

Effects of Web Experience factors on virtual retail purchase preferences¹

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ABSTRACT

This article examines the effects of different elements of the Web Experience (WE) on the buying behaviour of virtual consumers, specifically on the choice of the online retail vendor. The purpose of the study is to empirically test the theoretical findings as to the main parameters of the online customer experience and measure their relative importance and role as inputs in the customer's decision-making process. The study was conducted by means of an online consumer survey in a realistic virtual shopping environment. The results of the study show that out of the five web experience components analyzed, four (the usability, trust building, marketing mix and aesthetics) have a positive and significant effect on the choice of e-vendor while the fifth one (interactivity) does not seem to positively influence the choice of an online vendor. Furthermore the study examines the effect of two behavioural variables (experience and motivation) on the choice of online -vendors.

This topic could expand the scope of academic research on the issue of online marketing and at the same time provide online marketers with new insights and tools for building a commercially successful online presence.

Keywords: Web Experience, virtual buying behaviour, online marketing tools, experience, motivation, online marketing strategy.

INTRODUCTION AND MAIN OBJECTIVE

The ever-increasing importance and role of the Internet as a strategic commercial tool and marketing channel has increased the

pressure on businesses to professionalize their online activities. The pressure is the upshot of the fact that the Internet has gained ground against traditional media and

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has led to increased customer empowerment and sophistication (Urban, 2003).

There is plenty of evidence that the large majority of wired consumers consider by now the web as their primary source of information when searching for products, services, news, weather, travel directions or entertainment: With more than 1.4 billion users worldwide² the web has also become a major contributor of business globalization and trade but also a tool of customer sophistication and empowerment (McDonald & Tobin, 1998; Urban, 2003). According to a BurstMedia survey, 57.1% of all US web users over 18 years old use the Internet as their primary source of information about products and services they intend to buy.³ This percentage is even higher (69.2%) among the most affluent consumers with income of \$75 000 or more. In the background of these developments it is not surprising that marketers increase their efforts to attract audiences to their websites, something evident by the substantial increase of online marketing budgets. A study by TSN Media Intelligence⁴ found that in the first quarter of 2006 advertising spending on the Internet – excluding paid search advertising – showed the highest increase (19.40%) against all other media, and projected that 12% of the total advertising expenditure in the US will be spent in 2006 in online advertising, an increase by 13% against 2005. With the Internet becoming the main information source and a major distribution channel, the task of attracting customers to the company website becomes a strategic imperative. In fact, according to a recent Nielsen Online report, Internet shopping in some countries has already been adopted by more than 95% of the Internet users; 40% of

the total online population are regular online shoppers while 85% of them had done at least once an online purchase until the end of 2007.⁵ Regarding e-commerce in Europe, data recently released by Mintel show that online sales in the UK reached \$25.4 billion last year, around \$5 billion ahead of nearest rival, Germany. Next comes France with \$11.1 billion, followed by Italy (\$1.7 billion) and Spain (\$1.6 billion).⁶ Presenting web users with superb online (or Web) experience is necessary for attracting the attention of the virtual customers and persuading them to engage in online business.

The main objective of this article is to analyze the impact of the Web Experience (WE) factors on virtual buying behaviour. Based on the background literature as a starting point, we propose a model to study the signification of the effect of WE perceived by users on e-retailers' choices.; moreover, we have included a number of behavioural variables in order to observe their influence on WE.

BACKGROUND LITERATURE: THE ONLINE EXPERIENCE

The customer experience from visiting a website has been recognized as one of the most important factors for online success. According to Novak et al. (2000), "creating a compelling online experience for cyber customers is critical for creating competitive advantage on the Internet". The same authors argue that relatively little is known about the factors that contribute to a superb online experience, noticing that "online executives marketers need to develop a comprehensive understanding of consumer behaviour in commercial online environments".

² Internet World Stats, 2008, <http://www.internetworldstats.com/stats.htm>

³ MarketingVox, 20 April 2006

⁴ TSN Media Intelligence, <http://www.tns-mi.com/news/05312006.htm>

⁵ BizReport, January 28, 2008. http://www.bizreport.com/2008/01/85_of_worlds_population_shopped_online.html

⁶ BizReport, March 31, 2008. http://www.bizreport.com/2008/03/british_are_europes_largest_online_spenders.html

In the years that elapsed since the publication of this paper, a substantial amount of academic research has been carried out with the purpose of understanding the online consumer behaviour. The propensity of consumers to engage in online business has been extensively studied and analyzed (e.g. Cappel & Myerscough, 1996; Cockburn & Wilso, 1996; Spiller & Lohse, 1997; Jarvenpaa & Todd, 1997; Degeratu et al., 2000; Childers et al., 2001; Dahan & Hauser, 2001; Eastin, 2002; Liu & Wei, 2003; Corbitt et al. 2003; Van Schaik & Ling, 2003; Keen et al., 2004, etc.). Many researchers emphasise that the quality of the online presence is an important influencer of the online consumer's behaviour, something regularly confirmed in research conducted by non-academic parties (Nielsen NetRatings, 2003).

More recently, researchers have focused their attention on the effects of shopping enjoyment on online consumer satisfaction (Cai & Xu, 2006) and also studied the browsing behaviour as background for effective Website design (Tan & Wei, 2006). Several aspects related to the customer experience and particularly the visual aspects of Websites have attracted also academic attention (e.g. Eroglu et al., 2001, 2003; Vrechopoulos, et al., 2000; Vrechopoulos & Siomkos, 2002; Vrechopoulos, 2002, 2004; Dailey, 2004; Lorenzo, et al., 2006, 2007; Tractinsky & Lowengart, 2007; Kim & Lennon, 2008, etc.). Some authors argue that visual impressions are very important for forming a positive or negative opinion about the quality of a website, and an exposure of 50 milliseconds is enough for establishing this opinion (Lindgaard et al., 2006). A similar study has also proved the consistency of the immediate aesthetic impressions with the online quality perception from exposure of half a second (Tractinsky et al., 2006).

While an aesthetically appealing website is the basic requirement for attracting virtual customers, visual attractiveness is one of several elements that combined shape the Web Experience. The WE can be defined as "the total impression online

customers get about the virtual firms" (Watchfire Whitepaper Series, 2000) and "the result of exposure to a combination of notions, emotions and impulses caused by the design and other marketing elements of the online presentation" (Constantinides, 2004). As such, the WE is influenced by factors like searching, browsing, finding, selecting and evaluating information as well by impressions generated during interaction and transaction with the online firm.

In a study carried out by Novak et al. (2000), based on a conceptual model of flow describing the components of "a compelling online experience" (Hoffman & Novak, 1996), they concluded that it is possible to define its ingredients, to measure them and relate them to important marketing variables. Other researchers have applied the flow theory (Csikszentmihalyi, 1990) as the framework of analysis of human-computer interaction and as a model describing different aspects of the online consumer's behaviour (Koufaris, 2002; Pace, 2004). For all intents and purposes, the large number of variables affecting the WE and the constantly changing, dynamic character of the online environment underline the need for more research on the components of the WE and continuous refinement of business approaches (Kuniavsky, 2003).

Based on a review of 48 academic publications, Constantinides (2004) identified the different elements of the online experience and classified them in three categories:

- *Content category*: Factors exercising a direct and powerful influence on the WE by making the website aesthetically positive and its offer tangible and attractive. They include the Aesthetics and Marketing Mix factors. Aesthetics factor is composed by elements such as design, presentation quality, design elements, and style/atmosphere. Marketing Mix factor is composed of communication, product, fulfilment, price, promotion and characteristics elements.

- *Psychological category*: Trust-building factors.; Websites must communicate trust and ensure users of the vendor's integrity and credibility in order to persuade customers to stop explore them, and interact online. Building trust is possible by deploying uncertainty-reducing elements, ensuring the safety of customers' personal information and transaction data, eliminating fears of fraud and building trust between the online user and the often unknown and far away located vendor. Specifically, Trust factor is composed by transaction security, customer data misuse, customer data safety, uncertainty-reducing elements, and guarantees/return policies elements.
- *Functionality category*: Factors enhancing the online experience by presenting the virtual client with a good, functioning, easy to use search as well as interactive website. The Functionality category includes the Usability and Interactivity factors. Usability factor is composed of variables such as convenience, site navigation, information architecture, ordering/payment process, search facilities and process, site speed and findability/accessibility. Interactivity factor is composed of customer service/after sales, interaction with company personnel, customization and network effects elements.

This classification was the basis of an empirical study in The Netherlands meant to identify the relative importance of the different factors as influencers of online consumers' decision-making process (Constantinides & Geurts, 2006).

HYPOTHESES

Websites offering superb WE not only meet the users' needs, increase their expectations and emotions, but also offer the right assortment, sense of security, high quality of services, etc. (O'Keefe & McEachern, 1998). The inclusion and mix of different web experience factors in the website design produce diverse online

store designs triggering different perceptions to the users that consequently affect their shopping behaviour (Constantinides & Geurts, 2006). On the basis of the above we propose the following hypotheses:

H₁: The Web Experience Factors are significant influencers of the online buyers' preferences.

H_{1a}: The Usability factor is significant influencer of the online buyers' preferences.

H_{1b}: The Interactivity factor is significant influencer of the online buyers' preferences.

H_{1c}: The Trust factor is significant influencer of the online buyers' preferences.

H_{1d}: The Aesthetics factor is significant influencer of the online buyers' preferences.

H_{1e}: The Marketing Mix factor is significant influencer of the online buyers' preferences.

According to these hypotheses, this study will analyze if each experience factor has or not influence on the election of virtual vendor by the buyer.

Some authors suggest that usability reflects the perceived ease and usefulness for the navigation through the Internet (e.g. Davis, 1989; Vrechopoulos, 2002; Nielsen, 2003). Other studies found that usability is a very important attribute for achieving desirable internal and behavioural responses (e.g. Childers et al., 2001; Eroglu et al., 2003; Flavián et al., 2004, 2005; O'Cass & Fenech, 2003). The Marketing Mix elements are widely considered as the main controllable influencers of consumer behaviour (e.g. McCarthy, 1964; Goldsmith, 1999; Jobber, 2001; Kotler, 2003). Nevertheless, the introduction of the Internet as a business management element and as the main interface with the customer has questioned the importance of the Marketing Mix elements as the main influencers of the online consumer (Constantinides, 2002). In this sense it is important to understand the significance of the new elements of influence and their relevant importance

versus the traditional Marketing Mix. We propose the following hypothesis:

H₂: Online customers prefer to buy from web shops scoring better in Usability and Trust, while the Marketing Mix is not the main influencer of the online buying preference.

According to above hypothesis, this study will analyze what type of WE factor has more influence on the election of virtual vendor by the buyer.

The personal attributes of consumers (i.e. involvement, motivation, experience, ability to Internet adaptation, and so on) affect their purchase process and final decision (e.g. Davis, 1989; Eroglu et al, 2003; Yoh et al., 2003). Based on Constantinides and Geurts (2006), and in order to analyze the influence of two specific internal variables (i.e. motivation and experience) on users' preferences, we propose two hypotheses, as follows:

H₃: The motives of online customers to buy online do not have an effect on the way the WE factors influence their online vendor preference.

According to above hypothesis, this study will analyze if a specific characteristic of user (motives to buy in an online context) has or not influence on the election of virtual vendor.

The next hypothesis tests (a) the effect of the user's affinity with the Internet expressed in the number of years one is using it; and (b) the effect of the user's previous experience with online purchases.

So, finally, in this study is proposed that:

H₄: The degree of experience of virtual customers in online shopping affects the importance they attribute to each Web Experience factors (Usability, Interactivity, Trust, Aesthetics, and Marketing Mix) as influencers of their online vendor decisions.

H_{4a}: The number of years one is using the Internet affects the importance that e-buyers attribute to WEFs as influencers of their online vendor decisions.

H_{4b}: The experience with the online purchase affects the importance that e-buyers

attribute to WEFs as influencers of their online vendor decisions.

According to these hypotheses, this study will analyze if a specific internal characteristic of user (experience) has or not importance on each WE factors and, in consequence, it has or not influence on the election of virtual vendor by the buyer.

RESEARCH METHOD

Online shopping environment: The scenario

Participants in the survey were recruited from the student ranks of a research University in Spain. The study was conducted in a realistic virtual shopping environment in the computer laboratory where users were instructed by supervisors on how to carry out an online shopping assignment (i.e. searching and buying online a digital camera with a certain technical characteristics) and fill in a questionnaire was available online and was divided in two sections. The first one (i.e. "Introduction form") included questions about basic demographics and questions about the users' attitudes towards online shopping and previous experience with the Internet. The second section contained three forms: A, B, and C. In form A the participants had to indicate their experiences about the online store where they bought the camera; in form B they had to record their experience from the online shop of their second choice, a web shop they found attractive enough and saw as alternative option. In Form C they had to indicate their experiences for a virtual shop that they found unattractive and they would never choose for an online purchase.

Sample, procedure and variables

The final sample was composed of 204 participants, split in nine sessions. They were recruited from different disciplines (Economics, Business, Computer, Teaching, etc.) in order to obtain different types of online users with different virtual purchase perspectives. The sampling process was carried out through an appeal for the each classroom explaining to students the goal of this study by research. The participants were

recompensed with a participation certificate. The procedure consisted on exposing them to virtual shopping experience with a specific objective. Once users had filled the introduction questionnaire, they had to search the web, and find and buy a digital camera online. Participants were asked to compose a list with two types of online vendors: "Favourites" and "No favourites", according to their feeling from visiting and interacting with their web sites. A fictitious amount of 300 Euros per participant (including price and postal costs) was available to spend on purchasing a digital camera. The time to carry out the virtual visit was limited to 30 minutes. Once finished the purchase, the user had to fill the rest of the online survey (A, B, and C forms). The web-based tool developed for this research included an automatic tracking process based on e-agent software to track and record all click-throughs and times related to the browsing behaviour during the experiment in order to obtain information on the type of websites visited, times spent in each website and each section within the website, and so on. Each part of online survey contained different types of variables (Constantinides & Geurts, 2006). The introductory form included questions about demographic characteristics, about user's attitudes towards online shopping and previous experience with the Internet (buyers/no buyers) as well as about their main motives for shopping or not shopping online. Forms A, B, and C included questions five-points Likert scale – related to users' perceptions of each website (explained paragraph above) in 25 individual characteristics making up the five factors of the WE (e.g. "It is convenient to buy products in this online shop", "the shop offers excellent customer service", "the site offers adequate guarantees for the safety of online transactions", "the site's design is superb", "the site offers a wide deep product assortment", and so on).

MAIN RESULTS

Descriptive

Most of the participants were female (63%) and the majority between 18 and 22 years old. An important percentage of participants (73%) were experienced Internet users with more than two years of active usage, although only 31% of them had previously bought goods or services online and, in turn, 15% of them are spending between 50 and 100 Euros per year for online purchases. Moreover, 83% of the participants had a credit card. The most important reason for not buying online products for the majority of users (25%) was that they prefer shopping in other ways, while 21% mentioned the lack of physical contact with the product. The ease of finding better prices (21%) and comparing prices (20%) were the first and second more frequently mentioned main reasons for online shopping. Twenty-five different brands of digital cameras (e.g. Sanyo, Olympus, Canon, Fujifilm, Benq, Samsung, Sony, HP, etc.) were "bought" by users, including a large variety of models.

Additionally, within the "Introduction Form", participants were asked to indicate (based on their previous experience) in a five-point Likert scale their opinion on the influence of the five WE factors on their choice of an online vendor in order to observe the users' perceptions in percentages (table I). In general, the participants consider all five the WE elements are relevant influencers of their choice for online shops, attributing special importance to the Trust and Marketing Mix elements.

Statistical results

The three websites chosen by users (two favourites and one undesirable) have been analyzed from the responses on 25 WE elements where participants could totally agree, agree, neither agree nor disagree, disagree or totally disagree. In order to test our hypotheses, a factor analysis was carried out in order to reduce the number of WE items. As result, we obtained five factors, as is shown in table 2.

Table 1: Importance of WE factors for online users on choice of a virtual vendor (%)

WE factors	Very important 5	4	3	2	Not important 1
Usability	36.3	47.1	10.8	5.9	0.0
Interactivity	19.1	46.6	23.0	10.3	1.0
Trust	76.0	18.6	3.4	1.5	5.0
Aesthetics	15.2	48.5	22.5	11.8	2.0
Mk mix	54.9	33.8	9.3	2.0	0.0

Table 2: Factorial analysis

ITEMS	Factors				
	Usability	Trust	Aesthetics	Interactivity	Marketing Mix
Convenient to buy products (q1)	,64				
Navigation is simple (q2)	,74				
Information easily accessible (q3)	,67				
Ordering process is simple (q4)	,52				
Good internal search facilities (q5)	,50				
Pages are loading very fast (q6)	,33				
Little search effort (q7)	,38				
Excellent customer service (q8)				,37	
Shop's staff is easy (q9)				,52	
Excellent search customization (q10)				,56	
Other customers' experiences (q11)				,23	
Safety of online transactions (q12)		,65			
Protection of customer's personal data (q13)		,71			
Guarantees against misuse of personal data for commercial purposes (q14)		,68			
Logos of organizations that guarantee secure online shopping (q15)		,49			
Transparent guarantee policy (q16)		,51			
Site's design is superb (q17)			,65		
High site's presentation quality (q18)			,71		
Site's design is unique innovative elements (q19)			,55		
Good online shop's atmosphere (q20)			,50		
Communication with customer is a professional way (q21)					,17
Wide and deep product assortment (q22)					,26



Very reliable fulfillment process (q23)					,13
Very competitive prices (q24)					,66
Very attractive promotions (q25)					,63
Main values of factors	9,51	1,63	1,25	1,07	,98
% variance explained	38,03	6,53	5,02	4,31	3,94
Cronbach's Alpha	,83	,81	,81	,67	,77
Kaiser-Meyer-Olkin sample adaptation measurement	,94				
Bartlett's test of sphericity	6574,00 df. 300 Sig. 0,00				
<i>Legend:</i>					
<ul style="list-style-type: none"> • Extraction Method: Principal Axis Factoring. • Rotation Method: Varimax with Kaiser Normalization. • Rotation converged in iterations. 					

An overview of measurement of web experience factors is showed in table III.

Table 3: Measurement of WE Factors

Factor label	Example question	Number of indicators	First Eigen* Value	Cronbach's Alpha
Usability	Q3 Information easily accessible	7	3.57	0.83
Interactivity	Q8 Excellent customer service	4	2.04	0.67
Trust	Q16 Transparent guarantee policy	5	2.85	0.81
Aesthetics	Q18 High presentation quality	4	2.59	0.81
Mk mix	Q24 Very competitive prices	5	2.61	0.77

* Principal component analysis, each construct separately

A binomial logistic regression was executed with the five WE factors per website as independent variables and the purchasing behavior as the dichotomy explained variable (i.e. buy/not buying). In table IV the users' buying preferences regarding the WE factors are shown.

Table 4: Consumer's purchase preferences from web experience factors

Dependent variable (buy/not buying)		Consumer Preferences		
Hypothesis		H1/H2	H3	H4
Nagelkerke		.34	.46	.35
Hoshmer Lemeshow		14.99 (8)*	7.95 (8)	9.80 (8)
WE Factors – H1/H2 (Independent variables)	a: Usability	1.29 (.15)*	1.82 (.37)*	1.34 (.15)*
	b: Interactivity	.19 (.13)	-.56 (.28)	.18 (.13)
	c: Trust	.55 (.11)*	.96 (.21)*	.58 (.12)*
	d: Aesthetics	.47 (.12)*	.72 (.26)*	.47 (.12)*
	e: Mk Mix	.54 (.13)*	.71 (.25)*	.55 (.13)*



Main Motive – H3 (Independent variable)	To find better prices **		–.15 (.40)	
Experience – H4 (Independent variable)	a: Years Internet usage			–.11 (.07)
	b: Online buyer			–.18 (.22)
<i>Legend</i>				
Proxies of standardized regression parameters are presented in the cells.				
Asterisk (*) indicates statistical significance on 5% level (i.e. confidence level: 95%).				
Between brackets are the standard errors.				
Double asterisk (**) indicates that “to find better prices” is the motive to buy online with the highest impact. So, the rest of the identified motives are not reported in this table.				

Based on the above analysis, the validity of the hypotheses tested is explained in the following paragraphs.

H_{1a}, b, c, d & e: The Web Experience factors (a: Usability, b: Interactivity, c: Trust, d: Aesthetics, e: Marketing Mix) are significant influencers of the online buyers' preferences

As predicted, all WE elements have a positive effect on buying preferences. However, all of them, with exception of Interactivity factor, are also significant influencers of the online buyers' preferences. So, the sub-hypotheses H1a, H1c, H1d and H1e are accepted (Usability, Trust, Aesthetics and Marketing Mix indicate statistical significance on 5% level. Usability has more influence, 1.29 score, than the rest of WE factors, 0.55, 0.47, and 0.54 scores, respectively) while the sub-hypothesis H1b is rejected (Interactivity factor does not indicate statistical significance on 5% level). This means that the Interactivity factor is not a significant predictor of purchasing decision.

Furthermore, the majority of participants in this study had no previous experience in online purchase. It would be interesting to be investigated in the future whether this is pervasive in the long run if the population consists of more experienced web users with higher online shopping familiarity.

H₂: Online customers prefer to buy from web shops scoring better in Usability and Trust while the Marketing Mix is not the main influencer of the online buying preference.

According to literature, Usability and Trust are the most influential web experience elements, while the Marketing Mix elements, unlike in traditional marketing (Constantinides, 2002), are not the critical influencers of the online buying behavior. In this study, the H2 is rejected because in spite of Usability and Trust having relevant scores (1.29 and 0.55, respectively), Marketing Mix and Aesthetics have relevant scores too (0.47 and 0.54, respectively). Therefore, the inclusion of web elements such as promotions, low prices, pleasant colors and sounds, etc., improves the users' preferences in their choice of e-vendor.

The negative impact of the factor “to find better prices” (Table IV4) implies that consumers tend to look into websites that could be otherwise seen as inferior because of lower prices offered.

H₃: The motives of online customers to buy online do not have an effect on the way the WE factors influence their online vendor preference

The survey results (Table IV) indicate that the most common motive for online shopping is “to find better prices” (as “main motive” of online customers to buy online) is not a significant variable (statistical significance lower 5%). This leads to acceptance of H3 because the motives (specifically, main motive) of online customers to buy through the Internet do not have an effect on the way the WE elements influence their online vendor preference. The inclusion of the motivation variable in the regression analysis results in an increase of all factors

studied, although the error level is also increased. Nevertheless, the statistical significance is not accepted because it exceed the maximum level permitted. Additionally, we consider it important to mention a special result obtained in this analysis; the interactivity factor has an adverse effect on consumer' preferences. This result challenges the widely held belief that interactivity is one of the fundamental advantages of the internet and source of customer value. The behavior observed in this study could generate a new research line in order to deeply analyze the specific reasons for this negative effect.

H_{4(a, b)}: The degree of experience of virtual customers in online shopping (a: Number of years one is using the Internet, b: Experience with the online purchase) affects the importance they attribute to each Web Experience factors (Usability, Interactivity, Trust, Aesthetics, and Marketing Mix) as influencers of their online vendor decisions.

After an isolated analysis on two experience variables we concluded that the "online buyer" variable is not significant (H4b is rejected) while the "years Internet usage" variable, affects all factors except Interactivity (statistical significance on 5% level in all cases except Interactivity). Regarding the relation between the years of the Internet usage and the WE components, we observed that the longer people have been using the Internet, the more critical and hard to satisfy they become. Therefore, H4a (for all factors except Interactivity) is accepted under these conditions. In other words, the years of Internet usage affects the importance consumers attribute to some WE factors as influencers of their product and online vendor decisions., however, the fact that someone is an experienced online buyer does not affect the importance attributed.

Finally, the inclusion of both variables (years of experience and experience with online shopping) in the model causes an effect not significant due to their high

correlation (co-linearity). Moreover, the inclusion of two experience variables together with "main motivation to buy online" causes a decrease of the WE scores (Usability: 1.82 to 1.34; Trust: 0.96 to 0.58; Aesthetics: 0.72 to 0.47; Marketing Mix: 0.71 to 0.55).

CONCLUSIONS AND MAIN IMPLICATIONS

Based on Constantinides and Geurts (2006), in this study we have tried to identify the effects of Web Experience factors on Spanish online buyers and the possible existence of discrepancies between perceptions of e-consumers and the actual way these factors influence purchasing behavior and buying decisions.

A major conclusion is that the Web Experience elements significantly influence the choices of online shoppers, a finding confirming previous literature findings. This study has furthermore attempted to measure the relative importance of these elements in combination. It was found that the main source of influence are the aspects related to Usability of websites followed by (although with less impact) users' Trust towards website, Marketing Mix and online store's Aesthetics elements. The results indicate that, contrary to the common wisdom, one of the five WE elements (i.e. Interactivity) does not have a substantial influence on the choice of e-vendor. The fact that survey participants had limited time to conclude the experiment could explain this unexpected result; however, this is an issue requiring further research. It is interesting that regarding interactivity there is also a discrepancy between customers' perceptions as to its importance and their actual buying behavior.

Motives and familiarity with online purchasing do not seem to play any significant role on the online shopping process. In contrast, the years of web usage have significant effect on consumer preferences as to the choice of online vendors. This could mean that online vendors used to operate in markets with

longer history and higher penetration of the Internet, like the N. European and N. American ones, should apply different approaches when entering immature online markets.

A further implication for e-marketers involved in creating online stores is that the elements related to usability, as well as aspects such as trust, marketing mix and finally the aesthetics are important cues for attracting e-consumer preferences. Online vendors must focus their effort on enhancing the total online experience by designing websites easy to use and navigate, reinforcing the safety and trust expectations of customers, with sufficient and easy to find information about products and services and last but not least, they must design their websites presenting customers with attractive and creative visuals.

Finally, provided that further research findings confirm that interactivity is not important to online customers, web designers must consider what is the right dose of interactivity that allows to customers access to customer service or online help while avoiding time-consuming interactive elements likely to reduce the overall customer experience.

MAIN LIMITATIONS AND FUTURE RESEARCH

An important limitation of our research is focused on the use of students as sample. Nevertheless, researchers think that this is a group of people that can be adequate for this type of study because it constitutes a segment of population familiarized with the new media, and, even, with the online purchase. Another limitation is related to the limited familiarity with the shopping through the Internet by the sample. This fact caused that participants to spend more time trying to find and learn the way of completing the purchase process than, for instance, to browse other models of digital cameras in different online stores. However, this circumstance led to a new research line

for researchers, namely the study of intercultural online behavior differences.

Considering the recent literature, one can argue that the exceptional growth of the online Market space has attracted the interest of many researchers on the issue of website aesthetics (e.g. Dailey, 2004; Eroglu et al., 2003; Lindgaard et al., 2006; Tractinsky et al., 2006). So, we suggest that future research must further analyze the e-consumers' perceptions about aesthetics aspects of the online store in order to add new knowledge about the online customer behavior, something with academic and practical interest. Moreover, this study could be adapted to other regions such as Southern African, The Netherlands, Greece, USA, Great Britain, Italy, etc., in order to carry out a comparative analysis between different types of e-users' perceptions about WE factors.

REFERENCES

- Cai S. Xu Y. 2006. Effects of outcome, process and shopping enjoyment on online consumer behavior. *Electronic Commerce Research and Applications*, 5(4): 272–281.
- Cappel J.J., Myerscough M.A. 1996. World Wide Web uses for electronic commerce: Towards a classification scheme. Retrieved from <http://hsb.baylor.edu/ramsower/ais.ac.96/papers/aisor13.htm>
- Childers T.L., Carr C.L., Peck J., Carson, S. 2001. Hedonic and utilitarian motivations for retail shopping behavior. *Journal of Retailing*, 77(4): 511–535.
- Cockburn, C., Wilso T.D. 1996. Business use of the World Wide Web. *International Journal of Information Management*, 16(2): 83–102.
- Constantinides, E., Geurts P. 2006. The impact of web experience on virtual buying behavior: An empirical study. *Journal of Customer Behavior*, 5: 307–336.
- Constantinides, E. 2004. Influencing the online consumer's behavior: The web experience. *Journal of Internet Research:*

- Electronic Networking Applications and Policy*, 14(2): 111–126.
- Constantinides, E. 2002. The 4s web-marketing mix model, e-commerce research and applications. *Elsevier Science*, 1(1): 57–76.
- Corbitt, B., Thanasankit, T., Yi, H. 2003. Trust and e-commerce: A study of consumer perceptions. *Electronic Commerce Research and Applications*, 2(3): 203–215.
- Csikszentmihalyi, M. 1990. *Flow: The psychology of optimal experience*. New York: HarperPerennial.
- Dahan, E., Hauser, J. 2001. The virtual consumer: Communication, conceptualization and computation. Paper 104, MIT Sloan School of Management, Center for E-Business. Retrieved from <http://ebusiness.mit.edu/research/papers/104%20EDahan,%20JHauser%20Virtual%20Customer.pdf>
- Dailey, L. 2004. Navigational web atmospherics. Explaining the influence of restrictive navigation cues. *Journal of Business Research*, 57(4): 1–9.
- Davis, F.D. 1989. Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3): 319–340.
- Degeratu, A., Rangaswamy, A., Wu J. 2000. Consumer choice behavior in online and traditional supermarkets: The effects of brand name, price, and other search attributes. *International Journal of Research in Marketing*, 17(1): 55–78.
- Eastin, M. 2002. Diffusion of e-commerce: An analysis of the adoption of four e-commerce activities. *Telematics and Informatics*, 19(3): 251–267.
- Eroglu, S.A., Machleit, K.A., Davis, L.M. 2001. Atmospheric qualities of online retailing: A conceptual model and implications. *Journal of Business Research*, 54: 177–184.
- Eroglu, S.A., Machleit, K.A., Davis, L.M. 2003. Empirical testing of a model of online store atmospherics and shopper responses. *Psychology and Marketing*, 2(2): 139–150.
- Flavián, C., Guinalú, M., Gurrea, R. 2004. Análisis empírico de la influencia ejercida por la usabilidad percibida, la satisfacción y la confianza del consumidor sobre la lealtad a un sitio web. Proceedings XVI Encuentro de Profesores Universitarios de Marketing, Alicante (Spain): 209–226.
- Flavián, C., Guinalú, M., Gurrea R. 2005. The role placed by perceived usability, satisfaction and consumer trust on website loyalty. *Information and Management*. Retrieved from <http://www.elsevier.com/locate/dsw>
- Goldsmith, R.E. 1999. The personalized marketplace: Beyond the 4Ps. *Marketing Intelligence & Planning*, 17(4): 178–185.
- Hoffman, D., Novak, T. 1996. Marketing in hypermedia computer-mediated environments: Conceptual foundations. *Journal of Marketing*, 60: 50–68.
- Jarvenpaa, S.L., Todd, P.A. 1997. Consumer reactions to electronic shopping on the World Wide Web. *Journal of Electronic Commerce*, 1(2): 59–88.
- Jobber, D. 2001. *Principles and practice of marketing*. London: McGraw-Hill.
- Keen, W., Wetzels, M., De Ruyter, K., Feinberg, R. 2004. E-tailers versus retailers: Which factors determine consumer preferences? *Journal of Business Research*, 57: 685–695.
- Kim, M., Lennon S. 2008. The effects of visual and verbal information on attitudes and purchase intentions in Internet shopping. *Psychology & Marketing*, 25 (2): 146–178.
- Kotler, P. 2003. *Marketing management*, 11th ed. Englewood Cliffs, NJ: Prentice-Hall International Editions.
- Koufaris, M. 2002. Applying the technology acceptance model and flow theory to online consumer behavior. *Information Systems Research*. 13(2): 205–223.
- Kuniavsky M. *Observing the user experience. A practitioner's guide to user research*, 1st ed. The Morgan Kaufmann Series in Interactive Technologies.
- Lindgaard, G., Fernandes, G., Dudek, C., Brown, J. 2006. Attention web designers:

- You have 50 milliseconds to make a good first impression. *Behaviour & Information Technology*, 25(2): 115–126.
- Liu, X., Wei, K.K. 2003. An empirical study of product differences in consumers' e-commerce adoption behavior. *Electronic Commerce Research and Applications*, 2(3): 229–239.
- Lorenzo, C., Gómez, M.A., Mollá, A. 2006. Impact of hedonic attributes on consumer responses: Animation of products in the virtual world. Proceedings of the 13th EIRASS conference, Budapest, Hungary.
- Lorenzo, C., Gómez, M.A., Mollá, A. 2007. Website design and e-consumer: Effects and responses. *International Journal of Internet Marketing and Advertising*, 4(2): 114–141.
- McCarthy, E.J. 1964. *Basic marketing: A managerial approach*, 2nd ed. Homewood, IL: Richard D. Irwin.
- McDonald, J., Tobin, J. 1998. Customer empowerment in the digital economy. In Lowy, A. Ticoll, D. (Eds). *Blueprint to the digital economy: Creating wealth in the era of e-business*. New York: McGraw-Hill, 202–220.
- Nielsen, J. 2003. *Usability 101*. Retrieved from <http://www.useit.com>
- Nielsen NetRatings. 2003. *Coach, Neiman Marcus and J. Crew maximize sales channel relationships with web customers*. Press release (January). Retrieved from http://www.nielsen-netratings.com/pr/pr_030114.pdf
- Novak, T., Hoffman, D., Yung, Y. 2000. Measuring the customer experience in online environments: A structural modeling approach. *Marketing Science*, 19(1): 22–42.
- O'Cass, A., Fenech, T. 2003. Web retailing adoption: Exploring the nature of Internet users' web retailing behaviour. *Journal of Retailing and Consumer Services*, 10: 81–94.
- O'Keefe, R.M., McEachern, T. 1998. Web-based customer decision support systems. *Communications of the ACM*, 41: 71–78.
- Pace, S. 2004. A grounded theory of the flow experiences of web users. *International Journal of Human-Computer Studies*, 60: 327–363.
- Spiller, P., Lohse G.L. 1997. A classification of Internet retail stores. *International Journal of Electronic Commerce*, 2: 29–56.
- Tan, W.G., Wei, K.K. 2006. An empirical study of web browsing behaviour: Towards an effective website design. *Electronic Commerce Research and Applications*, 5(4): 261–271.
- Tractinsky, N., Cokhavi, A., Kirschenbaum, M., Sharfi, T. 2006. Evaluating the consistency of immediate aesthetic perceptions of web pages. *International Journal of Human-Computer Studies*, 64(11): 1071–1083.
- Tractinsky, N., Lowengart, O. 2007. Web-store aesthetics in e-retailing: A conceptual framework and some theoretical implications. *Academy of Marketing Science Review*, 11(1): 1–18. Retrieved from <http://www.amsreview.org/articles/tractinsky1-2007.pdf>
- Urban, G. 2003. Customer Advocacy: Is it for you? Working paper 175. MIT Sloan School of Management, Center for E-Business. Retrieved from http://ebusiness.mit.edu/research/papers/175_Urban_Trust.pdf
- Van Schaik, P., Ling, J. 2003. The effect of link colour on information retrieval in educational internet time. *Computers in Human Behavior*, 19(5): 553–564.
- Vrechopoulos, A.P. 2002. An emerging store layout for Internet grocery retailing. Proceedings of the 3rd ECR Europe Scientific Competition, Barcelona, Spain.
- Vrechopoulos, A.P. 2004. Developing alternative store layouts for Internet retailing. In Doukidis, G., Vrechopoulos, A.P. (Eds). *Consumer-driven electronic transformation: Apply new technologies to enthuse consumers*. Heidelberg: Springer.
- Vrechopoulos, A.P., O'Keefe, R.M., Doukidis, G.I. 2000. Virtual store atmosphere in Internet retailing. Proceedings of the 13th

- International Bled Electronic Commerce conference, Bled, Slovenia.
- Vrechopoulos, A.P., Siomkos, G.J. 2002. Virtual store atmosphere in non-store retailing. *Journal of Internet Marketing*, 3(1): 22–38.
- Watchfire Whitepaper Series. 2000. *Bad things shouldn't happen to good web sites: Best practices for managing the web experience*. Retrieved from <http://www.watchfire.com/resources/search-and-ye-shall-find.pdf>
- Yoh, E., Damhorst, M.L., Sapp, S., Lacznia, R. 2003. Consumer adoption of the Internet: The case of apparel shopping. *Psychology & Marketing*, 20(12): 1095–1118.