

Consumer Behavior in a Multichannel, Multimedia Retailing Environment

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Abstract

Over the past decade, multichannel, multimedia retailing environments have grown in variety, scope, and sophistication. However, research regarding the implications of this trend for consumer behavior is rather scarce. We seek to address this need by providing a comprehensive yet flexible approach for formulating promising consumer behavior-related research questions based in multichannel, multimedia retailing environments. This approach adopts a consumer-centric view of multichannel, multimedia retailing and identifies a number of important dimensions of this environment. We then illustrate how this approach could be applied via specific examples involving consumer memory, product assortment, and information acquisition. We conclude by considering the managerial implications of our proposed approach.

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Introduction

Shopping in retail environments is a fundamental aspect of consumer behavior and is influenced by complex and varying psychological processes. For example, consumers shop to pursue a variety of goals, ranging from basic functional drives such as satisfying hunger to more complex motivations such as enhancing self-esteem, interacting with significant others, or just dispelling boredom (Balasubramanian, Raghunathan, and Mahajan 2005; Ratneshwar, Mick and Huffman 2000; Sivaramakrishnan, Wan, and Tang 2007). In addition to these conscious motives, consumer shopping behavior is also influenced by nonconscious processes (Chartrand et al. 2008), emotions (Dawson, Bloch, and Ridgway 2002), values (Kasser, 2002), and experiences (Hutchinson and Eisenstein 2008). For example, prior research has examined not only how cognitive

perceptions influence consumers to choose one retail store over another (Fotheringham 1988; Leszczyc, Sinha, and Timmermans 2000), but also how perceptions and behavior are shaped by various elements of the retailing environment, such as store layout (Morales et al. 2005), background music (Morin, Dubé and Chebat, 2007), and website design (Mandel and Johnson 2002).

Although the extant literature on the psychology of shopping behavior is extensive, most of this research has focused upon a single type of shopping environment (i.e., online or offline) (see Verhoef, Neslin, and Vroomen 2007, and Gupta, Su and Walter, 2004, for notable exceptions). However, as technology advances, consumers are increasingly shopping across a variety of channels and communication media. For example, a consumer might use the internet to obtain product information and prescreen options, then visit a retail outlet to view and examine their consideration set, and finally order the chosen brand via phone (Ansari, Mela, and Neslin 2008). Thus, consumer shopping behavior within multichannel, multimedia

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environments is an important yet under-researched domain.¹ It is important to understand how consumers utilize the multiple media and channels available to them, manage their complementarities and conflicts, and come to rely on particular media and channels (Kumar and Venkatesan 2005; Neslin et al. 2006; Rangaswamy and van Bruggen 2005).

We believe there are at least two key reasons for this relative lack of research on consumer shopping behavior in a multichannel environment. First, multichannel shopping is a fairly recent development, for example, very few leading retailers like Walmart and Target paid serious attention to their websites before the turn of the century. Thus, consumers have only recently begun to fully experience the wide and rich selection of retail shopping environments, which allows them to choose between multiple media and channels within a particular retailer, or among various brick-and-mortar and online retailers. Consequently, multichannel shopping is a recent paradigm shift and has just begun to capture the attention of consumer researchers (e.g., Konuş, Verhoef, and Neslin 2008).

Second, the consumer research discipline places considerable emphasis upon the development of nomothetic theories that are applicable across a wide swath of consumer phenomena (Houston and Ozanne 1988). For many consumer researchers, a particular medium or channel is only interesting to the extent that it can offer insights that are generalizable across a variety of settings. This belief system may lead some consumer researchers to infer that multichannel shopping is merely a contextual issue with little opportunity for contributing to the broader corpus of consumer behavior scholarship. While we understand this concern, we suggest that the recent profusion of multiple retail channels offers significant opportunities to both develop basic disciplinary knowledge and generate important managerial implications. As recently noted by Deighton (2007, p. 3), “Something needs to be said in defense of concreteness.”

Accordingly, our goals are to raise consciousness about the multichannel retailing environment among consumer researchers and provide a comprehensive and flexible approach for formulating consumer behavior research questions attuned to this environment. Our suggested approach adopts a consumer-centric view of media and channels, identifies relevant channel- and consumer-specific dimensions, and proposes variables useful in studying consumer behavior in a multichannel environment. We employ a process-oriented perspective that demarcates what consumers *bring* to a multichannel environment, what they *encounter* in this environment, and what they *do* during the course of confronting and using these channels. Our proposed approach also explicitly considers the marketer’s role in influencing consumers’ use of multiple channels by recognizing the marketer as an intermediary between the channel and the consumer. Finally, we provide a bird’s eye view of the vast scope and diversity of research issues involving consumer behavior in a multichannel environment, and offer a

conceptual tool to help consumer behavior researchers formulate specific research questions about multichannel phenomena.

Our next section provides a brief review of existing consumer behavior research about multichannel environments. We then describe our proposed multidimensional approach for studying consumer behavior in a multichannel setting, followed by specific examples of how this approach can be used to generate interesting research questions. We conclude with a set of theoretical and managerial implications.

Overview of Multichannel Consumer Research

To date, extant research on consumer behavior in multichannel environments has focused on two sets of general issues: (1) segmenting and profiling customers based upon their multichannel preferences, and (2) examining processes of channel selection and migration. Across both of these domains, researchers do not typically distinguish between multichannels and multimedia even though many consumers use certain channels strictly as media (i.e., for obtaining information). We briefly review a few key studies in each of these domains, acknowledge their contributions, and identify gaps in our knowledge of multichannel consumer behavior.

Segmentation and Profiling Studies of Multichannel Customers

As noted by Neslin et al. (2006), consumer segmentation is a critical aspect of effective multichannel strategy design. Given its practical importance, several studies have used consumers’ channel usage as the basis for segmentation (see Konuş et al. 2008 for a recent review). When compared to channel selection and migration research (discussed next), these studies tend to be quite descriptive in nature. For example, in a study of US multichannel shoppers, Keen et al. (2004) identified four consumer segments: “generalists,” who make channel choice part of their overall shopping experience, “formatters,” who care greatly about which channel they use and only buy through physical stores, “price sensitives,” who are agnostic to channels and purchase from the cheapest one, and “experiencers,” who prefer to use a channel that they had successfully used before. In a more recent study of Dutch consumers covering a broad cross-section of products, Konuş, Verhoef, and Neslin (2008) proposed three multichannel segments: (a) “multichannel enthusiasts,” who have positive attitudes towards all channels (stores, the internet, and catalogs), high levels of innovativeness and a view of shopping as a pleasurable experience, (b) “store-focused consumers,” who are oriented towards brick-and-mortar stores and have the highest levels of channel and brand loyalty, and (c) “uninvolved shoppers,” with little interest in any of channels and a low degree of shopping involvement.

Thomas and Sullivan (2005) provided an important contribution in this domain by identifying the incidence and value of various shopping segments. Using a year’s worth of behavioral data, they segmented customers of a large US retailer into various single and multichannel groups. Specifically, they found that 63% were store-only shoppers, 12% were catalog-only shoppers, 12% were Internet-only shoppers, 12% were

¹ For ease of exposition, while acknowledging the differences between channels and communication media, we use the term “multichannel” to signify “multichannel and multimedia” throughout this paper.

dual channel shoppers, and only about 1% of the customers shopped across all three channels. In addition, they found that dual- and triple-channel customers visited the retailer more often and spent substantially more over the course of their relationship with the firm. They used this analysis to predict future channel choices and formulate marketing targeted communication for each segment.

As this brief review indicates, although existing segmentation studies provide useful insights into how consumers differ in their use of channels, much remains to be known regarding their underlying motivations, dispositions, psycho-social influences, and how product category and marketer actions help explain differences between these segments.

Channel Selection and Migration Research

In addition to segmenting and profiling multichannel shoppers, extant research has also focused on understanding how consumers select a specific channel and migrate from one channel to another. Broadly speaking, these studies argue that consumers frequently use different media and channels at different stages of their decision-making and purchase process (e.g., Balasubramanian et al. 2005; Burke 2002; Frambach, Roest, and Krishnan 2007). For example, many consumers look to the internet for deals, to stores for urgent purchases, to telephones for placing customized and complex orders, and to catalogs for gift giving (e-tailing Group 2006). In general, consumers use channels to satisfy at least five distinct goals: (1) economic goals (obtaining a good deal), (2) self-affirmation goals (demonstrating expertise in channel selection and use), (3) symbolic meaning goals (being thoughtful and thorough during the shopping process), (4) socialization and experiential goals (being part of social milieu and a stimulating environments), and (5) routine or script maintenance goals (achieving regularity and familiarity in the shopping process) (Balasubramanian et al. 2005). Media and channel choice in a multichannel setting is also driven by customers' price expectations (Brynjolfsson and Smith 2000), the type of product being purchased, perceptions of switching costs, efficiency concerns (Johnson 2008), risk aversion (Dholakia, Zhao, and Dholakia 2005), and geo-demographic characteristics (Inman, Shankar, and Ferraro 2004).²

A growing number of multichannel studies suggest that channel choice is not static but changes over time, as consumers migrate from one channel to another. For example, Gupta, Su, and Walter's (2004) survey of 337 multichannel shoppers reveals that 52% migrated from offline to online channels across four product categories including books, airline tickets, stereo systems, and wine. Furthermore, this channel migration behavior was predicted by channel risk perceptions, price search intentions, evaluation effort, and waiting time, but unrelated to customer demographics. This study is nicely

complemented by Sullivan and Thomas's (2004) study of customer channel migration across stores, catalog, and Internet shopping, which provides an analytical approach for forecasting shifting channel choices over time. Likewise, Ansari, Mela, and Neslin (2008) offer a model that analyzes the migration of customers across multiple channels. By applying this model to the customers of a large multichannel retailer, they discovered that a significant segment migrated to the internet from other channels and subsequently purchased less when compared to other segments. They explained this finding by suggesting that migration to the internet lowered consumers' switching costs, and the attendant lack of personal contact reduced customers' loyalty to the retailer.

Collectively, both streams of research (i.e., segmentation and profiling, and selection and migration) offer important contributions by revealing considerable diversity in terms of how consumers view and employ multiple channels. Perhaps most surprisingly, this research broadly suggests that many consumers appear to prefer the use of a single traditional channel (i.e., retail store) and that their migration to newer channels (i.e., Internet shopping) is a careful and systematic process. Thus, an understanding of the reasons why many consumers are hesitant to employ multiple channels is an important gap in our existing knowledge of consumer behavior in a multichannel environment.

There may be many alternative reasons why most consumers do not yet employ multiple channels. In particular, it is not yet clear whether these single-channel shoppers prefer particular channels for their specific affordances (e.g., convenience, validation from independent sources, etc.) or because they find essential functionalities to be missing from each one (e.g., the touch and feel from online shopping, a larger multi-category assortment and the ability to shop across competitors from brick-and-mortar stores, etc.). This motivational issue is important because it holds implications for the degree to which consumer loyalty in one channel carries over to other channels and how many channels each retailer should offer.³ As explained subsequently, our proposed approach provides useful directions to help address these issues.

A Proposed Approach for Studying Consumer Behavior in Multichannel Environments

Our proposed approach seeks to enrich and extend prior research on consumer behavior in a multichannel environment by adopting a consumer-centric view of channels. More specifically, our approach is expressed in terms of how consumers view, choose, and use the various retailing channels they know about and encounter. Consumers use channels for many reasons and in a multitude of ways. Consumers choose and use channels based on their specific goals at a particular point in time, their prior experiences, and their expertise (Hutchinson and Eisenstein 2008). Because various channels provide consumers with unique affordances and constraints (Norman 1999), they vary in terms of how much they can facilitate or hinder shopping goals, both individually and in combination with other channels. For

² Geo-demographic factors are defined by Inman, Shankar, and Ferraro (2004) as consumer profiles constructed by classifying consumers based on neighborhood characteristics (e.g., affluence, urbanicity), combined with demographic characteristics (e.g., presence of children, age of the family's head of household). See also Johnson (1989).

³ We thank a reviewer for suggesting this idea.

example, when the goal is to obtain comprehensive information about the functional attributes of various options, such as different car models, a consumer may prefer to use the internet rather than physically travel to multiple dealerships. This consumer may subsequently visit online automobile communities to learn the opinions of owners, seek price quotes, and then visit and negotiate with car dealers face-to-face prior to purchase. Thus, consumers’ goals, expertise, and channel characteristics influence their construction, integration and personalization of channel assortments. Scant consumer research has examined these types of channel coordination issues. It is also possible that instead of viewing channels in the same way, different consumers have different evaluations and preferences for different channels. For example, one consumer may prefer the recommendations of fellow online shoppers at an e-tailer’s website, whereas another consumer may rely on the advice and suggestions of a department store salesperson with whom he or she has a close interpersonal relationship.

As this discussion illustrates, a more nuanced characterization is needed in order to stimulate research that adequately recognizes, analyzes, and explains the complexity of consumer behavior in multichannel retail settings. Specifically, we propose that the interaction between channels and consumers (Venkatesan, Kumar, and Ravishanker 2007) mediated by marketers should explicitly account for: (a) what consumers bring, (b) what they encounter, and (c) what they do during their channel interactions. In addition, because channel–consumer interactions occur within the domain of a marketer’s control, we consider the ways in which a marketer can influence consumer–channel interactions. Our proposed approach is graphically summarized in Fig. 1 and described in greater detail next.

Channel Dimensions

It is useful to consider the dimensions along which channels may vary in order to understand their constraints and

advantages. Perhaps the most basic distinction is whether the channel is used primarily for purchase or for information. While purchase channels are mainly used to obtain products, information channels can provide product-related information, both prior to and after purchase (Dholakia et al. 2009). Each channel can provide both functions (e.g., a retail store) or just one (e.g., an online customer support group). Information channels, by and large, come in the forms of communication media and permit varying levels of addressability and interactivity.

Another critical dimension by which channels can vary is whether they are physical or virtual. This dimension is interesting not only because many consumers are concerned with sensory trial prior to purchase (Peck and Childers 2003), but also because technological advances are constantly increasing the physicality of channels that were previously virtual (Riva 2007). Third, channels vary in their degree of accessibility. With the widespread adoption of wireless internet and mobile phones, some channels such as a website or a call center can be accessed by virtually anyone across the globe, whereas others, such as a brick-and-mortar store or an ATM, are stationary and available to a geographically limited consumer base.

The fourth dimension is in the type of communication that a channel permits. For example, some online channels such as email lists or bulletin boards (e.g., Craigslist) allow only asynchronous communications. In contrast, other channels such as telephones or chat-rooms permit real-time synchronous communication with a retailer or other consumers. This difference in the degree of synchronicity can strongly impact how much information is available to a consumer and how this information is utilized (Dholakia, Bagozzi, and Klein Pearo 2004).

Fifth, channels also vary in the nature of their interface. For example some channels such as a retail store offer a fixed interface or front to all consumers, while the interface of other channels such as an online portal can be customized to suit an individual consumer’s tastes and preferences.

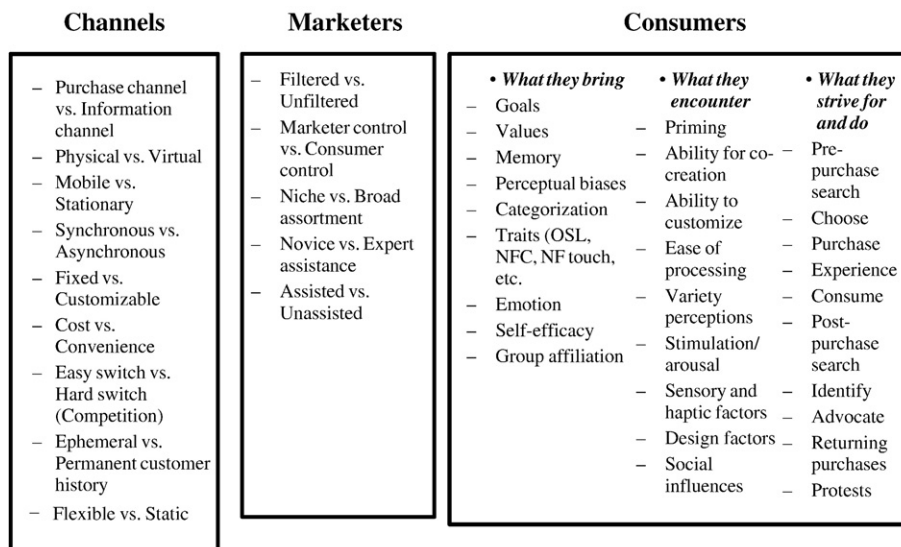


Fig. 1. Relevant dimensions and variables for formulating consumer behavior research questions in multichannel environments.

The sixth dimension is the *level of convenience* a channel provides to its customers. Typically (but not always), greater convenience is accompanied by higher costs for the consumer (Burke 1997). For example, a geographically proximal convenience store will offer an assortment of consumable products with a greater degree of convenience with respect to time and distance, but usually charge a price premium for these goods compared to a supermarket.

Seventh, channels (especially online ones) vary in how easily they *allow the consumer to switch* from one particular channel of a firm to another or to a competitor's channel (Verhoef, Neslin and Vroomen 2007). For example, it is relatively easy to click away from one retailer's website to a competing one; it is not as easy to make such a switch when walking along the aisles of a physical store.

The eighth dimension is a channel's degree of flexibility in the organization and portrayal of their assortment. In particular, virtual channels allow consumers the option to self-organize a product category so that it aligns with their cognitive structure for that category. In contrast, physical channels largely result in static arrangements of product categories. Categorization theory (Sujan 1985) suggests that a consumer's prior category knowledge affects their information processing ability. Thus, if there is a match between the way that consumers categorize items internally and the way the retailer organizes them in a channel, consumers can process information more easily (Morales et al. 2005). For example Morales et al. (2005) find that the amount of variety that consumers can process in an assortment and the satisfaction that consumers derive from that assortment is dependent on whether the internal organization inside the consumers' head is congruent with that provided by the retailer. This suggests that virtual retailers should have an advantage over physical stores in terms of portraying their varied assortments in a flexible manner than can be easily processed by a wide variety of consumers. On the other hand, this flexible categorization may inadvertently result in decreased impulse purchasing, as consumers may tend to search for and purchase only preplanned products or services that align with their pre-categorized shopping goals.

Finally, channels vary in the extent to which they store a customer's *behavioral history*. Whereas some channels (i.e., online shopping) maintain a permanent or historical record of a customer's transactions, others (i.e., a retail store) retain little or no memory. Recorded transactions across multiple channels can be used to devise joint marketing programs such as point-of-purchase offers and customized communications (Rust and Chung 2006).

Consumer Dimensions

Drawing upon the classic model of consumer decision making (Howard and Sheth 1969), we specify three broad process-based categories of consumer influences upon channel–consumer interactions: (1) what consumers bring; (2) what they encounter; and (3) what they do, during their choice of, and interaction with retailing channel(s). This distinction allows us to explicitly consider both consumers' utilities for the products

they purchase through these channels as well as the purchase process itself (Balasubramanian et al. 2005). Although our focus is on the direct effects of these constructs as predictors of channel outcomes, these constructs may also serve as moderators of the effects of many of the other consumer and channel factors explicated in our framework. Due to space limitations, we do not explicitly discuss these moderator effects.

What Consumers Bring

Consumers possess a number of characteristics that influence their choice and use of a particular channel or channel assortment. Thus, we suggest that they “bring” these factors to their interactions with retail channels. First of all, consumers may have a variety of superordinate and specific goals that influence their use of a given channel, some of which may be enduring and others generated by the situational conditions (Balasubramanian et al. 2005). In addition, consumers also possess a broad set of functional and terminal values that may favor certain channel options and disfavor or even eliminate others (Gutman 1982). For example, a consumer who holds the value of supporting local small businesses may reject shopping at a large national retailer even when other characteristics make it a superior alternative. Consumer–channel interactions are also influenced by a consumer's level of prior experiences with a particular channel or channel assortment (Inman, Shankar, and Ferraro 2004). For example, a positive experience with a customer service representative on the phone may make a consumer more likely to purchase an airline ticket via phone the next time, even if it is more convenient to shop for and buy it online.

Furthermore, a consumer's choice of a channel or channel assortment is susceptible to a host of possible perceptual biases (e.g., Kahneman 2003). These biases may make a consumer favor certain channel characteristics at a particular time, or affect the manner in which a channel is framed or categorized. For example, in-store kiosks that provide access to the internet may be categorized as web browsers rather than as shopping aids (e.g., Burke 1997). Consumers also display a number of dispositional characteristics that have relevance to their channel interactions. For example, a shopper with a high need for touch (Peck and Childers 2003) is likely to gravitate toward physical channels. Other important elements that consumers bring to channel interactions include their emotions, perceptions of self-efficacy, and group affiliations (Bagozzi and Dholakia 1999).

What Consumers Encounter

When interacting with a particular channel, a consumer is likely to be influenced by various channel features “encountered” during a shopping occasion. For example, the amount of time and money that a consumer spends in a brick-and-mortar store may be shaped by its layout, organization, ambience, lighting, and music (Mattila and Wirtz, 2001). Likewise the colors, backgrounds, and fonts used for an online shopping website may prime particular aspects of consumer memory (e.g. Mandel and Johnson 2002) and also affect perceived ease of processing, perceptions of variety, and level of stimulation and arousal (Balasubramanian et al. 2005). Other important channel elements that consumers

may encounter when shopping include sensory and haptic factors (Peck and Childers 2003), design factors, and social influences (Dholakia et al. 2009). These elements are likely to influence how a consumer experiences the interaction and how the channel is evaluated subsequently.

What Consumers Do

When interacting with a particular channel, a consumer can engage in a variety of behaviors such as searching for product information, product selection, transacting the purchase, and experiencing a service or consuming a product. In addition, a consumer can also engage in several post-purchase behaviors such as complaining, spreading positive word of mouth, and repairing or returning a purchase (e.g., Kumar and Venkatesan 2005). These behaviors may be influenced by the nature of a particular channel and vice-versa. For example, in their study of complaining behavior, Mattila and Wirtz (2004) found that consumers seeking redress prefer to use interactive channels (e.g., brick-and-mortar stores) that allowed synchronous communication rather than more remote channels (e.g., online portals). In contrast, consumers who wanted to vent their frustration leaned more towards remote asynchronous channels such as the internet or even writing letters. Likewise, a consumer's proclivity to express their enjoyment of the shopping experience or engage in behaviors of advocacy or identification may vary across particular retailing channels (Konuş et al. 2008).

The Role of Marketers in Influencing Consumer–Channel Interactions

Marketers have the ability to heavily influence consumer–channel interactions through a variety of strategies and tactics (Thomas and Sullivan 2005; Grewal et al., forthcoming). We consider four specific dimensions that shape the nature and scope of marketer control upon channel–consumer interactions. The first dimension is the extent to which a marketer filters, moderates, or otherwise manipulates the information transmitted to consumers within a channel. For example, some self-support information channels (e.g., company-run online bulletin boards) tend to be controlled in a heavy-handed manner by the moderator(s), whereas others (e.g., enthusiast-run fan-sites) are largely unmoderated (Dholakia et al. 2009). Relatedly, in some cases, especially for channels controlled by firms, technical support personnel have specific scripts they must follow, whereas other channels display greater flexibility and discretion in terms of offering solutions to customers (Das 2003). This distinction has implications not only for a channel's authenticity and credibility but is also likely to affect consumer preference.

The second dimension is a channel's ownership structure. In some cases, a particular channel may be entirely sponsored and governed by the marketer, in other cases, it may be organized and maintained by external entities such as customer enthusiasts, or even other firms (Almeida, Dholakia, and Mazzon 2009). For example XBOX Forum is an online forum developed and managed by Microsoft employees to disseminate information and service support for owners of the XBOX gaming console,

whereas Nikonians.org performs similar functions for Nikon camera customers, but is independently run by three Nikon camera enthusiasts. While marketer-owned channels often display greater degrees of filtering and moderation compared to customer-run channels, this is not always the case. For example, even though Nikonians.org is owned by customer enthusiasts and unaffiliated with the company, the content submitted to this channel is heavily filtered and moderated.

The third dimension is the degree of assortment that the marketer offers via a given channel. For example, some channels such as office superstores or specialist websites offer a narrow but deep assortment while others such as a supermarket offer a broad and shallow assortment (Burke 1997).

The fourth and final dimension is the level of assistance provided by the marketer (Burke 2002). For example, some stores such as Nordstrom offer a high level of service to their customers whereas others such as IKEA employ a self-service model.

Collectively, these channel, consumer, and marketer dimensions offer a broad-based set of variables for advancing the study of multichannel retailing environments from a consumer behavior perspective. We believe that consumer researchers can gainfully employ these dimensions and variables to generate theoretically interesting and practically useful research questions, which we illustrate next through two specific examples.

Two Illustrative Applications of our Proposed Approach

Memory of the Shopping Experience

One way that channel choice may affect consumer behavior is through a consumer's enjoyment of the shopping process. Consumers shop not only because they value the items they buy or consume, but also because they derive pleasure from the shopping experience itself (Hirschman and Holbrook 1982). Furthermore research suggests that customer satisfaction with shopping experiences is not simply a function of real-time utilities associated with those experiences, but rather a function of their retrospective utility (i.e., memory) of these experiences (Kahneman 1994, Kahneman et al., 1993). Retrospective memory has a similar effect on product preference. For example, when shopping, consumers are likely to select a varied set of items that includes less-pleasing goods (e.g., choosing several different flavors of ice cream rather than just sticking with their favorites), not because this leads to the greatest enjoyment in real time, but because it leads to a better memory of the experience (Ratner, Kahn, and Kahneman 1999). In aggregate, this line of research suggests that consumer memory has an important influence upon both shopping behavior itself as well as satisfaction with the outcomes of the shopping experience.

We also know that consumer memory is biased (Kahneman 2003). Thus, if consumers make decisions because they want to maximize their memories of a shopping experience then channels that allow for more accurate memories (such as virtual channels that can record both past purchases, past searches and perhaps even past enjoyment ratings) may be preferable to physical channels that rely heavily on human memory for

recollection of past experiences. For example, consider online grocery shopping where a consumer has the ability to hit a key and purchase the exact same products purchased last time, as opposed to a physical grocery experience which requires walking up and down the aisles and remembering what was purchased last time (or be influenced by current in-store displays). Certainly the shopping experience, as well as the items purchased, will differ significantly across these two types of channels.

Biased memories can also affect channel choice. Consumers frequently base their memory of an experience on both the peak moment and the ending moment (Kahneman et al., 1993). Thus, if a consumer has a positive experience in a store, or on a website, but then something goes badly at the end, they may negatively over-react to the experience and could be less likely to choose that channel in the future. For example, a consumer who has a very positive interaction while interacting with a retailer’s website but has difficulty navigating the checkout page may end up discounting their entire online shopping experience. A similar type of discounting can occur if a consumer has an enjoyable experience at a retail outlet but faces a crowded parking lot when trying to leave the mall. These biased negative memories are likely to influence the channel choice on subsequent shopping occasions.

When a channel becomes salient within a consumer’s memory store of past shopping experiences, the marketer becomes, often unintendedly, a partner in consumer learning activity. Under these circumstances, managerial decision aids (e.g., an anthropomorphic information agent, Sivaramakrishnan, Wan, and Tang 2007) may either enhance consumer expertise and help refine preferences or encourage consumers to remain cognitively lazy by not updating their preferences. In either case, the influence of different channels upon consumer memory process is likely to play an important role in terms of shopping activity in specific and consumer behavior in general. These influences represent an interesting topic for future research. Fig. 2 succinctly summarizes this discussion and offers a template for generating research questions involving other

combinations of consumer behavior, channel, and marketer dimensions.

Consumer Behavior in Interaction with Information Channels

As noted earlier, channels play a critical role in terms of transmitting information to and from different entities. This role is important in the highly knowledge-intensive environment that characterizes modern retailing (Powell and Snellman 2004). Information channels are useful not only for providing persuasive communications and product-related information to channel intermediaries and end-customers via websites, product manuals, and customer hot-lines, but also for delivering customer education (especially valuable for complex products and services), technical support, and increasingly, for connecting one customer to one another (Das 2003; Dholakia et al. 2009).

Information channels take many specific forms, from face-to-face interactions with a firm’s sales and service personnel, to telephone service lines through which employees answer customer questions and offer technical support, to online chat-rooms, bulletin boards, and email lists where social interactions occur mostly between customers. Information channels have historically been neglected by channel researchers; however, as the functions they perform become increasingly significant within a firm’s multichannel strategy, there are many consumer behavior-related issues that the firm must grapple with, leading to promising research opportunities.

The first important research area concerns the organization and management of a retailer’s multiple co-existing (and in some cases, competing) information channels. This issue is especially interesting because for many firms (e.g., Coke), some information channels are organized and managed by its professional managers and employees (e.g., www.coca-cola.com), while others are grassroots organizations founded and run independently by its customer enthusiasts (e.g., www.fan-ish.net/coke/) and/or detractors (e.g., www.killercoke.org), and beyond the firm’s control (e.g., McConnell and Huba 2007; Muñiz and Schau 2005; Porter and Donthu 2008). In many cases, both these official and unofficial channels are regularly used by a firm’s customer base, which presents stiff managerial challenges in regard to both corporate and brand strategy (Cook 2008; Thompson, Rindfleisch, and Arsel 2006) and a host of interesting research issues.

For example, relatively little is known regarding the role of a firm’s employees in customer-enthusiast information channels. One recent study suggests that information-based aspects of customer service support such as information variety, newsworthiness, and accuracy are crucial to customer valuation of an information channel (Dholakia et al. 2009). These findings raise questions about the implicit assumption that customers should be allowed to generate content entirely on their own, with little or no employee interference (e.g., Porter and Donthu 2008; Thompson 2005). To the extent that employees control the quality of information in the channel, it is likely that their participation will have a positive effect on its customer value.

Further research is also needed to better understand which governance structures are most effective in managing information

Consumer Behavior Dimension	Relevant Issue in the Channel	Contributions to Marketing and Consumer Behavior Theory	Areas of Managerial Practice Influence
MEMORY	<ul style="list-style-type: none"> Some channels allow the history of customer behaviors to be recorded, whereas others do not. Accumulative effect of multiple channels in creating overall customer history and experience 	<ul style="list-style-type: none"> Alter understanding of expected experience by allowing the channel to reduce the bias in retrospective utility Learning is offloaded to marketer. <ul style="list-style-type: none"> > Could change consumer’s preference and knowledge structure. > Could either increase expertise or make consumer cognitively lazy and/or affect his or her ability to formulate preferences 	<ul style="list-style-type: none"> Value creation. Segmentation. Building loyalty and repeat purchasing. More efficient individualized marketing program creation. Prediction of future customer behavior.

Fig. 2. Application of our proposed approach to develop research questions: example of memory of the shopping experience.

channels, as well as the conditions under which some management approaches work better than others in providing customer value (e.g., Brown and Duguid 2001; Thompson 2005). Thompson's (2005) distinction between "seeding structures" and "controlling structures" within communities of practice appears quite relevant for studying this issue. Seeding structures are elements of a channel (e.g., tools that allow members to see each other or chat with each other in real time) that facilitate communication and collaboration. In contrast, controlling structures are elements of a channel (e.g., rules for posting messages, policies regarding sharing personal information, etc.) that directly govern current collaboration between users. Based on a 16 month observational study of a community of practice, Thompson (2005) recommended that firms should judiciously employ seeding structures as they support users' intrinsic motivations by providing appropriate venue elements, but carefully refrain from the use of controlling structures because they divert users' attention away from the central foci, arouse reactance, and engender suspicion. Future research is needed to better understand the structural elements, policies, and affordances of information channels that are seen as seeding vs. controlling structures by customers (and other users), and how they affect user motivations, relational orientations toward the firm, and customer behavior.

Conclusion

As these examples illustrate, our approach of delineating channel, consumer, and marketer dimensions in multichannel retailing environments offers a flexible and broad-based palette for investigating important consumer behavior issues. Although our approach is conceptual in nature, the research questions we developed are amenable to empirical investigation via a range of traditional methodologies such as laboratory and field experiments, surveys, and ethnography, as well as relatively newer methods such as netnography (Kozinets 2002) and simulated shopping episodes in virtual environments (Burke 2002). In this concluding portion of the paper, we highlight these insights, identify the limitations of our approach, and offer directions for researchers interested in enriching and extending our work.

Managerial Insights

As retailing channels continue to expand, retail managers are faced with the prospects and problems associated with channel proliferation and channel migration among their customer base (Rangaswamy and van Bruggen 2005). Perhaps most importantly, retailers must manage the increasingly difficult task of deciding which specific channels to use to reach their customers and how to profitably coordinate their chosen channel assortment (Marcus and Collins 2003). In addition, retailers are faced with the challenge of encouraging consumers to migrate from higher cost, lower valued channels to lower cost, higher valued ones and managing changing consumer preferences across these channels (Thomas and Sullivan 2005). While some retailers are actively seeking to manage multichannel customer behavior (e.g., Walmart, Best Buy), others appear to

adopt a more passive stance (e.g., Burberry, True Religion Jeans). This type of passive and reactionary approach can significantly harm both consumer perceptions and firm profitability. As we pointed out, retail managers may find value in adopting a more active, customer-centric view of their channels by carefully managing each of their various dimensions. A particularly important managerial challenge is the crafting of integrated strategies across multiple channels. Zhang et al. (forthcoming) provide an excellent discussion of this topic.

Perhaps because of the ease of obtaining such data, much of the existing multichannel consumer behavior research has studied consumer choice among channels offered by a single retailer. Thus, from a managerial standpoint, much of the existing research considers resource allocation and implications for a single retailer. However, many consumers switch retailers when they switch channels. Not only is an understanding of the magnitude of this phenomenon important for managers, but it is also likely to provide a different (and more accurate) assessment of the value of adding a particular channel into one's retail assortment.⁴

Limitations and Future Research Issues

While we believe that our customer-centric approach and illustrative applications provide a rich set of theoretical contributions and managerial insights, we regard this approach as a work in progress and encourage other multichannel scholars to enrich and extend our efforts. One important extension to our approach would be to expand it to consider a more direct examination of multimedia per se. Although several dimensions we identified (e.g., physical vs. virtual, fixed vs. customizable, synchronous vs. asynchronous) are clearly applicable to both channels and communication media, a more explicit examination of the nature and characteristics of multimedia would be valuable. For example, consumer switching behavior appears to be considerably easier for media (e.g., turning a dial or clicking a mouse) than for channels (e.g., geographic distance may hamper switching). Consequently, some of the channel dimensions we identify may be less relevant when considering how customers interact with multimedia. Conversely, multimedia may present relevant dimensions currently excluded from our approach. For example, media richness theory suggests that some forms of media (e.g., television) are "richer" than others (e.g., radio) because they are able to provide added information via non-verbal cues (Daft and Lengel 1986; Sproull and Kiesler 1986). This additional, richer information may have important implications for a media's persuasion ability and should be carefully balanced in a multimedia environment.

Future research could also lend value by further extending our illustrative applications. For example, our discussion on memory indicated that channels vary considerably in terms of their effects upon consumer memory. Future efforts are needed to identify the impact of these differential memory effects upon consumer engagement, search, and selection. Likewise, our discussion of how consumers use information channels would

⁴ We thank a reviewer for suggesting this managerial insight.

be enriched by additional insights about how retailers can best facilitate information generation and transmission across various channels and communication media. A closely related issue is the identification of the optimal governance structures for managing information across multiple channels. In particular, the applicability of traditional transaction cost theory (e.g., Williamson 1985) to a multichannel setting is an intriguing topic for future inquiry.

A third limitation and future research challenge of our approach is the need to update it to correspond to the continual and rapid growth of new channel and media forms. Although our approach was purposively designed to focus on underlying (and hopefully, enduring) channel, customer, and market characteristics, it is likely that their relevance may wax and wane, as new channels/media emerge and existing channels/media metamorphose into new forms. A current example is the emergence of mobile marketing via smart phones, which according to some projections will shortly become a dominant retailing channel for many products and services (Leppäniemi and Karjaluoto 2005). Shankar et al. (2010) provide an excellent overview of this emerging technology and its implications for multichannel and multimedia marketing. Another (but considerably more preliminary) emerging channel is the coming advent of 3D printer technology, which may enable consumers to self-fabricate a wide variety of products and bypass both online and offline retail channels (Malone and Lipson 2007). These emerging technologies may present a variety of new channel-related dimensions and may also alter the nature and/or effect of the customer and marketer dimensions we identified. Thus, future scholarship could lend considerable value to our efforts by updating our approach to accommodate these types of new technologies, and thus, increase our understanding of consumer behavior in multichannel and multimedia environments.

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