Gender differences regarding the product’s online visual representation: impact on satisfaction and purchase intention


Abstract

The websites’ design has been revealed as a key factor for the success of online transactions. In addition, searching for information about products is one of the most frequent activities on the Internet. Thus, the online product presentation is representing a challenge for marketers and designers, since they have to present the products to satisfy the consumers’ needs. This study analyses the effects of different visual representations of the product on users’ satisfaction with the website and online purchase intention. Besides, the gender is considered as a moderator of these relationships with the aim of finding the best design combination for each gender. An experiment was carried out in which the visual representation of the product was manipulated by means of its size, quality and movement. The results of the analyses allow us to stress the importance of the online product presentation for affecting consumers’ perceptions and intentions.

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Moreover, the individual's gender influences notably the proposed relationships.

Key words: website design, visual representation of the product, satisfaction, online purchase intention, user's gender.

JEL codes: M31 - Marketing.
1. Introduction

Recently, the diffusion of the Internet as a retail and distribution channel has undergone a great growth. We face a global market with more than 1,500 million people (Internet World Stats, 2009) and more than 80,000 million of commercial and corporate websites (Domain Tools, 2009), wherein the opportunities for exchange are almost infinite. In Spain, more than a half out of the 18 million Internet users (AIMC, 2009) have purchased through the Web. Besides, the e-commerce turnover was up to 4,700 million euros in the last year (AECE, 2008).

This growth of the Internet has provoked changes in the way consumers acquire information about products, which is an important stage of the shopping-decision process (Engel, Blackwell and Miniard, 1995). Searching for commercial information is one of the most performed activities in the Internet. Specifically, 89.3% of purchasers and 45.2% of non-purchasers use the Internet as the main source for acquiring information (AECE, 2008). Thus, the online channel must provide consumers with tools to facilitate the search, acquisition and processing of information related to the products they want to buy, or they just want to know about.

In this context, the online product presentation turns into a key element of the virtual store. Aspects such as the product placement in the interface or the purchase route could affect the consumers’ tendency to browse the web to search for information (Khakimdjanova and Park, 2005). Besides, the attitudes towards the product presentation could influence the consumer’s searching and buying behaviour (Kerfoot, Davies and Ward, 2003).

Given that in the online context there is no possibility either to “touch” the product or to examine it physically before the purchase, marketing practitioners should make an effective use of the design tools for presenting the company’s products. In this way, the visual representation of the product is critical for consumers to identify it and consider its purchase. In fact, most of websites use images to present their products to users. The use of this feature should be carefully managed, since the navigation speed could be limited if there is an overload with the use of very large pictures, with excessive resolution and/or animation (Cristóbal, 2006).
However, there is a lack of studies focused on analysing the effects of product pictures on the consumer behaviour. Therefore, it seems necessary to examine the role played by the characteristics of the product picture on the online user’s perceptions.

2. The importance of visual product representation on consumers’ perceptions

The specialized literature has demonstrated the existence of a clear link between the environmental elements of a virtual store and the online consumers’ affective and behavioural states (e.g., Liang and Lai, 2002; Ranganathan and Ganapathy, 2002; Khakimdjanova and Park, 2005). In this sense, high levels of user satisfaction with the website could be a determinant factor for the success of online businesses (Liu and Arnett, 2000; Zivran, Glezer and Avni, 2006). In fact, user satisfaction could have a positive impact on his/her purchase intention (Shih, 2004), derived from the generation of favourable attitudes towards the website.

Thus, it seems interesting to examine the role played by the visual representation of the product in these determinant variables of the e-commerce success. More concretely, this study focuses on the specific case of electronics’ websites to analyse the impact of three elements frequently exploited in the presentation of the product (i.e., size, quality, and movement of images) on user’s satisfaction and online purchase intention.

Moreover, consumer characteristics could be also important to determine the acceptance of e-commerce and to affect the way they behave online (Swaminathan, Lepkowska and Rao, 1999). In this way, it has been established that consumers’ gender could influence the way they perceive visual stimuli, because men and women differ in their information processing (e.g., Holbrook, 1986). Given that the offline and online environments are completely different, it would be interesting to examine the moderating role of consumers’ gender on their online purchase behaviour.

In short, this study tries to find answer to the following research questions:

1. Is there a relationship between the visual representation of the product and users’ degree of satisfaction with the website?
2. Is there a relationship between the visual representation of the product and users’ online purchase intention?
3. Is there an optimal design combination which provokes the most favourable responses on online users?
4. Does the gender of the consumer play a moderating role in the proposed relationships?

The following sections deal with the theoretical background that supports the hypotheses development which tries to give answer to these research questions. Figure 1 reflects graphically the proposed relationships regarding the visual representation of the product, users’ satisfaction with the website, their online purchase intention, and the moderating role of the gender.

2.1. Impact of Visual Representation of the Product on User’s Satisfaction with the Website

In general terms, satisfaction is an affective response of the consumer arising as a consequence of a global evaluation of all the aspects that compose the relationship between the company and the customer (Anderson and Sullivan, 1993). Satisfaction is a signal of the user’s favourable attitude; satisfied users can stay longer navigating through the website, they can visit it more frequently or generate positive word-of-mouth (Zhang and Von Dran, 2000).

Some researchers have stressed the importance of user’s satisfaction with the website in order for virtual stores to succeed. Thus, a successful website, in the context of the electronic commerce, “is one that attracts customers, makes them feel the site is trustworthy, dependable, and reliable and generates customer satisfaction” [Liu and Arnett, 2000; p. 24]. In this way, Kim and Stoel (2004) examined the website’s quality and identified the main dimensions that influence the online consumer’s satisfaction. Zviran, Glezer and Avni (2006) investigated the effects of usability on user satisfaction, which is considered a measure of the success of the website.

Although a good website design does not guarantee consumer satisfaction, it has a direct impact on it (Flavián, Guinalíu and Gurrea, 2006). In
fact, graphic representations (e.g., icons, colours, images and animations) are used to increase the vividness of the website and, as a consequence, the levels of user satisfaction (Zhang and Von Dran, 2000). In this sense, Muylle, Moenaert and Despontin (2004) identified the website design as a main dimension of online satisfaction, emphasising colours, graphic elements and animations as important factors.

Following this idea, a big size and a high quality of the product picture could evoke positive feelings when navigating through the website because the product is perceived more clearly, which helps users to know the product better and remember it easily (Lee and Benbasat, 2003; Park, Lennon and Stoel, 2005). Therefore, it seems reasonable to propose that a high quality and a proper size of the product picture lead to a higher degree of consumer satisfaction.

In addition, images with movement could generate greater levels of attractiveness and entertainment for online users (Jeandrain, 2001; Daugherty, Li and Biocca, 2008). If we also take into account the higher information and interactivity that movement offers to the product presentation, we could expect that a dynamic image will lead to a higher level of user’s satisfaction with the website:

H1a: The size of the visual representation of the product will have a direct impact on user’s satisfaction with the website.

H1b: The quality of the visual representation of the product will have a direct impact on user’s satisfaction with the website.

H1c: The existence of movement (vs. absence) of the visual representation of the product will have a positive impact on user’s satisfaction with the website.

2.2. Impact of Visual Representation of the Product on User’s Online Purchase Intention

In a traditional retail context in which several alternatives have to be considered before the purchase, consumers need to evaluate a great amount of features related to the product characteristics, such as the price, the quality of the materials, the colour or the size (Lee, Lee and Wang, 2004). In a
similar way, in a virtual retail environment, the aspects related to the appearance of the website could influence the user’s purchase intention and eventually increase the company’s sales (Then and DeLong, 1999; Cristóbal, 2006).

Therefore, it seems reasonable to state that the correct use of product images could lead to a higher purchase intention of the online consumer. More specifically, if the product pictures are presented with a proper size and a high quality, positive feelings could arise towards the website and consumer’s online purchase intention could increase.

In this sense, Ariely (2000) and Klein (1998) showed that the quality of the decision and the users’ attention improve in those websites with high levels of interactivity. The movement of the visual representation of the product allows users to examine it from multiple perspectives and interact with it in a greater extent. Thus, if the product is presented properly, the acquisition and processing of the information about it would be easier, speeding up the shopping process and therefore boosting the purchase intentions. Consequently, we could expect that the image movement will have also a positive effect on consumer’s online purchase intention:

**H2a:** The size of the visual representation of the product will have a direct impact on user’s online purchase intentions.

**H2b:** The quality of the visual representation of the product will have a direct impact on user’s online purchase intentions.

**H2c:** The existence of movement (vs. absence) of the visual representation of the product will have a positive impact on user’s online purchase intentions.

### 2.3. Interaction Effects

In addition, we can point out the effects derived from the simultaneous manipulation of the three elements considered in the visual product representation (Lee and Benbasat, 2003). Online companies are currently manipulating these aspects in their websites, looking for the best design to present their products. Consequently, it seems interesting to find interaction effects between the size, quality and movement of images that generate the better
consumer’s responses. In this sense, we propose that those treatments that produce the more positive effects will interact to affect users’ satisfaction with the website and online purchase intention in a greater extent; in other words, we expect that larger pictures, with higher quality and enhanced with movement will produce the greater effects on consumers:

*H3a: A good combination of size, quality and movement of the visual representation of the product will have a positive impact on user’s satisfaction with the website.*

*H3b: A good combination of size, quality and movement of the visual representation of the product will have a positive impact on user’s online purchase intention.*

2.4. The Moderating Role of Gender

Into the consumer behaviour literature, some studies suggest that males and females differ in their information processing (Holbrook, 1986; Palmer and Bejou, 1995), reacting in different ways to the stimulus which they perceive (Meyers-Levy, 1989).

On the one hand, females respond to non-verbal stimuli by evoking more associative, imagery-laced interpretations and more elaborate descriptions than males (Gilligan, 1982). Thus, females could be more sensitive to visual information than males when evaluating products, which could have a direct effect on their degree of satisfaction with the website.

On the other hand, males’ perceptions could also be different from females’ perceptions. The study carried out by Chiu, Lin and Tang (2005) demonstrated that, compared to females, males tend to reveal more idiosyncratic behaviours. These behaviours are characterised by a higher degree of assertion and pragmatism, as well as a special preference for the speed to make transactions. All these aspects have a direct relationship with the visual product presentation:

*H4a: Individual’s gender will moderate the influence of the size, quality and movement of the visual product representation on user’s satisfaction with the website.*
**H4b:** Individual’s gender will moderate the influence of the size, quality and movement of the visual product representation on user’s online purchase intention.

### Figure 1. Research Proposal

![Research Proposal Diagram](image)

**3. Methodology**

With the aim of analysing the relationships proposed, an experiment was carried out. A total of 176 graduate and undergraduate students participated in the experiment. The specialized literature has frequently used students for this type of studies (e.g., Liang and Lai, 2002; Lee and Benbasat, 2003; Jahng, Jain y Ramamurthy, 2007), since they are more likely than other consumers to be potential Internet shoppers (Park, Lennon and Stoel,
2005). Thus, we were satisfied with the achieved sample profile because it showed similarities to recent studies (AECE, 2008; AIMC, 2009) (Table 1). The majority of the respondents were male and young (between 18 and 34) and they had some online shopping experience (62.3% had purchased at least one product or service, and 30.9% had purchased more than 4 products or services through the Web).

Table 1. Representative Nature of the Sample

<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>Sex (Males)</strong></td>
<td>57%</td>
<td>51.5%</td>
<td>60%</td>
</tr>
<tr>
<td><strong>Age (23-45 years old)</strong></td>
<td>50.3%</td>
<td>61.5%</td>
<td>64.3%</td>
</tr>
<tr>
<td><strong>Internet experience (3 years or more)</strong></td>
<td>72.1%</td>
<td>79%</td>
<td>75%</td>
</tr>
</tbody>
</table>

Participants were randomly assigned to a between-subjects factorial design with 2 (image size: large versus small) x 2 (image quality: high versus low) x 2 (image movement: static versus dynamic) conditions. To perform the experiment, 8 websites were created, which simulate a hypothetical electronic virtual shop: “Electroshop.com” (see Figure 2). The visual representation of the product – digital video camera – was manipulated, and the rest of elements were the same for the different conditions. This focal product is appropriate for three main reasons. First, electronics are especially attractive to the sample demographic; according to a recent report, electronic goods are among the most frequently purchased items online and the most common topics of information searches (EIAA, 2008). Second, electronic products require analytic information processing, and the use of simple product presentation (such as those created for the experiment) could accomplish the objective of offering high-quality information which could be easily remembered (Jahng, Jain y Ramamurthy, 2002). Third, digital video cameras are not as standardized as some other electronic products (e.g., mp4 players, digital camera), which minimizes the
amount of possible generalized knowledge. Because digital video cameras offer various features, consumers must focus on the information provided about the product to understand it.

The size and the quality of the pictures were manipulated according to the idea of maximizing the difference (Lee and Benbasat, 2003) so that the participants could perceive such differences. In this sense, large pictures (8.93cm x 7.61cm) were four times bigger than smaller ones (2.23cm x 1.90cm). For the quality condition, which was measured by means of resolution (i.e., number of pixels per squared centimetre), low quality pictures were at 25% of resolution with respect to high quality images (28 pixels/cm). Regarding the movement condition, a flash animation was used to create a 360 degree view. In the static image condition, only a product picture was presented.

Participants could interact with the product for a few minutes. Once the time was over, they filled in the questionnaire. All the variables were measured with 5-point Likert scales. Two scales largely validated by the literature were adapted and used for satisfaction with the website (SAT) (Smith and Barclay, 1997; Janda, Trocchia and Gwinne, 2002; Flavián, Guinalíu and Gurrea, 2006) and online purchase intention (OPI) (Jarvenpaa, Tractinsky and Vitale, 2000; Van der Heijden and Verhagen, 2003) (see Appendix).
4. Results

In order to test for the validity of the scales, reliability and dimensionality analyses were developed (Churchill, 1979; Anderson and Gerbing, 1988). Regarding the reliability of the scales, we based on Cronbach’s Alpha indicator (Cronbach, 1970), taking 0.7 as a minimum value (Nunnally, 1978), and on the item-total correlation for each of the dependent variables.
analysed (Bagozzi, 1981), taking a minimum value of 0.3 (Nur ossis, 1993). The results showed acceptable indices of internal consistency in the scales considered.

The next step to analyse the scales consisted on the study of their unidimensionality (Hair, Anderson, Tatham and Black, 1998). A principal components test with varimax rotation was carried out, basing on the existence of eigen-values higher than 1. In this analysis, a significant percentage of explained variance and factorial loading higher than 0.5 were required to assure the unidimensionality. The results of these tests were satisfactory, supporting the unidimensionality of the scales. Besides, all factor-loadings were higher than 0.5 (Hair, Anderson, Tatham and Black, 1998).

4.1. Effects of the Visual Representation of the Product
Firstly, a MANOVA test was carried out, including all the dependent and independent variables. The results showed that both the satisfaction with the website and the online purchase intention were affected by the experimental treatments (Wilk’s Lambda = 0.749; F (14, 334) = 3.717; p < 0.01).

With reference to the effects for the visual representation of the product, the results revealed that the size, the quality and the movement of the product image had a significant influence on the participants’ degree of satisfaction with the website (Table 2), giving support to hypotheses H1a, H1b and H1c. Regarding the online purchase intention, the higher quality of the picture and the possibility to see it from multiple angles impacted significantly to the subjects (Table 3). However, it was not found a significant effect for the size of the picture, so we must reject H2a. We also observed no significant interaction effects between the independent variables on the dependent variables, rejecting hypotheses H3a and H3b.

(1) Cronbach’s Alpha:
\( \alpha_{\text{SAT}} = 0.929; \alpha_{\text{OPI}} = 0.906. \) All item-total correlations were higher than 0.5.
(2) % Explained Variance: SAT = 87.5%; OPI = 84.36%
4.2. Moderator Effects of Individual's Gender

In order to examine the role played by the consumer’s gender in all these relationships, a MANCOVA test was developed, including the gender as a
covariate (Lattin, Carrol and Green, 2003). The results showed that the fact of being a man or a woman affected the dependent variables (Wilk’s Lambda = 0.958; \( F (2, 166) = 3.654; \ p < 0.01 \)). In addition, the same effects in the previous analysis were also obtained (see Table 5), so we can state that the individual’s gender has a moderator effect in the relationships between the visual representation of the product and the consumers’ perceptions (Hypotheses H4a and H4b).

According to this finding, we can examine the potential differences between males and females in their degree of satisfaction with the website and their online purchase intention. Thus, an independent sample t-Test to detect mean differences was carried out. The results revealed significant differences. Females showed a higher degree of satisfaction with the website and a more favourable purchase intentions than males, which is reflected in Table 4.

Table 4. t-Test for Differences between Males and Females

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>MALES</th>
<th></th>
<th>FEMALES</th>
<th></th>
<th>t</th>
<th>Df</th>
<th>sign.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Mean</td>
<td>Std. dev.</td>
<td>N</td>
<td>Mean</td>
<td>Std. dev.</td>
<td>t</td>
</tr>
<tr>
<td>Satisfaction with the website</td>
<td>106</td>
<td>3.295</td>
<td>0.867</td>
<td>106</td>
<td>3.723</td>
<td>0.767</td>
<td>3.447</td>
</tr>
<tr>
<td>Online purchase intention</td>
<td>70</td>
<td>2.567</td>
<td>0.872</td>
<td>70</td>
<td>2.921</td>
<td>1.005</td>
<td>2.412</td>
</tr>
</tbody>
</table>

Note: ** p < 0.05; *** p < 0.01

With reference to the effects of gender on the manipulated variables of the experiment, the pattern of males and females is completely different (see Table 5). On the one hand, female subjects showed a higher preference for high quality images, given that this variable had a significant impact on both their satisfaction with the website and their online purchase intention. The rest of independent variables had no significant impact. Moreover, we can observe an interaction effect between the size and the quality of the product picture: a high quality image together with a size large enough

(3) Equal Variances Assumed (Leuven Test:
SATISFACTION: 
\( F = 0.789; \) sign. = 0.376; PURCHASE INTENTION: \( F = 1.363; \) sign. = 0.203).
could represent an effective combination to influence on females’ affective states.

On the other hand, males showed a different pattern. As can be observed from Table 5, in spite of the fact that none of the effects regarding their online purchase intention was detected, we did find that the three elements –i.e., size, quality and movement– affected significantly their degree of satisfaction. The three elements also interacted to impact on males’ satisfaction with the website. Thus, the combination of these three attributes could reflect the best option to influence on this segment of consumers. Nevertheless, the results indicated that the visual aspects considered did not affect males’ online purchase intention. Although the visual aspects influenced their overall satisfaction with the website, there may be other variables that affect in a greater extent their purchase intentions, such as the product allocation or the information about its characteristics. Further research will try to find which these factors are.

Table 5. Results for Males and Females

<table>
<thead>
<tr>
<th>Source</th>
<th>MALES</th>
<th>F</th>
<th>Sig.</th>
<th>F</th>
<th>Sig.</th>
<th>F</th>
<th>Sig.</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size</td>
<td>4.831</td>
<td>0.032**</td>
<td>1.003</td>
<td>0.320</td>
<td>1.287</td>
<td>0.259</td>
<td>0.909</td>
<td>0.343</td>
<td></td>
</tr>
<tr>
<td>Quality</td>
<td>9.596</td>
<td>0.003***</td>
<td>1.973</td>
<td>0.165</td>
<td>24.375</td>
<td>0.000***</td>
<td>11.601</td>
<td>0.001***</td>
<td></td>
</tr>
<tr>
<td>Movement</td>
<td>14.959</td>
<td>0.000***</td>
<td>1.474</td>
<td>0.229</td>
<td>0.080</td>
<td>0.778</td>
<td>0.954</td>
<td>0.331</td>
<td></td>
</tr>
<tr>
<td>Size*Qual</td>
<td>0.908</td>
<td>0.344</td>
<td>0.754</td>
<td>0.389</td>
<td>5.647</td>
<td>0.019**</td>
<td>3.670</td>
<td>0.058*</td>
<td></td>
</tr>
<tr>
<td>Size*Mov</td>
<td>0.054</td>
<td>0.817</td>
<td>0.199</td>
<td>0.657</td>
<td>2.109</td>
<td>0.150</td>
<td>0.633</td>
<td>0.428</td>
<td></td>
</tr>
<tr>
<td>Qual*Mov</td>
<td>0.444</td>
<td>0.508</td>
<td>0.603</td>
<td>0.440</td>
<td>0.114</td>
<td>0.737</td>
<td>0.299</td>
<td>0.586</td>
<td></td>
</tr>
<tr>
<td>Size<em>Qual</em>Mov</td>
<td>4.202</td>
<td>0.045**</td>
<td>2.949</td>
<td>0.091*</td>
<td>1.552</td>
<td>0.216</td>
<td>0.079</td>
<td>0.779</td>
<td></td>
</tr>
</tbody>
</table>

Note: * p < 0.1; ** p < 0.05; *** p < 0.01
5. Discussion and conclusions
The development of the Internet as a new retail and distribution channel has involved important changes in the manner and frequency of commercial relationships, as well as offering new avenues for doing business. In this context, companies are trying to differentiate their offerings in order to attract as many visitors and buyers as possible to their website. Once the initial fears about intensified price competition among e-firms have been overcome, the competition is arising by means of offering more attractive and quality contents to the users, which lead companies to develop a competitive advantage (Lynch and Ariely, 2000).

Thus, visual aspects related to online product presentation have been revealed as key elements to determine the success of an online firm, given that consumers are using this media for acquiring information about products more and more every day (EIAA, 2008). For this reason, the present study has examined thoroughly the effects of the size, quality and movement of the product picture on users’ perceptions.

The results of the experiment state that the quality of the product picture (i.e., resolution) affects significantly both the users’ satisfaction with the website and their purchase intention. This finding is in accordance with previous studies in the specialized literature on electronic commerce and information processing (e.g. Lee and Benbasat, 2003; Zhang and Myers, 2005). In this way, online consumers could penalise the bad resolution of the product images in terms of negative affective responses. Moreover, both males and females showed a great preference for this attribute in the visual representation of the product. More specifically, females especially value the quality of the picture, since this element impacts not only their satisfaction with the website but also their intentions to purchase the product.

With reference to the movement of the images, we also observed significant positive effects on the dependent variables of the study, although this effect was only found significant for male respondents. The interactivity that the online product presentation offers could lead to positive reactions in consumers (Jiang and Benbasat, 2007; Park, Lennon and Stoel, 2005). Thus, the possibility of rotation to see the product from different
views made participants perceive a higher degree of interactivity, which provoked an increase in their levels of satisfaction. Besides, this 360-degree view availability helps users to identify and know the product in a better way, which facilitates the decision-making process and eventually favours the purchase intentions.

On the contrary, the effects of the size of the product picture were significant only for the males’ degree of satisfaction with the website. In this sense, large images could help to improve the experience with the website. If the online user is provided with an image with a proper size, s/he avoids doing more clicks than necessary to enlarge it and to know better the product. This reduction of effort and the greater speed in performing the task could provoke an increase of the males’ satisfaction with websites, given that these two aspects are especially valued by this group of consumers (Chiu, Lin and Tang, 2005).

If we take into account the sample as a whole, it was not possible to find any interaction effect of the three elements that influenced significantly their perceptions. However, taking into account the moderating role of the individual’s gender, we could state that there are different combinations which could lead to an effective product presentation. On the one hand, high quality pictures with a large size are the best combination for females. For males, presenting the product with a large size, high quality and the possibility of movement was the most preferred alternative. In this sense, we note that, when evaluating a website of electronic products, females search for an adequate product picture, with high levels of size and quality. In addition, males prefer a presentation which lets them interact with the product.

6. Implications, limitations and future research lines
All these results could have important implications associated for the responsible of the design of websites which offer electronic products. Website designers not only have to take into account the costs derived from the implementation and maintenance of visual elements, but also those associated to possible losses in the navigation speed because of the use of design tools. In this sense, electronics’ websites tend to invest great
amounts of resources to develop sophisticated modes of presenting their products regardless of its real utility for users. Nonetheless, it seems reasonable to state that, to present electronic products in the interface, designers should consider the maximization of the quality of the picture, that is, to offer the highest resolution, as a primary concern rather than other features, since this variable influences positively the users’ perceptions of the website.

In addition, consumers’ characteristics could be important to design effective visual representations of the products. The consumer behaviour literature has acknowledged that the individual’s gender affects the way of processing the information and responding to stimuli (Holbrook, 1986; Meyers-Levy, 1989). The present study has demonstrated that males and females differ in their perceptions and preferences regarding the features of the product pictures. In this way, females value especially the picture quality, while males prefer a higher interactivity with the product. Besides, combinations among these features influenced differently on males and females’ perceptions. Therefore, website designers should bear in mind which the profile of their target is (either the website target or the product target) to present their products in the most attractive way.

Following this idea, it seems reasonable to state that there may be different combinations which could lead to optimal visual website design, and these combinations will depend on the type of consumers that visit the site or on the type of products for sale. In this way, further researches should examine these relationships regarding different product categories of different levels of users’ familiarity. Thus, this study has focused on only one product –digital video camera–. In this type of products, it is possible that consumers may be guided by utilitarian benefits, such as functionality and ease of use, rather than other type of benefits. In this way, it would be interesting to analyse the effects of different product presentations on users’ perceptions with other type of products, in which users could seek more hedonic benefits, such as pleasure or entertainment. In addition, consumers who are familiarized with one type of product could have a great knowledge about its main characteristics, while novice consumers may entail in a more complex learning (Zhou and Nakamoto, 2007), which
could lead to different users’ responses depending on their degree of familiarity. In addition, only students participated in the study. Although the representative nature of the sample has been justified, future researches could investigate the effects of the visual representation of the product on men and women with other socio-demographic characteristics. For instance, the marketing literature has revealed that there are differences on the shopping habits between working women and housewives (Rodríguez, Collado and Herrero, 2005), mainly due to the less time available that working women have to make their purchases. To the extent that the Internet saves time and effort to the consumer, it would be interesting to analyse the online shopping behaviours differentiating these groups of women.

Finally, this study has focused on three basic elements of the visual presentation of the product. In practice, we can observe new and more sophisticated ways of presenting the products (e.g., virtual reality, 3D technologies, animations, movies, etc.) which provide users with higher interactivity, vividness and entertainment (Fiore and Jin, 2003; Klein, 2003; Jiang and Benbasat, 2007; Daugherty, Li and Biocca, 2008). Some of these tools include the use of characters (e.g., avatars, virtual assistants, actors) that may affect the way that men and women identify themselves with this communication channel, which usually happens with other conventional media (Royo, Miquel and Capliure, 2006). Thus, it would be interesting to analyse how these new forms to know the products affect consumer’s perceptions. Nonetheless, the basic elements which have been examined in this research will remain important in order for e-firms to succeed in commercial transactions.
Appendix: Measurement Scales

<table>
<thead>
<tr>
<th>SATISFACTION WITH THE WEBSITE</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAT1  I am satisfied with the use of this website</td>
</tr>
<tr>
<td>SAT2  The experience that I have had with this website has been satisfactory</td>
</tr>
<tr>
<td>SAT3  In general terms, I am satisfied with the relationship with this website</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ONLINE PURCHASE INTENTION</th>
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<tbody>
<tr>
<td>OPI1  If I had to buy a video-camera, I would probably use this website</td>
</tr>
<tr>
<td>OPI2  If I had to buy a video-camera, I would probably consider the purchase of a video-camera in Electroshop.com</td>
</tr>
<tr>
<td>OPI3  I will probably consider the purchase of a video-camera in Electroshop.com if I need this product</td>
</tr>
</tbody>
</table>
References


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