

Effective presentation e-merchandising techniques. The importance of review the literature to improve the management of digital companies

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Abstract

Can we influence the behavior of online shoppers through the inside layout of the online store? When merchandising emerged for more than a hundred years, many researchers have analyzed the influence of the point of sale on the consumer's emotional states and their buying behavior. However, although online stores are the ultimate exponent of self-service, there is hardly any research on e-merchandising. Therefore, an exploratory study is conducted in order to better understand the context of the research and to make an approximation to the variables of interest within the study area, which will allow e-commerce companies to know which e-merchandising techniques must implement for efficient business management.

Keywords

E-commerce merchandising, web design, information architecture, perceived risk.

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**Merchandising:
set of
commercial
techniques
related to
distribution
marketing
aimed at
achieving a
situation where
the products
sell themselves,
in the best
material and
psychological
conditions**

1. Introduction

In the early part of the 20th century, with the birth of the free service trade, the figure of the seller disappeared and products had to begin to sell themselves. It was at this time that merchandising emerged, understood as the set of commercial techniques related to distribution marketing, the aim of which is to achieve that the products sell themselves, under the best material and psychological conditions, i.e., meeting the needs of the market and improving the profitability of the point of sale (Salén, 1994).

In general, consumers use key factors in the selection of the point of sale, such as differences in products and prices, for example. However, when these are minimal between the different establishments, consumers need more discriminating criteria, and thus matters related to the point of sale become particularly relevant (Reinares & Calvo, 1999). This is true to the point that some authors have gone so far as to suggest that weather conditions may even have a greater influence on purchasing decisions of individuals than the product itself (Kotler, 1973).

Along these lines, it is no wonder that in online stores, the ultimate expression of self-service, it is even more necessary to intensively develop communication strategies capable of persuading and enticing shoppers (Martínez, 2005). In light of this need, merchandising techniques have shifted towards the virtual shopping context, with the aim of attracting users and providing a convenient, quick and entertaining visit that ultimately promotes better sales results (Lorenzo, Mollá & Gómez-Borja, 2006).

Electronic merchandising (also known as e-merchandising or e-commerce merchandising) is therefore the “integration of all the persuasive communication and marketing actions that are carried out on the online point of sale and with the aim of maximizing profitability by generating value for customers and managing information” (Martínez, 2005).

The influence of the factors that define the physical shopping environment on the emotional states and shopping behavior of individuals is a fact that has been more than demonstrated in the literature (Babin, Darden & Griffin, 1994; Baker, Parasuraman, Grewal & Voss, 2002; Bitner, 1992; D'Astous, 2000; Donovan & Rossiter, 1982; Mehrabian & Russell, 1974; Turley & Milliman, 2000). However, much less research has been done on its nature and effectiveness in web environments (Gómez & Lorenzo, 2006; Puente, 2016). As a matter of fact, a simple initial search of the different multidisciplinary digital databases of recognized prestige (such as ScienceDirect, Springer, Wiley, Taylor & Francis and Emerald, for example) is enough to see that the e-merchandising applied to the mass market food-based sector has received little attention in the literature. For this reason, it is considered fundamental to carry out a thorough review of the literature that will allow us to have a better grasp on the context of the research and give us a tentative approach to the analysis variables that are of interest within this area of study.

The objective is definitely to identify some implications for management that would enable online shops in the mass market food-based sector to design their websites efficiently, merging the information architecture with persuasion to guide the user toward the final objective, which is the purchase. For this reason, from a methodological point of view, we have considered the multidisciplinary nature of the topic, analyzing the literature from both the commercial and marketing area and that of computer science and usability.

2. Presentation e-merchandising

Throughout the literature, various researchers have studied the customer shopping experience (Chang & Huang, 2016; Fatma, 2014; Fernández-Sabiote & Román, 2016; Homburg, Jozić &

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Kuehnl, 2017; Lin & Bennett, 2014; Lipkin, 2016; Pappas, Pateli, Giannakos & Chrissikopoulos, 2014; Sukwadi, 2015; Trevinal & Stenger, 2014), understanding it to mean the set of human states and activities (Ranjan & Read, 2016) during each individual's contact with the company (Puccinelli, Goodstein, Grewal, Price, Raghuram & Stewart, 2009; Homburg, Jozić & Kuehnl, 2017). According to Kamaladevi (2010), consumer shopping behavior can be significantly influenced by the atmosphere of the shop. Along these same lines, authors like Joshi (2014) and Li and Yeh (2010) suggest that the design of the online store is an essential factor to generate successful, long-lasting experiences.

Dailey (2004) defines the web environment as “the intentional design of web environments to create positive cognitive and affective states in users, with the intent of favorably increasing the shopper's responses (for example, revisiting the website or browsing the site longer)”. Many studies recognize web design as a key factor for the development of successful e-commerce (Huizingh, 2000; Jarvenpaa & Todd, 1997; Ranganathan & Ganapathy, 2002), stressing in this regard the importance of presenting good contents, with quality information and easy, attractive navigation (Burke, 2002).

Obviously, in virtual environments, the shop is reduced to the screen of the computer or device in question, so it lacks three of the five appeals to the senses (smell, taste and touch). In addition, there is not direct contact with other people in the shop (employees or customers). However, research by Vrechopoulos and Siomkos (2002) shows that these shortcomings can be overcome with other properties that, in the right combination, can create a significantly different context than that of traditional brick-and-mortar stores, but not necessarily one that is less profitable.

Within e-merchandising, the techniques focused on the way to present items in the shop with the intention of making the purchase as easy as possible for the customer and as profitable as possible for the merchant are those of presentation e-merchandising. This is a subcategory within e-commerce merchandising that encompasses multiple techniques. No common classification criterion is found in the literature, which is why the decision was made to approach them according to two large groups: those related to the interior layout of the point of sale and those related to the presentation of stock (Díez de Castro & Landa, 1996; Masson & Wellhoff, 1991).

2.1. Interior layout of the point of sale

Within the first group, from the perspective of the interior layout of the point of sale, the traditional merchandising techniques are classified into three large subgroups: those related to the customer circulation flow, those concerning the arrangement of the sections and those linked to hot and cold spots in the point of sale.

2.1.1. Customer circulation flow

With regard to the first category, those related to the customer circulation flow, it must be said that the aim is to get the customers to circulate throughout most of the sales area, but without giving them the impression that they are being forced to follow a preset route (Díez de Castro & Landa, 1996; Escrivá & Clar, 2005). To accomplish this, we rely on three pillars: itinerary, speed and duration or length of the visit.

1. Itinerary. In the brick-and-mortar world, the path a customer follows inside the store can be modified by varying certain factors, such as the position of the boxes and the entrance door (Kumar & Karande, 2000), the way the furnishings are arranged (Newman, Yu & Oulton, 2002), product placement (Lorenzo et al., 2006; Zorrilla, 2002) and the use of information elements (Díez de Castro & Navarro, 2003).

Its aim is to encourage customers to circulate throughout most of the sales area, but without giving them the impression that they are being forced to follow a set path

In the online environment, when users have just landed on an e-commerce site, they can perform one of two actions (Nielsen, 2000; Nielsen & Loranger, 2007): they can search directly for what they need, in which case navigation has a goal-oriented objective, or they can browse the website freely, in which case a more experiential approach would predominate. Regardless of the action chosen, it is important for the virtual merchant to contemplate both options when designing the information architecture of the website, i.e., the articulated combination of systems used to organize, label, search and navigate, with the aim of improving how users utilize them (Baeza-Yates, Rivera & Velasco, 2004; Hassan & Ortega, 2009; Martín & Hassan, 2003).

The organizational systems are composed of schemas that divide and classify the website contents, and of structures that organize said contents, revealing the logical dependencies between them. An important aspect that must be taken into account in the navigation structure is establishing who is in control of it. With a more rudimentary design of the interface, the web designer can control where the user will go. However, the most modern web designs are characterized by greater flexibility in navigation that gives control to the users, since the fact that they can see all the hyperlinks available on every page makes searches easier and allows for quicker movement. This gives users the impression that they are using and controlling the entire website, and not just a certain page. Some of the methods that can be used to reduce the clutter in navigation are aggregation (showing an information unit that represents a set of smaller units), summaries (presenting a large amount of data with a lesser amount), filters (which allow the elimination of complete blocks of information that are not of interest), pruning (cutting out all of the content except for the initial parts of the information, and allowing the user to expand them) and example-based representations (displaying only some representative models and communicating that there are others) (Nielsen, 2000).

In terms of labeling or marking systems, it must be said that when users are in browsing mode, they usually ignore the large blocks of content and focus their attention on the links to get an idea of the meaning of the site. For this reason, it is crucial to create names as short and specific as possible to maximize browsing. It is also recommendable to intensify the links starting with an informative keyword that helps users to quickly identify what interests them (Nielsen & Loranger, 2007). The objective is to facilitate access to the information, so it is important to present the content in an efficient manner by using the right labels.

Thirdly, in terms of search systems, it should be noted that, generally speaking, every time a user accesses a website, it is because they are looking for something. Therefore, the success of a website lies in visitors being able to find what they are looking for in the shortest possible time. Searches are such an important part of the web experience that users harbor great expectations about the way they should work. The internal search engine is one of the most important design elements of a website and it is especially useful for searchers who know exactly what they want and what terms they should enter in the search box. That being said, offering good categories of links encourages browsers to explore the website and discover what is available, especially when they are simply glancing over a website in search of an emotional experience or they do not know the most appropriate search terms. Bearing in mind that more than half of the users opt for searches, nearly one fifth of them follow the links and the rest exhibit a combination of behaviors, it is clear that promoting both types of behaviors is important in order to capture a wide audience (Nielsen, 2000; Nielsen & Loranger, 2007).

According to user expectations, some of the factors that are used to assess the suitability of an internal search engine are: its location (it must be located in an area with a high visual

The success of a website lies in visitors finding what they are looking for on it in as little time as possible

hierarchy, preferably on the right-hand side, and be accessible from anywhere in the structure), its identification and clarity –there are three standard elements any search engine should have so that users can identify it as such (Koyani, Bailey & Nall, 2004; Nielsen & Loranger, 2007): a box to type in words, a button labeled “Search” and a SERP page or a page with the most relevant results, listed in order according to their relevance–, its autocompletion option (a functionality that attempts to predict the user’s search as it is being typed, thus making the process faster) and the size of the box (considering that larger search boxes are better, because they reduce the possibility of making a mistake and encourage users to enter longer queries, which usually leads to more accurate and useful results; it is recommended for search boxes to be thirty characters wide), among others (Koyani et al., 2004; Nielsen & Loranger, 2007).

Finally, with regard to navigation systems, it should be mentioned that in conventional retail environments, shoppers look for the products they want through the identification of the spatial representations of the store design and by recognizing how the products are grouped (Titus & Everett, 1995). Traditional merchants combine different elements that make up the atmosphere of the store in order to provide the customer with an easy, convenient and entertaining visit (Baker et al., 2002). Likewise, virtual vendors use texts, images and links as signals that facilitate the user’s navigation within an online point of sale (Hoffman & Novak, 1996). Attractive web designs must be created that are fun and easy to navigate, in order to get users to spend more time on them. Thus, an effective design of the web interface can lead to a competitive advantage for merchants (Alba, Lynch, Weitz, Janiszewski, Lutz, Sawyer & Wood, 1997).

Vrechopoulos, O’Keefe, Doukidis and Siomkos (2004) investigated the effects of shop design on buyer behavior in a virtual context and found that the traditional design is not directly applicable to this environment, since the effects on the individual responses do not match what is established in the literature on conventional commerce in this regard. For this reason, they suggest adapting the virtual designs and using them with special care in order to achieve the desired effects. Vrechopoulos (2001) and Vrechopoulos and Siomkos (2002) distinguish three types of organizational designs for online shops: the network design (hierarchical navigation network in the form of an inverted tree based on the criteria of “being part of” something and characterized by the use of restrictive navigation bars), which is the equivalent of straight grid placement of physical retail shops; the circular design (users are guided by the system along certain paths, so they can search for the products they want, which implies the mandatory use of the forward-backward bars on the browser), which is equivalent to a herringbone arrangement; and the free design (a non-restrictive navigation structure that allows users to move freely through all the pages of the website through multiple links provided on each page; this design is thus characterized by facilitating immediate access to each existing category).

The stimuli that make up the virtual environment (specifically, the navigation design) affect the internal statuses and the behavioral responses by users (Bigné & Andreu, 2004; Childers, Carr, Peck & Carson, 2001; Dailey, 2004; Eroglu, Machleit & Davis, 2001). In general, users have more positive internal states when they are exposed to non-restrictive web designs, which in turn favors their rapprochement responses. According to Dailey (2004), when companies develop environments with restrictive navigation structures, people experience increasing levels of negative emotions, such as frustration, anger and hostility. On the other hand, in free navigation web designs, users purchase more products and spend more money than in network designs, although they spend more time on the website in the latter case (possibly because navigation is more difficult due to the greater

In free navigation web designs, users buy more products and spend more money than in network designs

restrictions, and therefore they need more time to browse through the entire shop) (Lorenzo, Mollá & Gómez-Borja, 2009).

2. **Speed.** The elements that have an influence on the agility of movement within the brick-and-mortar store are the width and length of the aisles, the presence of bottlenecks and the information on the location of departments and products (Díez de Castro & Navarro, 2003). In the online world, in turn, speed is also a *conditio sine qua non*. To achieve optimal usability (UX or User Experience), the pages need to download in less than one second (Koyani et al., 2004). Given that the decision to remain on a website or to leave it is usually made on the home page (or after examining one or two pages linked to it), this page must transmit value immediately and allow visitors to find what they are looking for within a margin of two seconds. If the home page is slow, users will conclude that the rest of the site is also slow, and it is more likely that they will abandon it (Nielsen & Tahir, 2002).

The bottlenecks inherent in the physical world can be compared to online situations in which collapses occur that hinder the natural activity, such as the lack of trust, usability or information. Along these lines, there are three most probable forms of risk in virtual shopping environments: financial risk (to avoid this, it is necessary for the customer and the merchant to establish a relationship based on mutual trust, and thus it is necessary for the merchant to opt for transparency in terms of prices and privacy, returns and security policies, to offer corporate information that shows the user that behind the website are real, honest people, to opt for flexibility of payment and shipment, and to maintain contact with the customer during the purchasing and delivery process) (Alonso & Grande, 2013), functional risk (the design must be attractive, simple and effective, since online shopping is influenced not only by the cultural, personal, social and psychological characteristics of the individual, but also by his or her Internet shopping skills, which may present a barrier for some people, in spite of the fact that for others they enhance the convenience aspect) (Dholakia & Uusitalo, 2002; Jee & Lee, 2002; Kim & Eom, 2002) and the psychological risk, which alludes to the doubts users have when they go to purchase a product and they do not have the information they need to make the final purchasing decision. In the latter case, to eliminate this, it is necessary to design the product pages in such a way that they can provide the information they need to make buying decisions with confidence, according to the different phases through which they pass. It would be ideal for them to be designed in layers, first showing the key points, along with specifications and general details of the products (Nielsen & Loranger, 2007).

Along these lines, the first step in any shopping process is attention (Nielsen & Loranger, 2007; Nielsen & Pernice, 2010). This is the first contact the user has with the product, so the page must include the product name, some pictures, its price and availability and a button to add it to the shopping cart. It is important for the price to be shown from the outset, since it is one of the first pieces of information that any shopper wants to know, since it provides some clues as to the value of the product, whether it matches the budget and whether they are shopping in the right segment. It is also a key component for comparing products. Not showing prices to users goes against their needs and creates a hostile shopping environment. The prices should be shown both on the products lists for each category and on the individual pages for each product, since forcing the customer to have to go back and forth is inconvenient. Likewise, it is recommended to show any additional costs as soon as possible, and in any case on the first page of the shopping cart, to prevent unnecessary surprises. As far as pictures go, a priority is for them to be clear and to provide added value for the user (providing different views of the same image or adding rotation functions, for example), since customers look at them even when they are buying products that are not important to

The length of time that users spend on a web page follows a Weibull distribution

see and whose complete description they have already read (Nielsen & Loranger, 2007; Nielsen & Pernice, 2010).

The second step is interest. Once the product has captured the attention of the user, it is quite likely that they feel that it meets their expectations, but they are still not sure, so they will try to expand on the initial information. In this case, the product information must include a description of the product and its features, as well as secondary images and videos. Precise descriptions with appropriate images help customers make confident buying decisions, but they need to be detailed enough to help differentiate the product. It is recommended to facilitate the purchasing decision as much as possible, enabling customers to narrow down their options. To do this, it is best to provide support for comparative sale through the use of tables, since these are usually the most effective method for communicating differences between similar items (Koyani et al., 2004; Nielsen & Loranger, 2007).

The third step is decision. This last level is not necessary for all users. It includes evaluations, recommendations of alternative products, comments and videos created by other shoppers and information from the social networks.

3. **Duration.** Liu, White and Dumais (2010) discovered that the time customers remain on a web page follows a Weibull distribution, in such a way that 99% of all websites have a negative aging effect, since customers know that they have a very variable degree of quality and do not usually waste time on those of poor quality. This implies that the first ten seconds of the visit are critical when making the decision to stay on the web or abandon it, with a very high probability of leaving it during this period. After this first screening, users take a look at the website, subjecting it to a second evaluation, and therefore, during the next 20 seconds, the probability of abandonment remains very high. It is only after people have remained for thirty seconds that the curve becomes relatively flat. The length of time a user stays on an e-commerce site is related to the two variables mentioned above: the itinerary, or the number of pages seen, and the speed of movement, in which we must pay special attention to the speed with which the website loads. Just like offline shopping environments, it is impossible to establish the optimal duration for a visit, but it must be kept in mind that excessively quick visits (as shown by indicators such as the bounce rate) are negative, because they indicate almost zero interest on the part of the user. Likewise, excessively long visits may mean one of two things: that navigation is difficult and excessively restrictive, which forces the user to make a greater effort, or that the content is of great value to the user. Therefore, the ideal duration will be that which permits users to fulfill their objectives in a satisfactory manner and leave the e-commerce site with a feeling of having had a good experience.

2.1.2. Layout of the sections

Continuing on with the merchandising techniques related to the interior layout of the point of sale, we should mention in second place the techniques related to the layout of the sections. The customer behavior model by Chétochine (1994) differentiates between planned or scheduled purchases (those the customer has thought about before entering the point of sale and the search for which constitutes the reason for his or her movement) and unplanned or impulse buys (the result of having seen the product at the point of sale), which are those that make a difference in a company's profits and in which presentation merchandising is especially important. Therefore, it is vitally important to know the impulse coefficient for a point of sale (the relationship between the planned and unplanned purchases) in order to properly allocate the sales space among the different sections so that they present a logical, rational order that makes shopping easier (Alonso & Grande, 2013; Díez de Castro & Landa, 1996; Miquel,

The presentation of products in a strategic location, depending on the moment, demand, seasonality and characteristics is a key factor

Escrivá, Clar, Miquel & Parra, 2004; Quintanilla, 2002). The presentation of the products in a strategic place, according to the time, their demand, their seasonality and their characteristics is a key factor that must be given careful consideration, depending on the type of product (Lorenzo et al., 2006; Zorrilla, 2002).

Along these lines, we must distinguish among several types of products (Díez de Castro & Landa, 1996; Escrivá & Clar, 2005; Reeves, Moose & Venema, 2014). First of all are the products with the power of attraction, the star products, i.e., the best-sellers. It is a good idea to put them in different sections to promote navigation and increase the amount of time spent on the website. Placing them on the home page is also a selling point. Secondly, it is possible to differentiate between products that constitute rational purchases and those that are impulse buys. Taking into account the decision-making process in each case, it is recommended that the former be accompanied by a video or interactive image that allows the user to reflect on the purchase and see the added value of the product. However, in the latter case, it is a good idea to reserve a strategic location, such as the start of the payment process (the equivalent of the check-out lanes in traditional supermarkets), and to visually show that the product is on sale.

Thirdly, when it comes to segmenting the catalog into categories, it is important to consider complementary products. Cross-selling and upselling are cross sales strategies based on the recommendation of complementary or related products, equivalent to the typical “Can I get you anything else?” that we so often hear in traditional shopping environments. Cross-selling is a sales multiplier that offers users several products that complement their selection in order to increase the amount of their order. In this case, the ideal thing is to show this type of products once the user has added the original product to the shopping cart, but avoiding any distractions. A good way to do this is to appeal to impulsiveness, facilitating their purchase with a single click, with no need to show the full product information to the user. Upselling offers users a similar product to the one they are seeing, but one that is more profitable for the company. It does not necessarily have to be more expensive; it can have a higher profit margin or the store may just be interested in selling it for other reasons, such as an overstock, for example. It is important to bear in mind that this technique must be implemented before the user adds the product to the cart, since otherwise it could result in a lost sale as the result of too much distraction. Unlike cross-selling, upselling does not attempt to multiply sales, but rather to trigger conversion through product comparison. Product recommendations are a very powerful tool that enables us to reduce the number of clicks that users must make to buy a product, thus increasing the conversion rate (CR) and the average order value. They can be implemented through joint promotions or by showing users other items related to the one they are seeing to provide different options for purchases and prevent customers from leaving the site because the specific product they are looking at fails to interest them.

2.1.3. Hot and cold points

Finally, to conclude the discussion of the merchandising techniques related to the interior layout of the point of sale, it is necessary to analyze the hot and cold points. All designers know that their websites compete with others for the attention of the public, but it is true that competition also exists within each page: menus, images, links and promotions compete with one another for the visitors’ attention, and not all of them can win. Understanding how users look at web pages and what type of elements catch their eye helps determine where and how to place the most important content and how to keep the page elements competing for their attention. In online shopping environments, web analytics and techniques like eyetracking make it possible to identify hot and cold areas of the e-commerce site. The prominent locations of a website are usually the home page, the main page of each section, the first screen of each page (above the fold) and the top part of the menu (Nielsen & Pernice, 2010).

The commercial function must be defined based on the imperatives of usability and efficacy, which must be made compatible with attraction and convenience

This being the case, what causes users to dedicate more visual attention to one area of the interface over another? To answer this question, we must first understand that during the first moments of visual perception, the information flows massively in the form of basic characteristics: color, movement, orientation, size and other similar aspects. People voluntarily and actively guide their attention, deciding what graphic properties (characteristics of the desired objects: links, text, images, controls, etc.) they want to pass through the filter of visual attention and which they do not at each particular moment; this activity can be facilitated or hindered. According to the type of element they are looking for with each visual search, users are more likely to pay attention to the areas of the interface where it is usually found on most websites (Hassan & Ortega, 2009).

2.2. Presentation of stock

Presentation e-merchandising, like its corresponding equivalent in the physical world, is focused on the method of presenting the items in the store to promote sales, with the caveat that in the virtual world, the products have a great disadvantage: their intangibility. Customers cannot touch the product, so they cannot be sure of the correspondence between the visual quality that they see on screen and the real quality (Lorenzo et al., 2006). The counterpart to this is that the tangible signals from the environment help shape the attitudes and behaviors of consumers (Baker, Grewal & Parasuraman, 1994; Bitner, 1992; Shostack, 1977; Zeithaml, 1988).

The website content is one of the key factors for the success of virtual trade transactions and contribute to ensuring future visits (Rosen & Purinton, 2004). Both the general and specific information about the products and the structure and spatial layout of said information represent design tools that influence the perceptions of users (Van der Heijden & Verhagen, 2003; Khakimdjanova & Park, 2005) when it comes to decision-making (Lurie & Mason, 2007), their satisfaction with the website (Liu & Arnett, 2000; Zviran, Glezer & Avni, 2006) and their online buying intention (Richard, 2005). In terms of defining the “customer’s information environment,” we must bear in mind that users react differently, depending on how the product is presented (Lynch & Ariely, 2000; Hong, Thong & Tam, 2004).

The visual information includes images and graphic elements that show the information more clearly and succinctly (Lurie & Mason, 2007), which facilitates decision-making. Appearance is one of the main dimensions of the quality of a website; it determines whether the user ultimately decides to enter the store, improves the perception of the information needed to make decisions and can lead to greater satisfaction on the part of individuals (Kim & Stoel, 2004; Melián & Padrón, 2006; Tan & Wei, 2006). Normally, e-commerce websites attempt to improve the quality of the visual presentation of the products by increasing the size of the images and using better-quality formats, 3D effects and images with movement. However, doing so creates a technical problem, given that the website loads more slowly. Faced with this dilemma, online stores need to be aware that in a commercial environment oriented towards sales and customer loyalty, the communicative function of the website is situated in a framework in which the more intuitive the functionality is, the better. Therefore, the commercial function must be defined based on the imperatives of usability and efficacy, which must be rendered compatible with attraction and convenience (Lorenzo et al., 2006).

Textual information, in turn, includes the verbal descriptions of the products that offer detailed information about their characteristics (Kim & Lennon, 2008) and can be presented in one of two ways: in paragraphs with the information on the product characteristics or in a schematic form, with lists/tables of characteristics and specifications. The literature has demonstrated that users process information better when it is in the latter form (Koyani et al.,

Digital marketing is an area that is enriched by including variables from other disciplines (such as psychology and computer science) when studying consumer behavior

2004; Lurie & Mason, 2007), since it is easier to remember and facilitates knowledge about the product and the purchasing decision.

Generally speaking, there is no optimal combination of the two types of information (visual and textual) that represents the best option in every case, but rather it depends on several factors, such the type of product, shopper characteristics or their needs when searching for information. Nonetheless, it has been demonstrated that visual information plays a more important role than textual information in the context of online supermarkets, while textual information carries a greater weight in products related to fashion and electronics (Lohse & Spiller, 1999).

3. Final considerations with regard to presentation 'e-merchandising'

Although there is research that analyzes specific techniques (Vrechopoulos, 2001), the truth is that from a theoretical point of view, e-merchandising lacks a solid framework of study (Puente, 2016), which complicates the efficient management of digital companies.

Digital marketing is an area that is enriched by contemplating variables from other disciplines (such as psychology and computer science) when studying consumer behavior and the new phenomena resulting from the use of new technologies (as in the case of e-commerce). For this reason, the main contribution of this study is a review of the multidisciplinary literature, which by analyzing e-merchandising with the same structure as its physical counterpart, allows us to know the similarities and differences that exist between the two, considering them in greater depth and taking a first look at the analytic variables that are of interest within the area of study and that have been explained throughout this text (such as the different types of perceived risk that act like the bottlenecks found in the physical world, for example), which is not only useful for future research, but also for the professional practice of sector companies.

In this regard, it is important to point out certain implications for management:

- **Interior layout of the point of sale:**

- **Customer circulation flow (itinerary, speed and duration):** mass market purchases can be classified as planned or scheduled, since normally before entering an online point of sale, users have thought about what products they are going to buy and it is precisely the search for these products that motivates their circulation. The first ten seconds of the visit are critical when it comes to making the decision to remain on the website or to abandon it, so the website must download in less than one second and help users find what they are looking for in less than two seconds, preventing the bottlenecks typically found in the online media (lack of confidence, usability or information). Although key performance indicators (KPI) must be defined according to each business and sector, as a guideline, an ideal rebound rate could be considered to be less than 40%. Bearing this in mind, it is crucial for online supermarkets to have a good information architecture (an articulated combination of organization, navigation, search and labeling systems aimed at improving how users utilize them).
- **Organization and navigation systems:** the most effective web design to improve the ease of use of an e-commerce site is a network design, i.e., opting for a hierarchical navigation structure characterized by the use of restrictive navigation bars. However, considering that free designs (non-restrictive navigation structures that facilitate the

It is necessary to bear in mind that users react differently, depending on how the product is presented

immediate access to each category) improve variables such as perceived usefulness and time, which cause users to buy more products and spend more money, the best recommendation is the combination of both designs, so that the e-commerce organization system relies on a hierarchical structure, but with a free navigation system so that users can choose the product category they wish to see at any given moment, without this decision impeding the free access to others. Furthermore, the navigation menu should be in a single row at the top of the page.

- **Labeling systems:** short, specific names should be used, as well as carefully chosen key words to facilitate access to information and prevent common problems such as ambiguity, arbitrariness and disorientation. Along these lines, it is not recommendable to categorize food according to the type of meal throughout the day (e.g., breakfast, snack, supper), since consumption habits vary and it is not always clear what products belong in each category.
- **Search systems:** it is recommended for the search engine to be an open field not enclosed in the navigation menu and located at the top of the website (preferably the top right corner).
- **Layout of the sections:** taking into account that the impulse buy coefficient in a supermarket is minimal, the presentation of products in a strategic location is a key factor for success.
 - **Products with the power of attraction:** the best-selling items must be placed in different sections (including on the home page) to promote navigation and increase the time spent on the website.
 - **Impulse buy products:** given the low consumer involvement with mass market products, it is important to boost their impulse buying by placing certain products in a strategic location that does not interfere with the search task (for example, at the start of the payment process).
 - **Complementary products:** taking into account that the mass market sector is characterized by very low prices and per unit profit margins and its profitability relies on achieving large sales volumes, it is necessary for online supermarkets to implement sales techniques like cross-selling and upselling. In the case of Spain, food-based e-commerce sites know this and take advantage of the fact that the more committed consumers are to food and cooking, the more money they spend on mass market products to implement this type of techniques. Most are implementing a content strategy related to the world of gastronomy and offer their community ideas and recipes for dishes whose ingredients and cooking utensils can be conveniently purchased in their stores.
- **Hot and cold points:** the strategic locations must take into account hot and cold zones in order to direct user traffic towards certain products, but also in order to know where to place each type of content so that it meets user expectations. It is important to remember that the prominent locations on a website are usually the home page, the main page of each section, the above the fold and the top part of the menu. Moreover, the content area zone that catches the eye the most is the top left corner.
- **Presentation of stock:** when it comes to deciding how the stock will be arranged, it is necessary to bear in mind that the objective is to attract and seduce customers and offer

It is a matter of merging the information architecture with persuasion to guide the user towards the final objective

them the products they need without any type of obstacle. To accomplish this, it is recommended to take advantage of the possibilities offered by the Internet: interactivity, dynamic content updating, hypertexts and a global presence, among others. Aspects related to design and the ease of using the web pages currently constitute basics in the “tangibilization” of an online store and its offer, but the web contents are also important (both the general and specific information about the products and the structure and spatial layout of this information).

In short, it is a matter of merging the information architecture with persuasion to guide users towards the final objective. Ensuring that users can access products in a simple manner is crucial, but not enough. The website must be designed from a commercial and marketing perspective, in order to create persuasive user experiences. From the moment users enter the website, it is necessary to understand their motivations in order to communicate to them that they are in the right place, causing their movements to flow naturally through the different pages and convincing them that there is no better alternative for purchasing the product and the best time to do it is “now.”

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