HOW ABOUT INTEGRATION: THE IMPACT OF ONLINE ACTIVITIES ON STORE SATISFACTION AND LOYALTY

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SOM-theme F: Interactions between consumers and firms

Abstract

Although there has been widespread support for the concept of integrating the Internet with other channels, relatively little empirical research has been conducted in this area. This paper examines the effects of integrated online activities on customer perceptions, i.e., satisfaction and loyalty, as well as customer behavior, i.e., purchases. As this study focuses on a non-transaction site, the purchases only take place in the store. Through structural equation modeling, we test a model that determines the relationships between loyalty and satisfaction in two channels – the store and the web site –, as well as the antecedents of both store and site satisfaction. The results provide evidence for synergy effects between the store and the site. Site satisfaction and site loyalty are both positively and significantly related to their offline counterparts. Store loyalty and site loyalty are also positively and significantly related to each other, but the relationship between store satisfaction and site satisfaction is not significant. The online activities do not directly influence offline purchases, but there is an indirect effect via store loyalty. However, the magnitude of this effect is rather small.

Keywords: Multi-channel; Integration; Satisfaction; Loyalty

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1. Introduction

Peterson et al. (1997) have been one of the first to recognize that the marketing implications of the Internet could not and should not be considered in isolation. In the Integrated Marketing Communications (IMC) theory, integration implies speaking with one voice in all potential customer contact channels (Shimp, 1997). In relation to the Internet, integration implies that companies should not develop a specific e-commerce strategy, but their use of the Internet should be part of their marketing strategy, covering multiple communication and transaction channels. Since the end of the Internet bubble, there has been widespread support for this integration philosophy (e.g., Zettelmeyer, 2000; Vriens and Grigsby, 2001; Porter, 2001; Sheehan and Doherty, 2001).

A multi-channel orientation is needed as the online channel influences consumers' attitudes not only for the online channel but also for the traditional channels (Kannan, 2001). Combining channels, with integrated marketing, can lead to greater impact, higher gross margins and lower marketing expenses (e.g., Moriarty, 1994; Duncan and Moriarty, 1998; Barsh et al., 2000). Therefore, alignment of multiple channels, physical and digital, may provide businesses with the means to satisfy customers and gain a competitive advantage (e.g., Anderson et al., 1997; Wigand, 1997; Smith et al., 2000). In order to create the added value, it is essential that Internet applications should be derived from the overall business strategy (Huizingh, 2002b).

The comparison of online and offline transaction channels has been the focus of a few recent studies (e.g., Shankar et al., 2000; Hitt and Frei, 2002). However, research into the combined effect of multiple channels is not that well established yet. Several authors indicated a lack of academic research focusing on the combined use of multiple channels and its effect on consumer attitudes and behavior (e.g., Krishnan and Ramaswamy, 1999; Meuter et al., 2000; Geykens et al., 2002).

The goals of this study are to determine (1) whether and how web site satisfaction and web site loyalty have an impact offline on store satisfaction and store

loyalty and (2) how these attitudes influence customer purchases in the offline stores. Although most studies that analyzed web site effectiveness have focused on transaction sites (e.g., Lynch and Ariely, 2000; Szymanski and Hise, 2000; Agrawal et al., 2001; Moe and Fader, 2004), we investigate a non-transaction site. Using the Internet only for information and communication purposes is not an alien concept. Huizingh (2000) has found that only about a third of the 650 sites that were analyzed had an online ordering facility. In an earlier study, Dutta and Segev (1999) have shown similar results. Even lower percentages are reported by Bégin et al. (2001) for Canadian web sites (9.4%), and Carroll (2002) for the Top 500 Irish companies (17.6%). Although transaction sites are sometimes considered as the most sophisticated kind of sites (e.g., Holland and Baker, 2001; Wilson and Abel, 2002), they are probably a minority of current web sites. Furthermore, Huizingh (2002a) has found that having a transaction function is not crucial for web performance. In the case of web sites without a transaction function (non-transaction sites), synergy between the online channel and the other channels is not just preferable but a necessity since online sales, by definition, equals to zero.

The key concepts in the chain of effects we study are site satisfaction, site loyalty store satisfaction, store loyalty and actual purchases. We formulate hypotheses about the relationships between these concepts and test them empirically, using data from 2,604 customers who frequently visited both the site and the stores of a national retailer. A framework is developed that includes both the effectiveness of each channel and the effect of the integrated effort. The integrated effort will enable companies to create synergy in the multiple channels they use and provide opportunities for gaining a competitive advantage (Porter, 2001). The results of our empirical study show a positive contribution of a non-transaction web site to offline activities. The site has a direct effect in terms of attitudes and an indirect effect on customer behavior (purchases).

The paper is structured as follows. First, we describe the background of the concepts that play a major role within our framework. The hypotheses regarding the key concepts and the antecedents of these concepts lead to the presentation of the conceptual model. Then the research design including the measurements, validity,

reliability, unidimensionality issues and the method of analysis are discussed. After a presentation of the results of the data analyses, we end with a discussion, ideas for future research, managerial implications and the main conclusions.

2. Theoretical background

Lederer et al. (2000) show that web managers expect to gain a competitive advantage by competing via the web, but this will only be true if the online activities improve the way companies serve their customers. Moreover many organizations are more or less forced to invest in online activities, even though there is doubt concerning the effectiveness. The Internet can be used to perform three marketing functions, namely distribution, transaction and communication (Peterson et al., 1997; Kiang et al., 2000). Using the Internet as a transaction channel, thereby integrating communication and transaction may result in more sales and lower costs. As a distribution channel, the Internet can be used to cut out the middleman and reduce inventory (Bauer et al., 2002).. As a communication channel, the Internet may not only provide information on products, services and the organization to customers. Also, customer interactions may allow the organization to improve the relationship with their customers through the information collected (Bauer et al., 2002; Kiang et al., 2000). The Internet as a communication channel has the advantages of constant availability of information, interactivity and efficient transfer of information.

The site we focus on in this study is a non-transaction site. Its goal is to disseminate information, offer entertainment, and help customers to obtain product knowledge, but not to sell products online. The web site provides customers with a better impression of the store, its merchandise, prices, and image. However, it is not an electronic brochure; it is a theme-oriented site. Dahlén et al. (2003) argue that for topics in which site visitors are not higly involved, visitors are more engaged with peripheral cues, such as games and competitions, than with the brand. They conclude that brand exposure should then take place in the context of other activities in the site. In this case, the theme-orientation is translated into specific topics, such as personal care, interior design and events. The integration of the web site with the traditional chain of stores should provide customers with a consistent image. The site aims to have customers generate ideas online and fulfill them in the store. The site provides

customers with a better perspective of the value the organization has to offer, and as a result it is intended to improve store traffic.

In order to determine the effect of the web site on the offline activities, we focus on two main concepts, namely satisfaction and loyalty, both in terms of attitudes and actual behavior. Please note that the value of the current research is not in establishing the relationship between store satisfaction and store loyalty but in testing whether these relationships can be confirmed for a (non-transaction) web site and most of all whether satisfaction and loyalty with the web site influences the attitudes towards the offline store and actual customer purchases.

Loyalty

According to previous research, loyalty consists of two dimensions, attitudinal and behavioral loyalty (e.g., Mittal and Kamakura, 2001; Methlie and Nysveen, 1999). Attitudinal loyalty relates to the feelings customers have towards a product/service or organization. Behavioral loyalty relates to behavioral intentions to continue purchasing the same product/service (e.g., Odin et al., 2001; Srinivasan et al., 2002). The relationship between attitudes and actual behavior is of great importance to organizations (e.g., Dick and Basu, 1994). Therefore, in our study we focus not only on the attitudes, but also on actual purchases on an individual customer level. Loyalty to both the store and the site will be taken into account through self-reported intentions and purchase behavior through registered purchases.

In a store setting, loyalty can have two meanings, namely loyalty towards the store and towards the brand (i.e., Bloemer and Lemmink, 1992; Macintosh and Lockshin, 1997; Odin et al., 2001). Odin et al. (2001) refer to the confusion surrounding these two attitudes, as customers generally are not only loyal to the store but also to the brands the store carries (Macintosh and Lockshin, 1997). Store loyalty may even enhance brand loyalty. For example, Bloemer and Lemmink (1992) have shown in their study on car dealers, that dealer loyalty may act as an intervening variable between satisfaction with the product or service and brand loyalty.

In our study, the focus is on a chain of department stores offering a large variety of products and brands. Most of them are not sold exclusively. Therefore, the

relationship between store loyalty and brand loyalty for these brands is not as obvious as the relationship between dealer loyalty and brand loyalty, nor is it as easily taken into account.

Thus, we will focus on store loyalty and site loyalty instead of brand loyalty. The attitudes that are reflected in the loyalty towards the store or site are future intentions (e.g., Bloemer and Lemmink, 1992) and preferences or positive feelings (e.g., Macintosh and Lockshin, 1997; Oliver, 1999).

Satisfaction

The time-based distinction between satisfaction as a transaction-specific evaluation and perceived quality as a long-run evaluation (e.g., Bitner, 1990; Cronin and Taylor, 1992; Selnes, 1993; Sirohi et al., 1998; Söderlund, 2002), has given ground to split satisfaction into transaction-based satisfaction and cumulative satisfaction (e.g., Bolton and Drew, 1991; Oliver, 1999; Johnson et al. 2001). Cumulative satisfaction is the result of a long run evaluation of a product of brand.

In our study, the entity is a store and satisfaction is defined as cumulative satisfaction. In the retail literature, Macintosh and Lockshin (1997) have defined store satisfaction as the customer's overall evaluation of the store experience. Therefore, we define store satisfaction as the result of the overall evaluation of shopping at the store.

Previous research (e.g., Szymanski and Hise, 2000; Taylor and Hunter, 2002) has shown that the conceptual domain of satisfaction in an online setting is similar to that in an offline setting. Web site satisfaction has been associated with information system satisfaction, where user satisfaction has been defined as either the extent to which users believe that an information system meets their information requirements (e.g., McHaney et al., 2002) or the affective reaction of individuals toward the use of computer applications in general (Al-gathani and King, 1999).

Comparable definitions can be found in the Internet literature, where web site satisfaction is either described as the web site meeting or exceeding the customer's needs or expectations (e.g., Hanson, 2000; Aladwani and Palvia, 2002; McHaney et al., 2002) or as the overall evaluation of the web site (Chaffey, 2002). Similar to store

satisfaction we define web site satisfaction as the result of the overall evaluation of using the web site.

3. Conceptual Model

This section first presents the hypotheses for the key concepts, and then discusses the hypotheses for the antecedents of store and web site satisfaction. The section concludes with the conceptual model and the operationalization of the various concepts.

Hypothesis: Key concepts

Dick and Basu (1994) developed a framework for customer loyalty where loyalty consists of relative attitude and repeat patronage. Attitude is characterized as the association between an entity and an evaluation of this entity. Relative attitude, where for instance the store has been compared to other stores, creates a stronger indication that repeated patronage will take place. Therefore our first hypotheses concern the expected influence of store loyalty and site loyalty in terms of attitudes that have a positive relationship with actual purchases in the store.

> H1. Store loyalty is positively related to store purchases.
> H2. Web site loyalty is positively related to store purchases.

Oliver (1999) has indicated that satisfaction and loyalty are linked inextricably and this assumption is widely accepted in marketing research (e.g., Fornell, 1992; Bloemer and Lemmink, 1992; Dick and Basu, 1994; Macintosh and Lockshin, 1997; Martensen et al., 2000). Following these studies, we consider store satisfaction as an antecedent of store loyalty and web site satisfaction as an antecedent of web site loyalty. Moreover, as we focus on loyalty as self-reported future intentions, instead of the overall feeling of loyalty, we do not model the relationship between loyalty and overall satisfaction as found by Shankar et al. (2003).

> H3. Store satisfaction is positively related to store loyalty.
> H4. Web site satisfaction is positively related to web site loyalty.

8

The relationship between web site loyalty and store loyalty is a yet relatively unexplored area of research. According to Reichheld and Schefter (2000), the basic rules of loyalty do not change in online channels and the full range of customer interactions influences loyalty. Furthermore, in the context of business-to-business relationships, Bauer et al. (2002) have found that Internet characteristics, such as constant availability of information, can have a positive influence on loyalty to a supplier. In a brand and dealer loyalty setting (Bloemer and Lemmink, 1992), it has been found that these types of loyalty influence each other. We hypothesize that web site loyalty and store loyalty will positively influence each other.

     H5. Web site loyalty is positively related to store loyalty.
     H6. Store loyalty is positively related to site loyalty.

More and better information will enhance consumer satisfaction with the transaction (e.g., Spreng et al., 1996; Shankar et al., 2003). A web site can provide customers with more and better information regarding prices, available products, and the positioning of the organization. Use of the site can also make the customer feel special, if customers have access to an exclusive (personalized) site that provides them with special offers and invitations to special offline purchasing opportunities, such as shopping during exclusive opening hours. Thus, a site can enhance the process of making purchases in a (offline) store in many ways. Moreover, from a multi-channel perspective (e.g., Schoenbachler and Gordon, 2002; Montoya-Weiss et al., 2003), it is expected that both channels complement each other and therefore the relationships between site satisfaction and store satisfaction are expected to be positive.

     H7. Web site satisfaction is positively related to store satisfaction.
     H8. Store satisfaction is positively related to site satisfaction.

9

Hypothesis: Antecedents of satisfaction

The satisfaction antecedents range from physical characteristics such as store interior, price and merchandise to softer characteristics such as service, employee courtesy, store personality and pleasure (e.g., Kelly and Stephenson, 1967; Berry, 1969; Baker et al., 1992; Van Kenhove et al., 1999). Bell (1999), Sirgy et al. (2000) and Tang et al. (2001) have also focused on the more physical store attributes, while others, e.g., Martineau (1958), Kelly and Smith (1983) and Donovan et al. (1994), focus more on the softer characteristics.

In our study, we focus on a mix of these characteristics, i.e., store interior, price, merchandise and service. Store interior is defined as the consumer's perception of the interior of the store, e.g., colors and signs in the store. Price is considered as the consumer's perception of the prices charged by the organization. The perception of the merchandise relates to quality, depth, and meeting the consumers needs. Service is defined as the consumer's perception of the service provided by the salespeople in the store, e.g., knowledge and attitude of salespeople. We expect that the store's performance on these attributes will positively contribute to the consumer's satisfaction regarding the shopping experience.

> H9a.   The more positive the store interior evaluation, the higher the store satisfaction.
>
> H9b.   The more positive the price evaluation, the higher the store satisfaction.
>
> H9c.   The more positive the merchandise evaluation, the higher the store satisfaction.
>
> H9d.   The more positive the service evaluation, the higher the store satisfaction.

Store location is also a common antecedent of store satisfaction in retail settings such as supermarkets. However, with regard to the location of the store, Arnold et al. (1977) found that fashion shoppers are not as concerned with physical convenience,

but that they appear to be willing to travel to whatever location is required to find what they want. This has been confirmed for department store shoppers by Hansen and Deutscher (1977) and Knox and Denison (2000). Therefore, in this study the perception on the location of the store is not included.

In Internet research, it has been proven that several factors related to the content and design of a web site have a positive influence on web site satisfaction or usage (e.g., Chen and Wells, 1999; Venkatesh and Davis, 2000; Huizingh, 2000; Van der Heijden, 2003; Childers et al., 2001; Bauer et al., 2002). For instance, whether a customer believes that site use will contribute to reaching a specific (purchasing) goal is determined by the usefulness of the site. Several researchers have indicated that the amount and the quality of information provided online have a positive influence on the overall perception of the site (e.g., Shankar et al., 2003; Van der Heijden, 2003; Huizingh, 2000; Novak et al., 2000; Lederer et al., 2000; Mathwick et al., 2001). Next to usefulness, several studies have found that enjoyment also has a positive relationship with overall site evaluation (e.g., Liu and Arnett, 2000; Liu et al., 2001; Van der Heijden, 2003). Together, the factors usefulness and enjoyment form the "infotainment" the site offers to customers, that is, web sites should inform in an attractive manner (Huizingh, 2002b).

Besides these two content factors, the importance of ease of use has been proven extensively in Internet research (e.g., Shankar et al., 2003; Liang and Lai, 2002; McHaney et al., 2002; Ranganathan and Ganapathy, 2002). Ease of use is defined as the degree to which using the web site is free of effort (Van der Heijden, 2003). In the evaluation of the online visiting experience, the factors described – usefulness, enjoyment and ease of use – are expected to contribute positively to web site satisfaction, leading to the final set of hypotheses.

>   H10a.   The more positive the usefulness evaluation, the higher the site satisfaction.
>   H10b.   The more positive the enjoyment evaluation, the higher the site satisfaction.

11

H10c. The more positive the ease of use evaluation, the higher the site satisfaction.

The conceptual model as shown in Figure 1 provides an overview of all hypotheses are tested.

<<Insert Figure 1>>

4. Research Design

The data to test our model were collected among the customers of a large retailer in the Netherlands. These customers had registered themselves as users of the company's site by supplying their loyalty card number. We collected both the attitudes as well as the store purchases of individual customers . The attitudes and purchases could be linked on an individual customer level by means of the loyalty card identification number.

The data were collected through an online survey during May 2002, approximately a year after the introduction of the web site. The design of the survey, i.e. the inclusion of rule-based checks, and the direct link to an Access database, ensures a minimum of errors in the data collection process. The customers were asked by e-mail to participate in the online survey and were offered a small incentive in return for their participation. The e-mail message contained the URL of the survey. This web page was username and password protected, both were listed in the e-mail. Among the 25,000 customers who visited the site, 4,787 filled in the survey. The final sample contains only those customers who have both visited the web site and made purchases offline during the three months before the survey took place. The final sample contains 2,604 customers.

The scales to measure the various concepts were derived from previous studies. The measurement scales for the store satisfaction antecedents, i.e., store interior, service, merchandise, and price, were taken from Maddox (1982), Bell (1999) and Van Kenhove et al. (1999). The antecedents for the site satisfaction antecedents, i.e. ease of use, enjoyment and usefulness, were based on Van der Heijden (2003) and Huizingh et al. (1999). Store and site satisfaction were both measured with one general item, indicating a person's overall satisfaction with the store or the web site.

The scale for web site loyalty was based on Van der Heijden (2003), Huizingh et al. (1999) and Reynolds and Beatty (1999). These items measured the feelings towards the site and the intention to use the site more frequently in the future. For store loyalty we combined the scales from Reynolds and Beatty (1999) and Methlie

and Nysveen (1999). As not all of the scales were originally intended for a retail environment (e.g., Söderlund and Vilgon, 1999), they were adapted if necessary. All items were measured on a five point Likert scale ranging from 'completely disagree' to 'completely agree'. The appendix contains the survey items. The store purchases are measured in terms of the number of loyalty program credits collected by the respondents during May 2002. The loyalty program credits are a linear proxy of the monetary value of the purchases.

Through a pre-test, we confirmed the quality and applicability of the scales to this study. The scales not related to the web site, i.e. store loyalty and store satisfaction, and the antecedents of store satisfaction, were tested using a convenience sample consisting of master's students and university staff (n=50). The scales for the online environment were not tested using this sample due to the private character of the web site. Using data from the first 100 customers who participated in the study we tested these scales. Since the scales did not need to be improved, these 100 customers were also included in the final sample.

Descriptive analyses and frequencies were performed to test for normality of the variables. Almost all the scale items met the criteria of normality. For the behavioral variable, which also displayed non-normality, we used the logarithmic function.

In order to purify the measures, tests for unidimensionality and reliability were performed (e.g., Churchill, 1979; Hair et al., 1998). The principal component analyses performed on both the test sample and the final sample suggest unidimensionality. Regarding the reliability, Cronbach's alpha was used to test for the consistency of the scale. As a result of these tests some of the scales were altered, this concerned either the wording or the number of included items. In the final sample all Cronbach's alpha's, which can be found in the appendix, well exceeded the level of 0.8, with one exception (Merchandise = 0.76).

For the test samples (offline n=50 and online n=100) and the final sample, two other measures of internal consistency were performed, namely item-to-total, and inter-item correlation (e.g., Churchill, 1979; Hair et al. 1998). All the correlations for the final sample are significant at a 0.01 significance level and meet the required

standards for internal consistency, i.e. item-to-total correlations are larger than 0.5 and inter-item correlations are larger than 0.3.

5. Results

The model was estimated with structural equation modeling using LISREL (version 8.5). The two-step approach with summated constructs was used. To assess the reliability of the measurement model, construct reliability, both average and lowest loading, and the variance extracted were determined (Hair et al., 1998). Table 1 shows the results per construct. Furthermore, based on the Fornell and Larcker criterion, the discriminant validity was checked (Fornell and Larcker, 1981). Regarding the reliability measures, all of the values are well above the respective norms (Hair et al., 1998).

<<Insert Table 1>>

As not all of the variables meet the normality assumption, the Satorra-Bentler Scaled Chi-square index is used to assess model fit, along with other fit indices (Byrne, 1998; Boomsma, 2001). The generally accepted standards were taken into account in order to determine the fit of the model (Jöreskog and Sörbom, 1993; Byrne, 1998; Boomsma, 2001).

The Satorra-Bentler Scaled Chi-square is significant for the model ($X^2 = 178.68$; DF = 30). However, this statistic is sensitive to high sample sizes (e.g., Byrne, 1998), which is the case in this study (n=2604). The RMSEA (0.044) and the SRMR (0.031) indicate that the estimated covariance matrix deviates only slightly from the sample covariance matrix. In addition, the other measures also indicate a good fit (GFI = 0.95; CFI = 0.96; NFI = 0.96). Figure 2 presents the coefficients and standard errors of the structural part of the alternative model.

<<Insert Figure 2>>

16

The standardized coefficients indicate the relative importance of the causal relationships; they closely approximate effect sizes comparable to standardized beta coefficients in regression analysis (Hair et al., 1998).

The first two hypotheses reflect the relationship between store and site loyalty on the one hand and actual purchases on the other hand. Based on the results the hypothesis for store loyalty can be accepted. Store loyalty has a positive and significant influence on the actual purchases in the store. For web site loyalty the hypothesis is not accepted. Site loyalty does not have a significant direct influence on the purchases made in the store.

The third and fourth hypotheses describe the relationship between satisfaction and loyalty for each channel. Both hypotheses can be accepted. The relationship between store satisfaction and store loyalty is positive and significant. We also find a positive significant coefficient for the relationship between web site satisfaction and web site loyalty.

The expected reciprocal relationship between web site loyalty and store loyalty were formulated in the fifth and sixth hypotheses. Both hypotheses are confirmed. The results show that loyalty to one of the channels has a positive and significant effect on the loyalty towards the other channel. The positive influence of web site loyalty on store loyalty is intuitive as the web site provides customers with information regarding a variety of topics and the products, which are sold in the store. However, the influence of store loyalty on web site loyalty may not be that intuitive, but it confirms the integration philosophy.

Surprisingly, no effect of store satisfaction on web site satisfaction was found, therefore we do not accept hypothesis eight. However, the influence of web site satisfaction on store satisfaction was significant, leading to the acceptance of hypothesis seven. The overall evaluation of store is thus positively influenced by the evaluation of the web site, indicating that the site may be perceived as a complement to the store.

The final set of hypotheses relates various antecedents to store satisfaction and web site satisfaction. Regarding the antecedents of store satisfaction, all of the relationships are positive and significant and of reasonable magnitude. Merchandise

17

has the biggest influence and price and store interior have a similar but smaller impact on store satisfaction. The service provided by the employees has the smallest impact on store satisfaction. Therefore, hypothesis nine is also accepted.

The relationships between the antecedents, i.e., ease of use, usefulness and enjoyment, and the key concept web site satisfaction are all significant, leading to the acceptance of hypothesis ten. The most important factors are usefulness, and enjoyment, confirming the belief that "infotainment" is an important element of web sites. The effects of both usefulness and enjoyment on web site satisfaction are more than twice as big as the effect of ease of use. The small effect of ease-of-use on web site satisfaction could be due to what Venkatesh and Davis (2000) refer to as "the known role of direct hands-on experience in forming this belief". They showed that this construct tends to be less stable over time. Hence, it could be that ease of use plays an important role during the first few visits but that its effect dies out after having frequently visited the web site.

6. Conclusions

In this paper, we proposed a framework to evaluate the benefits of a non-transaction site in an integrated multi-channel setting. A number of hypotheses were formulated to test these benefits; eight of them (H1 – H8) were related to the key concepts in our study, i.e., purchases, loyalty and satisfaction. The remaining two (H9 and H10) concerned the antecedents of satisfaction in the two channels.

Six of the eight hypotheses concerning the key concepts were accepted, providing evidence for synergy effects between two channels and for the effectiveness of a web site without a transaction function. Two hypotheses could not be accepted, the first one focused on the influence of store satisfaction on site satisfaction. This rejection could be a case-specific result, since we studied a non-transaction web site. Store satisfaction measures the customer's overall satisfaction with shopping at the store, while, in this case, the web site does not offer the opportunity to make purchases.

We could also not accept the hypothesis regarding the direct influence of web site loyalty on actual purchases. However, we did find a significant positive influence of web site loyalty on store loyalty. These findings indicate that the contribution of a non-transaction web site mainly lies in the improvement of consumer attitudes and that it does not have a direct effect on consumer purchases. Nevertheless, we found evidence that the non-transaction site has an indirect effect on consumer purchases, via its influence on store loyalty, which is positively related to purchases. Compared with the direct effect from the offline channel, i.e., store satisfaction, the magnitude of this indirect effect is rather small.

Evidence has been found for the remaining causal relationships, all were found to be positive and significant. The results for the relationships between web site loyalty and store loyalty show the synergy between the two channels. The positive and significant reciprocal relationship between store loyalty and site loyalty underscores the customer's multi-channel perspective. With respect to store satisfaction we also find a positive contribution of web site satisfaction. Although we

19

found evidence for synergy between both channels, in each case the magnitude of the effects through the antecedents of the corresponding channel is much larger than this synergy effect. This implies that although companies can gain from the synergy between multiple channels, these effects should not be overestimated.

For managers the results of our study show the possible synergistic effects between multiple channels. When allowing customers to interact via multiple channels, managers should be aware of the influence these channels have on each other. These synergy effects can be beneficial to the company, but if a channel is not managed properly, they could also hurt the company's performance.

We found that the main effects of a non-transaction site are related to consumer attitudes, we found no direct relationship with offline purchases. This finding implies that the content of non-transaction sites should focus on improving the customer's emotional link to the store, e.g., store satisfaction and store loyalty. These sites should not be designed as merely a digital catalogue without a transaction function.

The online attitudes are mainly formed through the perception of the quality of the "infotainment" the web site provides. Infotainment consists of both usefulness and enjoyment, implying that the site should provide customers with valuable information that is presented in an attractive manner. To improve site usefulness, managers should make sure that the site is interesting, informative and provides value to the customer. One way to identify useful content is to analyze the various moments of customer interaction (Huizingh, 2002a). Enjoyment of the site reflects a pleasurable site where customers like to pass their time. Especially, if the topic of the site is of low interest to customers, which is often the case with department stores, including attractive elements will have positive effects on customer attitudes (Dahlén et al., 2003).

This study was performed for one organization with a non-transaction web site. The generalizability of the model should be tested for other industries, other channels or web sites with other purposes, e.g. transaction web sites. Our model has been tested in a two-channel situation. As the model can easily be extended to include more channels, i.e. a catalog or telemarketing, the strength of the model in such

situations should be tested. The ability to apply the model to various settings with more than two channels greatly enhances its usability .

Considering that the synergy of a non-transaction web site and an offline store mainly takes place on an attitudinal level, it would be interesting to study the effects of an Internet channel with a transaction facility. One may then expect not only a direct effect of the online channel on consumer purchases, but also a direct effect. It would also be interesting to explore if the relative impact of the various antecedents of site satisfaction will be the same for a transaction site. It could be argued that in case of transaction sites the significance of enjoyment will be less prominent. This may also apply to situations where customers are segmented into goal-directed site visitors and experiential site visitors (Hoffman and Novak, 1996).

Zettelmeyer (2000) has demonstrated the use of Internet in achieving finer consumer segments. He has determined that the use of multiple channels enables organizations to provide consumer segments with different information, thereby affecting the consumers' expected utility. Vriens and Grigsby (2001) have taken this idea one step further, stating that using Internet for personalization and customization will create an overall more enjoyable experience for the consumer, improved relationships, and competitive advantage. It would be interesting to investigate whether effective personalization and customization can further improve the effectiveness of (non-transaction) sites.

The Internet forms an integral part of our society. The role it plays in information exchange, communication, transaction and distribution is expected to further increase. Learning how to apply this new channel effectively will be essential in all kinds of businesses. This study shows that the use of non-transaction sites as part of a multi-channel strategy can result in positive and measurable benefits, both in terms of consumer attitudes and behavior. Our framework indicates that various channels can have a combined effect; the online channel in this study plays a major role in improving store satisfaction and loyalty.

The key in realizing benefits is making sure that the visits to the non-transaction site are beneficial to consumers. By providing customers with useful information on

lifestyle, available products and services in an entertaining and easy to use environment, customers will become satisfied with the web site. Web site satisfaction has a positive impact on store satisfaction. In turn, site loyalty positively influences store loyalty, which results into actual purchases. These findings show that companies can improve customer loyalty and purchases by means of a web site, even in cases when the site does not contain a transaction function. The integration of a non-transaction site with the traditional channel – the store – has synergistic benefits in the form of improved customer attitudes that are manifested offline in increased purchases.

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| Construct	Items	Cronbach's α
Store interior	• The interior of (store name) is attractive • The colors used at (store name) are attractive • The departments of (store name) are attractively designed	0.85
Price	• The prices (store name) charges are reasonable • The prices are in line with the quality • I am happy with the prices charged by (store name) • (store name) offers a good buy	0.87
Merchandise	• (store name) has the products I need • (store name) has products that are me • The quality of the products (store name) carries is good	0.76
Service	• The salespeople at (store name) are kind and polite • The salespeople at (store name) have a positive attitude • The salespeople at (store name) know their products well	0.81
Store satisfaction	• Overall, I am very satisfied with shopping at (store name)	
Store loyalty	• I intend to keep on as a customer of (store name). • I plan to shop at (store name) in the future. • I enjoy shopping at (store name). • I would recommend (store name) to friends and family as a store. • The next time I would need the type of products I bought before at (store name) I would buy them there again.	0.89
Usefulness	• I find (web site name) primarily a useful site • The information on (web site name) is interesting to me • I find this a site that adds value • I find the site informative	0.90
Enjoyment	• I find (web site name) primarily an entertaining site • I browse the site for pleasure • Browsing (web site name) is an agreeable way of passing time • Overall, I find that the site looks attractive • The lay-out of the site is attractive	0.91
Ease of use	• It is easy to navigate around the site • I can quickly find the information that I need • I think it is a user-friendly site	0.88
Web site satisfaction	• Overall, I am satisfied with (web site name)	
Web site loyalty	• I am positive towards (web site name) • I intend to visit (web site name) on a regular basis • In the future I intend to visit (web site name) more frequently than now	0.86
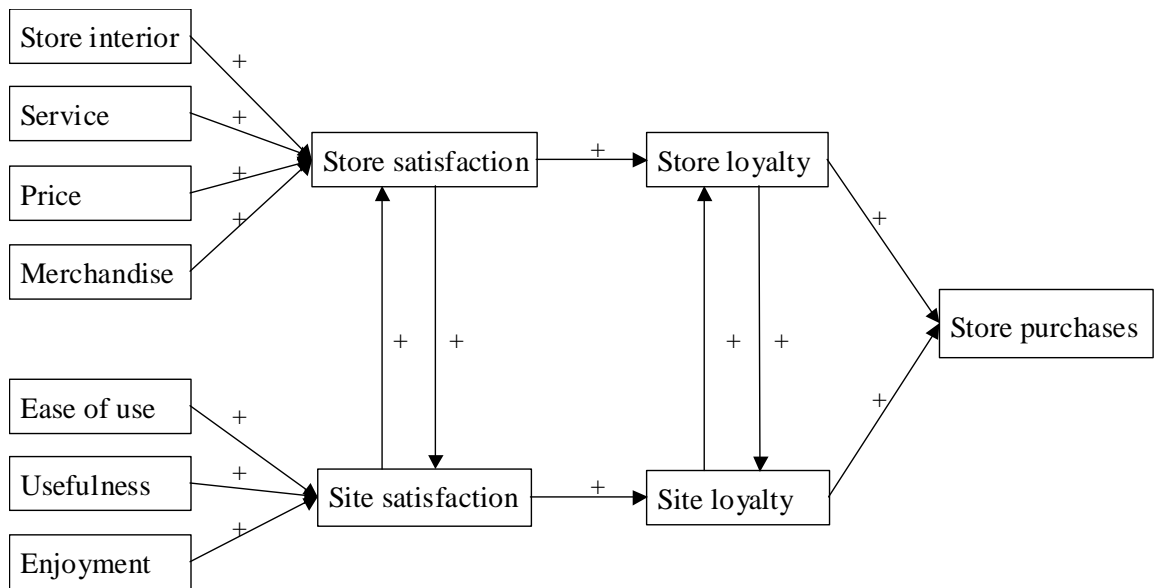
Figure 1. Conceptual model (+ indicates an expected positive effect)

Table 1. Reliability measures of the measurement model change

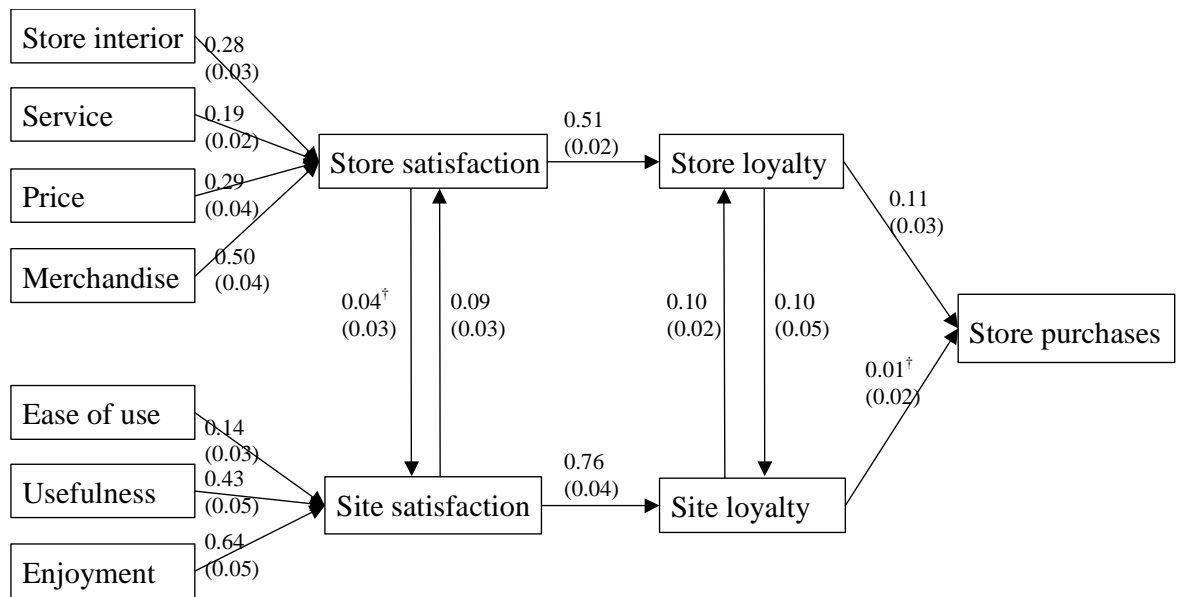|	Construct reliability (>0.70)	Average loading	Lowest loading	Variance extracted (>0.50)
Store	0.89	0.85	0.76	0.73
Price	0.92	0.85	0.80	0.73
Service	0.86	0.82	0.70	0.68
Merchandise	0.80	0.75	0.68	0.57
Usefulness	0.93	0.88	0.83	0.77
Ease of use	0.91	0.88	0.88	0.78
Enjoyment	0.94	0.86	0.85	0.74
Store loyalty	0.92	0.84	0.72	0.69
Site loyalty	0.90	0.86	0.80	0.75

Figure 2. Empirical results showing the standardized latent path coefficients and the (standard error of the coefficients). Coefficients indicated with † are not significant. All other coefficients are significant at the 95% confidence level.