Identifying Central And Peripheral Dimensions Of Store And Website Image: Applying The Elaboration Likelihood Model To Multichannel Retailing

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ABSTRACT

Could the difficulties that retailers face in creating a seamless, cross-channel experience be due to the fact that their stores and website activate such different central and peripheral routes to persuasion that perfect transferability between channels is not possible?

By relying on a rigorous and innovative dual-step methodology, this study provides a solid support for research aimed at identifying other channel-related central and peripheral elements. Although perceptual structure of the two channels is very similar, the store and website have no central or peripheral dimension in common.

To enhance fluidity between its channels, a multi-channel retailer cannot rely on the customers’ perceived integration of its channels. However, the retailer can easily orient its customers toward a given channel, by appealing to their enduring involvement. Finally, pricing and sales promotions are both peripheral dimensions: the former influences in-store buying and the latter, website buying.

Keywords: Multichannel Retailing; Elaboration Likelihood Model; Store Image; Website Image; Price

1. INTRODUCTION

Retailers are often advised to create a seamless cross-channel experience (Rosenbloom, 2007) in order to enhance overall sales, while satisfying their customers’ need for autonomy (Payne and Frow, 2004), and reducing the risk of free-riding toward competitors (Pookulangara, Hawley, and Xiao, 2011). Perceived channel integration (identical product offering, identical pricing, identical services, etc.) is regarded as a prerequisite for achieving that goal (Schoenbachler and Gordon, 2002; Rosenbloom, 2007). The more there is a need to create a total, coherent customer experience, the greater the desired level of cross-channel interaction must be (Payne and Frow, 2004).

However, in spite of the rapid disappearance of organisational silos, the consumer’s journey between a retailer’s channels has continued to be a bumpy one (Rosenbloom, 2007). The explanation frequently given is the lack of coherence between the information provided by each of the retailer’s channels (Kwon and Lennon, 2009; Lee and Kim, 2010; Badrinarayanan et al, 2012). By placing all or part of their channels’ image dimensions (offering, pricing, sales promotions, customer service, etc.) on equal footing1, retailers should, theoretically, be able to achieve complete or partial integration; which would resolve the problem for the most part, if not entirely.

1 This research focuses on the image-related dimensions of retail channels. Hansen and Deutscher (1977) use the term “dimension” to describe the highest categorization level for store image (merchandise selection, price ranges, etc.) and the term “attribute” to describe the components of this dimension.
Yet, a second explanation is possible. In spite of cross-channel coherency, the perceived integration would be weakened or become entirely ineffective if, by their very nature, the channels’ image dimensions do not affect the customer purchasing process in the same way in the store and on the website. Indeed, advice and customer service could take on added importance in luring customers to buy from stores (Goldsmith, Flynn, and Clark, 2005), whereas websites could gain in customer attraction by virtue of their rich product offering and favourable pricing policies (Brynjolfsson, Smith, and Hu, 2003). Might it not be possible, then, that central-route elements perceived to be at work in the store become peripheral elements on the website, which hinders transferability between these channels (Mariadoss et al, 2010)? In that light, this study focuses exclusively on that new aspect of the total explanation. If it were demonstrated that a retailer’s website and stores exhibit the same central and peripheral dimensions, the lack of perceived channel integration could be attributed, quite simply, to the comparatively different intensity in image dimensions (Explanation 1); otherwise, this phenomenon could be explained by the difference in nature between the channels themselves (Explanation 2).

In an effort to identify the central and peripheral route elements associated with each channel, and then compare them, this study makes use of the Elaboration Likelihood Model (ELM). This model was previously used to evaluate the impact of several characteristics of the store (Bitner and Obermiller, 1985) or websites (Eroglu, Machleit, and Davis, 2001; Richard, 2005; Warden, Wu, and Tsay, 2006) on the consumer decision-making process. However, no research has yet applied it to both the website and stores belonging to a single multichannel retailer, to compare consumer perception and the effects of each channel’s respective image dimensions.

Drawing on a sample of 1,015 of multichannel customers, i.e. consumers who purchase from the multichannel retailer’s website as well as from its stores, this study looks, first, at ELM and its applications to stores and websites, and then assesses certain research hypotheses. From an empirical standpoint, it will examine perceptual structure of both channels and investigate their central and peripheral components. The discussion compares the findings in order to answer the research question. This approach also makes it possible to draw a better distinction between the effects of pricing and sales promotions, by channel.

2. CONCEPTUAL FRAMEWORK

2.1. Overview of the Elaboration Likelihood Model and Routes to Persuasion

Petty and Cacioppo’s ELM model is widely used in advertising and sponsorship to explain and predict cognitive processes (MacInnis and Jaworski, 1989; McKenzie and Lutz, 1989; Sengupta, Goodstein, and Boninger, 1997; Kirmani and Shiv, 1998). Indeed, persuasive advertising consists not only of strengthening or modifying consumer attitude toward a brand or a product (Lee and Schumann, 2004), but, also, getting the consumer to act on that attitude.

In the past, psychology researchers identified two routes to persuasion that both lead to a change in attitude. The central route is based on thoughtful consideration of an issue that is “not necessarily rational” (Petty, Cacioppo, and Schumann 1983, p143); it is governed by information that is deemed to be relevant in motivating consumer action. In contrast, the peripheral route involves following “simple decision rules,” when the consumer relies on “various positive and negative cues” that occur in a specific situation (Petty, Cacioppo, and Schumann 1983, p 143).

The key contribution of ELM is that it explains the individual’s choice of route of persuasion, in light of its degree of personal involvement. It is based on likelihood elaboration, which "reflects the extent to which information in working memory is integrated with prior knowledge structures" (MacInnis and Price 1987, p 475). Petty and Cacioppo (1979) challenged the Social Judgment Theory (Sherif and Hovland, 1961), which speculated that it is more difficult to persuade highly involved individuals, especially when the information conveyed is inconsistent with their initial mental schema. According to Petty and Cacioppo (1979), subjects exposed to convincing counter-attitudinal arguments can undergo a change in initial attitude, even those who are intrinsically motivated to achieve the final outcome and are not influenced by immediate situational rewards. What matters is no longer whether the arguments are pro- or counter-attitudinal, but, rather, “the nature of the cognitive responses elicited” (Petty and Cacioppo 1979, p 1923).
Taking the central route to persuasion is more a question of the quality rather than the source, of the message (Petty and Cacioppo, 1979; Petty and Cacioppo, 1981; Petty and Cacioppo, 1984b). It is the route taken by individuals who have a high level of involvement with a task or a product, who have a strong need for cognition, or who are in a bad mood. The route’s three characteristics, whether acting separately or together, trigger an enhanced level of elaborative effort, leading to a more analytical processing of information (Sar, Duff, and Angheleev, 2011) and a greater likelihood of undergoing an attitude change when faced with a strong argument (Eagly and Warren, 1976). However, Petty and Cacioppo have focused primarily on the role of involvement, while regarding the other elaboration conditions as marginal factors.

Conversely, low-involvement subjects take the peripheral route. They assign the utmost importance to the source of the message, relying on factors such as expertise, trustworthiness, and attractiveness, when deciding to accept or reject a message. The more arguments there are (versus the personal relevance of the message), the more inexperienced subjects, or those with low involvement, are likely to be influenced to change their decision (Petty, Cacioppo, and Goldman, 1981).

In practice, soap makers activate central routes to persuasion when creating advertisements whereas luxury brands focus on peripheral factors, and firms such as L’Oréal, Nutella or Kinder rely on a combination of both approaches (De Barnier, 2006).

2.2. The Elaboration Likelihood Model Applied to Retail Channels

In the fields of both physical distribution and electronic distribution, some studies have also relied on ELM to gain insight into how stores or websites appeal to consumers. Nevertheless, their contributions are limited, for two conceptual or methodological reasons.

From a conceptual perspective, those studies investigate only a small part of the perception of the retail channel under examination: most often, atmospherics (Obermiller and Bitner, 1984; Eroglu, Machleit, and Davis, 2001; Richard, 2005). However, atmospherics constitute merely one aspect of the concept of image, which is best seen as “the way in which the store is defined in the shopper’s mind, partly by its functional qualities and partly by an aura of psychological attributes” (Martineau 1958, p 47). Moreover, scholarly literature has pointed out ten or so other channel image dimensions (Mazursky and Jacoby, 1986; Ghosh, 1994; Hopkins and Alford, 2001). Spiller and Lohse (1997) and Van der Heijden and Verhagen (2004) demonstrate that these dimensions also apply to websites. Bèzes (2014) confirmed that store and e-tail image possess ten dimensions: product offering, price ranges, layout, accessibility, sales promotions, customer service, institution (presentation of the retailer as featured in the channel), advice, reputation and connections with the other channels. It is these dimensions of image that will serve as the basis of this study.

The second limitation apparent in past studies is methodological, in two respects. They contend, solely by intuition, that certain cues are either central or peripheral. In general, no preliminary empirical analysis was undertaken with consumers into what shaped their perception of the retail channel, for example, by making a clear distinction between what constitutes intrinsic characteristics of a channel as opposed to its more extrinsic aspects. Only Mazursky and Jacoby (1986) carried out such earlier analytical work on store image; but they drew direct conclusions from their multi-dimensional analysis regarding the central or peripheral nature of each dimension. In ELM, however, the labels “central” or “peripheral” are validated only after analysing the consumer cognitive process, while taking into account the moderating effects of respondents’ involvement. In other words, it is not the information per se that is central or peripheral, but, rather, merely the individual’s perception of it (Pham 1996). A recent study by Zhou (2012) has provided a good illustration of the two methodological flaws we observed. This author assumed that information quality and service quality would serve as antecedents to central route persuasion in building trust in online mobile banking whereas system and Internet browsing quality would serve as antecedents to peripheral route persuasion. But in demonstrating that point, he never used level of involvement as a moderator variable.

That is why, besides broadening the scope of variables (analysing two channels based on ten image dimensions), this study differs from earlier research in that it uses a methodology that draws on two steps, which are
intentionally kept separate. The decision to rely on this rigorous methodology is based on conceptualising central and peripheral routes of persuasion while applying ELM.

3. RESEARCH HYPOTHESES

The first step entails defining a theoretical framework and then empirically validating the two intrinsic and extrinsic components that underlie the store and website image (Hypotheses 1 to 4). Indeed, in the ELM model, the dimensions that make up these two components are assumed to activate the routes to persuasion. Hypotheses 5 to 8 seek to demonstrate with certainty that the dimensions can be regarded as central or peripheral.

3.1. First step: Identifying Channels’ Intrinsic and Extrinsic Dimensions

The central route to persuasion is viewed as being based on the intrinsic characteristics of the object under consideration. Miyazaki, Grewal and Goodstein (2005, p. 146) recognise that intrinsic attributes are “inseparable” from the physical product. Accordingly, Petty, Cacioppo and Schuman (1983) identify the central arguments behind an ad for a razor as those that are intrinsic to the product and the most functional (e.g., blade angle). By comparing the impact of an ad in developed and emerging countries, Zarantonello, Jedidi and Schmitt (2013) also establish a link between functional and central aspects of the message.

In contrast, the peripheral route is activated by extrinsic attributes of the object or action at issue. Miyazaki, Grewal and Goodstein (2005) regard as extrinsic the non-physical features of the product, which, when modified, do not affect the product’s material properties. Low-involvement individuals base their assessments on the extrinsic attributes of the message that resonate with their own behaviour or present a “transient situational utility” (Petty, Cacioppo, and Schuman 1983, p. 136). To take another example involving the ad for a razor, Petty, Cacioppo and Schuman (1983) refer to messages making weak arguments for the product (e.g., the variety of shapes and colours). Zarantonello, Jedidi and Schmitt (2013) also establish a link between the highly experiential aspects of the message and the peripheral aspects.

3.1.1. Intrinsic and Extrinsic Dimensions of Store Image

Citing fifteen store image attributes, Mazursky and Jacoby (1986) have broken them down into four broad categories: price range and sales promotions; range of merchandise and brands; store location and layout; and, lastly, policy and service. In the authors’ view, pricing and sales promotions constitute central, and thus intrinsic, message cues of store image because, for the researchers, any initiative to change a store’s pricing policy image requires modifying all other store features. That would not be the case with attributes deemed to be peripheral, such as the return of goods policy. This point of view closely parallels that adopted by retailers surveyed by Oppewal and Timmermans (1997).

However, borrowing Petty and Cacioppo’s terminology, product price is a peripheral and extrinsic cue. Zaichkowsky (1988) shows that price constitutes a major cue for low-involvement buyers because it is readily available and determinable, entailing the exertion of little cognitive effort to choose between two alternatives. On the other hand, it decreases in importance for high-involvement individuals. Purohit and Srivastava (2001) also classify price among low scope cues (and thus, intrinsic and peripheral cues), because it can send a false signal that affects solely novice or low involvement consumers. By contrast, store reputation requires deeper involvement to evolve over time and, as a result, is a more reliable indicator. Miyazaki, Grewal and Goodstein (2005) also classify price, warranties and guarantees, country of origin and product brand name among extrinsic product attributes.

Thang and Tan (2003) show that store preference is determined, first, by product offering, then by a store’s accessibility, reputation, customer service, store atmospherics and, lastly, sales promotions. Their study confirms the findings advanced by Lindquist (1974), who suggested that a store’s product offering dominates store image, taking precedence before price range, accessibility, service and sales staff. Although the store is the focus of the study (and no longer merely a contextual element of the product buying process), its accessibility, range of merchandise, advice offered, after-sales service and reputation thus constitute intrinsic attributes of the store. Indeed, the store would be altogether different if it were relocated (city centre versus city outskirts), if it no longer offered the same product
categories, if it replaced the sales staff with a full self-service format, if it no longer handled the repair of defective products on site, or if a change in management were to lead to a substantial modification in its previous customer service policy. Any such shifts would likely bring about long-lasting changes in the store image and its attractiveness.

On the other hand, Obermiller and Bitner (1984)\(^2\) identified store atmospherics as an important peripheral cue for low involvement buyers, having no effect on high involvement individuals. Nonetheless, in their study, atmospherics are studied in the context of product evaluation and not store evaluation, as a factor that can generate or reinforce peripheral cues, insofar as it is extrinsic to the tangible product. Furthermore, the concept that is of particular interest, here, is that store layout is viewed as incorporating store atmospherics, as well as the store’s design elements and its merchandising journey. But what would Ikea be without its famous in-store journey or Abercrombie & Fitch, without its highly experiential store environment? When retailers develop such a strong and unique store concept (as is also the case for the retailer that is the subject of this study), store layout can be seen as being, without question, an intrinsic attribute. These studies suggest that:

**H1:** The store’s (a) accessibility, (b) layout, (c) product offering (d), advice, (e) customer service and (f) reputation constitute intrinsic attributes of the store. They act together to form a single component, which underlies and dominates store image.

Conversely, for reasons already mentioned, price, sales promotions, the connections with the other channels, and the manner in which the store communicates about the retailer as an institution, may be regarded as extrinsic attributes of the store. They are prone to rapid swings, in line with changing economic circumstances.

**H2:** The store’s (a) pricing, (b) sales promotions, (c) link with the other retail channels and (d) the manner in which the store enhances the retailer’s positive image (institution), may be regarded as extrinsic attributes of the store.

They act together to form a single component, which plays a less structuring, and more secondary, role.

### 3.1.2. Intrinsic and Extrinsic Dimensions of Website Image

More authors rely on the Elaboration Likelihood Model in the e-commerce sector, no doubt because it has a closer similarity with communication channels (Eighmey, 1997). On the other hand, as is the case with stores, research focuses primarily on website atmospherics.

For their part, Eroglu, Machleit and Davis (2001) treat atmospherics as forming two classes of cues: “high task-relevant” cues and “low task-relevant” cues. The former consist of texts or images on the screen, including browsing display options, which are intended to help the online consumer attain his shopping goal, as he navigates through sequences ranging from product descriptions to return policies. Such cues appear to engage the attention of goal-oriented consumers focused on central cognitive process (Eroglu, Machleit, and Davis, 2001). By applying S-O-R (Stimulus-Organism-Response) and ELM to an e-commerce context, Richard (2005) shows that all high task-relevant cues (browsing conditions, website structure and organisation, useful and up-to-date information) are utilised in the central route taken by Information Seekers. Even if Warden, Wu and Tsay (2006) do not take into account the online consumers’ degree of involvement, their findings also remain consistent with the expected results derived from ELM: the central route was found to be used by web surfers who desired to minimise the need to travel, optimise access to information and have proof of secure payment (Time Savers and Information Seekers). Low task-relevant cues consist of the decor (colours, music, animation, games, icons, etc.). They are not directly consequential to completing the purchasing task but enhance customer enjoyment or facilitate readability (Eroglu, Machleit, and Davis, 2001). Hedonic consumers find them particularly appealing, but they risk antagonising utilitarian customers. Richard (2005) as well as Park, Lee and Han (2007), show that entertaining website atmospherics are viewed by casual browsers, above all, as peripheral cues. Except for Information Seekers who are very interested and highly involved in, the purchase of the product (Park, Lee, and Han, 2007), the peripheral route would be taken by consumers who give precedence to website usability, price comparisons and the protection of personal information (Warden, Wu, and Tsay, 2006).

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\(^2\) Cited by Bitner and Obermiller (1985).
All these observations corroborate the idea that a central route is activated by intrinsic features of the website and a peripheral route by extrinsic features. The website can thus have a structure that closely approximates that of stores. The intrinsic component of the website could include website accessibility (Warden, Wu, and Tsay, 2006), its reputation, its range of products and the website layout. In fact, for the purposes of the study, the latter attribute encompasses not only website atmospherics (low-task relevant cues) but also two crucial factors on Internet: navigation conditions and ability to use the website to locate the appropriate information (high-task relevant, according to Richard 2005 or Eroglu, Machleit, and Davis 2001). On the other hand, advice and customer service, which are associated less with the website than with the store, could be considered to be extrinsic attributes, along the same lines as pricing, sales promotions, the connections with the other channels, and the website’s ability to promote the retailer’s image as an institution. These studies suggest that:

**H3:** The website’s (a) accessibility, (b) layout, (c) product offering, and (d) its reputation constitute intrinsic features of the website. They act together to form a first component, which underlies and dominates the image of the website.

**H4:** The website’s (a) product pricing, (b) sales promotions, (c) advice, (d) after-sales service, (e) connections with the other channels, and (f) the manner in which the website enhances the retailer’s positive image (institution), may be regarded as extrinsic features play a less structuring, and more secondary, role.

### 3.2. Second Step: Identifying Channels’ Central and Peripheral Dimensions

After that basic but necessary overview of the aspects underlying store and website image, let us now consider how image dimensions identified as intrinsic or extrinsic to the channel have been qualified, with certainty, as central or peripheral. For it must be borne in mind that a channel feature may play an important role, without being deemed to constitute a central-route feature according to ELM. For example, Birtwistle, Clarke and Freatty (1999) highlight the importance of pricing, compared to store layout, in consumer perception of fashion retail outlets, but nothing supports their assessment that pricing constitutes a central route feature for these outlets, whereas layout constitutes a peripheral route feature. Similarly, the fact that pricing constitutes one of the three main components of store image (Morschett, Swoboda, and Foscht, 2005) is no guaranty that this component activates a central route to persuasion. To ascertain the nature of these factors under ELM, they must have varying impacts on consumer attitudes, depending on the respondents’ degree of involvement (Miniard, Dickson, and Lord, 1988; Zaichkowsky, 1988; Macken and Spreng, 1992): Hypotheses H5 to H8.

#### 3.2.1. Enduring Involvement as a Key Criterion under the Elaboration Likelihood Model

Involvement is the key criterion in ELM, when making a distinction between the routes to persuasion. Defined as “personal relevance” (e.g., Petty, Cacioppo and Schumann, 1983) or (as) an individual’s subjective feeling of the importance of the judgment process or importance of the object about which judgment is being made (e.g. Mantel and Kardes 1999)” (Zhang and Markman 2001, p 15), it reflects the individual’s outcome dependency. Whether it is motivated by personal, enduring involvement, or by a short-term and situational interest, “felt involvement” (Celsi and Olson 1988, p 210) dictates the way in which the information is processed: analytically, in the case of high-involvement individuals, holistically by those who exhibit the least involvement (Fiske et al, 1987). The more the subjects’ involvement is motivated by personal and situational factors, the more they concentrate their attention on product-related information (Celsi and Olson, 1988).

Involvement tends to be enduring when it is linked to the individual’s intrinsic attributes and appeals to past experiences stored in long-term memory; it tends to be situational depending on the perceived risk associated with “physical and social aspects of the immediate environment” (Celsi and Olson 1988, p 211). The authors note, however, that, as a matter of convenience, the studies (e.g. in the experiments conducted by Park, Lee and Han 2007) devote more attention to situational involvement than to enduring involvement. That is why Celsi and Olson take into account both of these types of involvements, by evaluating the subjects’ level of enduring involvement and arranged for two procedures to generate different levels of temporal involvement, based on whether or not the individual participated in a lottery. To avoid making the analysis yet more complex, the present study will focus solely on the effects of enduring involvement, the key criterion under ELM, by inducing the same level of high situational involvement among all respondents.
3.2.2. Central Dimensions of Website and Store Image

ELM explains and predicts changes in attitude induced by activating one of two possible routes to persuasion. That is why McKenzie and Lutz (1989), Pham (1996) as well as Karson and Fisher (2005) use attitude and not intention as the dependent variable, to identify the central and peripheral routes to persuasion. The hypotheses advanced in this study reflect the same choice.

Central route cues guide high-involvement consumers (Petty, Cacioppo, and Schumann, 1983), especially when they are motivated to make an irreversible purchase of expensive, high-risk products (Bitner and Obermiller, 1985). Their decision-making process is influenced more by intrinsic and central cues than by cues that are extrinsic and peripheral to the object in question (Miniard, Dickson, and Lord, 1988). The change in attitude is brought about by exerting a considerable cognitive effort, entailing a rapid yet thorough examination of the most relevant cues, which are not necessarily the greatest in number (Petty and Cacioppo, 1979; Chaiken, 1980; Petty, Cacioppo, and Godman, 1981; Borgida and Howard-Pitney, 1983; Bitner and Obermiller, 1985), regardless of the attractiveness, trustworthiness, and expertise of the source of the message (Petty and Cacioppo, 1984b). Petty, Cacioppo and Goldman (1981, p 853) explain this careful and effortful consideration of information as growing out of these consumers’ desire to make a “reasoned” opinion that will be “more adaptive” and “easier to defend,” but also growing out of their advanced cognitive abilities, based on a larger array of information memorised earlier (mental schema). Moreover, Bagozzi and Burnkrant (1979) have established a relationship between individuals’ high level of involvement and their attitude dominated by a cognitive component, notably when preparing to make a complex purchase.

Although such a change in attitude is more difficult to induce in the case of a highly involved individual, it is “relatively enduring and predictive of behavior” due to the cognitive efforts employed to evaluate counter-arguments (Petty, Cacioppo, and Schumann 1983, p 135).

Literature suggests that the central route to persuasion is viewed as being based on the intrinsic characteristics of the channel under study.

**H5:** As intrinsic dimensions, a store’s (a) accessibility (b) layout, (c), product offering (d), advice, (e) customer service and (f) reputation, do not have a significant impact on the consumer’s attitude towards in-store purchasing except for customers who are highly involved in the product in question. These dimensions can thus be considered to be central for the purposes of ELM.

**H6:** As intrinsic dimensions, a website’s (a) accessibility, (b) layout, (c) product offering and (d) reputation do not have a significant impact on the consumer’s attitude towards website purchasing except for customers who are highly involved in the product in question. These dimensions can thus be considered to be central for the purposes of ELM.

3.2.3. Peripheral Dimensions of Website and Store Image

Regardless of the quality of the message contents (Petty and Cacioppo, 1984b), the peripheral route to persuasion is employed by low-involvement consumers making impulse purchases (Bitner and Obermiller, 1985). They attribute greater importance to the number of arguments and extrinsic cues (Miniard, Dickson and Lord, 1988; Sengupta, Goodstein, and Boninger, 1997): experts versus non-experts, celebrities versus “average citizens” (Petty and Cacioppo 1984b, p 669). In addition, Bagozzi and Burnkrant (1979) show that, with low-involvement individuals, the affective component of attitude towards the object prevails. Literature suggests that the peripheral route to persuasion is viewed as being based on the extrinsic characteristics of the channel under study.

**H7:** As extrinsic dimensions, the store’s (a) product pricing, (b) sales promotions, (c) connections with the other channels and (d) the manner in which the store enhances the retailer’s positive image (institution), do not have a significant impact on the consumer’s attitude towards in-store purchasing except for customers who have low involvement in the product in question. These dimensions can thus be considered to be peripheral for the purposes of ELM.
H8: As extrinsic dimensions, the website’s (a) product pricing, (b) sales promotions, (c) advice, (d) customer service, (e) connections with the other channels, and (f) the manner in which the website enhances the retailer’s positive image (institution), do not have a significant impact on the consumer’s attitude towards website purchasing except for customers who have low involvement in the product in question. These dimensions can thus be considered to be peripheral for the purposes of ELM.

4. METHODOLOGY

This study deals with the website and stores of a French multichannel retailer specialising in technical and cultural products. It entailed an online questionnaire survey of 1,015 multichannel purchasers, extracted from the retailer’s behavioural databases. 68% of the sample population were men. The average age is 47.6. 55.1% of them reside in cities with fewer than 50,000 inhabitants; 27.2% live in large cities (with more than 200,000 inhabitants). Their educational level is high: 81% have earned higher-education degrees. They regularly patronise both retail channels (92% visit the website at least once a month; 59.2% shop at the retailer’s store with the same regularity). During the past two years, the respondents have all made a purchase online as well as in the retailer’s store under study. Each respondent evaluated both the website and the stores, in turn, based on the purchase of a product: namely, a digital camera, whether bought through the website or at one of the stores operated by the retailer being evaluated.

For each construct\(^3\), respondents gave answers on a 7-point Likert Scale. Product offering (6 items), price (5 items), layout (4 items), accessibility (4 items), sales promotions (3 items), customer service (3 items), manner in which the channel communicates about the retailer as an institution (3 items), advice (3 items), reputation (3 items) and connections with the other channels (4 items) are the ten store and website image dimensions examined. All of these scales were validated by Bèzes (2014). They all have the distinctive feature of measuring each image dimension using precisely the same evaluation items for the website and the stores, in order to facilitate comparisons between channels. All scales demonstrated very satisfactory psychometric properties: CR>0.85 and AVE>0.58).

The scale measuring attitudes toward website and in-store purchasing is that devised by Jarvenpaa, Tractinsky and Vitale (2000). It shows excellent psychometric properties for both the website and the stores: CR>0.95 and AVE>0.86.

The Strazziéri scale (1994) is frequently used in France to measure enduring involvement. It offers the advantage of using items very similar to those employed by Zaichkowsky (1985) while being more limited in scope. 4 items were chosen for their high psychometric performance (CR=0.87 and AVE=0.64). Level of involvement was measured with respect to the digital camera that was the focus of the study. By organising a lottery to win this product, the participants were placed on the same level of situational involvement (Celsi and Olson, 1988). Respondents were primarily involved in the purchase of digital cameras (mean: 4.96; standard deviation: 1.24): 79.4% were involved or showed very high involvement in this type of product; 20.6% showed low or no involvement.

5. FINDINGS

5.1. What is the Perceptual Structure of store and Website?

To test the first four hypotheses, principal component analyses have been performed on the ten dimensions contributing to the image of the stores and the website. The study was not intended to validate these dimensions psychometrically or test their underlying connection to the concept of image (such a study was already conducted), but sought, rather, to determine whether the dimensions would indeed make it possible to classify the image of the channel into two distinct components, one intrinsic, the other extrinsic. As the correlation matrix does not allow a Varimax rotation, these analyses were performed while relying on an Oblimin rotation. For both channels examined, the KMO is always above 0.8 and Bartlett’s test always significant at 0.00. Loadings below 0.4 do not appear in tables 1 and 2.

\(^3\) Scales and tables available upon request.

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As expected, only two components with eigenvalues above 1 contribute to defining store image (Table 1). The first component, which can be qualified as intrinsic to stores, explains more than 43% of the variance. As a dominant component, it encompasses product offering, accessibility, customer service, advice, reputation and store layout. Hypotheses H1a, H1b, H1c, H1d, H1e and H1f are therefore affirmed. Nevertheless, the intrinsic component of the store also includes sales promotions. Their presence, even in a marginal way, attests to their offline influence (Degeratu, Rangaswamy, and Wu, 2000).

The second component, which can be qualified as extrinsic to the store, explains more than 12% of the variance. It encompasses the connection with the retailer’s other channels, the manner in which the store communicates on the retailer (institution) and pricing. H2a, H2c and H2d are affirmed. However, H2b is rejected due to the presence, as noted earlier, of sales promotions in the intrinsic component of the store.

Table 1. Factor analysis of store image

<table>
<thead>
<tr>
<th>Store image dimensions</th>
<th>Communalities</th>
<th>Component 1</th>
<th>Component 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Store reputation</td>
<td>0.625</td>
<td>0.794</td>
<td></td>
</tr>
<tr>
<td>Store offering</td>
<td>0.563</td>
<td>0.780</td>
<td></td>
</tr>
<tr>
<td>Store accessibility</td>
<td>0.485</td>
<td>0.747</td>
<td></td>
</tr>
<tr>
<td>Store layout</td>
<td>0.642</td>
<td>0.744</td>
<td></td>
</tr>
<tr>
<td>Store customer service</td>
<td>0.440</td>
<td>0.586</td>
<td></td>
</tr>
<tr>
<td>Store advice</td>
<td>0.509</td>
<td>0.579</td>
<td></td>
</tr>
<tr>
<td>Store promotions</td>
<td>0.469</td>
<td>0.468</td>
<td></td>
</tr>
<tr>
<td>Store connections with the other channels</td>
<td>0.699</td>
<td>0.889</td>
<td></td>
</tr>
<tr>
<td>Store price</td>
<td>0.563</td>
<td>0.682</td>
<td></td>
</tr>
<tr>
<td>Store institution</td>
<td>0.544</td>
<td>0.620</td>
<td></td>
</tr>
<tr>
<td>Variance explained (%)</td>
<td></td>
<td>43.115</td>
<td>12.295</td>
</tr>
<tr>
<td>Eigenvalues</td>
<td>4.312</td>
<td>1.230</td>
<td></td>
</tr>
<tr>
<td>Bartlett’s test</td>
<td>0.000 (45 df)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>KMO index</td>
<td>0.882</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Website image is also built upon two components (Table 2). The first component, which is intrinsic to the website (more than 44% of explained variance), encompasses accessibility, product offering, reputation, sales promotions and website layout. H3a, H3b, H3c and H3d are affirmed. However, as was the case with stores, sales promotions must be added.

The second component (11.5% of the explained variance) encompasses extrinsic dimensions, which aspects that are either closely linked with the source (institution, connections with the other channels), or which were already identified as peripheral by Warden, Wu and Tsay (pricing) or relatively marginal with regards to the website (customer service, advice versus information). H4a, H4c, H4d, H4e and H4f are affirmed. However, H4b is disaffirmed, in consideration of the inclusion of sales promotions in the intrinsic component of the website.

Table 2. Factor analysis of website image

<table>
<thead>
<tr>
<th>Website image dimensions</th>
<th>Communalities</th>
<th>Component 1</th>
<th>Component 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Website accessibility</td>
<td>0.698</td>
<td>0.917</td>
<td></td>
</tr>
<tr>
<td>Website offering</td>
<td>0.599</td>
<td>0.780</td>
<td></td>
</tr>
<tr>
<td>Website reputation</td>
<td>0.623</td>
<td>0.697</td>
<td></td>
</tr>
<tr>
<td>Website layout</td>
<td>0.654</td>
<td>0.663</td>
<td></td>
</tr>
<tr>
<td>Website promotions</td>
<td>0.513</td>
<td>0.553</td>
<td></td>
</tr>
<tr>
<td>Website institution</td>
<td>0.562</td>
<td>0.782</td>
<td></td>
</tr>
<tr>
<td>Website price</td>
<td>0.572</td>
<td>0.775</td>
<td></td>
</tr>
<tr>
<td>Website connections with the other channels</td>
<td>0.466</td>
<td>0.685</td>
<td></td>
</tr>
<tr>
<td>Website advice</td>
<td>0.530</td>
<td>0.601</td>
<td></td>
</tr>
<tr>
<td>Website customer service</td>
<td>0.404</td>
<td>0.461</td>
<td></td>
</tr>
<tr>
<td>Variance explained (%)</td>
<td></td>
<td>44.687</td>
<td>11.525</td>
</tr>
<tr>
<td>Eigenvalues</td>
<td>4.469</td>
<td>1.152</td>
<td></td>
</tr>
<tr>
<td>Bartlett’s test</td>
<td>0.000 (45 df)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>KMO index</td>
<td>0.889</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
In spite of the multitude of image dimensions considered in this study, a comparison between the website and the store revealed that perceptual structures are quite similar. With five dimensions common to the store and the website (accessibility, product offering, reputation, layout and sales promotions), a first, intrinsic component dominates consumer perception of both channels. Added to these factors, in the case of the store, are advice and customer service, both of which had been considered to be distinctive characteristics in relation to e-commerce. The second, extrinsic component encompasses three dimensions common to the store and to the website (pricing, institution and connections with the other channels). Added to these, in the case of the website, are advice and customer service, which figure less prominently than they do for stores. Lastly, for both channels, customers make a clear distinction between sales promotions and pricing, insofar as these items do not appear in the same component.

5.2. Which Central and Peripheral Dimensions can be Inferred?

After intrinsic and extrinsic dimensions of each channel were identified, the next step consisted in verifying whether such image dimensions could actually be qualified as central or peripheral, under ELM. To that end, a direct causal model was created between channel image dimensions and attitude towards purchasing on a given channel, taking into account the moderating effect exerted by the respondents’ level of involvement (Miniard, Dickson, and Lord, 1988; Mackenzie and Spreng, 1992). Given the absence of mediating variables and the disproportionate number of exogenous variables (10) compared to endogenous variables (1), this part of the study was conducted using backward linear regressions. As dictated by ELM, these regressions were applied to two groups with different levels of involvement (weak: 1 to 4; strong: above 4).

Attitude towards in-store purchasing, on the part of highly involved customers, is determined solely by four intrinsic dimensions: reputation and product offering and, to a lesser extent, store accessibility and the advice offered there. On the other hand, the attitude exhibited by low-involvement or non-involved customers is strongly influenced by four dimensions: three that are intrinsic, namely, the store’s product offering, customer service and accessibility; and one, extrinsic: pricing (Table 3). Because they exert influence solely in the case of high involvement consumers, reputation and advice do indeed constitute central intrinsic dimensions for the store. H5d and H5f are affirmed. Pricing, for its part, is clearly a peripheral extrinsic dimension of store image, insofar as it influences the purchasing attitude of solely the least involved consumers. H7a is affirmed.

On the other hand, other store image dimensions (layout, sales promotions, connections with the other channels, institution) cannot be regarded as either central or peripheral because they never have a significant effect on attitudes. H5b, H7b, H7c and H7d are disaffirmed. Conversely, the store’s product offering and accessibility cannot be considered to be central dimensions, at least under ELM, as they are key determinants for both involvement groups. H5a and H5b are disaffirmed. Lastly, customer service, although intrinsic to the store, constitutes a peripheral-route element. H5e is disaffirmed.

Table 3. Effect of store image factors on attitude towards in-store purchasing

<table>
<thead>
<tr>
<th></th>
<th>Low involvement (1 to 4)</th>
<th>High involvement (&gt;4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Store accessibility</td>
<td>0.169 **</td>
<td>0.139 ***</td>
</tr>
<tr>
<td>Store offering</td>
<td>0.283 ***</td>
<td>0.234 ***</td>
</tr>
<tr>
<td>Store price</td>
<td>0.167 **</td>
<td></td>
</tr>
<tr>
<td>Store customer service</td>
<td>0.205 **</td>
<td></td>
</tr>
<tr>
<td>Store advice</td>
<td></td>
<td>0.086 **</td>
</tr>
<tr>
<td>Store reputation</td>
<td></td>
<td>0.250 ***</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td></td>
<td>0.302</td>
</tr>
</tbody>
</table>

(*** p<0.000; ** p<0.01)

As regards the website (Table 4), the purchasing attitude of low-involvement consumers is based on two extrinsic dimensions (advice and institution), in addition to two intrinsic dimensions (reputation and sales promotions). However, involved consumers are influenced by two intrinsic dimensions (product offering and reputation), but also by an extrinsic dimension (advice). Under ELM, product offering can therefore be qualified as central and institution as peripheral. H6b and H8f are affirmed.
On the other hand, certain website image dimensions (accessibility, layout, pricing, customer service, and connection with the other channels) can be viewed as neither central nor peripheral. Regardless of the consumer’s level of involvement, these dimensions have no significant effect on attitude. H6a, H6b, H8a, H8e, H8d and H8e are disaffirmed.

Conversely, advice and reputation continue to have an impact, no matter the consumer’s degree of involvement. H6d and H8c are disaffirmed. Lastly, H8b is disaffirmed: sales promotions on the website do indeed constitute peripheral dimensions, but, as was shown in testing hypotheses 3 and 4, it is intrinsic to the website and not extrinsic.

Table 4. Effect of website image dimensions on attitude toward website purchasing

<table>
<thead>
<tr>
<th></th>
<th>Low involvement (1 to 4)</th>
<th>High involvement (Above 4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Website connections with the other channels</td>
<td>- 0.120</td>
<td>0.060</td>
</tr>
<tr>
<td>Website advice</td>
<td>0.309 **</td>
<td>0.171 ***</td>
</tr>
<tr>
<td>Website institution</td>
<td>0.194 ***</td>
<td>0.070</td>
</tr>
<tr>
<td>Website offering</td>
<td></td>
<td>0.101 **</td>
</tr>
<tr>
<td>Website reputation</td>
<td>0.178 **</td>
<td>0.169 ***</td>
</tr>
<tr>
<td>Website customer service</td>
<td></td>
<td>0.069</td>
</tr>
<tr>
<td>Website promotions</td>
<td>0.147 *</td>
<td></td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.270</td>
<td>0.202</td>
</tr>
</tbody>
</table>

(*** p<0.000; ** p<0.01; * p<0.05)

6. DISCUSSION AND CONCLUSION

Could the difficulties that retailers face in creating a seamless, cross-channel experience be due to the fact that their stores and website activate central and peripheral routes to persuasion that are so different they hinder cross-channel transfers? To answer that question, which is of interest to management scholars, this study is the first to apply the Elaboration Likelihood Model in a multi-channel retail context, while taking into consideration such an extensive array of image dimensions.

6.1. Research Implications

The decision to use a methodology relying on two separate, but linked, steps made it possible to first analyse then compare consumer beliefs about the image conveyed by each channel. In the first step, which, to our knowledge, has never been undertaken in scholarly literature, it was revealed that the channel’s image was comprised of two components: one intrinsic, which underlies and dominates the consumer’s image of the channel, the other, extrinsic, playing a more secondary role. The results showed that the store and the website exhibit a very similar perceptual structure. However, the store differs from the website by virtue of two intrinsic elements, which are deemed to constitute the brick-and-mortar channel’s main strengths: advice and customer service (Goldsmith, Flynn, and Clark, 2005).

In the second step, ELM was used to verify whether the same image dimensions lead down identical routes to persuasion on the website and at the store. In spite of the differing natures of advertising media and retail channels, it proved entirely possible to transpose ELM from one universe to the other. Although the model cannot be used to classify all of the image dimensions tested, it nonetheless demonstrated its usefulness for identifying with certainty a number of dimensions associated with retail channels, whether as central route elements (product offering, in the case of the website; reputation and advice, in the case of the store) or peripheral route elements (institution and promotions, in the case of the website; pricing and customer service, in the case of the store). The central route dimensions, for the purposes of ELM, are always intrinsic to the channel in question, whereas the peripheral route dimensions are primarily extrinsic but are sometimes intrinsic. Once identified, such elements can be easily manipulated by retailers to influence consumers to take one route to persuasion or another.

On the other hand, in spite of its appropriateness for evaluating store image and website image, ELM cannot be used to classify certain dimensions, either because they exert a significant influence on all customers, regardless of their level of involvement (advice and reputation, in the case of the website; product offering and
accessibility, in the case of the store), or because they have no significant effect on consumer attitude, no matter which channel or level of involvement is considered (connection with the other channels, channel layout). Despite the important role that layout plays in the consumers’ perception of a channel, the previous statement should lead us to relativise the scope of earlier studies, which focused on atmospherics, a much narrower concept than the channel layout.

Also, contrary to what Fiske (1982) has suggested, involved customers do not seem to be more analytical and thus prone to exert more cognitive effort than others. In the case of the website, low-involvement individuals even tend to interpret more cues than others, undoubtedly because of their inherently less favourable attitude towards online purchasing than that of more involved customers (based on additional calculations).

6.2. Managerial Implications

But the prime lesson to be taken from this study pertains to the lack of a central or peripheral route element common to the website and the store. This conclusion yields important managerial implications, justifying this research. To facilitate customer movements across its distribution channels, a multi-channel retailer can no longer count on perceived channel integration. Although that might seem fairly easy to do, insofar as the store and the website are very similar in terms of perceptual structure, it does not produce the same effects on customer attitude, depending on the channel at issue. For a retailer to place all or part of its store and website image dimensions on equal footing, as if they were equivalent, is to engage in an illusion, in a dubious effort to achieve full channel integration.

That disparity between the store and the website, which is most pronounced in terms of consumer attitudes than in terms of consumer beliefs, should, however, facilitate channel specialisation by making it possible to orient certain clients toward a particular channel. The idea of replicating cross-channel experiences, where channels would end up being seen as perfect substitutes (Wolfinbarger and Gilly, 2001) thus warrants serious reconsideration: “consistency is not the same as uniformity” (Bradshaw and Brash 2001, p 527). For example, if the multi-channel retailer under study wishes to persuade its least involved customers to make purchases on its website, it could highlight sales promotions and its image (institution).

Conversely, it could play up its pricing policy and its customer service in order to attract customers to its bricks-and-mortar stores, which offer a higher level of experiential intensity and so are more likely to trigger impulse purchasing (Bitner and Obermiller, 1985; Stilley, Inman, and Wakefield, 2010). The retailer could also opt to orient its most involved customers to its website, by emphasising the breadth and depth of its product offering (Brynjolfsson, Smith, and Hu, 2003) or direct them to its stores by underscoring the retailer’s seriousness (reputation) and its adeptness at dispensing advice. Aside from showing very different consumer purchase orientations, depending on the channel, this study offers a new key for understanding customers’ purchasing journey, based on their level of enduring involvement.

A second managerial implication involves pricing and sales promotions. First of all, pricing is perceived as extrinsic to both channels, whereas sales promotions are intrinsic. The fact that these two image dimensions are not confused in consumers’ minds makes sense if we consider sales promotions as an effective way to blur price image. Researchers have an interest, then, in using a questionnaire design that makes a clear distinction between the two concepts, rather than merging them. Nonetheless, using one scale to measure the perceived price level on the channel, and another scale to measure the visibility of sales promotions, may have magnified that distinction in this study.

Secondly, pricing and sales promotions have two points in common, to the extent that they are both peripheral cues that have an effect solely on the least involved customers. That confirms, in particular, results from studies conducted by Zaichkowsky (1988) and Purohit and Srivastava (2001). However, these factors do not have an impact on consumer attitude toward purchasing on the same channels: pricing is solely a peripheral route dimension at the store, and sales promotions a peripheral route dimension on the website. The most plausible explanation is that, on Internet, a spate of sales promotions eventually delivers a stronger signal than pricing (Degeratu, Rangaswamy, and Wu, 2000). This phenomenon is propagated by click and mortar retailers, which apply the same
prices offline and online, to avoid cannibalising their store margins, while multiplying sales promotions on their website (for example, with exclusive Internet offers) to counter the aggressiveness of online-only pure players.

Nonetheless, a multi-channel retailer hoping to woo its low-involvement customers into buying a given product cannot focus solely on its attractive pricing in its stores, or on a sales promotion on its website. These peripheral dimensions must be consistent with other elements that must be considered (Purohit and Srivastava, 2001). Taken together, they can potentially lead to more enduring change in attitude (Sengupta, Goodstein, and Boninger, 1997). If this finding were generalised, it would challenge the analysis made by Mazursky and Jacoby (1986) as well as the opinion expressed by a majority of retailers, who view pricing as a crucial means of triggering a purchase, especially in times of economic difficulty (which Tesco is currently experiencing).

6.3. Limitations

Due to this study’s rigorous methodology, its findings can be generalised to other contexts outside retail distribution. It can thus serve as the basis for future research opportunities, in which new central and peripheral route factors affecting channels might be identified. Above all, this study suggests that future research is needed to evaluate the consistency and stability of results over time and across a variety of groups and settings. Clearly, focusing on one product and a single multi-channel retailer constitutes the main limitation of this study. To achieve a definitive classification of so-called central or peripheral dimensions (Miniard, Dickson, and Lord, 1988), the results and ramifications of this study should therefore be applied to other retailers offering other products, no doubt while comparing the contributions derived from the ELM approach as well as from other persuasion models, such as HSM.

The second limitation arises from having placed respondents in a context of high situational involvement (all of the participants chosen for this study took part in a lottery to win a digital camera). That methodological decision meant that only the moderating effects of the respondents’ enduring involvement were examined. However, this augmented situational involvement may have increased their overall involvement and, in that way, prevented classification of dimensions (accessibility and product offering, in the case of the store; advice and reputation, in the case of the website) that seem to influence all consumers, even low-involved individuals. New research should therefore also vary the level of situational involvement, as Celsi and Olson (1988) realised, in another context.

Finally, because the buyer’s level of involvement was a decisive factor in the study, though not detectable the retailer’s databases, it will also be necessary to retrieve certain customer profile data (gender, age, purchase intentions, etc.) governing the degree of interest toward making a particular purchase decision, in order to better target customers (Barron and Hollingshead, 2002).

AUTHOR INFORMATION

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