

Sandrine HEITZ-SPAHN

ICN Business School

13, rue du Maréchal Ney

54000 NANCY

Tél : +33 3 83 17 37 72

sandrine.heiz-spahn@icn-groupe.fr

My customer visits my competitors: explaining free riding and retention consumer behavior patterns in a multichannel environment

Abstract:

Free riding behavior (consumers' visit to different retailers during the decision-making process) is not a new phenomenon; however, in a retailing setting oriented towards multichannel strategies, it can be expected to rise.

This pattern of behavior pattern can be seen as an opportunistic and non-loyal behavior that can have a negative impact on retailers' profits. The purpose of this research is to determine shopping motives explaining retailer-related behavior patterns (free riding and retailer retention patterns) and channel-retailer-related behavior patterns in a multi-channel retailing context (a combination of behavior based on channel and retailer choice). 750 respondents completed an online survey on their past behavior (channel choice, retailer choice) for a product purchased in the last six months. Results show that consumers adopting a free riding and a cross-channel free-riding behavior pattern (consumers switching channels and retailers during the decision-making process) are looking for fulfilling utilitarian needs, especially price comparison and independence needs (need for achieving the decision-making process anywhere and anytime) during the decision making process. Consumers sticking to one retailer (retention behavior) and within-channel retention consumers (sticking to one channel and one retailer during the decision-making process) are looking for fulfilling a convenience need (need for achieving the decision-making process with a minimum of temporal, physical and cognitive efforts). We also discovered that people adopting a multi-channel behavior pattern are more likely adopting a free-riding behavior pattern than a retailer retention one. On a managerial perspective, it can be stated that multichannel retailing strategies can be counter effective since consumers have more opportunities to switch retailers during the decision making process. It also helps retailers fine tune their communication/promotional strategy by focusing on shopping motives characterizing different consumers segments.

Key words: Multichannel consumer behavior, Multichannel distribution strategy, Free-riding, Switching behavior, Marketing channels,

I) Introduction and Objectives

Retailers operating multiple channels are now the norm rather than the exception. Financial issues mostly explain this tendency since it is expected that multichannel retailing reduces the costs to access new markets (Geyskens et al. 2002, Neslin et al., 2006 ; Vanheems, 2009) and increases sales (Deleersnyder et al., 2002 ; Geyskens et al, 2002 ; Kumar et Venkatesan, 2005 ; Cheng et al., 2007).

Consequently, consumers have started to adopt multichannel behavior patterns to take advantage of each channel specific characteristics (Verhoef et al., 2007) therefore satisfying their shopping needs (Schröder and Zaharia, 2008; Konus et al., 2008). A large number of research studies has focused on this consumer segment and evidenced that multichannel consumers are an attractive market. They are supposed to spend more on average (Shankar and Winer, 2005; Venkatesan et al., 2007) and to have a higher lifetime value than those consumers using only one channel for purchasing (Neslin and Shankar, 2009). Furthermore they are expected to be more loyal and satisfied (Shankar and Winer, 2005; Wolk and Skiera, 2009).

However, negative aspects of multichannel consumer behavior have been also identified, such as channel cannibalization that has been significantly studied (Deleersnyder et al., 2002, Dholakia et al., 2005; Falk et al., 2007; Sharma and Mehrota, 2007; Vanheems, 2009; Wolk et Skiera, 2009) and free riding that has received few attention from the research community (Van Baal and Dach, 2005, Chui et al., 2011). Although this is not a new phenomenon (Singley and Williams, 1995), it has gained significance in a multichannel-retailing context since consumers can switch channels and retailers during the different phases of the decision process (information search, attributes evaluation, purchase). According to Chevalier, (2002), this phenomenon is linked to the increased use of the Internet. She states that the likelihood of adopting a free-riding behavior pattern is higher for the Internet than for other channels. Thus, it can be expected that free riding behavior patterns in a multichannel-retailing context are also more likely to be adopted since consumers often visit the Internet. It can be assumed that channel switch can led consumers to visit several retailers during the decision making process which causes consumers to adopt an opportunistic/non-loyal behavior that can have a dramatic impact on retailers' profits. Therefore, we sought to address the following questions:

- Will consumers' channel behavior patterns influence consumers' retailer behavior patterns?

- Which motives drive consumers' free riding and retention behavior patterns?
- Which motives drive consumers' channel-retailer behavior patterns? (e.g. cross-channel free-riding behavior pattern)

To address these gaps, we focus first on consumers' retailer behavior (free riding and retailer retention) and study the shopping motives explaining those two patterns of behavior. Second, we study shopping motives explaining channel-retailer behavior (cross-channel free riding, cross-channel retailer retention, within-channel free riding and within-channel retailer retention).

In the following sections, we first present the conceptual framework. We review prior research about free-riding and shopping motives. Next, we present the research methodology, including a delineation of the measurements we used to test the hypotheses. Following an examination of the results, we conclude with key managerial and research implications.

II) Conceptual Framework

1) Consumers' channel-related behavior and retailer-related behavior

In the previous single-channel environment, customers pre-purchased and purchased in one retailer either from different retailers (switch/free-riding) or at a same retailer (retention) at the different stages of their purchase decision. In the multichannel environment though, channel switch and channel retention have to be considered as well. Since the number of retailers adopting a multichannel distribution strategy grows, consumers shopping behavior patterns have become more complex.

Consumer free-riding behavior consists in visiting several retailers during the different phases of the decision making process in the same or a different channel. Specifically, a consumer visits one retailer or several retailers during the pre-purchase phase and purchases from another retailer or from one of the retailers visited during the pre-purchase phase, adopting a cross-channel free-riding behavior pattern.

With this definition, we extend previous consumer switch/retention classification (Chui et al., 2011; Van Baal and Dach, 2005) by considering several retailers and several channels visits during the preparation phase. Furthermore, our study does not focus on a specific pattern of behavior link to a specific type of channel as it has been formerly done. Chui et al., (2011) only explored one type of cross-channel free riding behavior pattern: searching for product information in an online store and then purchasing in another brick-and-mortar store. However, searching offline at one retailer and then purchasing online at another retailer represents another kind of cross-channel free riding. We focus on a general cross-channel free-riding behavior pattern that is not linked to specific channels;

We consider two criteria to classify consumers' behavior patterns in a multichannel environment: channel-related and retailer-related switch. If we combine these two types of behavior, four different behavior patterns can be presented (Figure 1). Cross-channel free riding is the most market opportunistic consumer behavior. It indicates that a consumer switches channels and retailers during pre-purchase and purchase phases. Within-channel free riding indicates that consumers stay in the same channel for both stages but switch retailers. Cross-channel retention indicates that a consumer switches channels but sticks to one retailer during the different phases of the decision process. Finally, within-channel retention is the less market opportunistic consumer behavior. They stay loyal to one channel and one retailer.

Figure 1: Channel-related and retailer-related behavior matrix

	Cross-Channel	Within-Channel
Retailer Switch	<p>Cross-channel free-riding Consumers prepare a purchase at one of the channels of a company or at several companies, then purchase from another channel of one of the company visited or another.</p>	<p>Within-channel free-riding Consumers prepare a purchase at one of the channel of a company or at several companies, then purchase in the same channel of one of the company visited or another.</p>
Retailer Retention	<p>Cross-channel retention Consumers prepare a purchase in one of the channel of a company, then purchase from another channel of the same company.</p>	<p>Within-channel retention Consumers prepare a purchase and purchase from the same channel of the same company</p>

The problem of free riding has not received extensive attention in marketing yet (Van Baal and Dach, 2005). This concept has been applied in economics (Klein and Murphy, 1988), specifically on the consumption of public goods, for which it is difficult or impossible to

restrict access to (Nicholson 1985). In a retailing context, free riding occurs when a company is not able to charge separately for its services (product information). According to Singley and Williams (1995), product information displayed by retailers is similar to public goods because it is available both to purchasers and to non-purchasers. A person adopting a free-riding behavior pattern can for instance take advantage of a salesperson's time and expertise (asking product related questions, seeking advices) at one retailer and not purchasing at that one. Thus, one retailer may engage in the activities necessary to sell the product free, but a different lower-priced retailer may realize the final sale. In this perspective, Singley and Williams (1995) report that free riding erodes the motivation of any retailer to invest in promotions of its products. Furthermore, it lowers sales force morale resulting in reduced selling effectiveness and customer service (Tang and Xing, 2001).

Van Baal and Dach (2005) studied the cross-channel free-riding behavior pattern and report that one fifth of the customers they surveyed have adopted this behavior pattern. They also state that multichannel retailers are losing more customers across channels than retaining them. More recently, Chui et al. (2011) conclude that consumers' Internet experience has a positive effect on cross-channel free-riding intention. Thus, when consumers perceive themselves as highly capable of employing different channels for different purposes, they also have higher intentions to switch between retailers. However, none of them has considered the relationship between channel-related behavior and retailer-related behavior.

In a multichannel setting, consumers adopting a cross-channel free-riding behavior pattern pursue different utilities through various channels (Wind and Mahajan, 2002). Each channel involves specific costs and capabilities (e.g. range of products). For example, the Internet is convenient for searching information, because it provides a wide range of information at a low cost (Chevalier, 2002; Klein and Ford 2003). Furthermore, online search engines provide shopping information fast and easily. Free riding is also stimulated by the availability of product with varying services at different prices from different e-retailers and brick-and-mortar retailers. Therefore, it reduces the power of online and brick-and-mortar stores to control where consumers will search information and purchase (Ba et al. 2007) and gives more opportunity for consumers to free ride across different e-tailers or brick-and-mortar stores.

We assume that in a multichannel distribution context, a consumer adopting a cross-channel behavior pattern (he is aware of the channels' service and price levels difference) will be more likely to adopt a free-riding behavior pattern than a retailer retention behavior pattern because decision making process will be done through various channels mostly including the Internet. Since it is easier and faster to switch retailers on the Internet, the consumer will rather adopt a free-riding behavior pattern than a retailer retention behavior pattern. A person adopting a within-channel consumer behavior pattern will be more likely to adopt a retailer retention behavior pattern than a free-riding behavior pattern. Therefore, we suggest a relationship between channel-related behavior and retailer-related behavior to occur:

Hypothesis 1: consumers adopting a cross-channel (within-channel) behavior pattern will be more likely to adopt a free riding (retailer retention) behavior pattern rather than a retailer retention (free-riding) behavior pattern.

2) Shopping motives

Previous research suggests that four types of psychological factors influence consumer behavior: motivation, perception, learning and beliefs (Kotler and Armstrong, 2000).

Shopping motives represent a useful basis for understanding consumer outcomes such as channel choice (Balasubramanian et al., 2005), online shopping behavior (Ganesh et al., 2010) or multi-channel behavior (Schröder and Zaharia, 2008) and emerge as forces guiding consumers' behavior that satisfy internal needs (Westbrook & Black, 1985). It can be seen as a gratification's anticipation coming from a choice of product, brand or retail store.

Motivation theories suggest that human motives are primarily oriented towards individual gratification or satisfaction and gives clues as to the reasons why people shop. Both cognitive and affective motives help explain consumers' motivation to shop (Maslow, 1970 ; Tauber, 1972 ; McGuire, 1974 ; Hirschman and Holbrook, 1982). These motives have been examined across a range of retail contexts including store formats (e.g. Bellenger and Korgaonkar, 1980; Babin et al., 1994; Farrag et al., 2010), non-store formats (Eastlick and Feinberg, 1999, Rohm and Swaminathan, 2004; Soopramanien and Robertson, 2007; Christodoulides and

Mihaelidou, 2011) and multi-channel formats (Balasubramanian et al., 2005; Noble et al., 2005; Schröder and Zaharia, 2008). Balasubramanian et al. (2005) have identified that consumers select their channels at each stage of the decision process to fulfill their needs. These motives are utilitarian (Kaufmann-Scarborough et Lindquist, 2002 ; Noble et al., 2005 ; Balasubramanian et al. 2005 ; Konus et al., 2008 ; Schröder et Zaharia, 2008) and hedonic (Balasubramanian et al., 2005 ; Konus et al., 2008 ; Schröder et Zaharia, 2008)

However, specific motives emerge as having a key role in shopping, including *convenience* (Korgaonkar et Wolin, 1999 ; Verhoef et Langerak, 2001 ; Chiang et Dholakia, 2003 ; Rohm et Swaminathan, 2004 ; Balasubramanian et al., 2005 ; Soopramanien et al., 2007 ; Choi et Park, 2006 ; Schröder et Zaharia, 2008, Christodoulides et Michaelidou, 2011), *price comparison* (Noble et al., 2005 ; Choi et Park, 2006 ; Konus et al., 2008), *variety seeking* (Noble et al., 2005, Christodoulides et Mihaelidou, 2011), *shopping experience* (Childers et al., 2001 ; Wolfenbarger et Gilly, 2001 ; Shim et al., 2001 ; Rohm et Swaminathan, 2004, Choi et Park, 2006 ; Schröder et Zaharia, 2008).

Applying shopping motives concept for explaining channel choice and free riding during the different phases of the decision process seems to be appropriate. In fact, channel choice and free riding can be linked to a cognitive evaluation processing as well as an experiential one (Holbrook et Hirschman, 1982). Shopping motives can therefore be a relevant theory for understanding the reasons motivating a consumer to adopt a certain type of retailer-related and channel-related behavior pattern a mix of both patterns.

2.1 Convenience Orientation

Convenience orientation is one of the most studied motives in literature. Previous research identified convenience as a key motive of shopping both offline and online (Bellenger and Korgaonkar, 1980, Rohm and Swaminathan, 2004, Balasubramanian et al., 2005, Soopramanien et Robertson, 2007, Schröder and Zaharia, 2008 ; Christodoulides and Michaelidou, 2011)

Although there are various dimensions of convenience (Kaufman-Scarborough and Lindquist, 2002), convenience shoppers usually select a channel based upon time or effort savings (Eastlick and Feinberg, 1999; Rohm and Swaminathan, 2004). Convenience orientation

characterizes customers, who regard shopping as a rational problem-solving process (Bellenger and Korgaonkar, 1980). For these consumers, a product has to be acquired with a minimum investment of time, physical effort, and mental effort (Schröder and Zaharia, 2008). These authors include “access convenience”, “search convenience”, “possession convenience”, “transaction convenience”, and “time convenience” under the convenience orientation shopping motive.

Anderson and Srinivasan (2003) advocate that convenience-oriented shoppers are less likely to search for new providers, thus tending to be more loyal. Srinivasan et al. (2002) have also suggested that convenience has positive effects on e-satisfaction and e-loyalty. It can also be assumed that visiting several retailers during the decision-making process is time and effort demanding. On this basis, it is expected that a consumer would save time and energy by visiting only one retailer, thus adopting a retention behavior pattern rather than a free-riding behavior pattern.

Hypothesis 2.1: the more a consumer is convenience oriented, the more will he adopt a retention behavior pattern.

Schröder and Zaharia (2008) suggested that non-store channels (mail-order catalog, online-shop) are better fulfilling convenience motives because of the easier access to information that provide an opportunity to save time and energy (Akaah et al., 1995 ; Li et al., 1999). In addition, it is easier to obtain information on other products and suppliers especially on the Internet. Schröder and Zaharia (2008) noted that single-channel customers, especially online ones look for convenience during their decision process. Thus if we consider channel switch and free riding, we can assume that convenience oriented consumers would better adopt a within-channel retention behavior pattern rather than the three other patterns.

Hypothesis 2.2 : the more a consumer is convenience oriented, the more will he adopt a within-channel retention behavior pattern.

2.2 Independence orientation

Previous research (Lingenfelder and Loevenich (2001 ; Schröder and Zaharia, 2008) suggest that independence can be contrasted to convenience and therefore be seen as an aspect in its

own right even if Kaufman-Scarborough and Lindquist (2002) consider this motive as a part of the convenience orientation motive and designated time-related independence as “schedule convenience” and independence relating to the shopping location as “place convenience”. In fact, location becomes irrelevant in the online and multichannel shopping context. Consumers may be motivated by ordering online at home or at the office any time of day.

Schröder and Zaharia (2008) define independence orientation as *the customer's need to be able to shop free from external constraints, 24 h a day and 7 days a week, if they wish so, regardless of the retailer's location*. They found single-channel customers, especially online single-channel customers to be striving for independence during the decision process, therefore seeking the opportunity to obtain information and making purchases at any time and in any place.

Based on these results, we can assume that independence oriented consumers will be more likely to adopt a free-riding behavior pattern because they will probably use the Internet to fulfill their need for independence. Since it is easier to switch retailer during the decision process on the Internet, they will rather adopt a free riding behavior than a retailer retention behavior. We can also assume that they will use the Internet for preparing the purchase and purchasing because this channel better fits to free from external constraints shopping needs (permanent information and payment access). Therefore, they will be more likely to adopt a within-channel free-riding behavior pattern rather than the three other patterns.

Hypothesis 3.1: the more a consumer is seeking independence, the more will he adopt a free-riding behavior pattern.

Hypothesis 3.2. : the more a consumer is seeking independence, the more will he adopt a within-channel free-riding behavior pattern.

2.3 Price comparison

Price comparison refers to a consumer's to compare comparable product/ service prices across channels (Noble et al., 2005). Consumers motivated to compare prices are usually focused on paying low prices, which relates to savings. (Lichtenstein et al., 1990). Seeking information about price increases a consumer's knowledge thus reducing the perceived risk to make a wrong choice (Alba and Hutchinson, 1987).

Previous research have focused on the impact of price comparison on channel preference (Noble et al. 2005), store choice (Skallerud et al., 2009) and multi-channel consumer behavior (Konus et al., 2008). It has been suggested that consumers maintain particular perceptions of prices in specific channels (Verhoef et al., 2007) in terms of consumers resources needed (e.g. time, effort) and that it can influence channel choice (Montoya-Weiss, et al., 2003). The Internet provides consumers with a wide range of information at a low acquisition cost (Hoffman and Novak 1996), easier access to product prices and attributes comparisons (e.g. third party price comparison websites) and thus the greatest utilitarian value for those consumers willing to attain price comparisons (Degeratu et al., 2000 ; Noble et al. 2005). On the other hand more efforts such as travel costs and greater time investments (e.g., visiting multiple retail locations, etc.) are mandatory to compare prices across stores (Degeratu et al., 2000; Chatterjee, 2010) eventually lowering the channel's overall price comparison value to consumers in comparison to other channels.

In a multichannel perspective, Balasubramanian et al. (2005) and Konus et al. (2008) assert, that one of the key advantages of multichannel behavior might be finding good deals by recognizing attractive offers across channels and thus lower prices (Shankar et al., 2003). Therefore, price comparison consumers would search information and evaluate the products by switching channel and/or by switching retailers so that they can maximize utility. Multichannel consumers are supposed to be more price sensitive than other consumers segments such as single-channel consumers (Kushwaha and Shankar, 2008; Konus et al. 2008). Hence, we can suggest that price comparison oriented consumers will rather adopt a free-riding behavior and a cross-channel free-riding behavior since they can maximize the chance to find the lowest price and reduce the perceived risk to make a wrong choice.

Hypothesis 4.1: the more a consumer needs to compare prices of products, the more will he adopt a free-riding behavior pattern.

Hypothesis 4.2: the more a consumer needs to compare prices of products, the more will he adopt a cross-channel free-riding behavior pattern.

2.4 Variety seeking

Consumer behavior research has linked variety seeking to the need to maintain an ideal level of stimulation (e.g., an intrapersonal motive for novelty, complexity, or change) (Raju, 1980; Menon and Kahn, 1995). Repeat purchases of products reduce stimulation, leading to satiation and boredom (McAlister & Pessemier, 1982). Thus, in order to maintain an optimal stimulation level, consumers often switch brands and seek innovations (Price & Ridgway, 1982). Eastlick and Feinberg (1999) define variety seeking as the value a consumer derives from being exposed to a variety of merchandise. This utilitarian value provides a consumer an opportunity to examine a variety of complementary and substitutable products/services, offering the consumer the opportunity to optimize their time, place and possession needs.

Noble et al. (2005) explain that assortments are tied to channel types so that the Internet has a larger assortment in comparison to stores that have physical restrictions. Alba et al. (1997) and Berner (2004) argue that the Internet has a higher number of product categories as well as a larger number of alternatives per category. Thus, consumers oriented towards variety seeking gain more value on the Internet rather than on other channels. Furthermore, according to Rohm and Swaminathan (2004), variety seeking is an important motive in an online context, given consumers' enhanced ability to access and compare multiple offerings and providers on the Internet.

Some authors suggest that variety seeking has a negative effect on loyalty (Berné et al., 2001; Oliver, 1999). Variety seekers get bored with products very easily and tend to switch to alternative offerings or try new ones (Trivedi & Morgan, 2003; Van Trijp & Steenkamp, 1992). Moreover, Kumar and Venkatesan (2005) note that a consumer oriented towards variety seeking switches channels in order to attain a larger product assortment. Therefore, we could apply this perspective to channel switch and retailer free riding. Variety seeking is likely to be a significant motive in the free-riding and multichannel contexts. Given that variety seekers tend to get bored easily and prefer to try new things, we would assume that they would rather adopt a free-riding behavior pattern than a retailer retention behavior pattern and adopt a cross-channel free-riding behavior pattern rather than the three others.

Hypothesis 5.1: the more a consumer is seeking variety, the more will he adopt a free-riding behavior pattern.

Hypotheses 5.2: the more a consumer is seeking variety, the more will he adopt a cross-channel free-riding behavior pattern.

2.5 Shopping enjoyment

According to Babin et al. (1994), shopping has both entertainment and emotional benefits for many consumers that relates to hedonic utility. The shopping enjoyment orientation motive refers to those aspects of shopping that go beyond the mere acquisition of goods (Tauber, 1972) and that lead to enjoyment and pleasure (Hirschmann and Holbrook, 1982, Babin et al., 1994; Arnold and Reynolds, 2003). These include the emotional need for an interesting, enjoyable shopping experience (Bellenger and Korgaonkar, 1980 ; Jones, 1999) as well as fun and excitement consumers experience by trying new experiences (Forsythe et al. 2006).

The recreational shopper has been defined by Bellenger and Korgaonkar (1980) as one who enjoys shopping as a leisure-based activity, spends more time per shopping trip on average and is motivated by the process and enjoyment of the shopping experience itself, independent of product-specific or other task-directed objectives.

In a channel selection research context, Nicholson, et al., (2002) and Verhoef et al., (2007) find that shopping enjoyment may influence channel selection. The multi-sensual approach offered by brick and mortar stores results in a better ability to satisfy the recreational orientation motive compared to the non-store channels although some research on online shopping suggest that it can also be related to shopping enjoyment and plays a significant role (Childers et al., 2001, Arnold et Reynolds, 2003). In this line, Konus et al. (2008) state that the multichannel shoppers' segment in their study derives enjoyment from shopping more than the other shopper segments though Schröder and Zaharia (2008) reject this idea since shopping enjoyment only characterizes their offline single-channel segment. According to Konus et al. (2008), they maximize their utility by employing several channels for both search and purchase. Thus, shopping enjoyment shoppers seem not to be bothered by the extra time required to engage in extensive shopping. Since switching channels and switching retailers is time costing, we can assume that consumers enjoying shopping will more likely adopt a free-riding behavior pattern and a cross-channel free-riding behavior pattern than any other behavior patterns. In fact, consumers switching channels and retailers will experience different shopping settings (online/offline and different store design as well).

Hypothesis 6.1: the more a consumer is seeking shopping experiences, the more will he adopt a free-riding behavior.

Hypothesis 6.2: the more a consumer is seeking shopping experiences the more will he adopt a cross-channel free-riding behavior.

III) Method

750 French respondents completed an online survey in July 2010 on their past behavior for a non-food item recently purchased (less than twelve months). The standardized questionnaire consisted of two subject areas. The first subject area dealt with questions relating to the use of the channels and the retailers. For a recent buying process, respondents were asked to state the product category and the item within the product category that has been purchased. Six non-food product categories were proposed (furniture, electronic appliances, electronics, house linen, music-video-books, apparels and accessories). They were also asked to state the channel in which they had bought the item and the channels (if several) in which they prepared the purchase (information search and evaluation of possibilities). They could also indicate if they did not pass through a pre-purchase phase (“I did not prepare my purchase”).

Based on this information, we classified respondents either as cross-channel consumers or as within-channel consumers. Further, we asked if they had visited several retailers during their decision-making process (pre-purchase and purchase) and we additionally checked this information by asking the name of the retailer(s) they visited for pre-purchase and for purchase so that we could classify respondents as free-riding consumers or retailer retention consumers.

The second subject contained statements on the shopping motives (using a Likert scale from one to seven, where one indicates “Totally disagree” and five indicates “Totally agree”). Respondents were asked to give their answers in relation to shopping for this particular product category/item. We translated original Anglo-Saxon scales used in previous studies into French by using a back and forth translation technique consisting in one person

translating the scale, then two others translating items back to English¹. Thanks to this technique, we could check for misunderstandings and misspellings resulting from the translation².

Finally, respondents were asked for socio-demographic information such as age, gender, profession (French socio-professional structure), proximity to shopping places. We also asked if respondents had prepared a purchase or purchased a product through the Internet and catalogs during the last twelve months. A pre-test was conducted with 10 participants in order to check and improve the understandability of the questions and the viability of the questionnaire. Sample characteristics are described in Appendix A Table 1.

In the sampling, 58,5% were women. 40% of the respondents are aged between 31 and 50. The upper class group is overrepresented (46,4%) in comparison to the French socio-professional groups' structure. 99,5% of the respondents have an Internet access mostly via home or office Internet connexions and via their smartphones. This sample has significantly used the Internet for pre-purchase or for purchase in comparison to the catalog during the last twelve months before completing the questionnaire (93,2% have used the Internet for pre-purchase versus 54,9% the catalog and 88,4% have purchased through the Internet versus 32% in a catalog).

IV) Findings

1) Shopping motives

Shopping motives scales were subjected to exploratory factor analysis with principal component analysis and Varimax rotation. Five factors emerge that can be assigned to the motives, “convenience orientation”, “independence orientation”, and “price comparison orientation”, “variety-seeking orientation” and “recreational orientation”. The PCA results

¹ Persons asked for back and forth translation had to be English native speaker living in a French-speaking country for two years or French native speakers living in an Anglo-Saxon-speaking country for two years or English teachers in a French-speaking country.

² One translation issue is the term shopping whose translation to French is difficult because it can also mean shopping without a purchase-directed goal. Since we concentrated on purchase-directed shopping, we transformed this term into the terms pre-purchase and purchase.

fall in line with the a priori defined variables. Only items exhibiting the factor loadings' absolute value of 0.5 or greater were selected (Field, 2009)³. The reliability coefficient varied from 0.68 to 0.86 which is acceptable (See Table 1 Appendix B for details on the factor structure of the shopping motives and the reliability coefficients "Cronbach Alpha").

2) Relevant patterns of behavior

Respondents are divided up according to the channels used for pre-purchase and the channel used for purchase (Table 2). In the overall sample survey, cross-channel consumers dominate (70,6%)⁴ which confirms the predominance of these consumers as did previously Verhoef et al. (2007) and Choi and Park (2008) although Schröder and Zaharia (2008) and Van Baal and Dach (2005) found that single-channel users in their sample survey dominated⁵. When we consider the cross-channel segment, we note that only 13 respondents had done their pre-purchasing in one channel and purchased in another whereas the rest (489 respondents) pre-purchased in several channels and purchased either in one of the channel in which they pre-purchased or in a different one. Thus, almost 69% of the total sample respondents adopt a more complex cross-channel behavior than what has been formerly studied (one channel for pre-purchase different and a different one for purchase).

Respondents are also divided up according to the retailers visited during the pre-purchase and the purchase phases (Table 2). Free-riding consumers are those visiting different retailers during the decision process (pre-purchase and purchase) whereas retention retailer consumers are those visiting one same retailer for the two stages of the decision process. Free-riding behavior pattern dominates (67,5% of the sample respondents)⁶ that differ from Van Baal and Dach's results (2005) who found 45% customers of their sample adopting a free-riding behavior pattern⁷.

³ Item 3 from the variety seeking measure "*I like to try new and different products*" has been removed because of a factor loading score beneath 0,411.

⁴ 39 answers have been deleted because they mentioned not having prepared their purchase.

⁵ These differing results can be linked to different cross-channel consumers definition. We consider as cross-channel, a consumer visiting one channel for pre-purchase that is different from the one used for purchasing and also a consumer visiting several channels during prep-purchase. None of the previous studies considered the latter behavior pattern in their definition.

⁶ 39 answers have been deleted because they mentioned not having prepared their purchase.

⁷ Our definition of free-riding differs from the one proposed by Van Baal and Dach (2005). They consider free-riders as customers visiting one retailer for searching information and an other one for purchasing and retention

Table 2: Channel-related and retailer-related behavior patterns

Channel Behavior patterns	Frequencies	Percentage
Cross-channel	502	70,6
Within-channel	209	29,4
Retailer Behavior patterns		
Free-riding	480	67,5
Retailer Retention	231	32,5

If we combine both channel-related behavior patterns and retailer-related behavior patterns, we can propose four different patterns of behavior: cross-channel free riding, cross-channel retention, within-channel free riding, within-channel retention behavior patterns (Table 3). 50% of the sample respondents adopt a cross-channel free-riding behavior pattern. This result highlights the fact that researchers should pay particular attention to this specific pattern of behavior. Besides, 1/5 of respondents remains loyal to a retailer and a channel and therefore adopts a within-channel retention behavior pattern that represents an interesting segment for retailers.

Table 3: Channel-retailer-related behavior patterns

Behavior related to channels	Behavior related to retailers			
	Free-riding		Retention	
	Frequencies	% out of total	Frequencies	% out of total
Cross-channel	391	55	111	12,5
Within-channel	89	12,5	120	16,9

In principle, consumer segments do not differ in respect to socio-demographic characteristics. A contingency analysis to check the connection between channel-related behavior patterns, retailer-related behavior patterns, channel-retailer related four behavior patterns and socio-demographic characteristics produced no significant dependence.

retailer customers the ones consulting competitors websites and the retailer's website from whom they purchase in the information search phase. We consider the latter behavior as free-riding as well.

4.3. Contingency analysis between channel-related behavior and retailer-related behavior

A contingency analysis has been run to check for hypothesis 1. It produces a significant dependence $\chi^2 = 83,856$, d.f. = 1, $p = 0,000$, therefore we posit that when a consumer adopts a cross-channel behavior pattern, he will be more likely to adopt a free-riding behavior pattern rather than a retailer retention behavior pattern. When a consumer adopts a within-channel behavior pattern, he will be more likely to adopt a retailer retention behavior pattern rather than a free-riding behavior pattern. Hypothesis 1 is supported.

4.4. Comparison of retailer patterns of behavior and checking of hypotheses related to shopping motives

The two retailer-related behavior patterns can now be examined with regard to whether they differ significantly in terms of shopping motives. To check the hypotheses, we used logistic regression. As a result of logistic regression, H2.1, H3.1 and H4.1 are upheld. Nagelkerke R^2 (coefficient of determination for logistic regression) scores 0,080 which means that 8% of the total variance is explained by the model containing the five aforementioned shopping motives. Overall, the model correctly classifies 68,8% of the sample respondents although a 15,2% accuracy score for retailer retention consumers is observed (Table 1 Appendix C). Table 4 shows significant relationships between convenience orientation, independence orientation and price comparison orientation, and retailer related behavior patterns. The results indicate that independence oriented consumers are more likely adopting a free-riding behavior pattern than a retailer retention behavior pattern (Wald $\chi^2 = 7,155$, $p = 0,007$ ($0,005 < p < 0,01$), $\text{Exp}(B) = 1,165$). Hypothesis 3.1 is supported. Price comparison oriented consumers are also more likely adopting a free-riding behavior pattern than a retailer retention behavior pattern (Wald $\chi^2 = 13,049$, $p = 0,000$, $\text{Exp}(B) = 1,244$) therefore supporting Hypothesis 4.1. Besides, as we expected, convenience oriented consumers are more likely adopting a retailer retention behavior pattern than a free-riding behavior pattern (Wald $\chi^2 = 7,215$, $p = 0,000$, $\text{Exp}(B) = 0,840$). Hypothesis 2.1 is upheld. Finally, the results indicate that variety-seeking orientation and shopping enjoyment orientation do not explain both behavior patterns. Hypothesis 5.1 and 6.1 are rejected.

Price Comparison
 Independance
 Orientation
 Orientation

+
 +
 +

Free-riding behavior pattern
 Retailer retention behavior
 pattern

We can state that free riders are motivated by realizing the decision-making process free from place and schedule constraints and by comparing product prices as well. Retailer retention consumers are motivated by realizing the decision process in a minimum time, cognitive and temporal investment (Figure 2).

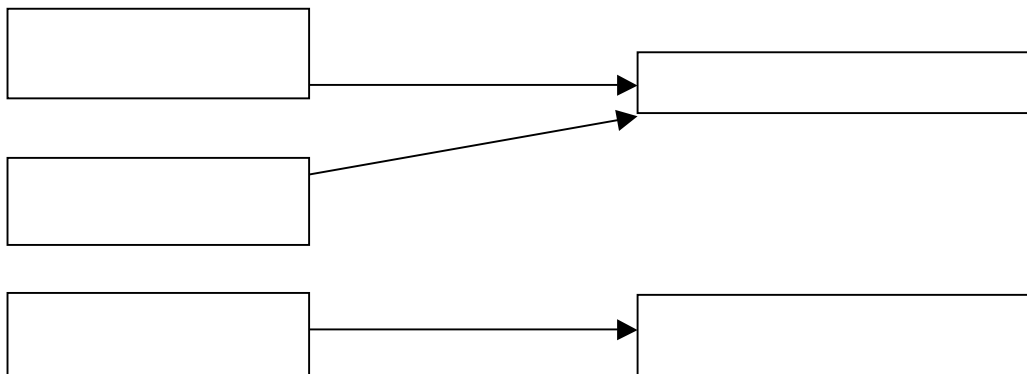
Table 4: Logistic regression of shopping motives explaining retailer behavior patterns

Step		A	E.S.	Wald	Ddl	Sig.	Exp(B)	IC pour Exp(B) 95%	
								Inferior	Superior
1	Convenience	-0,174	0,065	7,215	1	0,007*	0,840	0,740	0,954
	Independence	0,152	0,057	7,155	1	0,007*	1,165	1,042	1,302
	Shopping enjoyment	0,028	0,058	0,236	1	0,627	1,028	0,918	1,151
	Price comparison	0,219	0,061	13,049	1	0,000**	1,244	1,105	1,401
	Variety-seeking	0,051	0,066	0,602	1	0,438	1,053	0,925	1,198
	Constant	-0,639	0,551	1,345	1	0,246	0,528		

0 = retailer retention behavior pattern; 1 = free-riding behavior pattern

* = (0,01 > p) ; ** = (0,001 > p)

Figure 2: Direction of the relationship direction between shopping motives and retailer-related behavior patterns



4.5. Comparison of channel-retailer-related patterns of behavior and checking of hypotheses related to shopping motives

The four channel-retailer related patterns of behavior are also examined with regard to whether they differ significantly in terms of the shopping motives. To check the hypotheses mean comparison and discriminant analysis are used.

Table 5 specifies the four behavior patterns based on the five shopping motives. As we measure the five shopping motives using the same scale, the table provides information on the motives' ranking within a behavior pattern. Shopping enjoyment has the least score for the four behavior patterns meaning that this motive is not the one that mostly is taken into account by consumers. Convenience orientation is ranked first except for the cross-channel free-riding group (independence takes first place) which means the aspects concerning time and effort savings are extremely important to them.

Table 5: Specification of four behavior patterns according to shopping motives

	Cross-channel free-riding		Cross-channel retention		Within-channel free-riding		Within-channel retention	
	A	R	A	R	A	R	A	R
Convenience	5,38	2	5,45	1	5,61	1	5,91	1
Independence	5,79	1	5,41	2	5,56	2	5,22	2
Price comparison	5,35	3	4,89	3	5,41	3	4,63	4
Variety-seeking	5,33	4	4,95	4	5,23	4	4,93	3
Shopping enjoyment	4,53	5	4,49	5	4,88	5	4,15	5

A = Average; R = Ranking

As a result of mean comparison, all the five shopping motives explain these four behavior patterns (Table 6). However not all the hypotheses are upheld. As we expected, “within-channel retention” consumers are the most convenience oriented consumers of the four groups. Thus, the more convenience oriented a consumer is, the more likely will he adopt a within-channel retention behavior pattern. Concerning independence orientation, results indicate that the more independence oriented a consumer is, the more will he adopt a cross-channel free-riding behavior pattern. We expected independence oriented consumers to adopt predominantly a within-channel free-riding behavior pattern. When it comes to variety-seeking orientation, the more a consumer seeks product variety, the more will he adopt a cross-channel free-riding behavior pattern. This is in line with our expectations. Concerning

shopping enjoyment, the more a consumer enjoys shopping, the more will he adopt a within-channel free-riding behavior pattern. We expected those consumers to be more likely to adopt a within-channel retention behavior pattern. Finally, the more price comparison oriented a consumer is, the more will he adopt a within-channel free-riding behavior pattern. This is contrary to our expectations since we assumed that they would principally adopt a cross-channel free-riding behavior pattern.

Table 6: Shopping motives mean comparison for explaining the channel-retailer-related patterns of behavior

	Within-channel free-riding	Within-channel retention	Cross-channel free-riding	Cross-channel retention	Sig.
Convenience orientation	5,6067	5,9083	5,3772	5,4459	0,002*
Independence orientation	5,5562	5,2167	5,7928	5,4099	0,001**
Shopping enjoyment orientation	4,8764	4,1500	4,5303	4,4895	0,007*
Price comparison orientation	5,4101	4,6250	5,3504	4,8851	0,000**
Variety-seeking orientation	5,2303	4,9292	5,3274	4,9505	0,009*

* = (0,01 > p); ** = (0,001 ≥ p)

In order to check the validity of the mean comparison results, a discriminant analysis has been conducted. The four patterns of behavior differ significantly in terms of the discriminant function which is a combination of the shopping motives (Wilks' lambda = 0,900, $\chi^2 = 74,028$, d.f. = 21, $p = 0,000$). This function explains 75,4% of the variance. Three of the five shopping motives discriminate significantly between the four patterns of behavior.

In order to interpret this function, standardized canonical discriminant function coefficients, structure matrix and functions at group centroid are analyzed. Price comparison has the most important loading, followed by convenience orientation then independence orientation. The first two are positively correlated to the function; the latter is negatively correlated to the function (Appendix C Table 2). We consider group centroid for each behavior pattern to show relationships between the aforementioned shopping motives of the four behavior patterns (Table 7).

Table 7: Function at group centroid

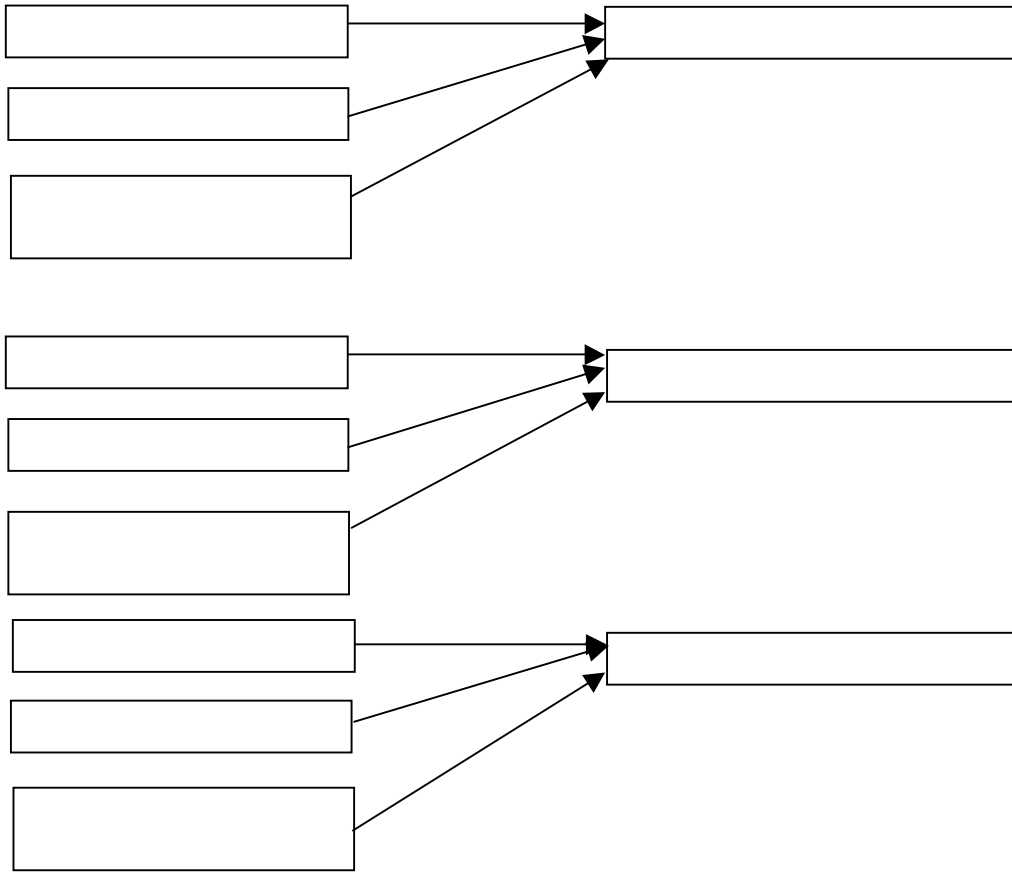
Group	Function 1
Within-channel free-riding	0,057
Within-channel retention	-0,535
Cross-channel free-riding	0,198
Cross-channel retention	-0,163

“Within-channel retention” consumers and “cross-channel retention” consumers are similar in terms of shopping motives. The first ones though have stronger needs than the latter. Both groups need more convenience during the decision process than the other two patterns of behavior. Thus, the more consumers seek convenience, the more will they adopt a within-channel retention behavior pattern and second, a cross-channel retention behavior pattern. These results support H.2.2 so did the mean comparison results.

Concerning “cross-channel free-riding” consumers, results show that they are looking for independence and price comparison during the decision process whereas the other groups do not. Thus, the more a consumer is seeking independence, the more will he adopt a cross-channel free-riding behavior pattern. Therefore, we support H3.2 though mean comparison results rejected it. In the same line, we assumed that price comparison oriented consumers are more likely adopting a cross-channel free-riding behavior pattern than the three other patterns, which supports H4.2 (rejected in the mean comparison analysis). None of the shopping motives included in our study were able to characterize the within-channel free-riding behavior pattern. Finally, hypothesis H5.2 and H6.2 are not supported since they are not related to the four behavior patterns.

Mean comparisons and discriminant analysis lead to different results. We decide to choose the most reliable results that are the discriminant analysis ones. Thus, only three hypotheses concerning channel-retailer-related behavior patterns are supported (H.2.2, H3.2 and H4.2). Direction of the relationships between shopping motives and the three behavior patterns are described in Figure 3.

Figure 3: Direction of the relationships between the shopping motives and the channel-retailer-related behavior patterns



V) Discussion

With this study, we explore several issues about channel-related and retailer-related behavior patterns. Based on free-riding and shopping motives literatures, we explain why consumers engage in different patterns of behavior. First, we state that contrary to the majority of the studies on multichannel consumer behavior focusing on consumers visiting one channel for pre-purchase and another channel for purchase, our study reveals that consumers adopt predominantly a more complex multichannel behavior consisting in visiting several channels during the pre-purchase phase. Further research need to consider this segment as they represent the majority.

Then we posit that free riding is a rising phenomenon that retailers have to take into account. In fact, 65% of the sample respondents mentioned having adopted a free-riding behavior pattern for purchasing a non-food product.

We discovered that consumers adopting a cross-channel behavior pattern are more likely adopting a free-riding behavior pattern rather than a retention behavior pattern and that those adopting a within-channel behavior pattern are more likely adopting a retailer retention behavior pattern rather than a free-riding behavior pattern. This result echoes the ones from Van Baal and Dach (2005) since the multichannel retailer they studied was losing more customers across channels than he retained. This can be one major disadvantage of this multichannel tendency though single channel competitors can also suffer from this phenomenon (consumers would at last not visit them because it is not possible to search information and purchase via different channels). Hence, can shopping through various channels engender more price-sensitiveness and volatile oriented consumers?

Studying shopping motives is one answer to that question. Price comparison orientation and independence orientation explains the free-riding behavior pattern. This consumer segment needs to compare product prices and need to be free to achieve the decision making process anywhere and at anytime. They focus on price aspects, searching the lowest price or deals and are therefore more inclined to be non-loyal and act opportunistically. It seems also important to them to be free of time and schedule constraints to achieve their decision process. This aspect could be link to a specific type of channel, the Internet, which fulfills this need. In fact, 81,5% of free riders adopted a cross-channel behavior pattern that is, use the Internet either for pre-purchasing or for purchasing. We decided to check for the rest of the free riders adopting a within channel behavior pattern. We conducted additional analysis to check for the channel type. Results show that 60% of the consumers adopting a free-riding within-channel behavior pattern have done it through a brick and mortar store. This means surprisingly that free riding is even stronger in an offline context rather than an online context when consumers stick to one channel during the decision-making process.

On the other hand, “retailer retention” consumers are looking for fulfilling a convenience need. This seems to be logical since visiting only one retailer requires less time, physical efforts and cognitive efforts than visiting several ones. We can mention that channels, the

Internet and the brick-and-mortar store are relatively equal when it comes to providing efforts. A physical investment (transportation is needed to visit a brick-and-mortar stores whereas online channels is time constraining when it comes to wait for product delivery and requires more cognitive effort than a brick-and-mortar store. To reduce shopping efforts, this consumer segment will probably be inertial-loyal⁸ to a retailer because it would take too much time and cognitive effort to switch retailers.

If we go one step further by looking at both channel-related behavior patterns and retailer-related behavior patterns together, we can make some interesting comments. More than 50% of the sample respondents are adopting a cross-channel free-riding behavior. This result gives interesting insight into the complexity of behavior patterns due to the use of the Internet and the existence of multichannel distribution strategies and is in line with results from Chui et al. (2011). The question of how to retain customers represents a crucial issue in multichannel environment. Consumers act opportunistically by changing channels and retailers depending on the product offers, pricing or promotion campaigns. Retailers facilitating consumer shopping experience through different channels and proposing a larger product assortment would also facilitate consumers' retailers switch. Thus, a trade-off has to be done in terms of financial investment and marketing activities (same promotional campaigns, product assortment different in each channel) needed to provide a seamless consumer experience through different channels (service level, salesperson training and incentives, website ergonomics).

When it comes to shopping motives explaining free-riding and retailer retention behavior patterns and channel-retailer-related behavior patterns together (except for the pattern of behavior within-channel free-riding for which none of the shopping motives analyzed in this research have an explanatory power, we can mention that cross-channel free-riding behavior pattern and within-channel retention behavior pattern are opposed.

Consumers adopting a cross-channel free-riding behavior pattern are price-comparison oriented and independence oriented. These results make sense because they visit several channels and thus the likelihood to retailers' switch increases. The more a consumer is

⁸ Inertial-loyal consumers are loyal because it would take to much energy and time to switch retailers and not necessarily because they have a positive attitude towards the retailer or are satisfied with it.

oriented toward price comparison, the more will he switch retailers and channels in order to see more products, deals and to find lower prices.

“Within-channel retention” consumers and “cross-channel retention” consumers as well are convenience oriented and not price comparison oriented and independence oriented. Since switching channels and retailers requires time, cognitive efforts and physical efforts, consumers who need to do their shopping with a minimum time, physical and cognitive investments would rather stick to one channel and one retailer than any other behavior pattern.

VI) Managerial Implications

This study contributes to knowledge by showing that utilitarian shopping motives in particular, price comparison orientation, independence orientation and convenience orientation significantly explain free-riding/retention behavior patterns and channel-retailer-related behavior patterns (except cross-channel retention behavior pattern). Hedonic motives seem to have no influence at explaining these behavior patterns. Thus, focusing on channel aesthetic elements (website design, ergonomics, store design, etc...) though important aspects, are not key behavior drivers when it comes to channel and retailer choice. Cross-channel free riders for instance are only focusing on utilitarian aspects that are link to price and schedule constraints and within-channel retention and cross-channel retention consumers on utilitarian aspects link to convenience. Thus, our study goes one step further by identifying the specific motives explaining these behavior patterns.

With regard to the patterns of behavior we investigate, shopping motives are well suited for explaining different consumer segments. Therefore, we give some directions to managers to focus on those specific motives affecting these behavior patterns. This could be used to fine tune promotion strategies by focusing on convenience, price and independence and by developing specific strategies for each consumer segment. Retention strategies should focus on satisfying consumers' need for convenience that is facilitating shopping either in stores or on the website. A database registering all the consumer's personal information and purchase information collected through the store and the company's website needs to be created. Sales force should have access to these data and be more efficient to offer consumers savings in terms of time and effort. Furthermore, mobile applications could help these consumers

prepare purchase and check for product availability without going to a brick-and-mortar store to check for it.

If a company is oriented toward attracting cross-channel free-riders given that this segment represents the majority of our respondents (50% of our sample survey) and those from Chui et al. (2011) and given that cross-channel consumers have been evidenced to be more attractive than other segments in previous research (Shankar and Winer, 2005; Venkatesan et al., 2007, Neslin and Shankar, 2009), it should adopt a channel differentiated promotion strategy, for instance offering different deals in each channel, so that consumers need to visit each channel to find the best deals. Since this segment is not focusing on physical and cognitive constraints, it will enjoy going in stores and websites to find these special offers. Moreover, managers should propose comparison tools (price and product characteristics) on their website in order to satisfy the need to compare prices and to realize shopping without place constraints. Finally, they could also develop mobile applications that would satisfy these consumers need to realize the decision process at any time of the day and from anywhere.

Mobile commerce seems to represent an interesting way to satisfy both consumer segments and research needs more understanding of this new phenomenon that has an impact on the way people shop like multichannel strategy had a couple of years before.

This study finally provides useful insights into one of the counter-effect related to the tremendous growth of multichannel distribution strategy adoption since consumers have more opportunities to switch retailers during the decision-making process. Our results show that if a large number of retailers are offering various channels to shop, consumers will be more likely to engage in free riding. Our purpose is not to give advice to retreat to single-channel strategies; it is to warn managers about a possible negative effect of multichannel retailing strategies on customer retention and the company financial performance in the long run.

VI) Limitations and further research

The first limitation concerns the problem of external validity. Further research could consider comparative results between product categories and between services and goods in order to check for behavior patterns differences.

Other factors, such as experience with a retailer, degree of differentiation of product categories or loyalty to a retailer may also influence consumer behavior and can be examined in future research. Finally, the current study considers multichannel search and purchase in a cross-sectional perspective. Additional research might instead collect longitudinal data during the different stages of consumers' shopping process. The use of diaries or videos to follow consumers' decision during each stage of the decision process can be appropriate. A further study could focus on consumers' specific channel use by analyzing the impact of channel characteristics on the four patterns of behavior identified. A special focus could be done on mobile commerce, since its use is growing. The use of smartphones engenders even more consumer behavior complexity in a multi-channel environment by leading to ubiquitous activities (e.g. searching information in the store of one retailer and checking on competitors' website while in the store). It seems important to take this new phenomenon into account. Finally, a customer empowerment perspective could be used as a theoretical background to improve our understanding of the cross-channel free-riding behavior pattern.

VII References

- Akaah, I.P., Korgaonkar, P.K., Lund, D., (1995), Direct marketing attitudes, *Journal of Business Research*, 34, 3, 211–219.
- Alba, J., Lynch, J., Weitz, B., Janiszewski, C., Lutz, R., Sawyer, A., Wood, S., (1997), Interactive home shopping, consumer, retailer and manufacturer incentives to participate in electronic marketplaces, *Journal of Marketing*, 61, July, 38–53.
- Alba J. & Hutchinson, W; (1987), "Dimensions of Consumer Expertise," *Journal of Consumer Research*, 13, March, 411-54.
- Anderson, R.E., & Srinivasan, S.S., (2003), E-satisfaction and e-loyalty: A contingency framework, *Psychology and Marketing*, 20(2), 123–138.
- Arnold, M.J. & Reynolds, K.E. (2003), Hedonic shopping motives, *Journal of Retailing*, 79, 77-95.
- Ba, S., Stallaert, J., & Zhang, Z., (2007) Price competition in e-tailing under service and recognition differentiation, *Electronic Commerce Research and Applications*, 6, 3, 322–331.
- Babin, B.G., Darden, W.R & Griffin, M. (1994), Work and/or fun : measuring hedonic and utilitarian shopping value, *Journal of Consumer Research*, 20, March, 644-656.

- Balasubramanian S., Raghunathan R. & Mahajan V. (2005), Consumers in a multichannel environment: product utility, process utility and channel choice, *Journal of Interactive Marketing*, 19, Printemps, 12-30.
- Bellenger, D.N. & Korgaonkar, P.K. (1980), Profiling the recreational shopper, *Journal of Retailing*, 56, 3, 77-92.
- Berner, R. (2004), Retail : this rising tide won't lift all boats, *Business Week*, 3865, 114.
- Berné, C., Mugica, J.M., & Yagüe, M.J. (2001). The effect of variety-seeking on customer retention in services. *Journal of Retailing and Consumer Services*, 8(6), 335–345.
- Chatterjee, P. (2010), Causes and consequences of 'order online pick up in-store' shopping behavior, *The International Review of Retail, Distribution and Consumer Research*, 20, 4, September, 431-448.
- Cheng, J.M.-S., Tsao, S.-M., Tsai, W.-H. & Tu, H. H.-J. (2007), Will eChannel additions increase the financial performance of the firm?—The evidence from Taiwan, *Industrial Marketing Management*, 36, 50–57.
- Chevalier, J.A. (2002), *Free riders issues and Internet retailing*, <http://www/ftc.gov/opp/e-commerce/anticompetitive> (Visited April the 18th 2008).
- Chiang, K.-P. & Dholakia, R.R. (2003), Factors driving consumer intention to shop online : an empirical investigation, *Journal of Consumer Psychology*, 13,1/2, 177-183.
- Childers, T.L., Carr, C.L., Peck, J. & Carson, S. (2001), Hedonic and utilitarian motivations for online retail shopping behavior, *Journal of Retailing*, 77, 511-535.
- Choi, J. & Park, J. (2008), Multichannel retailing in Korea : effects of shopping orientations and information seeking patterns on channel choice behavior, *International Journal of Retail and Distribution Management*, 34, 8, 577-596.
- Christodoulides, G. & Michaelidou, N. (2011), Shopping motives as antecedents of e-satisfaction and e-loyalty, *Journal of Marketing Management*, 27, 1/2, February, 181-197.
- Chui, H-C, Hsieh, Y-C, Roan, J., Tseng, K-J & Hsieh, J-K, (2011), The challenge for multichannel services: Cross-channel free-riding behavior, *Electronic Commerce Research and Applications*, 10, 268–277.
- Degeratu, A.M., Rangaswamy, A. & Wu, J. (2000), Consumer choice behavior in online and traditional supermarkets : the effects of brand name, price and other search attributes, *International Journal of Research in Marketing*, 17, 1, 55-78.
- Deleersnyder, B., Geyskens, I., Gielens, K. & Dekimpe, M.G. (2002), How cannibalistic is the Internet channel ? *International Journal of Research in Marketing*, 19, 4, 337-348.
- Dholakia, R., Zhao, M. & Dholakia, N. (2005), Multichannel retailing: a case study of early experiences, *Journal of Interactive Marketing*, 19, Printemps, 63-74
- Eastlick, M.A. & Feinberg, R.A. (1999), Shopping motives for mail catalog shopping, *Journal of Business Research*, 45, 281-290.
- Falk, T. Shepers J., Hammerschmidt, M. & Bauer, H. (2007), Identifying cross-channel dissynergies for multichannel service providers, *Journal of Service Research*, 10, Novembre, 143-160.

- Farrag D.G., El Sayed, I.S. & Belk, R.W. (2010), Mall shopping motives and activities: a multimethod approach, *Journal of International Consumer Marketing*, 22, 95-115.
- Forsythe, S., Liu, C., Shannon, D. & Gardner, L.C. (2006), Development of a scale to measure the perceived benefits and risks of online shopping, *Journal of Interactive Marketing*, 20, 2, 55-75.
- Ganesh, J., Reynolds, K.E., Lockett, M. & Pomirleanu, N., (2010), Online shopper motivations, and e-store attributes: an examination of online patronage behavior and shopper typologies, *Journal of Retailing*, 86, 1, March, 106-115.
- Geyskens, I., Gielens, K. & Dekimpe, M. G. (2002), The market valuation of Internet channel additions, *Journal of Marketing*, 66, 2, 102-119.
- Hirschman, E.C. & Holbrook, M.B. (1982), Hedonic consumption : emerging concepts, methods and propositions, *Journal of Marketing*, 46, Été, 92-101.
- Hoffman, D.L. & Novak, T.P. (1996), Marketing in hypermedia computer-mediated environments: conceptual foundations, *Journal of Marketing*, 60, July, 50-68.
- Holbrook, B.M. & Hirschman, E.C. (1982), The experiential aspects of consumption: consumer fantasies, feelings and fun, *Journal of Consumer Research*, 9, Septembre, 132-140.
- Jones, M.A. (1999), Entertaining shopping experiences: an exploratory investigation, *Journal of Retailing and Consumer Services*, 6, 129-139.
- Kaufman-Scarborough, C. & Lindquist, J.D. (2002), E-shopping in a multiple channel environment, *The Journal of Consumer Marketing*, 19, 4/5, 333-350.
- Klein, L. R. & Ford, G. T, (2003), Consumer search for information in the digital age: an empirical study of prepurchase search for automobiles, *Journal of Interactive Marketing*, 17, 3, 29-49.
- Klein, B. & Murphy, K.M. (1988), Vertical restraints as contract enforcement mechanisms, *The Journal of Law and Economics*, 31, October, 265-297.
- Konus, U., Verhoef, P.C. & Nelson, S.A. (2008), Multichannel shopper segments and their covariates, *Journal of Retailing*, 84, 4, 398-413.
- Kotler, P. & Armstrong, G. (2000), *Marketing: an introduction*, 5th Edition, Upper Saddle River, NJ: Pearson Prentice Hall.
- Korgaonkar, P.K. & Wolin, L.D. (1999), A multivariate analysis of web usage, *Journal of Advertising Research*, 39, 2, 53-68.
- Kumar, V. & Venkatesan, R. (2005), Who are the multichannel shoppers and how do they perform? : correlates of multichannel shopping behavior, *Journal of Interactive Marketing*, 19, 2, 44-62.
- Kushwaha, T.L. & Shankar, V. (2008), Single channel vs. multichannel retail customers: correlates and consequences, working paper, *Texas A&M University*, College Station, TX 77845.
- Li, H., Kuo, C. & Russel, M.G. (1999), The impact of perceived channel utilities, shopping orientations and demographics on the consumer's online buying behavior, *Journal of Computer-Mediated Communication*, 5, 2, 1-20.

- Lichtenstein, D.R., Netemeyer, R.G. & Burton, S. (1990), Distinguishing coupon proneness from value-consciousness : an acquisition-transaction utility theory perspective, *Journal of Marketing*, 54, Juillet, 54-67.
- Lingenfelder, M. & Loevenich, P. (2001), Die Identifikation und Bearbeitung von Internet-Käufern. In: Diller, H. (Ed.), *Der moderne Verbraucher -Neue Befunde zum Verbraucherverhalten*, Nürnberg, 133–160.
- Maslow, A.H. (1970), *Motivation and Personality*, 2^{ème} édition, Harper & Row, New York.
- McAlister, L. & Passemier, E. (1982), Variety seeking behavior: an interdisciplinary review », *Journal of Consumer Research*, 9, Décembre, 141-150.
- McGuire, W. (1974), Psychological motives and communication gratification, dans J.F. Blumler et Katz (eds), *The uses of masse communications : current perspectives on gratification research*, Beverly Hills, Sage Publications, 106-167.
- Menon, S., & Kahn, B.E. (1995), The impact of context on variety seeking in product choices, *Journal of Consumer Research*, 22, 285–295.
- Montoya-Weiss, M.M., Voss, G.B. & Grewal, D. (2003), Determinants of online channel use and overall satisfaction with a relational, multichannel service provider, *Journal of the Academy of Marketing Science*, 31, 4, 448-458.
- Neslin, S.A., Grewal, D., Leghorn, R., Venkatesh, S.S., Teerling, M.L., Thomas, J.S. & Verhoef, P.C. (2006), Challenges and opportunities in multichannel customer management, *Journal of Service Research*, 9, 2, 95-112.
- Neslin, S.A. & Shankar, V. (2009), Key issues in multichannel customer management : current knowledge and future directions, *Journal of Interactive Marketing*, 23, 1, 70-81.
- Nicholson, W. (1985), *Microeconomic Theory*, Dryden Press, Chicago.
- Nicholson, M., Clarke, I. & Blakemore, M. (2002), One brand, three ways to shop: situational variables and multichannel consumer behaviour, *The International Journal Review of Retail, Distribution and Consumer Research*, 12, 2, 131-148.
- Noble, S.M., Griffith, D.A. & Weinberger, M.G. (2005), Consumer derived utilitarian value and channel utilization in a multi-channel retail context, *Journal of Business Research*, 58, 1643-1651.
- Oliver, R.L. (1999), Whence consumer loyalty ? *Journal of Marketing*, 63, 3, 33–44.
- Price, L.L., & Ridgway, N.M. (1982), *Use innovativeness, vicarious exploration and purchase exploration: Three facets of consumer varied behaviour*. In B. J.Walker, W.O. Bearden, W. R. Darden, P.E. Murphy, J.R. Nevin, J.C. Olson & B.A. Weitz. (Eds.), *Proceedings of the AMA Educators Conference (56–60)*. Chicago: American Marketing Association.
- Raju, P.S. (1980), Optimum stimulation level: its relationship to personality, demographics and exploratory behavior, *Journal of Consumer Research*, Décembre, 272 – 282.
- Rohm, A.J. & Swaminathan, V. (2004), A typology of online shoppers based on shopping motivations, *Journal of Business Research*, 57, 748-757.

- Schroeder, H. & Zaharia, S. (2008), Linking multi-channel customer behaviour with shopping motives: an empirical investigation of a german retailer, *Journal of Retailing and Consumer Services*, 15, 6, 452–468.
- Shankar, V., Smith, A. & Rangaswamy, A. (2003), The relationship between customer satisfaction and loyalty in online and offline environments,” *International Journal of Research in Marketing*, 20, 2, 153–75.
- Shankar, V. & Winer, R.S. (2005), Interactive marketing goes multichannel, *Journal of Interactive Marketing*, 19, 2, 2-3.
- Sharma, A. & Mehrota, A. (2007), Choosing an optimal channel mix in multichannel environments, *Industrial Marketing Management*, 36, 21-28.
- Shim, S., Eastlick, M.A., Lotz, S.L. & Warrington, P. (2001), An online pre-purchase intentions model : the role of intention to search, *Journal of Retailing*, 77, 397-416.
- Skallerud, K., Korneliussen, T. & Olsen, S.O. (2009), An examination of consumers’ cross-shopping behavior, *Journal of Retailing and Consumer Services*, 16, 181-189.
- Soopramanien, D.G.R. & Robertson, A. (2007), Adoption and usage of online shopping : an empirical analysis of the characteristics of buyers, browsers and non-internet shoppers, *Journal of Retailing and Consumer Services*, 14, 73-82.
- Srinivasan, S.S., Anderson, R., & Ponnnavolu, K. (2002). Customer loyalty in e-commerce: An exploration of its antecedents and consequences. *Journal of Retailing*, 78(1), 41–50.
- Stingley, R.B. & Williams, M.R. (1995), Free-riding in retail stores : an investigation of its perceived prevalence and costs, *Journal of Marketing Theory and Practice*, Spring, 64-74.
- Tauber, E.M. (1972), Why do people shop ?, *Journal of Marketing*, 36, Octobre, 46-59.
- Trivedi, M., & Morgan, N.S., (2003), Promotional evaluation and response among variety seeking segments, *Journal of Product and Brand Management*, 12, (6/7), 408–425.
- Vanheems, R. (2009), Distribution multi-canal, pourquoi les clients mixtes doivent faire l’objet d’une attention particulière, *Décisions et Marketing*, 55, 41-52.
- Van Baal, S. & Dach, C. (2005), Free-riding and customer retention across retailers’ channel, *Journal of Interactive Marketing*, 19, 2, 75-85.
- Van Trijp, H.C.M., & Steenkamp, J.-B.E.M. (1992), Consumers variety seeking tendency with respect to foods: measurement and managerial implications, *European Review of Agricultural Economics*, 19, 181–195.
- Venkatesan, R, Kumar, V. & Ravishanker, N. (2007), Multichannel shopping : causes and consequences, *Journal of Marketing*, 71, Avril, 114-132.
- Verhoef, P.C. & Langerak, F. (2001), Possible determinants of consumers’ adoption of electronic grocery shopping in Netherlands,” *Journal of Retailing and Consumer Services*, 8, 5, 275–278.

Verhoef, P.C., Neslin, S.A. & Vroomen, B. (2007), Multichannel customer management : understanding research-shopper phenomenon, *International Journal of Research in Marketing*, 24, 129-148.

Westbrook, R.A. & Black, W.C. (1985), A motivation-based shopper typology, *Journal of Retailing*, 61, 78-103.

Wind, Y. & Mahajan, V. (2002), Convergence marketing, *Journal of Interactive Marketing*, 16, 2, spring.

Wolfenbarger, M. & Gilly, M.C. (2001), Shopping online for freedom, control, and fun, *California Management Review*, 43, 2, Hiver, 34-55.

Wolk, A. & Skiera, B. (2009), Antecedents and consequences of Internet channel performance, *Journal of Retailing and Consumer Services*, 16, 163-173.

Appendix A

Table 1: Sample characteristics (N=750)

	Frequencies	Percentage		Frequencies	Percentage
Gender			Age		
Male	311	41,5	Less than 21	18	2,4
Female	439	58,5	21 to 30	343	45,7
Status			31 to 50	300	40
Craftsmen and merchants	37	4,9	More than 50	89	11,9
Employees	143	19,1	Proximity to commercial centers		
Executives and intellectual professions	348	46,4	Less than 10 minutes	403	53,7
Workers	11	1,5	10 to 30 minutes	306	40,8
Intermediary profession	88	11,7	30 to 45 minutes	31	4,1
Retired and Unemployed persons	39	5,2	More than 45 minutes	10	1,3
Others	4	0,5%			
Internet use for pre-purchase and purchase (last 12 months)			Catalog use for pre-purchase and purchase (last 12 months)		
Pre-purchase	699	93,2	Pre-purchase	412	54,9
Purchase	662	88,3	Purchase	240	32

Appendix B

Table 1: Results of principal components analysis and reliability analysis

	Convenience	Independence	Price Comparison	Variety Seeking	Shopping enjoyment	Reliability (C.Alpha)
Shopping should not take too much time	0,876					0,685
Shopping should be easy to do	0,876					
I like shopping from home		0,884				0,718
I like shopping around the clock (24/7)		0,884				
I often compare product prices across retailers to get the lowest price			0,762			
I usually find myself price comparison shopping			0,759			
I often find myself looking for the exact same product at different outlets to find the lowest price			0,825			0,892
It is important for me to have the best price for the product.			0,682			
I like to have access to many brands when I shop				0,885		
I like to have access to a wide selection of products when I shop				0,885		0,870
Shopping is fun					0,819	
Shopping is enjoyable					0,837	0,868
Shopping is a leisure activity					0,741	

Appendix C

Table 1: Classification table

Observed		Predicted		
		Free-riding	Retailer retention	Correct percentage
Step 1	Cross-channel	454	26	94,6
	Within-channel	196	35	15,2
	Global percentage			68,8

Table 2: Standardized canonical discriminant function coefficients and structure matrix

Variables	Standardized coefficients	Structure matrix
Convenience	-0,564	-0,475
Independence	0,494	0,537
Shopping enjoyment	0,066	0,337
Price comparison	0,565	0,722
Variety-seeking	0,084	0,438