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MULTI-CHANNEL INTEGRATION AND ITS IMPLICATIONS FOR RETAIL WEB SITES

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ABSTRACT

The demise of electronic-only retailers has led to the domination of electronic retailing by multi-channel retailers. Many of the latter have recognized that multi-channel integration can improve their customer acquisition and retention capabilities. To realize these benefits, however, retailers need to provide a consistent and superior shopping experience across channels. This implies that the purpose of Web sites should no longer be solely to induce consumers to purchase products online. Instead, Web sites should facilitate and support consumers in their interaction with retailers throughout their purchase and consumption activities, regardless of in which channel the actual transaction takes place. Web sites thus become IT-based self-service instruments for consumers. Focusing on the retailing of tangible products, this paper elaborates on how multi-channel integration can lead to benefits for consumers and retailers. Specifically, the paper elucidates the new requirements and opportunities that arise for Web sites as integrated parts of retailers' channel portfolios.

1.   INTRODUCTION

During the previous two years, we have witnessed a severe shake-out and consolidation among electronic retailers. Many Internet start-ups that had market valuations vastly exceeding those of their traditional counterparts have now vanished (with the notable exception of Amazon.com). Gartner Group estimated that electronic-only retailers are left with a mere 17% share of the US e-retail market. Electronic retailing as a whole, however, continues to enjoy increasing popularity. It is still growing across the globe. It is now dominated, though, by traditional retailers that have successfully added the Internet as another channel to their channel portfolio. Moreover, these multi-channel retailers benefit not only from online sales. They also use the Internet to strengthen their traditional business. A study by Active Decisions in June 2001 found that two out of three online shoppers make their actual purchase offline. This business would be lost by electronic-only retailers. Multi-channel retailers, on the other hand, can still profit from such online shoppers if they are able to draw them to their own stores. In order to accomplish this, retailers need to integrate their channels and make them consistent, giving online shoppers incentives to stay with the same retailer when they switch channels.

The objective of this paper is to elucidate how multi-channel integration can lead to benefits for consumers and retailers. Specifically, the paper will shed light on the implications of multi-channel integration for design and functionality of retail Web sites. What multi-channel related features should a Web site have to serve the needs and desires of consumers and convert them into profitable customers? This research is valuable for practitioners, particularly managers of multi-channel retailers, providing guidance for integrating Web sites into their channel portfolio. Furthermore, this research is of interest to IS researchers, as it highlights crucial implications of consumer behavior theory for design and functionality of Web information systems in a multi-channel retailing context.

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The results and propositions presented in this paper are based on an exploratory study of multi-channel retailers. The information stem either from secondary sources, such as existing case studies and surveys, or have been collected by the author through interviews with retailers. The research is limited to North American and European retailers of tangible consumer products, such as apparel, computer hardware, and furniture. Some companies studied are actually not retailers per se but manufacturers that perform the retailing function themselves (e.g., the American computer manufacturer Gateway).

After defining relevant concepts used in this paper, the following section delineates the relationship between multi-channel integration and customer relationship management. Section three elaborates on how synergies between channels benefit consumers and how these benefits in turn increase retailers' customer acquisition and retention capabilities. Section four explicates the antecedents of these synergies in terms of channel coordination and integration requirements. These requirements can be viewed as the elements of a multi-channel integration strategy. Section five derives the specific implications of these elements for retail Web sites. A list of factors is presented that may serve as a benchmarking tool. The final section concludes the paper.

2. MULTI-CHANNEL INTEGRATION AND CRM

2.1. Definitions

In this paper, the term *channel* is used to denote the various marketing and communication media available to a retailing organization to interact with its customers. These include:
- Physical store-fronts where customers can walk in (henceforth simply referred to as stores)
- Web sites (e-mail is considered here as a feature associated with Web sites)
- Paper-based catalogs
- Kiosks (these are terminals inside of stores where customers gain access to online information such as the retailer's Web site)
- Mobile devices
- Call centers

Multi-channel integration is used in this paper to refer to the simultaneous and consistent employment by a retailing organization of Web sites and physical store-fronts possibly in addition to other channels, such that customers derive a seamless experience when they switch channels during their interaction with the retailer. The focus of this definition is thus the *customer interface*, i.e., the set of all touchpoints between a retailer and a customer. In this paper, the term *retailer* comprises both intermediaries and other organizations that sell products directly to end consumers. As mentioned before, only retailers of tangible products are considered.

2.1. The Relationship between Multi-Channel Integration and CRM

Customer relationship management (CRM) has emerged as a new trend in retailing during the previous decade. The interest in CRM was raised by Reichheld [1996], where he showed that acquiring new customers could cost five times as much as retaining current ones. Other studies subsequently confirmed this effect (cf. Winer [2001] for a list of such studies). The goal of CRM can thus be defined as the attraction, sustainment, and development of successful customer relationships over time. CRM is based on the relationship-marketing paradigm. Customer relationships have been common in industrial marketing long before the advent of CRM. Further impetus for relationship marketing came from the services marketing perspective where relational marketing practices were important for success due to the experiential nature of services [Egan, 2001]. The widespread availability of advanced information and communication technologies has now also enabled retailers to employ relational practices in their marketing strategies.

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Kalakota & Robinson [1999] conceptualized CRM to consist of three phases: acquisition, extension[1], and retention. *Customer acquisition* is important to establish a customer base. It consists of two steps: attracting visitors and converting visitors into buyers. *Extension* is achieved through cross-selling and up-selling, which deepens and widens the customer relationship. Finally, *retention* is the continued use of a store, Web site, or other channel by the customer, who thus becomes a repeat customer.

Despite its advantages, it is not certain that CRM is the right approach for all retailers. Customers might simply not wish any relationship. A study by the Meta Group showed that experienced customers allow at most between 10 – 20 relationships with online retailers. Egan [2001] also pointed out that CRM might not be appropriate for certain types of industries or products.

Multi-channel integration can support all three phases of CRM. For example, studies by shop.org and Greenfield Online found that multi-channel customers are more loyal and spend substantially more than other customers. This is not to say, though, that multi-channel integration is only valuable for retailers that engage in CRM. Multi-channel integration makes sense also for a transactional marketing approach, where retailers are only interested in effective customer acquisition and possibly extension. Nevertheless, it is useful to consider the three phases of CRM as the goals of multi-channel integration efforts. The reader only has to keep in mind that while a CRM strategy requires all three phases to be implemented, multi-channel integration remains valuable even if only one or two goals are pursued.

3. SYNERGIES AS A RESULT OF MULTI-CHANNEL INTEGRATION

There has been a debate in the literature and among practitioners whether multi-channel retailers should integrate their channels, i.e., coordinate their Internet endeavors with their existing business (cf. Gulati & Garino [2000]). Many companies initially opted for a separation, spinning off separate Internet businesses or at least granting autonomy to the management of Internet operations. The American book retailer Barnes & Noble was an example of a company with such a strategy, essentially leaving its biggest asset – its physical presence – unused. The reasoning behind such approaches was often influenced by the hype surrounding the Internet during its early times, when physical operations were deemed endangered or even obsolete.

Now that many electronic-only retailers have disappeared and multi-channel retailers compete with each other online and offline, more and more of the latter seem to recognize multi-channel integration as the preferable strategy. In their annual holiday shopping study Answerthink's Retail Solutions Group (www.answerthink.com) found that the number of U.S. multi-channel retailers that present a consistent shopping experience across channels has increased from 82 to 93 percent during the last year. The reason for the overwhelming preference for multi-channel integration is that it enables synergies between channels, which benefit customers. These benefits in turn improve retailers' customer acquisition, extension, and retention capabilities. It appears therefore that the advantages of multi-channel integration under most circumstances outweigh the benefits of channel separation as well as the difficulties of channel integration (cf. Gulati & Garino [2000]).

Potential synergies between stores and Web sites were first pointed out by Steinfield et al. [1999]. Here their work is extended by scrutinizing all possible purchase and consumption activities of consumers for potential benefits that they might gain through multi-channel integration. The *purchase and consumption process* (PCP) comprises all activities consumers may perform to satisfy a need. It includes both pre-purchase and post-purchase activities, as these constitute service encounters that can significantly influence customer behavior. Liang & Huang [1998] compared several models of the PCP. MacMillan & McGrath [1997] demonstrated how the consumer consumption chain (their version of the PCP) could be used to find sources of differentiation beyond the core product. Figure 1 depicts a

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[1] Kalakota & Robinson [1999] used the formulation "enhancing customer relationships." Here the term extension is preferred, emphasizing a widening scope of the interaction between customer and retailer.

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typical PCP. It is important to understand that the PCP is cyclical with regard to customer extension and retention, since subsequent purchases are significantly impacted by experiences a customer makes during earlier interactions. The PCP is thus an ideal framework for the identification of synergies between channels, as it includes all possible touch-points between retailer and customer. In the following, the synergies that could be derived based on the PCP are discussed and linked to the three aforementioned goals of multi-channel integration (see also Figure 2 in section 4). The focus is thereby mainly on synergies between Web sites and stores, as these are the most important channels (even though the considerations similarly apply to other channels).
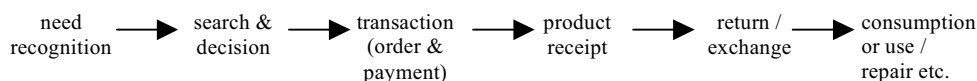
need recognition → search & decision → transaction (order & payment) → product receipt → return / exchange → consumption or use / repair etc.

Figure 1 – The Purchase and Consumption Process

Increased awareness: As a first step of any interaction with a retailer, the consumer needs to become aware of the retailer and its product offerings. Retailers compete for this consumer awareness, because it is crucial for customer attraction. However, creating consumer awareness is difficult both for physical and electronic retailers. Store retailers often create awareness through superior location(s) [Newman & Staelin, 1972]. Without a superior location, they are at a disadvantage. The problem of awareness creation is even exacerbated for electronic retailers, as they cannot benefit from location advantages. Accordingly, e-retailers need to spend more money on marketing and advertising, driving up their customer acquisition costs [Rosen & Howard, 2000].

Through multi-channel integration retailers can use their Web sites and stores to mutually enhance their level of consumer awareness. According to a study by McKinsey, multi-channel retailers spend only about $5 to bring an existing customer online, whereas electronic retailers need to spend on average $45 for acquiring a customer. This improved awareness creation is a benefit for both retailers and consumers.

Increased trust: Tan & Thoen [2000] conceptualized consumer trust and perception of risk as interdependent factors influencing a consumer's willingness to purchase. The perception of risk and the potential gains from the transaction determine a trust threshold that needs to be surmounted either by trust in the other party or by trust in control mechanisms. Jarvenpaa et al. [1999] viewed trust as a belief or expectation that the word or promise by a merchant can be relied upon and the seller will not take advantage of the consumer's vulnerability. Trust is particularly important during first-time interactions between retailers and consumers and therefore most pertinent to customer acquisition.

Lack of online consumer trust is an important impediment to electronic retailing [Tan & Thoen, 2000; Vijayasarathy & Jones, 2000]. According to Lei & Robey [1999], consumers have cultural expectations about how to conduct shopping and payment as well as cultural norms concerning privacy, security, and ethical use of information. Due to their novelty and the absence of many trust-building features on the Internet, electronic retailers have problems in achieving the same status of cultural legitimacy as physical retailers, which often results in mistrust regarding their commercial conduct [Steinfield et al., 1999]. Doney & Cannon [1997] found consumers' trust to be affected by the sellers' investments in physical buildings, facilities, and personnel. Jarvenpaa et al. [1999] mentioned prior interactions with merchants, interactions with knowledgeable salespersons, and protection by strong social and legal structures as positively influencing consumer trust. Associating electronic stores with traditional retail outlets can therefore be an effective method to increase consumer trust [Steinfield et al., 1999; Vijayasarathy & Jones, 2000]. This association must be sufficiently strong for consumers to perceive electronic and physical channels not as separate entities.

Reduced risk: Dowling & Stealin [1994] defined risk as a consumer's perception of the uncertainty and adverse consequences of engaging in an activity. Consumer purchase behavior is significantly influenced by the perception of risk [Sheth & Parvatiyar, 1995]. Risk therefore affects acquisition, extension, and retention. Jarvenpaa & Todd [1996] found that lower perceived risk is associated with more favorable attitudes toward shopping. Moreover, when the perceived risk is minimal, consumers

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bypass the search and evaluation phase [Hauser et al., 1993], which reduces the likelihood of destructive price competition for retailers.

Jarvenpaa & Todd [1996] found two types of risk to be important impediments to electronic retailing: personal risk and performance risk. The former involves possible harmful consequences such as stolen credit card numbers. The latter refers to the difficulty of establishing whether a purchased product would perform as expected. The perception of higher risk in electronic channels stems primarily from the limited amount of sensory cues and the lack of personal interaction [Kolesar & Galbraith, 2000; Vijayasarathy & Jones, 2000]. Customers may hence want to obtain additional assurances offsetting these limitations. Multi-channel retailers can reduce online risk by offering customers to physically inspect products at their stores before purchase as well as to pick up products ordered online from stores or to return them to stores. Conversely, comprehensive information provided online should reduce offline risk.

Increased convenience: One of the most important antecedents of satisfaction with shopping is convenience [Szymanski & Hise, 2000]. Customer satisfaction, in turn, is likely to have a very positive impact on customer acquisition, extension, and retention. Convenience includes the ease of locating merchants, finding items, placing and canceling orders, and returns and refunds, as well as timely delivery of orders [Gehrt et al., 1996]. Multi-channel integration offers a number of opportunities to improve on these factors (see section 4). Convenience also implies that purchase activities can be conducted wherever and whenever a customer wants to. Therefore, a combination of online and offline channels should further increase convenience. Consumers may search online or offline or both, order the product in one channel and obtain it in the other, and so forth.

Increased perceived control: According to Bateson [1985], perceived control has a positive effect on customer satisfaction. The possibility to choose different channels for their shopping activities should increase the level of control customers perceive. Moreover, the level or perceived control rises with the availability of resources and opportunities to perform a behavior [Keen et al., 2000]. As self-service instruments for customers, Web sites can provide precisely such resources and opportunities (see section 5). In comparison to the use of stores only, the use of retailers' Web sites to support offline purchases (e.g., for information search or post-purchase support) should therefore augment the perception of control even further.

Enhanced support: One branch of consumer choice theory views consumers as producers of "final desires" [Crouch, 1979] or "ultimate objects of choice" [Stigler & Becker, 1977]. A consumer's production depends on the array of acquired goods and services, the time allocated to production, and the ability to combine the goods and services in the given time into various quantities of final desires [Lei & Robey, 1999]. Value-adding services and supplementary products can support customers in the role of producer, adjusting for differential capabilities and knowledge. Providing such support also decreases the risk of commoditization. Enhanced support should particularly strengthen customer extension and retention. Multi-channel integration gives retailers the ability to provide support to customers, independently of in which channel the transaction has taken place. Moreover, since a multi-channel customer can utilize all channels, some of the supplementary products and services offered can be channel-specific, exploiting the strengths of the respective channels.

Ubiquitous personalization: Sheth & Parvatiyar [1995] proposed that consumers would engage in relational market behavior when marketers succeed in meeting their personalized needs. Relational market behavior, in turn, is tantamount to higher degrees of customer retention. On part of the retailers, personalization involves better understanding of individual customers' needs and offering the products and services addressing these needs [Keeney, 1999]. Multi-channel integration allows retailers to gather information across channels (to gain a more holistic picture of customer preferences) and then to meet individual needs across channels. This should strengthen customer retention and extension. Furthermore, comprehensive cross-channel information on customer preferences should also be beneficial for customer acquisition. Finally, customers benefit more directly if retailers enable consumers to access personal information (e.g., on past purchases) in all channels.

4.   COORDINATION AND INTEGRATION REQUIREMENTS

According to a study by Indiana University and KPMG in 2000, most Internet users in the U.S. prefer to use multiple channels when shopping. The study found that 82 percent of respondents prefer to use multiple channels to learn about new products, 77 percent to search for product information, 59 percent would like the option of receiving merchandise through the mail or a store visit, and 39 percent would like to be able to return products through both channels. By enabling customers to use multiple channels during their interaction with retailers, multi-channel integration provides the platform to fulfill these consumer desires and thus leads to the synergies presented above. While the existence of these synergies becomes now widely recognized, however, it is less clear what requirements and options multi-channel integration involves for retailers' channel strategies. At present, most retailers are still experimenting with different solutions and strategies.

In the following, six elements are proposed to reflect the coordination and integration requirements of multi-channel integration in terms of the customer interface (i.e., the sum of all touch-points between retailers and customers). In other words, these elements determine how customers perceive the interaction with a multi-channel retailer during the purchase and consumption process in terms of their ability to utilize different channels. Therefore, these elements can be seen as the antecedents of the synergies presented in the previous section. Figure 2 details the relationships between the elements of multi-channel integration, customer benefits, and ultimately retailer benefits.

Branding: Integrated branding across channels, i.e., using the same brand name, logos, slogans, and colors as well as conveying the same image across channels, should strengthen customers' perceived association between channels. This improves awareness creation (e.g., often consumers simply type in the name of a retailer to find the Web site) and trust (a brand is a surrogate for factual information about a retailer and the quality of its products). Moreover, encountering the same brand name in multiple channels should enhance consumers' awareness of the brand itself.

Channel cross-promotions comprise the provision of information on other channels as well as financial incentives for using them (e.g., coupons). Cross-promotions serve as a means to direct customers to other channels and to strengthen customers' perceived association between channels, increasing awareness and trust in other channels. Gateway, for example, successfully employs physical show rooms for this purpose. Similarly, the California-based apparel retailer Gap Inc. views its physical stores as a powerful advertising medium for their Web site. On the other hand, Web sites can be used to drive traffic to physical stores, an option particularly interesting for retailers with store location disadvantages.

Consistency: Enabling customers to utilize multiple channels for their shopping activities leads to the benefits of increased convenience and control as well as reduced risk. This requires that the major product categories are available online and offline; for products available only in one channel, at least information on them should be accessible in both channel. In-store kiosks can be used to give store customers access to products available only online. Products should also be priced consistently, including promotional discounts (e.g., during clearance sales). However, a specially designated Web discount (possibly offsetting delivery costs) might be in order. Consistency should even extend to customer support and policies (e.g., warranties, product return policies). Absence of consistency destroys the customers' association of channels and limits their channel choices. Without consistency in product selection, pricing, support and policies, retailers might not only forgo important customer benefits but also confuse or even irritate customers.

Integrating logistics is pertinent to a retailer's ability to offer in-store product pick-up and return as well as informational services, such as online information on store inventories. Gap Inc. reported that customers buying clothing online appreciate the possibility to return products at physical stores, primarily out of convenience and cost reasons. According to research by Jupiter Media Metrix in 2001, 83% of U.S. online buyers preferred to return online purchases at physical stores and 59% would like to order products online but pick them up from offline stores.

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Channel-specific capabilities can be exploited to support customers in their efforts to satisfy their final desires. Stores are superior for product sampling and social interaction between customers and sales assistants, catalogs for relaxed browsing, call centers for specific enquiries, and Web sites for information-based services as well as the provision of digital accessories (see more in section 5). Multi-channel integration does not mean that channel-specific advantages should be leveled. On the contrary, multi-channel retailers can enhance their customer support by exploiting unique channel capabilities. Through multi-channel integration this enhanced support can then be made available to the entire customer base. Ultimately, such a division of labor should also lead to cost savings. However, this needs to be carefully implemented, as customers might get irritated when essential services or products are only available at channels to which they do not have access.

Information management: It is with the help of customer information that companies can create a personalized environment for their customers. This not only improves the manner in which they respond to customer needs, it even allows them to actively anticipate those needs [Winer, 2001]. Furthermore, customers should also be given access to their personal information across channels. Channel-spanning personalization thus necessitates the collection of customer information in all channels, their integration, and their use for sales support across channels. Presently, only few retailers perform all three steps. According to a survey by Jupiter Media Metrix, only 18% of hybrid retailers are capable of assessing a customer's consolidated account activity while 67% of online buyers expected store staff to be able to view their online account information. A major difficulty of cross-channel information management is that customer behavior may differ across channels. Retailers need to take into account such differences when interpreting the data. On the other hand, comparison of information between channels can help retailers to identify strengths and uncover weaknesses of channels. Finally, retailers need to address privacy concerns of customers.
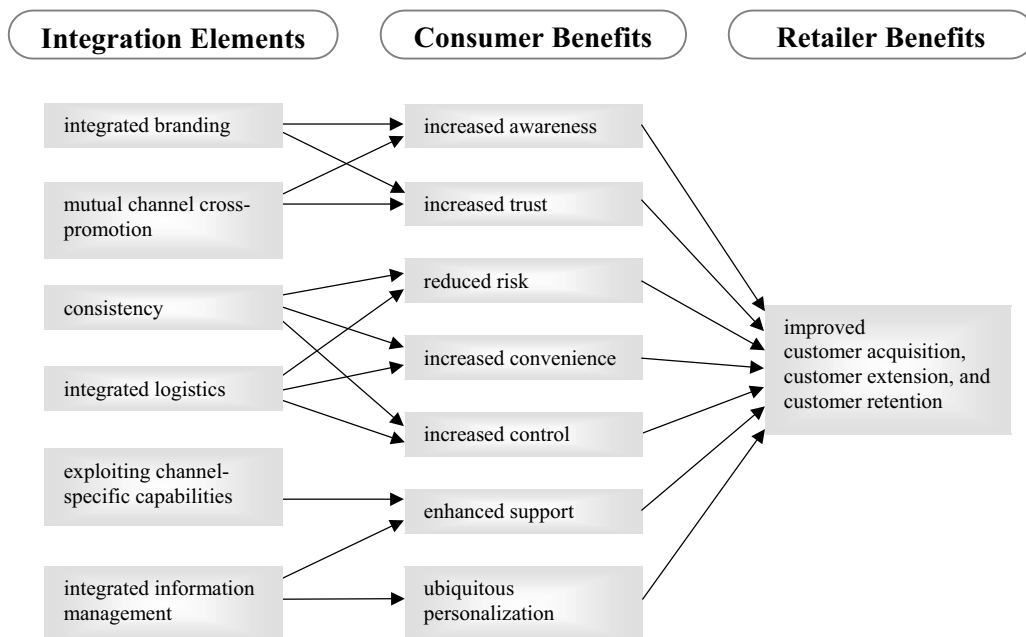

Figure 2 – Integration Elements and Synergies

Multi-channel retailers have some leeway as to how to implement these requirements. Moreover, the importance of the different requirements and the strengths of the resulting synergies may depend on market conditions, organizational capabilities, and product categories sold. However, these issues are beyond the scope of this paper.

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5.   THE ROLE OF WEB SITES IN A MULTI-CHANNEL CONTEXT

In order to contribute to the synergies presented in section 3, Web site design and functionality need to incorporate the coordination and integration requirements presented in section 4. Table 1 presents a list of features serving these requirements. This list has been compiled from examples of retailers pursuing multi-channel integration. The list is intended to be comprehensive with regard to commonly employed features. Following Table 1, some of the features are discussed in more detail and/or illustrated by examples. A full discussion of all features is unfortunately not possible due to the limited space.

Table 1 can also be understood as a complement to assessment frameworks that view Web sites as stand-alone channels. Such frameworks measure parameters – such as provision of information on the company and products, the possibility and sophistication of transactions, customer services, ease of use, and innovativeness – that remain important also in a multi-channel context.

Table 1 - Implications of Multi-Channel Integration for Web Site Design and Functionality

Integrated branding	(1) Clear and visible association of brand names (incl. logos and possibly slogans) across channels (either by using same name or cross-branding) (2) Web site design should reflect offline image and positioning of retailer (3) Web site name (URL should be found by typing the name of the retailer)
Channel cross-promotion	(4) Provision of information on other channels: store addresses, opening hours, and phone numbers; information on how to get in touch with customer support in different channels; store locators; information on call centers (5) Encouraging channel switching: enabling customers to order catalogs; explicit advice on services available offline or in other channels; advertisement of offline events; easy print-out of product information (6) Encouraging cross-channel purchases: online coupons etc. for offline purchases; enabling to redeem coupons etc. obtained offline
Consistency	(7) Offering most products that can be obtained in other channels (8) Information on product lines that are available in stores (9) Consistent prices, discounts, customer support, and policies
Integrated logistics	(10) Provision of information on options for offline pick-up, return, and repair. (11) Enabling customers to determine pick-up location, schedule repair appointments, etc. (12) Provision of information on order and delivery status (also for products ordered offline) (13) Real-time information on product availability in stores (14) Courtesy hold-on
Exploiting channel-specific capabilities	(15) Online offering of accessories and product support (16) Provision of informational services supporting a customers value creation (17) Provision of convenience services (18) Online offering of additional product types
Integrated information management	(19) Provision of information on offline transactions; pending offline transactions modifiable and cancelable (20) Providing customers with access to personal information pertaining also to other channels (e.g., information on past purchases, email news letters) (21) Adjustment of product selection, recommendations, and services based on information collected in all channels

(1) The American retail chain K-Mart still operates its Web site under the name bluelight.com – a questionable strategy, as the Web site contains several indirect associations with the K-Mart brand. (2) The Web site's layout, colors, and general atmosphere should give an online shopper a comparable impression as stores or catalogs give an offline shopper. For instance, the California-based home-furnishing retailer Williams-Sonoma gives its Web site a similar upscale image as the stores do.

(4) Land's End has deployed a service on its Web site that lets customers speak to employees using chat or voice-over-IP. Store locators enable customers to enter a zip code or address and find the

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nearest store (possibly including a map and directions to find the store). (5) It is important to enable customers to easily transfer information gathered in one channel to another. At a minimum, this means that online information can easily be printed out and taken to a store (Sears has made positive experiences with customers using this shopping method). In addition, in-store Internet access could enable customers to retrieve saved information. (6) Gap Inc. offers online redemption of gift cards and coupons obtained in stores.

(8) Since the selection of products online can be much larger than in other channels, information on which product categories or lines are available offline can be very helpful. (9) In general, consistency in pricing should include promotional discounts (e.g., for certain product lines); one exception can be product-independent discounts for purchasing online (e.g., offsetting delivery fees).

(10) Information on features such as offline pick-up and return must be visible, easy-to-understand, and comprehensive such that customers can easily compare available options. This should also include information on when products can be picked up. Sam's Club, for instance, notifies customers by email when an order is ready for pick-up. (12) Gateway lets customers check the delivery status for products ordered in their country stores. (14) This feature enables customers to be sure that the requested product will still be in store when they arrive.

(15) The American guitar manufacturer Gibson lets customers purchase strings, music sheets, and hard-to-find items online. Gateway offers online software updates, manuals etc. Product support also includes features, such as FAQ sections, self-help guidance, and e-community services where customers can exchange opinions and help each other. (16) Unilever provides online information on how to remove stains from clothing and then recommends suitable products. Grocery retailers may provide recipes and offer the necessary ingredients. (17) Macy's lets customers pay their bills online. Gap Inc. lets customers apply for, buy, and use their brand credit card online as well as offline. Safeway UK ran a project that let customers synchronize their handheld devices with personal information stored on the Web site (e.g., shopping lists). (18) Gap offers extended clothing sizes only online, as they are rarely bought. Generally, Web sites can offer a much larger product selection.

(20) Gap brand credit card users can access information on their account activity online. Gap's store customers can sign up for email newsletters in stores. They can modify or cancel news letters later at the Web site. (21) Such adjustments can be made by generally comparing sales data across channels (heeding potential differences in customer behavior across channels). Ultimately, such functionality should be personalized, depending on customer preferences, product categories, customer value to the retailer, and other such considerations.

With the implementation of multi-channel integration functionality, Web sites become a self-service instrument for consumers, aiding them in their interaction with retailers. In this respect, retail Web sites can also be regarded as information systems and consumers as IS users. Hence, the service perspective on IS can be applied to such Web sites. This perspective regards service quality as the gap between consumer expectations and actual perceived value [Pitt et al., 1995]. Since Web sites are paramount in establishing customer relationships, retailers need to ensure their continued use by customers. Bhattacherjee [2001] developed a model for IS continuance showing the significant influence not only of perceived usefulness but also of expectations confirmation.

There is a wide agreement that modern consumers are more demanding; many of them expect multi-channel services (as confirmed by the studies quoted in this paper). Following the service perspective on IS, Table 1 can be interpreted as a list of features desired and expected by consumers. Therefore, it can be predicted that implementing many of these features will soon become a competitive necessity for multi-channel retailers (a view also voiced by retailers interviewed by the author).

6. CONCLUSION

This paper has delineated the implications of multi-channel integration for the design and functionality of retail Web sites. A list of features was presented that should be incorporated by retailers to contribute to synergies between their Web site and other channels. This list is based on considerations arising from consumer behavior theory and illustrated with examples of successful multi-channel retailers. It was shown that the goal of multi-channel integration must be to provide a superior customer experience that is consistent and seamless across channels. Web sites have an outstanding role in a channel portfolio, as they can function as self-service instruments for customers supporting also their shopping activities in other channels.

This paper has focused on customer-related benefits of multi-channel integration. However, there is mounting evidence that multi-channel integration can also lead to cost savings for retailers. More research is necessary to investigate cost-saving potentials. Furthermore, no arguments have been made as to the organizational implementation of multi-channel integration elements. Retailers will face different challenges depending on their existing process infrastructure, their capabilities, their organizational structure, and their relationships to business partners. Challenges include: IS integration (including, for example, ERP and CRM systems), integration with business partners in the supply chain, creation of appropriate managerial and staff incentives, internal channel conflicts, and risks such as brand dilution. Further research is necessary to elucidate the hurdles and challenges of implementing multi-channel integration and possible paths to their solution.

Finally, the research presented is exploratory and thus to some extent hypothetical. Further research needs to be undertaken in order to validate the suggested relationships between elements of multi-channel integration, consumer benefits, and retailer benefits. There are three avenues for further research: a) a series of case studies to gather in-depth information on benefits and difficulties of multi-channel integration from the perspective of retailers, b) a survey of retailers to gain broader validation across product categories and other external factors, and c) a survey of consumers to verify the existence, antecedents, and consequences of cross-channel synergies from their perspective.

REFERENCES

Bateson, J. (1985): "Self-Service Consumer: An Exploratory Study," *Journal of Retailing*, 61, 49-77.

Bhattacherjee, A. (2001): "Understanding Information Systems Continuance: An Expectation-Confirmation Model," *MIS Quarterly*, 25(3), 351-370.

Crouch, R. (1979): "Human Behavior. An Economic Approach," Duxbury Press.

Doney, P.M. and Cannon, J.P. (1997): "An Examination of the Nature of Trust in Buyer-Seller Relationships," *Journal of Marketing*, 61, 35-51.

Dowling, G.R. and Stealin, R. (1994): "A Model of Perceived Risk and Intended Risk-Handling Activity," *Journal of Consumer Research*, 21, 199-134.

Egan, J. (2001): "Relationship Marketing - Exploring Relational Strategies in Marketing," Pearson Education.

Gehrt, K.C., Yale, L.J., and Lawson, D.A. (1996): "The Convenience of Catalog Shopping: Is There More to It than Time?" *Journal of Direct Marketing*, 10(4), 19-28.

Gulati, R. and Garino, J. (2000): "Get the Right Mix of Bricks & Clicks," *Harvard Business Review*, 78(3), May-June, 107-114.

Hauser, J.R., Urban, G.L., and Weinberg, B.D. (1993): "How Consumers Allocate their Time When Searching for Information," *Journal of Marketing Research*, 30, November, 452-466.

Jarvenpaa, S.L. and Todd, P.A. (1996): "Consumer Reactions to Electronic Shopping on the World Wide Web," *International Journal of Electronic Commerce*, 1(2), Winter, 59-88.

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

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Kalakota, R. and Robinson, M. (1999): "Customer Relationship Management: Integrating Processes to Build Relationships," in "E-Business: Roadmap for Success," 109-135, Addison-Wesley.

Keen, C., Ruyter, K.D., Wetzels, M., and Feinberg, R. (2000): "An Empirical Analysis of Consumer Preferences Regarding Alternative Service Delivery Modes in Emerging Electronic Service Markets," *Quarterly Journal of Electronic Commerce*, 1(1), 31-47.

Keeney, R.L. (1999): "The Value of Internet Commerce to the Customer," *Management Science*, 45(4), April, 533-542.

Kolesar, M.B. and Galbraith, R. (2000): "A Services-Marketing Perspective on E-Retailing: Implications for E-Retailers and Directions for Further Research," *Internet Research*, 10(5), 424-438.

Lei, J. and Robey, D. (1999): "Explaining Cybermediation: An Organizational Analysis of Electronic Retailing," *International Journal of Electronic Commerce*, 3(4), June, 47-66.

Liang, T. and Huang, J. (1998): "An Empirical Study on Consumer Acceptance of Products in Electronic Markets: A Transaction Cost Model," *Decision Support Systems*, 24(1), 29-43.

MacMillan, I.C. and McGrath, R.G. (1997): "Discovering New Points of Differentiation," *Harvard Business Review*, 75(4), July-August, 133-145.

Newman, J.W. and Staelin, R. (1972): "Prepurchase Information Seeking for New Cars and Major Household Appliances," *Journal of Marketing Research*, 9, August, 249-57.

Pitt, L.F., Watson, R.T., and Kavan, C.B. (1995): "Service Quality: A Measure of Information System Effectiveness," *MIS Quarterly*, 19(2), 173-187.

Reichheld, F.F. (1996): "The Loyalty Effect," Harvard Business School Press.

Rosen, K.T. and Howard, A.L. (2000): "E-Retail: Gold Rush or Fool's Gold?" *California Management Review*, 42(3), 72-100.

Sheth, J.N. and Parvatiyar, A. (1995): "Relationship Marketing in Consumer Markets: Antecedents and Consequences," *Journal of the Academy of Marketing Science*, 23(4), 255-271.

Steinfield, C., Mahler, A., and Bauer, J. (1999): "Electronic Commerce and the Local Merchant: Opportunities for Synergy Between Physical and Web Presence," *Electronic Markets*, 9(2), February, 51-57.

Stigler, G.J. and Becker, G.S. (1977): "De gustibus non est disputandum," *The American Economic Review*, 67(2), March, 76-90.

Szymanski, D.M. and Hise, R.T. (2000): "e-Satisfaction: An Initial Examination," *Journal of Retailing*, 76(3), Fall, 309-322.

Tan, Y. and Thoen, W. (2000): "Toward a Generic Model of Trust for Electronic Commerce," *International Journal of Electronic Commerce*, 5(2), Winter, 61-74.

Vijayasarathy, L.R. and Jones, J.M. (2000): "Print and Internet Catalog Shopping: Assessing Attitudes and Intentions," *Internet Research*, 10(3), 191-202.

Winer, R.S. (2001): "A Framework for Customer Relationship Management," *California Management Review*, 43(4), Summer, 89-105.