The Online Store Merchandising: an approach to the design and the usability

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Abstract
This article explains the keys that an online store must have to make an optimal merchandising strategy. Thus, the main characteristics that a virtual store are analyzed. At the moment of making a commercial initiative in Internet, like in the physical world, it is necessary to define an suitable design of the Website that adjusts to our idea of business and our target. Therefore, in the present work, it is analyzed how the design of the e-shop influences in the development of the marketing management, focusing the following aspects: graphical design, usability and accessibility.

Key words: Merchandising, e-commerce, design usability, accessibility, virtual store.

JEL Code: M31 (Marketing), L81 (Retail and Wholesale Trade; Warehousing; e-Commerce), L86 (Information and Internet Services; Computer Software).
1. Introduction
When we spoke of a virtual shop we can be imagining a store of the street but with the particularity of which it is located in Internet. We would not be on the wrong track totally, but it would have to make a series of detailings that give to this commerce the meaning of virtual, meaning that would be equivalent to the proposals by other authors like electronic shop, online store, Web stores, electronic retailing, electronic catalogue and many more.

Some authors affirm that to consider a Web site like a virtual store, this one must observe the only requirement to qualify the possibility of purchase through any online system, and that includes from the most complex forms of orders, to the simple e-mail, committing itself to the delivery of the product in the address that indicates the client (HECom, 2000).

Table 1. Analogies between real stores and online retail stores

<table>
<thead>
<tr>
<th></th>
<th>ELEMENTS OF THE CONVENTIONAL MERCHANDISING</th>
<th>ELEMENTS OF THE MERCHANDISING IN A VIRTUAL STORE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Exterior Disposition of the store</strong></td>
<td>Sign</td>
<td>Electronic address</td>
</tr>
<tr>
<td></td>
<td>Store entrance</td>
<td>Links with the store from information intermediaries and other Web sites</td>
</tr>
<tr>
<td></td>
<td>Shop window</td>
<td>–</td>
</tr>
<tr>
<td><strong>Inner design of the store</strong></td>
<td>Layouts and internal disposition of the store</td>
<td>Structure of the Web site</td>
</tr>
<tr>
<td></td>
<td>Disposition and presentation of the products</td>
<td>Design of the electronic catalogue</td>
</tr>
<tr>
<td></td>
<td>Store Atmosphere</td>
<td>Techniques of animation, advertising in the store</td>
</tr>
<tr>
<td><strong>Management Merchandising</strong></td>
<td>Selection and analysis of the product portfolio</td>
<td>Selection and analysis of the catalogue components</td>
</tr>
<tr>
<td></td>
<td>Management of the space of the aisle</td>
<td>Organization of the electronic catalogue</td>
</tr>
</tbody>
</table>

Of a summarized way we could affirm that the functions of a real store are (Viñals, 1999): To inform and to sell; to allow to make orders; to cash; to deliver the product; and to have after-sales services. All these functions we must find reflected in the services offered a virtual store. To the first function to inform and to sell is called virtual merchandising (Viñals, 1999).

This virtual merchandising like traditional merchandising takes care of the decoration of the place, the presentation of products, the rotation of such and the yield of the shop (see table 1).

In this way, the equivalent of the window display would be the design, the graphics and the communication (see table 1). These functions are constantly improved and updated by the incorporation of multimedia communication (audio and video). Even so, we find certain limitations that prevent us to put some traditional merchandising techniques into practice. For instance, the fact that the viewing of the virtual shop is bidimensional, make us to lose some information and other incentives that may constitute a very important point at the time of the decision (Rodriguez, I., 2000). Li Hairong et al. (1999) state that on line stores have three main drawbacks:

1. Firstly, it is likely that the way in which the information of the product appears in the virtual store may reduce the impact of the brand. These authors indicate that the screen of the computer shows a list of products and models –figures sometimes–, but the consumer can not see the packaging, logotype colours and other items that may be familiar to him.
2. In second place, the links of the virtual stores allow the consumers to go directly to a specific product, avoiding the distractions of the merchandising in the traditional shop. In this atmosphere, the purchasing by impulse and the test of new brands and products loses force.
3. Third: the online buyers can not perceive the experiences that they have when they come into a traditional store (shop atmosphere, salesman interaction, sensorial stimulus...).
Focusing in the online stores, the new technologies enable to limit the access to some clients to certain contents, based on their history loaded in the data base. In the same way, with a single click, the client can get in contact with an agent, who via voice and image can attend him. The existing technology allows to the online store make micro-merchandising (Liria, 1999).

The virtual store, will be constituted generally by a dominion, and usually is promoted by the own retailer. In its simpler version, it maintains a portfolio of his products that are accessible to the public the 24 hours of the day. It must be accompanied by the traditional strategies of promotion and commercialization. It is the solution represented by the sites of any company, and there are them from the dedicated ones simply to promotion tasks until which they allow to make online transactions (Tamayo, 1999).

The pages that compose the Web site of a company can become simultaneously a point of sale and a source of information. Some companies use the virtual stores like a complementary service, like a value added to their clients. The online shop and the physical shop may enhance each other with crossed promotions, logistic and supply services, or services of added value (Steinfield and Whitten, 1999).

We have already commented in previous occasions that maintaining a Web site in Internet is a communication instrument more, and therefore, an instrument more of public relations. This media more and more can be used like an important support at the time of constructing a corporative image. This necessity is accentuated still more in the companies that only have this channel to make contact with the public, since they don’t count on the reference of a strong brand or a physical store.

2. Online store design
The design and the presentation of the Web site can have a great importance in the consumer online behaviour since they are reference points with a great influence in the processes of purchase decision (Mandel and
Jonson, 1998; Menon and Khan, 1997). Aspects like the speed of navigation, contents definition, and of course, creative aspects of the Web site, have to be considered when the company comes into the Net (Rodriguez L., 2000). Therefore, not only the online store has to be attractive, but the design itself has to be an essential part of the global sales’ strategy (Hartmann and Zorrilla, 1998). The cultural and institutional element also has to be considered, due to its significant influence in the Web site design (Phau and Poon, 2000).

Some authors and consultants forecast a great development of the online sale to final consumer, but many works are demonstrating that these expectations are not being carried out. The number of Web sites and total sales is still marginal, and partly, it is caused by a poor navigability and design of these webs (Hoffman, Novak and Chatterjee, 1995; Lohse and Spiller, 1998).

A stream of investigation tries to demonstrate the effect that has the design of the Web site in the company profits. In this line, Lohse and Spiler (1998; 1999), made a study in which affirm that the Web site design affects significantly in the volume of sales. They elaborated a model in which the variables based on the characteristics of the Web site explain the sales: number of links, hours of promotional advertisements, and number of products and characteristics of navigation in the Web.

According to Enrile D’Outreligne (1999), the client in the first place looks for the product or the service more than a brand in concrete. For this author, the brand is not the main element of the Web if not the necessity satisfaction. This author indicates that there are other elements to consider, as the easy navigation, good product presentation, text in several languages, the company address, updated maintenance of the content, etc.

We have also to bear in mind when we establish the criteria to design a Web site, that this Web site is conformed by documents Web structured in a more or less hierarchized way (Hakman and Chung, 1998). In spite of their name, the Web documents present characteristics quite different
from the most traditional documents in paper support, or even other electronic supports (CDRom, for instance).

We must consider as well that in the Net we can find a lot of documents that contain advices and norms for the right accomplishment of a Web site, but there is not a list of universally accepted advices. In fact, there is not a general agreement on the elements that must be included in a Web site, neither on the basic knowledge that must have a designer (Benavent, 2000; Escribano et al., 1999).

In Internet we can find a great variety of lists of advises to design the web. Some of them are mere general recommendations. Others are centred only in the aspect of the document Web (aesthetic topics). An extract of these recommendations will be described in the following three subsections.

1.1. Graphic design
The recommendations about the graphics design are the most abundant, as much in Internet as in the specialized magazines. Usually they make advices on aspects like colour, typography, navigation's elements, characteristic of images for the bottom of the Web (smooth ends, small size, complementary colours), and size of the images that illustrate products. It is true that an image is worthiest than a thousand words, but a good image takes time to unload. On the other hand, a reduced image usually has low quality or appears blurred. The optimum is taking a balanced point (Lohse and Spiller, 1998).

The main problem of these advices and recommendations is the almost total absence of objective elements that makes them trustworthy, since they are based on the personal opinion and the experience of the author (Escribano et al., 1999). In spite of this, we can find some empirical studies that explain how the website design affects to the consumers perceptions and attitudes, and therefore how it influences in the purchase process (Mandel and Jonson, 1999).

These authors showed that environmental aspects of the web may have an important impact in the purchasing decision. Although its study was
only focused in the effects of the colour of the bottom, the authors affirmed that the results could be extended to other elements that compose the atmosphere of the Web site: sound or video, for instance.

Finally, we can emphasize that exists a group of recommendations present in most of the lists, reason why seems to have an implicit consensus in those points. The mentioned norms more usually are:

- Use of few colours to avoid that the file grows in excess.
- Polish the ends to smooth the transitions between images.
- Election of a clean bottom, of uniform colour or at least with smooth tones.
- Insertion of images with an adapted format and resolution to not slow down the surfer navigation.
- To be coherent with the selected typography. To highlight the hypertext connections as well (Benavent, 2000).
- To fit the design of the document to the resolution of screen more extended to avoid the horizontal displacement (Lohse And Spiller, 1998).
- To create a simple iconography, complete and of universal understanding for all the document.

1.2. Usability and design
The Web site design must assure a high level of usability. It has to solve the problems of interaction between the user and the different applications of the Web site (Concejero et al., 1997). Thus, a good relationship with the user will be established, and therefore the usability becomes a key element to obtain the client loyalty (Benavent, 2000).

In this section exists the advantage to count with a significant point of reference: http://www.useit.com. The fact that its creator, Jacob Nielsen, would be an authority in the matter, has done that the investigators and designers of Web pages, follow the direction marked by him. The rules mentioned in most of the lists are the following ones:
• To use a simple language using familiar concepts for all the possible users.
• To give emergency exits to leave an undesirable situation.
• To provide ways of operation or fast functions, addressed to expert users in the application.
• To minimize the mental load of work. The instructions of use of the system must be visible or easily recoverable when it is necessary. Use of the recognition intuitive over the effort of the memory. The users do not have to be forced to remember key information between documents.
• Consistency. Use of identical terms and graphs to indicate similar concepts. Use of uniform conventions of space distribution, formats, typographies and submarks throughout the Web site (Lohse And Spiller, 1999).
• Comprehensible error messages making reference explicit to the problem and suggesting, of constructive form, a solution.
• Helps and documentation. The information must be easily locatable and be focused to the tasks of the users, such as a small list of steps to make to establish a connection.
• Location system. In order to minimize the effect “to be lost” during navigation, several location systems must be provided. For instance the inclusion of the page title, sitemap, index of matters or alphabetical index. These systems of location can be divided in direction and position indicators. The firsts allow the internaut to locate in the hierarchic structure of the Website; the seconds, allow to select a destination. Actually the direction indicators are used, but not for that reason, we must neglect the position indicators, since they have a considerable importance (Benavent, 2000).
• To give informative feedback. The system must always maintain the informed user on which it is happening (Lohse And Spiller, 1999).
• Hierarchical organization of the information so that the most general contents are in the superior level and those of greater detail in
those of inferior level. It is recommended not more than two levels. Let us remember that the speed of reading on a screen is sensibly less fast than in paper support (Hoque And Lohse, 1999). Therefore it is recommendable to structure the information so that the user can comfortably distinguish the main thing of the accessory (Benavent, 2000).

- Use of links easy to detect and names conceptually related to the function. The number of links in one page must be between a minimum of 5 and a maximum of 10, depending on the length of the page. It is important that the visitor can discriminate quickly that what are the links and to understand towards where they go (Benavent, 2000).

On the other hand, perhaps the most important principle is than the design and the development process is based on a process that is known as user centered design. This process is gathered in recommendation ISO 13.407. Any process of design must begin with the definition of the user requirements, obtained of the real users (Concejero Et Al., 1997).

Tilson et al. (1998) showed the most frequent failures in the webs. One of them, for instance, is not explaining clearly how to add products to the shopping basket. The list includes 50 factors that affect the purchasing decision. The top five mentioned as more important are: security of the credit card, simplicity to change a product of the shopping basket, the detailed description of articles, the prices, and the security of the provided personal information.

An investigation made by Menon and Kahn (1997) suggests three elements to explain the satisfaction of the client: the characteristics of the products, the characteristics of the websites and the accessibility of the web. These authors show two main differences between e-commerce and the traditional one: the first one is that the environment of the Website is reduced to a small screen; and second, that distance and time appear compressed. The narrow field of vision suggests that the consumers are cen-
tred immediately in certain products; and the condensation of time suggests them that the products seen before have more influence than those seen later. Thus, in the e-commerce, a new element of design that can influence in the consumer behaviour is the sequence in which products are shown (Menon and Kahn, 1997).

As well, Lohse and Spiller (1999) studied, through a linear regression analysis, the design and the components of a determined type of website\(^1\), verifying the existence of a positive relationship between certain characteristics (like the assortment, the listing of products or the options of purchase) and volume of sales or flow of visitors.

These authors agglutinated in four groups the characteristics and elements of the online stores that more significant effects had on the online store design:

- **Navigation**: the Web site design must allow to easily compare products and in a same screen (not to have to open a window for each product that is desired to compare). Also it must facilitate the access to products related in the same store.

- **Promotion**: the online store promotion in the portal homepage or e-mail, increases the affluence of visitors and therefore the sales. Another way to promote the store online is offering additional entrances through links in others webs.

- **Store size**: a greater extension of the store surface implies a greater affluence of individuals, although this greater traffic not necessarily means an increase in the sales. One of the reasons is that they do not find the product that needs. For that reason it is necessary to qualify in the virtual store a service search or to introduce new mechanisms to locate products (by price, by size or another characteristic). In the virtual world, the size of the store is reflected in the number of hierarchic levels that there are since the user enters the store until he is arrived at the page of the products (number of screens that there are to view until finding the product wished).

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\(^1\) The study made by Lohse and Spiller (1999) was based on a category of virtual establishment that they called “Super Stores”. These authors indicated that the virtual shops “Super Stores” had an ample product selection and where the information provided to the client is extensive, including information of the company, products, the order management or the gratuitous services. They generally provide a service of the client attention (SPILLER and LOHSE, 1997).
- **The store presentation**: the authors did not find a significant effect of variables of presentation like the size of the images, the bottoms or the number of option button of the main page. They comment that the consumers want is to find products easy and quickly.

Due to the problems in obtaining the sales of the companies, its study was limited to only several virtual shops. However, the results are interesting and conclude that a poor navigation has an important influence in the conversion of visits into effective purchases. Between these results we can emphasize (Lohser y Spiller, 1999):

- more variety of products in the store attracts more traffic, nevertheless they found little evidence that this increase in the traffic was transferred to an increase in the sales;
- the improvement in the product listing (of a simple menu of products to sophisticated lists with images of products) has a great effect in the sales;
- a greater incoming number in the store involves a greater number of visits and an increase in the number of sales;
- the variety in the forms to buy, the additional information and the characteristics of products did not seem to have a significant effect in the sales.

2.3. **Accessibility and design**

When a Webpage is designed, it must be accessible, independently of the client configuration (Internet server, operating system, browser, resolution, software version, etc...). This implies the application of the principle of the standardization. And not only for technical reasons, but also to allow the access to the contents of the document to handicapped people (problems with the mouse, difficulties with the monitor, accessibility to an acoustic navigator, etc.). This is an indispensable condition for the construction of an Internet “for all” (Escribano et al., 1999).
Similar problems appear with the connection’ speed of the users modems. Not all the companies, neither the individuals, have the same speed of connection. A simple design is recommended (to avoid the abusive use of photos or extremely extensive pages). In spite of it, a segmentation of the visitors will allow to fit the weight of the page based on the computer equipment of the users (Benavent, 2000).

The accessibility to the information offered by an online salesman is very important in a context of electronic transactions. It is also important the reliability, the convenience of the offered services, and the competitiveness in prices (Swaminathan et al., 1999).

In order to finalize this section we present a study about the main factors that compose and define the merchandising of the virtual stores.

3. Objectives and methodology
The main objective of this work is to specify the most determining factors of virtual merchandising.

An empirical study on a representative sample of online buyers has been carried out. We considered as a user of a virtual store a person who have visited, purchased or enjoyed the services offered by a virtual store at least once in the three months previous to answering the questionnaire. A personal survey has been made with the purpose of emphasizing the main elements of the virtual shop and its importance in the purchasing process in Internet.

From the obtained results it makes a factorial analysis to determine the most important dimensions at the time of designing a commercial Web site. This method facilitates the excellent information to us of the data initially observed, and it determines the main factors that allow us to know the most valued characteristics in the online stores.

The fieldwork was carried out in Barcelona (Spain) in June 2001, by personal interviews. The total number of valid completed interviews was 461, representing a sample error of 4.66% for an infinite population (see table 2). The profile of the interviewed people was: male under thirty with
a university degree, experienced internet “surfer” (with more than three years connected), Internet user (more than once a day) and on line buyer.

Table 2. Technical record

<table>
<thead>
<tr>
<th>Population</th>
<th>Internet users, who have visited, purchased or enjoyed the services of a virtual store, at least once during the three months immediately previous to the accomplishment of the survey.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample</td>
<td>461 valid responses with a margin of error of ±4.66 % and a confidence level of 95.5 % (k=2 and P=Q=50%)</td>
</tr>
<tr>
<td>Procedure</td>
<td>Simple random sample</td>
</tr>
<tr>
<td>Period of Study</td>
<td>June, 2001</td>
</tr>
<tr>
<td>Method used to collect information</td>
<td>Personal Survey by means of semistructured questionnaire</td>
</tr>
</tbody>
</table>

4. Determining factors of the virtual merchandising

With the results of the survey, a factor analysis of the main components—with varimax rotation—was carried out from the attributes to value of a virtual store. This method reduced the whole group of correlated variables of perception of the service to a smaller number of mutually intercorrelated components. As a result, a series of quantitative indices was obtained. The most important of these included the eigenvalues, the commonalities, and the factor matrix. The eigenvalues indicate the percentage of variance of the original variables that explain each one of the components, the commonalities indicates the percentage of variance of each variable that is explained by the components and the factorial matrix shows to the correlation between the components and the variables.

The correlations between the variables demonstrated a degree of commonality in their explicative capacity. The matrix of correlations was submitted to two tests: Bartlett’s sphericity test and the Kaiser-Meyer-Olkin (KMO) index.
The Bartlett statistic, which takes the value $\chi^2 = 5.357,768$ with a critical significance level of 0.000, makes it possible to reject the null hypothesis of non correlation between the observed variables. The Bartlett test confirmed the existence of lineal dependence between the variables and justified continuing with the procedure.

### Table 3. Rotated Component Matrix

<table>
<thead>
<tr>
<th></th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>- The presentation and characteristics of the product are adequate</td>
<td>0.781</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>- The pages download quickly</td>
<td>0.772</td>
<td>0.266</td>
<td>-</td>
</tr>
<tr>
<td>- When they promise to do something within a certain period they do it</td>
<td>0.745</td>
<td>0.311</td>
<td>-</td>
</tr>
<tr>
<td>- When a customer has a complaint it is dealt with quickly and efficiently</td>
<td>0.739</td>
<td>0.372</td>
<td>-</td>
</tr>
<tr>
<td>- The contents of the web site are easy to find</td>
<td>0.725</td>
<td>0.339</td>
<td>-</td>
</tr>
<tr>
<td>- The web site is regularly updated</td>
<td>0.687</td>
<td>0.317</td>
<td>-</td>
</tr>
<tr>
<td>- Delivery is done within the agreed time and date</td>
<td>0.567</td>
<td>0.431</td>
<td>0.153</td>
</tr>
<tr>
<td>- The service is carried out well first time</td>
<td>0.564</td>
<td>0.500</td>
<td>0.113</td>
</tr>
<tr>
<td>- They give the impression of being a serious and trustworthy in their workings</td>
<td>0.547</td>
<td>0.449</td>
<td>0.172</td>
</tr>
<tr>
<td>- They contain clear information about available stock at the purchase moment</td>
<td>0.299</td>
<td>0.737</td>
<td>0.101</td>
</tr>
<tr>
<td>- They contain clear information about how to make a purchase</td>
<td>0.298</td>
<td>0.709</td>
<td>-</td>
</tr>
<tr>
<td>- Security elements are incorporated which customers are informed about</td>
<td>0.351</td>
<td>0.662</td>
<td>0.160</td>
</tr>
<tr>
<td>- Once the purchase is completed, confirmation is given of satisfactory completion of the purchase</td>
<td>0.231</td>
<td>0.645</td>
<td>0.142</td>
</tr>
<tr>
<td>- Different methods of payment are permitted (credit card, C.O.D., etc.)</td>
<td>0.128</td>
<td>0.591</td>
<td>0.321</td>
</tr>
<tr>
<td>- They give the possibility to change and/or postpone the purchase without compromise.</td>
<td>0.437</td>
<td>0.568</td>
<td>0.207</td>
</tr>
<tr>
<td>- Customer information is guaranteed to be strictly confidential</td>
<td>0.485</td>
<td>0.549</td>
<td>-</td>
</tr>
<tr>
<td>- They contain ample information about the characteristics of the product and the services offered</td>
<td>0.496</td>
<td>0.537</td>
<td>0.199</td>
</tr>
<tr>
<td>- They contain clear information about the company (name, kind of company, country telephone, address etc.)</td>
<td>0.191</td>
<td>0.447</td>
<td>0.379</td>
</tr>
<tr>
<td>- They have a leisure or entertainment element (games, videos, interactive applications, etc)</td>
<td>-</td>
<td>-</td>
<td>0.823</td>
</tr>
<tr>
<td>- They allow communication with other users with similar preferences or interests</td>
<td>-</td>
<td>0.148</td>
<td>0.778</td>
</tr>
<tr>
<td>- They have access to other web sites which have a complementary content</td>
<td>-</td>
<td>0.152</td>
<td>0.766</td>
</tr>
<tr>
<td>- The applications and elements which make up the websites are visually attractive</td>
<td>0.492</td>
<td>-</td>
<td>0.537</td>
</tr>
<tr>
<td>- 24 hour customer telephone service</td>
<td>0.104</td>
<td>0.433</td>
<td>0.524</td>
</tr>
<tr>
<td>- Different rates are offered for different kinds and periods of delivery</td>
<td>0.285</td>
<td>0.412</td>
<td>0.506</td>
</tr>
<tr>
<td>- The online store gives clients personalized service</td>
<td>0.427</td>
<td>0.340</td>
<td>0.429</td>
</tr>
</tbody>
</table>
It was therefore appropriate to apply factorial analysis. An exploratory factor analysis was carried out and three factors or components were obtained. The Kaiser criterion was used in their elaboration in such a way as to conserve only those factors that presented eigenvalues of one or greater. The first three factors retained 72.3% of the initial variance—which represents a correct proportion given that each of the new components provided independent (and therefore unrepeated) information.

With the rotated component matrix (Varimax rotation method) it was possible to obtain weightings for each factor in each of the variables (see Table 3). Note that the items that appear in this table have been grouped together in three bands. The first strip presents items with highest saturations on the first factor; the second strip presents those mainly saturated on the second factor; and the last group is formed by items more closely related with the third factor. Each factor had a high correlation with one group of variables and a low correlation with the rest—thereby providing a more appropriate interpretation of the initial factors.

The factors derived from the analysis were assigned a label and an index (or score). This index was the arithmetic average of the items that formed it. The variables with high saturations (which appear in italics in the previous rotated component matrix) corresponded to the following factors:

**FACTOR 1, Reliability:** it is positively related to characteristics like fulfilment of the done promises, fast attention of complaints, easy and effective navigation, fulfilment of the delivery dates, service is carried out well first, the suitable presentation of the product and its characteristics, or the transmission of a good image in transactions (average score: 5.15).

**FACTOR 2, Assurance:** it is defined by aspects related to the information from the purchase process or the availability of the product, the incorporation of security systems, the purchase confirmation, the possibility of making the payment through different ways or the confidentiality of the clients data (average score: 5.19).
FACTOR 3, Communication: it is positively related to the web information, with leisure elements and communication with people with similar interests, links to other websites, individualized attention, the fact to have a contact telephone 24 hours and the Web design (average score: 4,31).

Figure 1. Scorings for the three factors that define online stores quality service

The three factors were scored above four (the average value of the measurement scale range from 1 to 7), which leads us to the conclusion that the level of satisfaction of the online shopping experience was good. But there is still room for improvement, especially in communication.

In order to finalize this section, it is possible to say that the service quality in the e-commerce field is satisfactory by interviewed internauts. The three factors that determine the service quality have obtained scores between 4.3 and 5.2 in a scale [1, 7], where the 4 are the central value.
5. Conclusions
In this work we have reviewed a series of considerations about the elements that must incorporate the design of a virtual store and that techniques we arrange to apply it to the commercial management. After this revision we can draw the following conclusions:

First conclusion: the design, the content and the image of quality of an Internet store have a significant importance because is into virtual environment.

As in the traditional store, in the virtual shop, the atmosphere that surrounds to the online consumer has significant effects in its purchase behaviour. This atmosphere will have common components in both types of establishment, but the virtual store presents inherent characteristics. This environment will be done by the design from the bottoms, the links, by the structure of the contents, the hierarchic listing of products, the graphical and written information of products and processes of purchase, introduction of multimedia elements, etc.

Nowadays we are observing a great proliferation of this type of virtual stores, in which one notices that there are not standards in menus, in structures or navigation motors within the web, reason why the user must itself adapt based on each store to which he enters to buy.

As it is possible to be observed with these appreciations, the design and the image of quality of a virtual store can be key at the time of being different from the rest of virtual businesses and providing the necessary confidence so the user accedes to buy. In many occasions, this confidence is facilitated by the previous existence of the store in the physical world, with which this involves: brand improvement, transmission of the image of the physical store to the virtual store, advantage of the logistic resources and distribution, etc.

The fact that a firm coexist, as much in the physical world as in the virtual one, it does not ensure the success. The generalized implantation of the e-commerce can end up causing the disappearance of the companies that are not able to incorporate an added value different from the service.
which traditionally they facilitate, as well as greater guarantees of security in the transactions.

Another aspect to consider, is that in a next future, the access to Internet can that is not mainly through a computer screen. At the time of designing the virtual store, they must consider other means of access that at the moment are incipient and with great perspective of growth as they are the interactive digital television, the cellular phone, the personal data assistants, etc. This is of supposition that will as well cause an increase of the number of connected people to Internet, when multiplying the possibilities of access to Internet.

We must know clearly that a good design, only, does not ensure the success to us. Not even a good communication. Variables like the security, the trust, the delivery of the product, they are considered by the consumer at the time of materializing the purchase.

This can be a good reason that explains why the percentage of internauts who try to make a purchase in the Net, fail and resign, is so high. The problems are fundamentally technicians, of connection and similar, but also there are errors related to the transaction and the required information to complete the purchase process.

Security, price, comfort and speed, seem to be the keys to maintain an online store in Internet. The model of virtual store must show the objective of the business, to describe the mean options, to allow the intuitive direction and, finally, to include simplicity in the search processes, selection and payment. And of course, to let the website be known.

Second conclusion: the management of a virtual store carried out as a traditional business can be an important reason for failure.

The fact that a store in Internet has own characteristics, as the interactivity and the connectivity, must be considered by the manager of this type of businesses.

The marketing department managers will have to consider the way in which the communication and promotion patterns can be adapted to this interactivity. The interaction of the consumer will come given from many
ways: design of new products, development of a strategy of product and marketing differentiated or the innovation from the content (HOFFMAN and NOVAK, 1996). And we do not forget the aspect the design and the atmosphere that has quoted previously.

It can have great different reasons that explain the causes of the failure of an online store. We can emphasize some of them. In the first place, lack of strategic planning by the online businessmen. The offerers of information in Internet have an ample ignorance of this media and its transactional possibilities. It does not plan previously the possibilities of this new media. In many occasions it is tried to transfer the model of traditional business to the Net with few or null adaptations to the virtual environment or, the business in Internet like an extension of its activity in the physical world is considered. Then it is tried to justify the failure, or by the immaturity of the market or inexperience of the consumer, the lack of confidence or the delay at technological level of the country with respect to others. The true reason can be the absence of specific and adapted enterprise strategies.

Secondly, we have to emphasize a lack of promotion of the virtual site inside and outside the Net. When the Website is online, sometimes it does not consider registering in the national and international searchers, to advertise through banners, to insert links in compatible pages, to use traditional means of promotion, etc. to be found by the internauts. For example, he is quite usual which the Website is not identified with the rest of the promotional campaigns of the companies, like putting the electronic address in cards, folios, envelopes, in the corporative publicity, etc.

The benefits and new features of the Web site are not included either in the communication campaigns, do not even include these campaigns within the own Web, thinking that this is other people’s to all the other activities of the company. The belief is had that by the mere fact to be in the Net will be found by the million users, who the promotion becomes single.

Thirdly, we can mention the lack of resources of interaction between the Website and the user. The fundamental difference between Internet
and traditional mass media are the interactivity, since we have already commented previously.

It is frequent that in some virtual stores does not take care of as important aspects as the design, the processing of the image, the usability, the establishment of routes of communication with the client to know their opinions or to provide information to them about the company and products, the establishment of safe and simple procedures of purchase, among others.

This situation can be explained by the fact that at the time of designing and elaborating a virtual store, the manager is focused more in the technical aspects that in those of marketing, communication or commercialization. The origin of the problem can come in which the developed business policies through Internet are not integrated in the marketing strategies, since they are implanted of an independent way.

6. References


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