frequency. Such an approach inherently recognizes that all Internet users may establish clearly-definable patterns of using retail sites as part of their preferred methods of non-store and in-store shopping.

In order to examine our premises, we plan to divide our sample of Internet-using respondents into a set of usable groups:

- (1) Web non-shoppers, who neither browse nor shop on the Internet.
- (2) E-browser Is, who browse retail Web sites but make no purchases.
- (3) E-Browser IIs, who browse retail Web sites making infrequent purchases.
- (4) Occasional e-shoppers, who browse retail Web sites and purchase online a few times a year.
- (5) E-shoppers, who browse retail Web sites and purchase online on a regular basis.

Many shopping options

Non-store multi-channel shopping

Consumers today have many non-store shopping options. Instead of selecting one versus another, we expect that certain consumers are likely to browse in several media. In addition, we theorize that shoppers are attracted or repelled by their perceptions of the convenience that non-store shopping offers. We expect that an individual who shops online frequently is likely to use other non-store shopping methods frequently as well. *H1* addresses this expectation:

H1. There is a positive relationship between the frequency of online shopping and the frequency of using other forms of non-store shopping.

Comfortable and convenient

Fitting shopping into one's routine

We also expect that the use of non-store shopping at home represents a pattern of behaviors that must be comfortable and convenient for the shopper. Thus, a person is more likely to shop online from home if they already have established a habit of fitting shopping into their daily routine from the home setting. In addition, the online shopper is likely to associate e-shopping with browsing while not leaving the home (place convenience) and shopping when desired (scheduling convenience):

H2. There is a positive relationship between the frequency of online shopping and combining non-store shopping with other activities at home.

H3. The frequency of online browsing is positively related to perceptions of place convenience provided by non-store shopping.

H4. The frequency of online purchasing is positively related to perceptions of scheduling convenience provided by non-store shopping.

The "conversion" from browsers to purchasers may fundamentally depend on a shopper's preference for completing a transaction in the "bricks and mortar" setting:

H5. Persons who report online browsing without online purchasing will indicate a higher preference for in-store purchase than those who browse and purchase online.

Finally, e-shopping has been described as providing several types of convenience for persons who use it. We expect that the frequency of online shopping will increase with perceptions of the convenience it offers:

- H6.* There is a positive relationship between the amount of online shopping and the perception that online shopping is less work than going to the store (energy convenience).
- H7.* There is a positive relationship between the amount of online shopping and the perceived time convenience that the Internet provides (amount of time convenience).
- H8.* There is a positive relationship between the amount of online shopping and the use of the Internet for comparison shopping (comparison convenience).

Methodology

Sample

A total of 257 adult Internet users were recruited to participate in the survey. To qualify for participation in the study, respondents were required to be at least 18 years of age, to have access to a computer at home/work, and to use the Internet at least one hour a week for purposes other than e-mail. They were surveyed regarding their frequencies of Web use, their frequencies of other forms of non-store shopping, and their attitudes towards possible conveniences that non-store retail options provide. The sample was composed of 139 men and 118 women, ranging in age from 18 to 74, with an average age of 30.

The survey

The survey included items used by the authors in prior studies and also incorporated questions designed to measure e-shopping issues identified in recent research studies, such as number of hours per day spent on the Internet (Korgaonkar and Wolin, 1999). The survey instrument was composed of items designed to learn about the respondents' use of the Internet and other non-store shopping options. Statements were included that measured respondents' perceptions of non-store shopping convenience. The survey specifically identified non-store shopping as "catalog, Internet, phone ordering, television shopping, etc." so that the respondent was primed to consider a multi-channel set of options.

We collected frequencies of browsing and purchasing in five different non-store settings. These are the Internet, catalogs, television regular programming, television infomercials, and television shopping channels (like QVC). In order to anchor the respondents in recalling their shopping behaviors, we asked respondents to think about their shopping over the last 12 months, both browsing and actual purchasing. Browsing was defined as "looking at information with no immediate desire or intent to purchase at that time". Browsing was clearly linked to the shopping context in order to avoid reports of browsing other information or entertainment. The respondents were asked to indicate their browsing/purchasing frequencies. Possible responses were "never", "rarely", "a few times a year", "a few times a month", "a few times a week" and "everyday."

Analysis

The data were analyzed using the SPSS 10.0 statistical package. Multiple analysis of variance (MANOVA) was used to test for the significant differences among mean values of several variables representing the frequency of use, attitudes, and behaviors concerning non-store shopping. The overall significance of difference between means was tested first, followed by univariate *post hoc* tests.

Mutually exclusive groups

Findings

Patterns of online browsing and purchasing

Our analysis began by separating respondents into mutually exclusive groups based on increasing levels of Internet use for browsing and/or purchasing. First, we grouped those respondents who never used the Internet for shopping purposes. According to their self-reports, they “never” browsed retail sites and “never” made purchases from Web sites. They were categorized as “Web non-shoppers,” representing 18.3 percent (47 respondents) of the sample. Persons in this group used the Internet for purposes other than shopping, such as retrieving e-mail or work related to their employment. The remaining 210 persons did use the Internet for some retail purposes.

Of the remaining respondents, we next considered persons who browsed on the Web, but “never” purchased. These “E-browser Is,” constituted 24.5 percent (63) of the overall sample. This second group apparently uses the Internet primarily for information gathering regarding potential purchases at other types of retail formats.

The “E-browser II” made up 18.3 percent of the sample with 47 respondents. They reported online browsing at various rates of frequency, ranging from rarely to every day. However, persons in this group “rarely” purchased on the Web. By implication, their browsing rarely translated into actual online purchases.

The fourth category was labeled, “Occasional e-shopper”. They were the 22.6 percent (58) of the sample who browsed at various rates of frequency, yet purchased “a few times a year”. We decided to treat these persons as a separate group, since there was still an apparent lag between their browsing frequency and their purchasing frequency.

Finally, 16.3 percent (42) of the sample were classified as “E-shoppers.” In all but two cases, they reported browsing on the Internet “a few times a month” or more. Comparably, they also purchased from Web sites “a few times a month” or more. In their case, it is likely that browsing is purposely leading to purchase as a well-defined pattern of behavior.

Patterns of Internet use

Characteristics of the e-shopping segments

Table I presents the overall demographic makeup of each of the five segments. In addition, patterns of their Internet use are also given. Shopping and browsing online appear to be directly related to the amounts of time spent on the Internet and the reported percentage of computer use devoted to shopping. Interestingly, active e-shoppers appeared to follow the more traditional description of Internet shoppers, being more likely to be male, with college or professional degrees completed.

Browsing and purchasing using non-store, non-Internet channels

Since browsing and purchasing in the non-Web non-store media are correlated, they were analyzed as multiple dependent variables. First, MANOVA was used to test for the mean differences among the variables as a set. The overall F -test was significant, yielding the following values: Pillai’s trace ($F = 3.075, p = 0.000$), Wilks’ Lambda ($F = 3.196, p = 0.000$), Hotelling’s trace ($F = 3.302, p = 0.000$), and Roy’s Largest Root ($F = 8.662, p = 0.000$).

Post hoc tests were used to evaluate differences between group means of the eight non-Internet browsing and purchasing behaviors. Table II presents the mean frequency values within each of the five e-shopper segments, plus the individual F -tests of significance. Recall that values ranged from a high of

Variable	Web non-shopper (no browsing; no purchasing; N = 47)	E-browser I (no browsing; no purchasing; N = 63)	E-browser II (browsing; rarely purchasing; N = 47)	Occasional e-shopper (browsing; purchasing a few times a year; N = 58)	E-shopper (browsing and purchasing at least a few times a month; N = 42)
Gender, given as percentage female	51.10	50.80	44.70	41.10	40.50
Average age (years)	32.21	27.05	30.53	31.98	30.52
Educational level (percentage high school, associated degree, some college versus college or professional degree)	51.10	79.60	70.20	44.80	53.70
Average employment hours/average week	36.61	30.94	36.56	37.11	37.02
Average percentage of computer use devoted to shopping	5.77	5.97	7.49	10.38	15.50
Average hours per day spent on the Internet	1.60	2.29	1.45	1.78	2.49
Total household income > \$50,000 (%)	62.10	64.00	75.00	72.70	64.20

Table 1. Descriptive characteristics of the five segments

Variable	Web non-shopper ^a (no browsing; no purchasing; N = 47)	E-browser I ^a (browsing; no purchasing; N = 63)	E-browser II ^a (browsing; rarely purchasing N = 47)	Occasional E-shopper ^a (browsing; purchasing a few times a year; N = 58)	E-shopper ^a (browsing and purchasing at least a few times a month; N = 42)	F-test (significance)
Catalog browsing	2.17 (1.67)	3.13 (1.14)	2.45 (1.46)	3.09 (1.20)	3.12 (1.43)	F = 5.340 (0.000)
Catalog ordering	1.11 (1.11)	1.29 (1.13)	1.32 (0.91)	1.91 (0.90)	2.33 (1.14)	F = 11.400 (0.000)
Television browsing during regular programming	1.87 (1.93)	3.14 (1.73)	2.57 (1.68)	2.03 (1.77)	2.24 (1.90)	F = 4.509 (0.002)
Television purchasing during regular programming	0.32 (0.69)	0.35 (0.77)	0.60 (0.71)	0.53 (0.86)	1.26 (1.62)	F = 7.107 (0.000)
Television browsing using infomercials	0.53 (0.91)	1.10 (1.33)	1.09 (1.16)	1.02 (1.25)	1.45 (1.53)	F = 3.128 (0.016)
Television purchasing using infomercials	0.17 (0.43)	0.21 (0.57)	0.43 (0.68)	0.43 (0.82)	0.88 (1.23)	F = 6.108 (0.000)
Television browsing using a shopping channel	0.32 (0.89)	0.84 (1.33)	0.68 (0.93)	0.84 (1.32)	1.29 (1.47)	F = 3.365 (0.007)
Television purchasing using a shopping channel	0.19 (0.68)	0.24 (0.78)	0.26 (0.49)	0.43 (0.77)	0.79 (1.26)	F = 9.983 (0.004)

Notes: Pillai's trace ($F = 3.075, p = 0.000$); Wilks' Lambda ($F = 3.196, p = 0.000$); six levels of frequency: 0 (never), 1 (rarely), 2 (a few times a year), 3 (a few times a month), 4 (a few times a week), 5 (every day); ^afigures are means with standard deviations in parentheses

Table II. Group means – frequencies of non-store browsing and shopping behaviors

Lack of perceived benefits

“5” (indicating every day), through a value of “0” representing “never”. As expected, significant differences were found across all five segments in browsing behaviors, supporting our contention that online browsing and purchasing appear to follow similar, but not identical, patterns of patronage for other non-store media. Thus *H1* is supported.

As expected, Web non-shoppers appeared to have the least frequency of non-store browsing or shopping in the other four non-store media. If the study had focused on online behavior alone, as many contemporary studies do, it might be mistakenly concluded that persons in this segment simply did not use the Web for any shopping purpose. However, these data reveal that Web non-shoppers infrequently use catalog or television methods of browsing or purchasing. Their lack of patronage appears to be characterized by a lack of perceived benefits provided by non-store media in general.

E-browser Is, in contrast, appear to enjoy browsing using catalogs and television during regular programming. They do not restrict their browsing to the Internet alone. This finding suggests that this segment likes to browse, and that their behavior is not restricted to online browsing.

Similarly, e-browser IIs appear to conduct more browsing than purchasing in the other four purchase situations. While they indicate that they browse using catalogs, regular television programming, and infomercials, they rarely if ever make purchases through those sources. Again, the lack of “conversion” does not appear to be an e-shopping phenomenon, but instead appears to follow a pattern of browsing but not purchasing in non-store media.

Even occasional e-shoppers do more browsing than ordering in all the media considered. For instance, while they purchase online a few times a year, they report purchasing via catalogs at almost the same level of frequency. Their conversion is slightly higher than e-browser IIs.

Multi-channel environment

Finally, the e-shoppers reported both browsing and purchasing in catalogs at least a few times a year. They actively browse and purchase through television formats as well, but the frequency lags behind that of catalogs. In this case, the e-shopper appears to participate actively in the multi-channel environment, using several types of non-store shopping.

Perceptions of non-store convenience by e-shopping segments

MANOVA was also used in examining reported perceptions on non-store convenience among the five segments of respondents. Since the statements reflected different aspects of non-store and Internet perceptions, we would expect the direction and strength of the self-reports to be consistent with each other.

MANOVA was again used to test for the mean differences among the variables as a set. The overall *F* test was significant, yielding the following values: Pillai’s trace ($F = 2.440, p = 0.000$), Wilks’ Lambda ($F = 2.606, p = 0.000$), Hotelling’s trace ($F = 2.879, p = 0.000$), and Roy’s Largest Root ($F = 8.454, p = 0.000$).

Table III presents the mean values plus individual *F*-tests, which are all significant, supporting *H1-H8*. Recall that the hypotheses examined e-browsing and e-purchasing within the broader multi-channel shopping context, defined in the present study as “catalog, Internet, phone ordering, television shopping, etc.”

Perceptions of non-store convenience aspects differ by segment. H2, H3, and H4 suggested that a person is more likely to shop online from home if they already have established a level of comfort and acceptance of conducting non-store shopping in the home setting, providing place and scheduling

Variable	Web non-shopper ^a (no browsing; no purchasing; N = 14)	E-browser I ^a (browsing; no purchasing; N = 37)	E-browser II ^a (browsing; rarely purchasing N = 29)	Occasional E-shopper ^a (browsing; purchasing a few times a year; N = 51)	E-shopper ^a (browsing and purchasing at least a few times a month; N = 35)	F-test (significance)
Shop more in NS than stores compared to a year ago	2.93 (2.27)	2.97 (2.09)	3.07 (1.94)	4.27 (1.90)	5.17 (1.74)	F = 8.429 (0.000)
Combine NS shopping while doing other activities/home	2.57 (2.14)	3.05 (1.93)	3.72 (1.75)	4.10 (1.90)	5.06 (1.59)	F = 7.440 (0.000)
NS lets me look without leaving my location	4.36 (2.56)	5.32 (1.76)	5.31 (1.77)	5.82 (1.23)	6.37 (0.91)	F = 5.194 (0.001)
Like NS shopping/lets me shop whenever I want	3.71 (2.49)	4.51 (1.87)	4.93 (1.69)	5.57 (1.27)	5.89 (1.47)	F = 6.684 (0.000)
Browse using NS/rather go to store to purchase	4.78 (2.29)	5.00 (1.75)	5.69 (1.26)	4.63 (1.75)	4.11 (1.53)	F = 3.748 (0.006)
Shopping on Internet less work than going to store	4.00 (2.51)	4.08 (1.77)	4.14 (1.88)	4.94 (1.52)	5.69 (1.47)	F = 5.600 (0.000)
Spend less time shopping because of using Internet	2.43 (2.06)	2.65 (1.95)	2.76 (1.66)	3.71 (1.60)	5.09 (1.70)	F = 12.077 (0.000)
Use the Internet to do comparison shopping	3.57 (2.47)	3.84 (2.17)	4.31 (2.12)	5.35 (1.35)	5.26 (1.87)	F = 5.650 (0.000)

Notes: Pillai's trace ($F = 2.440, p = 0.000$); Wilke's Lambda ($F = 2.606, p = 0.000$); seven-point Likert-type scale, 1 "strongly disagree" to 7 "strongly agree", where 4 represents "neither agree nor disagree"; ^a figures are means with standard deviations in parentheses

Table III. Group means of perceptions of non-store convenience

Discrete activity

convenience. The findings are mixed and suggest that all shoppers do not perceive the same types of convenience, but instead perceive specific convenience aspects that appeal to them.

Web non-shoppers apparently do not like to combine non-store shopping with other activities at home, implying that they view shopping as a discrete activity in the physical marketplace. While they were neutral on place convenience, they disagreed that non-store shopping provided time convenience.

E-browser Is and E-browser IIs also did not like to combine non-store shopping with other activities at home, but did perceive place convenience for “looking at things without leaving their location”. They were neutral on time convenience. Thus, it is not surprising that they use the browsing aspect of non-store shopping in their home, but since they also preferred to shop as a separate activity, they did not realize the time conveniences that can be achieved.

Occasional e-shoppers and e-shoppers, however, did perceive both place and time convenience provided by non-store shopping. Their online browsing and purchasing behaviors are consistent. However, only the e-shopper segment was in agreement that they combined non-store shopping with other activities in their homes.

Conversions from browsing to purchasing

Preferences to purchase in the bricks and mortar setting. H5 examines the five segments in terms of their liking non-store shopping, but preferring to make purchases in the store. Interestingly, Web non-shoppers, occasional e-shoppers, and e-shoppers produced average scores in the neutral range, indicating a lack of overwhelming agreement or disagreement. E-browser Is and IIs, however, both agreed that while they browse using non-store shopping, they prefer to go to the store to make their purchases. Thus, conversions from browsing to purchasing in any non-store setting must consider whether the individual is approaching their multi-channel options as a set of interrelated alternatives. Pressure on these two segments to change to non-store purchasing may drive them to seek retailers who “accept” their non-store browsing/instore purchasing pattern and develop promotional campaigns directly related to their behavioral preferences.

Relation between frequency and convenience

Perceived convenience of Internet shopping. Finally, H6-H8 propose that the frequency of online shopping is directly related to the convenience that shoppers perceive. Three types of convenience were considered: energy, time, and comparison.

As might be expected, the e-shopper segment indicated relatively consistent agreement that all three types of convenience were provided by Internet shopping. The remaining findings are mixed. For instance, the other four segments were neutral in assessing that shopping on the Internet was less work than going to the store.

Such neutrality was not found regarding time convenience. The other four segments disagreed that they spent less time shopping because of using the Internet. While logically true for Web non-shoppers, evidently the e-browser I and IIs, plus the occasional e-shoppers, used the Internet but did not find it reducing their time in shopping.

The item representing use of the Internet to do comparison shopping revealed some surprising information. While we would expect Web non-shoppers to disagree that they comparison shop on the Internet, e-browser Is and IIs would have been expected to include comparison shopping as part of their browsing. However, they do not and apparently

separate out comparison shopping as a different type of behavior. Occasional e-shoppers, like the e-shopping segment, did actually use the Internet for comparison purposes.

Discussion

The present study was designed to examine online shopping and browsing in the context of multiple non-store channels involving catalogs and television formats. The five segments that were investigated were found to use these other non-store channels in ways that matched their Internet use. Thus, persons who use the Internet as a shopping option also look within the non-store multi-channel shopping environment for their shopping information and for their opportunities to buy.

Loyal to bricks and mortar

Web non-shoppers do not perceive convenience in non-store channels

For instance, some popular press studies tend to suggest that persons who do not shop on the Web can be reached through other non-store media, assuming that a dislike for the Web is driving their behavior, rather than a dislike for non-store shopping. However, the present study provides empirical evidence that such strategies are likely to fail, since Web non-shoppers do not appear to be avid non-store browsers or shoppers, regardless of the specific non-store format. They have not increased their non-store patronage over the past year, and do not use non-store shopping to shop when they want. Moreover, they do not perceive that the Internet has decreased their time in shopping or requires less work than going to the store. Given these perceptions, it is logically consistent that they are loyal to bricks and mortar formats.

E-browser Is: is conversion to Web purchasers likely?

This study addresses the issue whether persons who browse on the Internet are browsing in an Internet-specific way. That is, there is something about the Internet that impedes their “conversion” from browser to actual purchasers. Table II suggests that on the average, e-browser Is browse using catalogs and television programming a few times a month, while rarely or never translating their browsing into purchases. Thus, for this segment, the lack of “conversion” is not specific to the Internet, but rather exists across several non-store methods.

Recreational browsers within multi-channel environment

Insights into these related patterns can be gained by considering the group’s attitudes plus their demographics. For instance, they report no increase in non-store shopping compared to a year ago and do not strongly agree with combining non-store shopping with other activities at home. While they are aware of the place and time conveniences of non-store shopping, they would rather go to the store to make their purchases. As a result, they do not perceive that the Internet has reduced their overall shopping time.

Given this finding, strategies that attempt to convert e-browsers into e-shoppers are likely to fail, given the larger multiple-channel context of non-conversion revealed among our respondents. Extending Tauber’s suggestions to our findings, some consumers appear to enjoy browsing as a discrete activity and do not necessarily correlate it with making an actual purchase in the same medium. They are recreational browsers within the multi-channel environment.

In addition, some browsers may not be economically able to make frequent purchases. Referring to Table I, it is seen that more than half of our e-browser I segment are students without a college degree who are also working on the average of 30 hours a week. While they spend a daily amount

Wise choice of supplementary browsing material

of time on the Internet that is similar to e-shoppers, it is likely that much of that time is devoted to education-related activities.

E-browser IIs and occasional e-shoppers

E-browser IIs and occasional e-shoppers are more similar given that they browse on the Internet, and report making purchases either “rarely” or “a few times a year”. Since they have actually made online purchases, it is more likely that their online purchasing will increase, provided they do not encounter significant problems.

Table II indicates some interesting patterns. Both e-browser IIs and occasional e-shoppers browse in other non-store media, but they browse slightly less than e-browser Is. Catalogs do appear to be a wise choice of supplementary browsing material for e-browser IIs and occasional e-shoppers. Using Table III, it appears that purchasing frequency and attitudes toward non-store shopping are similar.

While e-browser IIs browse using non-store methods, they are the strongest of the five groups in wanting to go to the store to make their purchases. They apparently have not perceived enough energy or time savings to make Internet purchases worth the tradeoff.

E-shoppers: non-store methods are convenient

E-shoppers are active non-store media users as evidenced by the findings in the present study. They not only use catalog and television promotions in their browsing, but they also make purchases, although at a less frequent rate. Non-store shopping as a method appears to be a “fit” for them, since they also report combining non-store shopping while doing other activities in their home. Not surprisingly, they report increased non-store shopping compared to a year ago.

Link with conveniences

Such behaviors are likely to be linked with the conveniences that they perceive. For instance, they strongly agree that non-store shopping provides place convenience since they can shop without leaving their location. Scheduling time convenience is also a plus, since they agree that non-store shopping lets them shop whenever they want. When asked specifically about Internet shopping, they perceive that it is less work and takes less time, and also allows them to do comparison shopping.

Implications

The present study represents an early step in examining e-browsing and e-purchasing as part of the multi-channel environment in which they exist. Several implications can be discussed that extend the research in further directions.

Actual combinations of methods

Research implications

The present study has found related patterns of behavior among various non-store channel methods, when respondents in our sample were segmented by e-browsing and e-shopping. However, no information was gathered regarding the actual combinations of non-store methods that are chosen as a group for regular patronage. Future studies could be designed to specifically examine shoppers’ use of multiple channels in purchasing specific product categories.

In addition, the specific types of online browsing and online shopping were not identified in the study. That is, we did not examine whether respondents were browsing on sites posted by manufacturers, retailers, product aggregators, online auctions, product comparison sites, or some combination of these and other options. Future research could identify whether specific

“New” types of convenience

Not a workable strategy

types of sites are preferred by persons classified into segments of online users.

Follow-up studies are needed to investigate whether the profiles of recreational online shoppers are consistent with or different from prior research that considered browsing in the store setting. In addition, it is necessary to determine whether similar advice-giving and product-expert behaviors occur among online browsers.

Finally, several types of online convenience were hypothesized that add to the previous types of retail convenience discussed in the literature. While these “new” types of convenience bear face validity, research is needed to determine whether actual customers perceive the convenience as intended by the retailer.

Managerial implications

A basic premise in the present study is that online browsing and purchasing should be studied in a multi-channel context. That is, shoppers are likely to trade among various media as each is perceived to fit their lifestyles and needs for convenience.

First, we have demonstrated that simply substituting other non-store media for online promotions is not likely to be a workable strategy for our segment identified as Web non-shoppers. Instead, the responses suggest that members of this segment are currently loyal to the “bricks and mortar” setting and should be addressed in terms of the setting that they prefer.

Next, many of our respondents appear to fit the description of recreational Web shoppers. That is, they like to browse without much intent of making a purchase. Our e-browser Is and IIs like to browse numerous non-store media beyond simply using the Internet. However, both groups would rather make their purchases in a traditional store. Thus, attempts to force them to “convert” to the Web could result in lost patronage.

Several of our segments did not perceive the various types of convenience that industry analysts insist are provided by online shopping. As mentioned in the research implications, management should examine whether actual shoppers perceive conveniences before they are actually promoted to the customer.

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This summary has been provided to allow managers and executives a rapid appreciation of the content of this article. Those with a particular interest in the topic covered may then read the article in toto to take advantage of the more comprehensive description of the research undertaken and its results to get the full benefit of the material present

Executive summary and implications for managers and executives

Online retailing – just like the old stuff but harder

The Internet represents a huge challenge to marketers and especially retail marketers. But, the wonders of the Web present a parallel worry. We recognise the Internet's importance and its potential but we have also seen how getting e-strategy wrong can bankrupt a business in short order. Just as understanding consumer behaviour – and shopping behaviour in particular – is important in the “bricks and mortar” world, understanding how consumers approach shopping online provides the key to successful online retailing.

Kaufman-Scarborough and Lindquist note the importance of multiple channels rather than a reliance on just a single real or virtual channel. The authors also describe how a great deal of shopping behaviour is hedonistic rather than utilitarian. We shop for fun as well as to purchase specific items.

Online window shopping

Kaufman-Scarborough and Lindquist question whether Internet browsing is correlated with purchasing online and point out that “some shoppers enjoy browsing as a separate activity, while others buy without browsing if their choice is clear and determined in advance”. In addition to this “online window shopping” there are other constraints such as security, privacy, delivery times and lack of skill or confidence with computers. But the fact that many people search the Internet for product information and don't buy through this medium provides one of the clues to successful e-retailing.

We can list several different combinations of actions and motivations online:

- *Simple browsing with no intention to buy anything. The negative intention may relate to worries about the Internet (e.g. security or privacy) or may simply reflect the sort of behaviour we see in the mall every day – looking in the “shops” as a pleasant experience.*
- *Browsing with no intention to buy online. Mail order marketers have always known that many people prefer to buy from traditional shops – they want to handle the goods, to assess what size they are and to actually see the person they are buying from. Online retailing is no different and these people will continue to prefer to buy in person even when they use the Internet to look for things they might want to buy.*
- *Browsing with a possibility of buying online. Note here that buying online is only a possibility. People can be easily put off (just as they are with mail order purchasing) if the purchasing mechanisms are too complicated, intrusive or confusing. The degree of confidence in using computer technology is a crucial factor here.*
- *Browsing with the intention of buying online. The consumer might not be looking for something specific but will buy goods seen and liked. These consumers are not put off by the worries about buying on-line and might be seen as a key target for e-retailers.*
- *Using the Internet to identify and buy a specific item. The online equivalent of popping down to the hardware store to buy a bag of nails. We know what it is we want to buy and the Internet provides a convenient and quick means of getting the goods or service.*

It is important that we recognise that these categories are not exclusive. There is no reason to suppose that the aimless browser of today does not become the utilitarian shopper of tomorrow. In this aspect consumer behaviour on-line mirrors behaviour in the “bricks and mortar” world. We can therefore categorise Internet “shoppers” as follows (for any one occasion):

	<i>Will buy</i>	<i>May buy</i>	<i>Will not buy</i>
<i>Aimless browsing</i>	<i>May buy online</i>	<i>May buy online but likely to prefer offline follow up</i>	<i>Will not buy online, unlikely to follow up offline</i>
<i>Purposeful browsing</i>	<i>Will buy online</i>	<i>May buy online or offline</i>	<i>Will not buy online but may follow up offline</i>
<i>Targeted shopping</i>	<i>Will buy online</i>	<i>May buy online or offline</i>	<i>Will follow up offline</i>

This table may be a simplification but it illustrates how marketers need to consider multiple channels when designing appeals to shoppers online. If we do not design in different purchasing methods, we will lose sales that might have been secured otherwise.

The Internet presents great opportunities but realising these requires a recognition that consumers do not make a psychological distinction between different means of obtaining what they want. To the consumer the Internet is simply an alternative source of information about goods and services and a new way – should the individual consumer so desire – to buy something.

In the final analysis the core principles of retail strategy remain unchanged – good merchandising, appropriate service levels and location. What has changed is the definition of these principles – service now includes user-friendly online information and “location” is not just about being in the right place on the high street or in a prominent position in the mall. Today, location must include ease of access online, links from all the main Web browsers and a responsible interface once the consumer has arrived at the Web site.

At the same time the consumer will expect options as to how to conduct further information search, where to buy the product in the “bricks and mortar” world and an easy way to conclude a purchase.

(A précis of the article “E-shopping in a multiple channel environment”. Supplied by Marketing Consultants for Emerald.)