Evaluation of Web Users' Attitude toward the Brand Online: The Case of an Online Event

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Abstract

Web users surf the net looking for web pages that use several attractive tools such as music, graphics and colors. In the context of online purchasing, these atmospheric variables answer web users' queries and consequently influence their behavioral responses. The present survey targets the study of the impact of a website's atmospheric dimensions (readability and design) on the web user's attitude toward the brand. The study is about an online event created by Tunisiana versus Ooredoo (a private telecommunications operator in Tunisia) following the commercial rebranding that aimed at unifying the group and subsidiaries within one brand. The survey was conducted using administered questionnaire next to a convenience sample of 200 web users. The results of the study demonstrated the positive influence of website readability as well as design on the web user's attitude toward the brand.

Keywords: Website atmosphere, attitude toward the brand, readability, design, online event.

Introduction

Companies use websites to promote their products and services. Considering the multiplying number of sites and the constant concern for differentiation from competitors

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in conditions similar to the real purchasing environment, companies show more and more interest in this virtual context via web designers.

In fact, web users surf the net looking after various devices that would draw their attention such as music, graphics and colors. In an online purchasing context, these atmospheric variables help answer web users' queries (Limayem, 2006). Admittedly, in real sales outlets, distributors use decorative variables to increase the sales volume (Lemoine, 2005); while in virtual stores, designers are quite resourceful in varying the atmospheric variables.

Several studies dealt with websites' atmospheres. Some have for instance highlighted the impact of atmospheric variables such as music and colors on consumers' behavior (Manganari, 2009; Mummalaneni, 2005). Other studies have also focused on the mental imagery generated during the surfing experience (Khrouf and Gharbi, 2008). However, only a few studies have taken into consideration the evaluation of web users' attitude toward the brand.

The present study hopes to examine the impact of the atmospheric dimensions of a website (readability and design) on the web user's attitude toward the brand.

In order to meet this objective, we conducted a study on the online event created by Tunisiana versus Ooredoo (private telecommunication operator in Tunisia) following the rebranding strategy that was operated in April 2014. A questionnaire survey was conducted on a sample of 200 web users. The data analysis was realized using structural equations methods.

We hereby propose a literature review on the atmosphere of a website and the influence of atmospheric variables on the attitude of the web user toward the brand. Starting from this literature, we were able to develop a conceptual model that integrates a website's atmospheric variables (design and readability) and the attitude of the web user toward the brand. Secondly, we will present the methodology then the results and managerial implications.

Conceptual framework

The concept of a website atmosphere

It was during the 1970s that interest in the concept of atmosphere in a sales outlet started to take shape. The atmosphere of a physical sales outlet corresponds to « the creation of a purchasing environment producing emotional effects, such as pleasure or excitement, that is susceptible to increase the purchasing probability within the individual » (Kotler, 1973).

Studies on the atmosphere of a sales outlet are based on several models that discuss the dimensions of atmospheric variables. Milliman and Fugate (1993) define atmosphere as being the set of components of the purchasing envrionment affecting the individual's perceptual field and able to stimulate his/her senses. To this end, various dimensions have been proposed in the literature and one can mention that of Turley and Milliman (2000), Berman and Evans (1995), and that of Bitner (1992). Baker's definition (1983)

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particularly offers the most comprehensive vision. It provides information on ambient, design and social variables. Later adapted to the virtual world, this classification offers a wide area of research and drives scholars to propose theoretical foundations.

In fact, it was with the start of the millenium that some studies have tried to conceptualize the atmosphere of a website (Lemoine, 2008; Dailey, 2004).

Dailey (2004) defines the atmosphere of a website as the « *development of virtual environments destined to create positive effects, both at the individual's cognitive as well as emotional levels, in order to cause favorable responses towards the site (check the site again, spend time on the site)* ».

By analogy to a sales outlet's atmosphere, the atmospheric elements of a website influence the behavioral responses of the web user such as the time dedicated to the visit, the number of clicks, the number of consulted pages, the purchase intentions and the intentions to revisit the website. This influence will happen through various procedures such as colors, music and animations for instance. In fact, inspite of web users' volatility, they are attracted by some characteristics of this medium (Guizon and Amato, 2004).

The components of a website

Various variables of a website atmosphere can act on the web user's presence and on his/her online behavior. We can cite the functional elements (presence of pop-ups, site plans, pull down menus), or the hedonic ones (such as background music, animations, videos, games) or even symbolic elements (background colors, size and police used, nature of images on the site) (Chang et al., 2002).

We will hereby refer to the dimensions of readability and design. The choice of these two variables is not arbitrary, it is out of concern to vary the technical characteristics and a website's decoration variables. Besides, the study of the attitude toward a brand in a website requires the use of well-defined atmospheric variables that are in direct relationship with the web user.

Readability of a website

Among the most important characteristics of a website is its readability. According to Gonzalez (2005), this means the ease and the possibility of finding an answer to an online problem in at least one click. To Lemoine (2008), website readability appears as the variable associated to surfing the site, *i.e*. ease, simplicity and clarity of usage. Readability is definitely the most required variable by web users.

In the context of electronic commerce, the input of Boyer et al. (2008) classifies this variable among the 5 dimensions of website quality which are:

- The quantity and quality of information available on a website.

- Ease in surfing, use and understanding.

- Site design mainly readability and composition of its pages.

- Reliability and online seller's ability to keep promises.

- Security of transactions and personal data.

According to Elidrissi (2005), this variable is understood as « pleasure for the eyes ». It engages a good « visual quality » destined to apply background colors, texts and images to achieve « behavior loyalty » toward the site.

Gonzalez (2005) affirms that there is a need to add variables that have characteristics linked to aspects of color, music, animations: It is the design of a website.

The design of a website

Web users' online presence requires recognition of the needs and a particular design that allows answering their needs. According to Ladewin (2001), the design of a website acts on the « satisfaction of the web user, on his/her purchase decision and even on his/her loyalty». To Cova (2004), the design is seen as a global activity that unites both the physical and the mental aspects. This takes into consideration the formal dimensions of objects as well as their structural, functional and symbolic dimensions.

According to Lemoine (2008) the design of a website is in tight relation to navigability and accessibility. It is the variable that is compared to the agent that facilitates moving inside the sales outlet. In other terms, the design of a website is expressed by the ease of its use, its simplicity, its clarity and its readability.

The works of Katerattenakul (2002) have helped synthesize the design of a website in three dimensions:

-Design that target pleasure: they foster the web user's acceptance of the visited environment which in turn engenders an excitement that will extend the duration of his/her presence on that particular site. The user will then feel a kind of pleasure/displeasure and will consequently orient his/her behavior on the site.

- Design that facilitate the search: This is about the amount of information collected on a product/service which will satisfy a need in asking for further information. The web user would have easily understood the presented information without having the need to surf other web pages and extend the search toward other horizons. The existence of an information search tool, a comparison with competing rates, the availability of a virtual agent, the fast access to updated data are all tools that help direct online presence.

-Design that facilitate the transaction: exist in websites with online payment tools and drive the web user to finalize a purchase. In sum, this classification aims at making « a website one of quality or efficiency » (Katerattenakul, 2002). These designs meet the requirements of web users while making their surfing experience a pleasant one. In addition, the abundance of useful information on the product will more easily lead to a purchasing action endowed with a secure transaction. The design will then act as a fundamental element in the web users' intention to revisit the site and in their eventual behavior such as online attitude toward the brand.

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Impact of a website atmosphere on the web user's attitude toward the brand

There exist several definitions of « attitude » proposed in the literature. Mc Kenzie and Lutz (1989) define the attitude as « a predisposition to respond in a favorable or unfavorable way to a particular stimulus during a particular occasion of exposition». As to Eagly and Chaiken (1993), they define attitude as « a psychological tendency expressed while evaluating a particular entity with various degrees of approval and disapproval ». It is influenced by subjective values or beliefs toward the evaluated object (Ajzen, 2001).

In spite of the interest shown by research on the concept of website atmosphere, studies on the evaluation of the latter in terms of web users' attitude toward the brand hardly exist. Most of the works on website atmosphere have focused on the latter's evaluation in terms of attitude toward a website (Chen and Wells, 1999; Heijden, Verhagen and Creemers, 2001). For instance, the works of Gorn et *al.* (2004) exploring the effect of color on downloading time show that a long waiting time can affect the evaluation of an internet site and the willingness to recommend it to others. Biers and Richards (2002) studied the impact of a website's dominant color on the perception of promoted product. Finally, Sibéril (1994) examined the effect of music on the evaluation of a store.

Within the scope of our research, we are interested in the study of the impact of a website's atmosphere in terms of the attitude toward the brand. We argue that the atmosphere of a website could positively influence the attitude toward the brand. We particularly posit that the two components of the atmosphere of a website (which are readability and design) positively influence the attitude toward the brand.

Within the context of electronic commerce, the studies of Filser (2001) and Lemoine (2008) have demonstrated the influence of the atmospheric variables of websites on web users' online reactions. The readability and design factors justify emotional reactions such as pleasure, contentment, relaxation and anger among a number of behavioral reactions such as on site traffic and time dedicated to the visit (Lemoine, 2008).

These findings helped extend our research scope and integrate the attitude toward the online brand variable and consequently formulate the following hypotheses:

H1: Readability of a website positively influences the web user's attitude toward the brand.

H2: The design of a website positively influences the web user's attitude toward the brand.

This hypothesis is therefore divided in two further hypotheses as follows:

H2.a: Designs targeting pleasure positively influence the web user's attitude toward the brand.

H2.b: Designs facilitating the search for information positively influence the web user's attitude toward the brand.

The various relations that were distinguished can be schematically presented in the model (see figure 1) that we are trying to test.
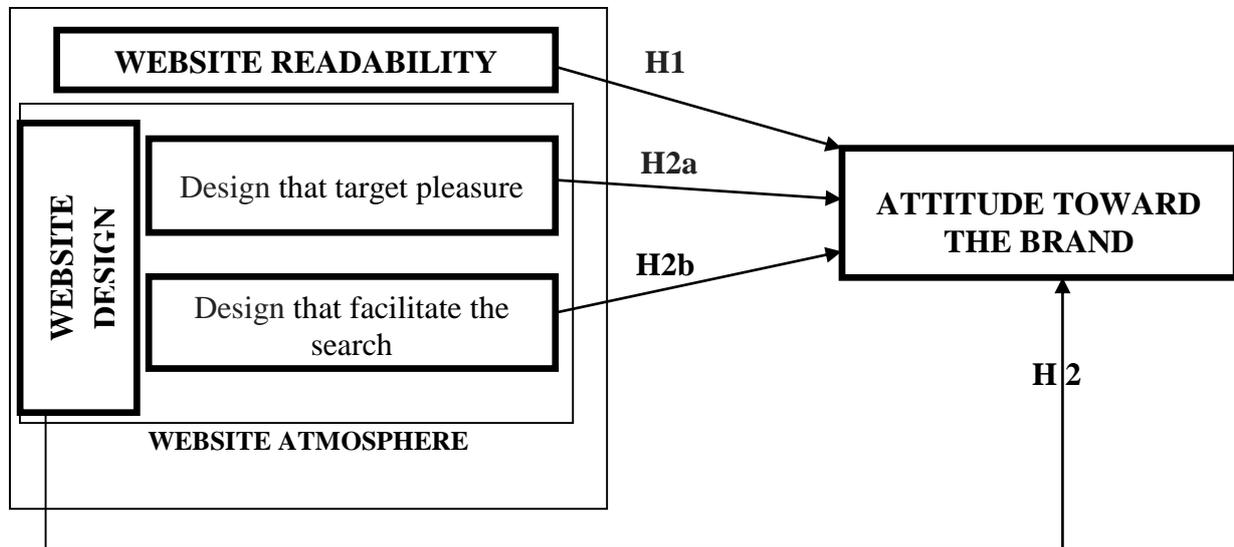

Figure 1 The conceptual model of the research

Methodology

Context of the study

Our study examined an online event created by Tunisiana (a private telecommunication operator) that changed its name into Ooredoo (meaning in English: *I want*) in April 2014. This *rebranding* strategy consists in modifying one or all the elements of a brand in order to create a new one. In the case of Tunisiana versus Ooredoo, the rebranding strategy covered all the elements of the brand (name, logo, and slogan). This decision has been made following the repurchase of *Tunisiana's shares by Qatar telecom who is now a majority shareholder.* This change in the trade name aims to unify the group and its subsidiaries under one brand as it was the case with Orange and Vodafone. *Ooredoo exists today in 15 countries and the brand is mainly visible in North Africa, in the Middle-East and South Asia.*

Data collection

In order to evaluate the impact of atmosphere of a sales outlet on the web user's attitude toward the brand, we have conducted a questionnaire survey. Data was collected via an online questionaire next to a convenience sample of 200 individuals, 43% of whom are males and 57% are females (see the table1 below on the sample's characteristics).

Table 1 Sample characteristics

Gender	%	Age	%	Educational level	%
Male	43	18-25	40	Primary	5
Female	57	26-35	35	Secondary	33
		36-50	17,9	University	62
		More than 50	7,1		

Measuring the variables

Readability was measured using the Yakov and al. scale (2005). This scale was validated by Yakov and al. (2005) by showing good reliability ($\alpha=0.82$).

The design's measuring scale was equally adopted in the works of Yakov and al. (2005) and is characterized by its good representation quality ($\alpha=0.83$) and by its exhaustiveness. It is composed of three dimensions which are: designs targeting pleasure, designs facilitating the search and designs facilitating the transaction. In the scope of our research, we have chosen to only refer to the first two dimensions considering that our study aims to know the web user's attitude toward the brand and not the possibility of buying a product online.

The attitude toward a website was measured using the Mitchell scale (1986) which represents a largely used reference in the marketing literature. It comprises three bipolar items (do not like/like, unfavorable/favorable, bad/good).

All the variables of the study were measured using a 5 point scale going from 1 « completely disagree» to 5 « fully agree ».

Results of the study

The survey's data were treated via the SPSS 18.0 and AMOS 18.0 softwares and were submitted to a set of analyses. Data analysis allowed us to check the dimensionality and the reliability of the measuring scales through an exploratory factorial analysis. We have then conducted a confirmatory factorial analysis in order to test the structural model.

Purification of the measuring scales

In a first stage, an exploratory analysis was done on all the scales. The results below mentioned in table 2 indicate:

- For all the scales, the data are adequate to the factorization (the KMO indices present satisfying values and the Bartlett test is significant). The percentage of the explained variable exceeds 70%.

- Cronbach alphas are highly satisfying exceeding the minimum threshold of 0,7.

Table 2 Results of Principal Component Analysis

Scale / Construct		Bartlett's sphericity test and the KMO index	Variance explained (%)	Reliability α
Website readability		KMO = 0,823 Bartlett's test = 0,000	Component 1 : 62,413 Total : 62,413	0,81
Website design	Design that target pleasure	KMO = 0,872 Bartlett's test = 0,000	Component 1 : 67,516 Component 2 : 12,275 Total : 79,791	0,83
	Design that facilitate the search			
Attitude toward the brand		KMO =0,776 Bartlett's test =0,000	Component 1 : 82,276 Total : 82,276	0,85

Table 2 shows that the coefficients of Cronbach Alpha (α) are reliable at the exploratory level for all the scales.

In a second stage, we applied a confirmatory analysis (AFC). We adopted the Fornell and Larcker procedure (1981), in order to calculate the convergent validity and the discriminant validity of the constructs.

Table 3 Results of Reliability and Validity of Scales

Scale / Construct		Rho of Jöreskog	Convergent validity	Discriminant Validity
Website readability		0,80	0,74	0,74>0,45
Website design	Design that target pleasure	0,77	0,62	0,62>0,45
	Design that facilitate the search	0,79	0,66	0,66>0,45
Attitude toward the brand		0,82	0,58	0,57>0,45

As shown in table 3, Jöreskog's Rhô indicate satisfying values exceeding the minimum threshold of 0.7. The Rhô of the convergent validity are superior to the minimum prescribed threshold of 0.5. The discriminant validity was verified considering that the extracted value is superior to the correlation square between the latent variables.

Thus, we can conclude that the scales are reliable and valid.

Causal model and verification of the research hypotheses

The causal model helps check the research hypotheses as well as the intensity and significance of the causality links between the latent variables.

Table 4 shows that the measuring model presents a good adjustment by referring to the obtained variables of the absolute, incremental and parsimonious indices.

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Table 4 Model adjustment

Indication	Chi-deux/ddl	GFI	AGFI	RMR	RMSEA	NFI
Value	2,452	0,863	0,845	0,023	0,031	0,767

Then, there is a need to verify that the relations between the latent variables are statistically significant (different from zero) (Roussel et *al.,* 2002). It is necessary to examine the direction and power of the regression coefficient. All the hypotheses have been simultaneously using a model of structural equations.

Table 5 Estimates of the Relationship between the Latent Variables

Hyp.	Relation	CR	P
H1	Website readability → Attitude toward the brand	2,400	0,000
H2a	Design that target pleasure →Attitude toward the brand	2,130	0,000
H2b	Design qui vise la facilité de la recherche →Attitude toward the brand	4,225	0,000

Table 5 shows that the readability of a website exercises an influence on the attitude of the web user toward the brand which allows the acceptance of hypothesis H1. The design of a website exercises a positive influence on the attitude of the web user toward the brand. Designs particularly aim at facilitating the search for information have more impacts on the web user's attitude toward the brand than designs targeting pleasure which validates hypotheses H2 a and H2 b.

Discussion and conclusion

The atmosphere of a website is to the company a place to promote its products or services to be different from competitors in the same fashion as it would be possible in a real environment. There are various atmospheric variables that help answer the web users' need for information. These variables influence the web user's behavior toward the brand.

Various studies have been conducted on the atmosphere of a website; however, very few of them have taken into consideration the latter's evaluation in terms of the web user's attitude toward the brand. Therefore, the present research aims at studying the impact of the dimensions of a website atmosphere (readability and design) on the web user's attitude toward the brand.

In this respect, we have developed a conceptual model that integrates readability of a website, designs targeting pleasure, designs facilitating the search for information and the web user's attitude toward the brand.

In order to check the hypothetical links, we conducted a survey next to a sample of 200 web users. The survey was about an online event created by Tunisiana versus Ooredoo (a private telecommunication operator in Tunisia) following the change of its commercial trademark aiming at unifying the group with its subsidiaries under one brand.

The empirical data of our causal model show that readability of a website exercises a positive and significant impact on the web user's attitude toward the brand. In fact, the

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results of our research suggest that all the lived experiences favor the emergence of willingness and a desire to maintain the relation with the website. The more the client finds the website readable, the more his/her satisfaction increases and his/her attitude heightens to make it even more familiar to surf and adopt this website as a reference. This result confirms the conclusions made by Lemoine (2008).

In addition, the results show the significant and positive influence of a website's design on the attitude toward the brand. The design of a website that is available in one that favors pleasure and facilitates the search produces a willingness to have a web experience. In the present study, we have found that it is rather the design that facilitates the search for information that has a more important effect on the attitude toward the brand than the design that targets pleasure. In fact, the web user gives more importance during his online visit to this aspect of the design than to the other. Our results are therefore in accordance with those of Gonzalez (2005) and Lemoine (2008).

The presence of the web user in a website is indeed profoundly assisted by both the acceptance of the virtual environment in which he surfs and the experience offered by the website. Consequently, we can consider that web users develop a positive attitude toward a brand and a favorable behavior toward the website. This could develop the frequency of visits, their duration as well as positive words of mouth.

On the theoretical level, our research affirms the results of several authors in the field of e-commerce.

On the managerial level, our study would guide the managers on the principal atmospheric variables that influence the attitude toward the brand. Admittedly, our study revealed that the event created by the telephone operator Tunisiana following the change in its commercial trademark had positive consequences in terms of the attitude toward the brand. In fact, the success of this event can be attributed to the quality of the atmospheric variables of the website (design and readability) which resulted in a positive attitude toward the brand on the part of the web user. More precisely, it is rather the design that facilitates information that helped explain the visit than the design targeting pleasure.

This study has its own limitations. One of these is the context of the study. In fact, our study focused on the Tunisian context and we omitted the other cultural contexts as the brand is present in various countries such as North Africa, The Middle East and South Asia. *Besides, the size of the sample was reduced and would not allow the generalization of the conclusions on all the country.*

It would be interesting to integrate other variables such as subjective expertise in future research. Taking into consideration the extended and repeated visits, the web user will be considered as an expert in the field with a certain ease in manipulating the site. In fact, web designers and the team that generally manages online sites and present signboards or even sell products will have the opportunity to benefit from the help of these online experts.

The latter will detect the key characteristics of websites principally taking into consideration the atmospheric variables and adding critical feedback for improvement

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purposes. They will play the roles of opinion leaders and will even transmit word of mouth messages.

We particularly propose to integrate web users' related key sociodemographic variables such as age, gender and socio-professional category. Thereby, website marketing managers have to consider these variables in order to better design sites that are oriented to suit the various categories of web users.

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