
Influencing the online consumer's behavior: the Web experience

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Abstract

Addresses one of the fundamental issues of e-marketing: how to attract and win over the consumer in the highly competitive Internet marketplace. Analyses the factors affecting the online consumer's behavior and examines how e-marketers can influence the outcome of the virtual interaction and buying process by focusing their marketing efforts on elements shaping the customer's virtual experience, the Web experience. Identifying the Web experience components and understanding their role as inputs in the online customer's decision-making process are the first step in developing and delivering an attractive online presence likely to have the maximum impact on Internet users. Click-and-mortar firms delivering superior Web experience influence their physical clients' perceptions and attitudes, driving additional traffic to traditional sales outlets. Provides a contribution to the theoretical debate around the factors influencing the online consumer's behavior and outlines some noticeable similarities and differences between the traditional and virtual consumers.

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The consumers' buying behavior has been always a popular marketing topic, extensively studied and debated over the last decades while no contemporary marketing textbook is complete without a chapter dedicated to this subject. The predominant approach, explaining the fundamentals of consumer behavior, describes the consumer buying process as a learning, information-processing and decision-making activity divided in several consequent steps:

- (1) Problem identification.
- (2) Information search.
- (3) Alternatives evaluation.
- (4) Purchasing decision.
- (5) Post-purchase behavior (Bettman, 1979; Dibb *et al.*, 2001; Jobber, 2001; Boyd *et al.*, 2002; Kotler, 2003; Brassington and Pettitt, 2003).

A distinction is frequently made between high and low involvement purchasing, implying that in practice the actual buying activity can be less or more consistent with this model, depending on the buyer's perceived purchasing risks. High or low degree of involvement is also a question of buyer experience; products purchased for the first time, in general, require more involvement than frequently purchased products (Boyd *et al.*, 2002).

Next to identifying the steps of the buying process and the potential role of marketing in each stage, marketers are eager to comprehend how purchasing choices and decisions are made, how consumers are likely to react to innovation and how to predict the outcome of the customer-vendor interaction (Davis *et al.*, 1989; Ajzen, 1991; Legris *et al.*, 2003).

Most academics and practitioners agree that demographic, social, economic, cultural, psychological and other personal factors, largely beyond the control and influence of the marketer, have a major effect on consumer behavior and purchasing decisions (Harrell and Frazier, 1999; Czinkota *et al.*, 2000; Czinkota and Kotabe, 2001; Dibb *et al.*, 2001; Jobber, 2001; Boyd *et al.*, 2002; Solomon and Stuart, 2003). Despite their incapacity to exercise any substantial influence on the above factors, marketers can have some bearing on the outcome of the buying process by engaging different marketing tools, the most prominent being the 4Ps – product, price, place and promotion – also known as the marketing mix (Borden, 1964; McCarthy, 1964). While the value and current standing of the mix as a marketing toolkit is frequently disputed (Dixon and Blois, 1983; Grönroos, 1994; Gummesson, 1997; Goldsmith, 1999) marketing practitioners nonetheless widely deem the 4Ps as the tools that can influence the consumer's behavior and the final outcome of the buyer-seller interaction (Kotler and Armstrong, 2001; Kotler, 2003; Brassington and Pettitt, 2003).



Online buying behavior

Understanding the mechanisms of virtual shopping and the behavior of the online consumer is a priority issue for practitioners competing in the fast expanding virtual marketplace. This topic is also increasingly drawing the attention of researchers. Indicative of this is the fact that more than 120 relevant academic papers were published in 2001 alone (Cheung *et al.*, 2003). Given the continuous expansion of the Internet in terms of user numbers, transaction volumes and business penetration this massive research endeavor is not surprising. More than 20 per cent of Internet users in several countries already buy products and services online (Taylor Nelson Sofres, 2002) while more than 50 per cent of US net users regularly buying online (Forrester Research, 2003). These developments are gradually transforming e-commerce into a mainstream business activity while at the same time online consumers are maturing and virtual vendors realize the importance and urgency for a professional and customer-oriented approach. Yet the Internet meltdown at the end of the 1990s and plenty of more recent anecdotal and empirical evidence indicate that many online firms still do not completely understand the needs and behavior of the online consumer (Lee, 2002) while many of them "... continue to struggle with how effectively to market and sell products online" (Joines *et al.*, 2003, p. 93).

As in the case of traditional marketing in the past, most of the recent research and debate is focused on the identification and analysis of factors that one way or another can influence or even shape the online consumer's behavior; a good deal of research effort is focused on modeling the online buying and decision-making process (Miles *et al.*, 2000; Liu and Arnett, 2000; Cockburn and McKenzie, 2001; Liao and Cheung, 2001; McKnight *et al.*, 2002; Joines *et al.*, 2003; O'Cass and Fenech, 2003). While many researchers do not see any fundamental differences between the traditional and online buying behavior, it is often argued that a new step has been added to the online buying process: the step of building trust or confidence (Lee, 2002; Liebermann and Stashevsky, 2002; McKnight *et al.*, 2002; Suh and Han, 2002; Liang and Lai, 2002).

An important contribution in classifying the increasingly growing number of research papers on the subject of the virtual customer's behavior is the study of Cheung *et al.* (2003). The findings of their comprehensive literature review are summarized in a model depicting the main categories of factors affecting the online consumer. The study identifies two groups of uncontrollable factors – consumer characteristics and environmental influences – as well as three groups of controllable ones:

- (1) Product/service characteristics.
- (2) Medium characteristics.
- (3) Merchant/intermediary characteristics.

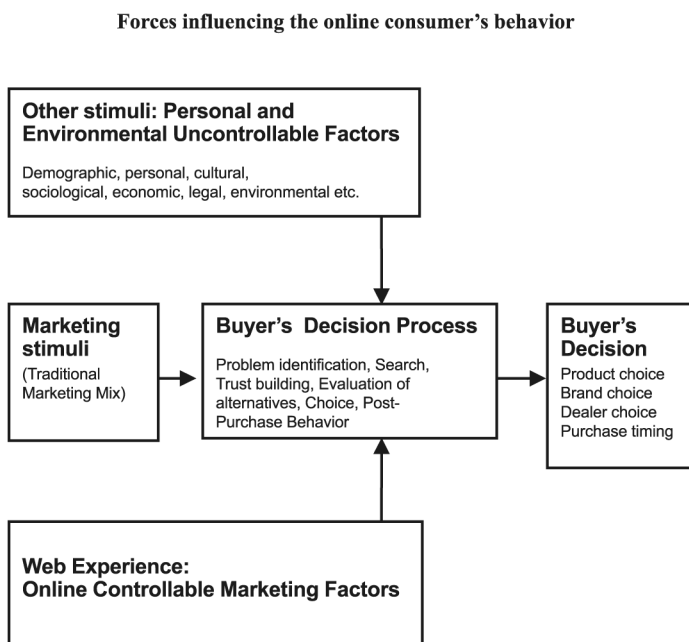
This classification underlines the fact that most researchers endorse the suggestion that – like in traditional markets – the interaction of controllable and uncontrollable factors underpins also the online decision-making process (O'Cass and Fenech, 2003).

Online marketer's persuasion tools and the Web experience

Next to the personal and external uncontrollable factors influencing the buying behavior, exposure of customers to the company's marketing can affect the decision-making by providing inputs for the consumer's black box where information is processed before the final consumer's decision is made (Kotler, 2003). Online marketers can influence the decision making process of the virtual customers by engaging traditional, physical marketing tools but mainly by creating and delivering the proper online experience, the Web experience: a combination of online functionality, information, emotions, cues, stimuli and products/services, in other words a complex mix of elements going beyond the 4Ps of the traditional marketing mix. The prime medium of delivering the Web experience is the corporate Web site, the interfacing platform between the firm and its online clients (Constantinides, 2002).

This paper focuses on identifying and classifying the Web experience elements: the marketing tools and actors under the control of the e-marketer that can influence or shape the online consumer's behavior during the virtual interaction. The Web experience is in this sense a new, additional input in the traditional buying behavior frameworks found in marketing textbooks (Kotler, 2003). In Figure 1 a new category of controllable elements – the Web experience – has been added to the factors influencing the online consumer.

Identification and classification of the Web experience elements is necessary for an all-inclusive picture of the controllable actors likely to affect or even determine the outcome of the virtual interaction. The classification can help marketing practitioners to recognize and better understand the nature and potential of their online marketing tools. It can also contribute to the ongoing theoretical debate on online consumer's behavior by summarizing the prevailing ideas of researchers and identifying issues for further research.

Figure 1 Factors affecting the online consumer's behavior

Source: Based on the P. Kotler's framework (2003)

Web experience: definition and importance

Several academics and practitioners have identified the "online shopping experience" or "virtual experience" as a crucial e-commerce marketing issue. Tamimi *et al.* (2003) define the online shopping experience as a process of four stages describing the successive steps of an online transaction. Considering that an online customer is not simply a shopper but also an information technology user (Cho and Park, 2001) one can argue that the online experience is a more complicated issue than the physical shopping experience: the Web experience can be defined as the consumer's total impression about the online company (Watchfire Whitepaper Series, 2000) resulting from his/her exposure to a combination of virtual marketing tools "...under the marketer's direct control, likely to influence the buying behavior of the online consumer" (Constantinides, 2002, p. 60). The Web experience embraces elements like searching, browsing, finding, selecting, comparing and evaluating information as well as interacting and transacting with the online firm. The virtual customer's total impression and actions are influenced by design, events, emotions, atmosphere and other elements experienced during interaction with a given Web site, elements meant to induce customer goodwill and affect the final outcome of the online interaction[1]. It should be noticed here that the Web experience is important not only for Web sites marketing products or

services but also for sites targeting customers interested in informational content (news, weather, sports etc.), sites acting as online intermediaries and generally to all types of Internet ventures competing for the attention of the online public.

The Web experience as a major parameter of customer influence is crucial for dot.com-type firms but also for multi-channel vendors. For traditional firms expanding their business with Internet presence, the quality of online experience they deliver is an issue requiring special attention: poorly designed and dysfunctional Web sites are a potential threat not only to the company's virtual aspirations but also a hazard for their physical activities. According to the Dieringer Research Group half of all adult Internet users who have abandoned online orders seem to have changed their opinion about brands due to negative online experience, while 60 per cent of those online adults whose opinions changed, switched brands at purchase, whether they bought via the Net or at a brick-and-mortar store (Nua Internet Surveys, 2002). Research also underlines the synergic effects of the positive Web experience on customers making use of a company's Web site next to its traditional channels. Based on the collection of online and either in-store or catalog traffic of US retailers in 2002 NielsenNet Ratings (2003) found that compared to average Internet users, customers visiting well designed Web sites like J. Crew's and Bloomingdale's are ten times more likely to visit the brick-and-mortar stores; visitors of NiemanMarcus.com are 18 times more likely to visit a Nieman Marcus physical store than the average net user while for Coach Shops this figure goes up to 27 times.

The primary means of delivering the Web experience is the corporate Web site. Sites delivering superb Web experience are designed in a way not only addressing the client's product needs and expectations but also assisting the customers through the steps of the buying process. In that respect the back-office e-commerce infrastructure (O'Keefe and McEachern, 1998) is also of crucial importance. Web sites must be seen therefore as vital instruments of customer service and persuasion rather than simply as online brochures or catalogues of the company's products.

Methodology

This study presents the results of the review of 48 academic papers selected from a large pool of articles on consumer behavior in online environments. The criterion for the paper selection was the focus on studying the effects of controllable (by the online marketer) factors on the online buying

decision-making process (see Appendix). The papers selected for the review were published after 1997 in 28 academic journals and five conference proceedings. Out of the 48 papers, 42 (88 per cent) were published between the years 2000 and 2003 and six (12 per cent) between 1997 and 1999. The majority of papers were drawn from the *Journal of Electronic Commerce Research*, the *Journal of Consumer Marketing*, the *Journal of Information Management* and the *Journal of Internet Research*.

The controllable elements identified in the literature as influencing the online buying behavior were grouped into three main categories and five sub-categories, each one including several of these elements (Table I). The selection of papers, review and allocation of the Web experience elements to one of the above categories and sub-categories was done by the author, in order to ensure the conformity of the selection criteria; a minimum of one literature reference was necessary for including a given component in the classification.

The definitions used in describing the main building blocks of the Web experiences, as basis of the classification are the following:

Functionality factors

Factors enhancing the online experience by presenting the virtual client with an good functioning, easy to explore, fast, interactive Web site. Functionality includes “Usability” and “Interactivity” elements.

Psychological factors

Web sites must communicate integrity and credibility in order to persuade customers to stop, explore them and interact online. Psychological factors are those playing a crucial role in helping online customers unfamiliar with the vendor or unfamiliar with online transactions to overcome fears of fraud and doubts as to the trustworthiness of the Web site and vendor.

Content factors

Factors referring to creative and marketing mix-related elements of the Web site. These factors exercise a direct and crucial influence on the

Web experience. They are divided in two sub-categories: “Aesthetics” and “Marketing mix”.

The above terms reflect the nature and/or the effect of the Web experience elements on the buying process. As an example the policies regarding the use of customer data by online vendors and product return policies, factors likely to affect the customer trust, were classified as psychological issues while design and atmosphere, typical aesthetic elements were considered as elements of the Web site content.

A few remarks on the results of this review: the total number of literature references per Web experience factor and the frequency of references for each component per subcategory can be found in the Figures 2-7. The number of references could be indicative of the importance of each factor but these numbers must be seen and explained with some degree of caution. The relative importance and the effects of the different elements of the Web experience during the online buying process are separate questions that this study was not meant to address; answering these questions is an issue for further research. The classification is normative and descriptive, meant to present the total picture of an extensive and fragmented research. Finally it should be noticed also that the order of listing of the three

Figure 2 Web experience building blocks: literature references per sub-category

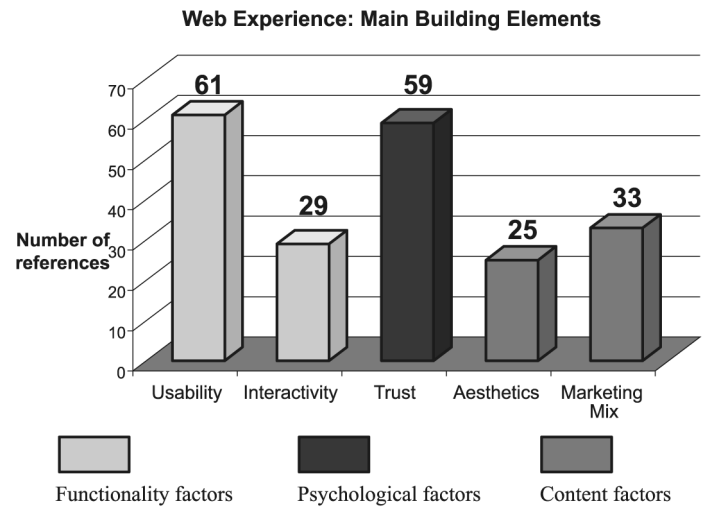
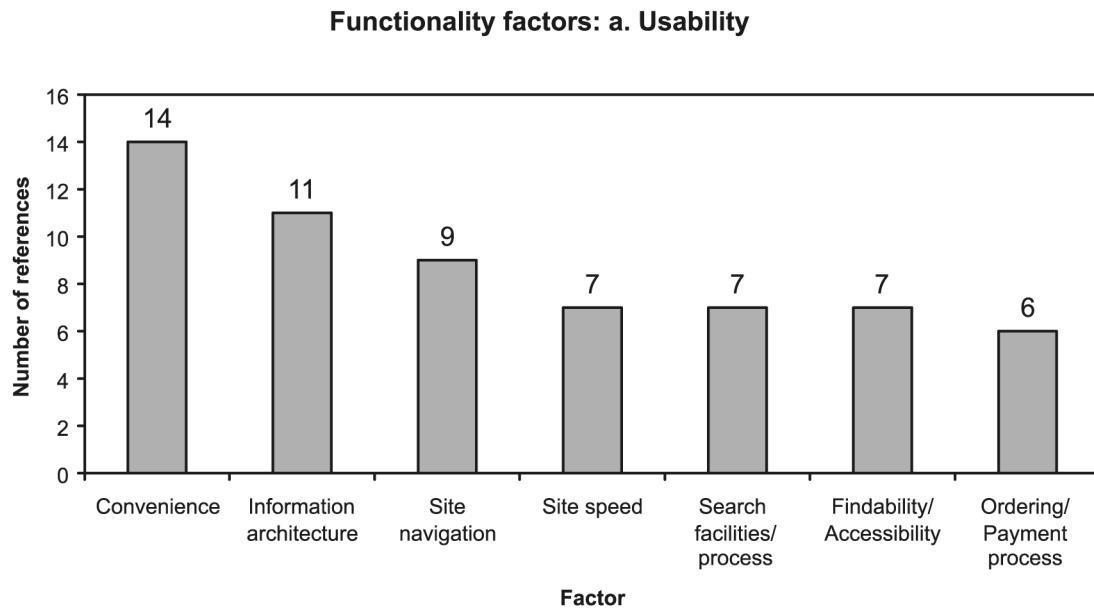


Table I Main building blocks of Web experience and their sub-categories

Functionality factors		Psychological factors	Content factors	
Usability	Interactivity	Trust	Aesthetics	Marketing mix
Convenience	Customer service/after sales	Transaction security	Design	Communication
Site navigation	Interaction with company personnel	Customer data misuse	Presentation quality	Product
Information architecture	Customization	Customer data safety	Design elements	Fulfillment
Ordering/payment process	Network effects	Uncertainty reducing elements	Style/atmosphere	Price
Search facilities and process		Guarantees/return policies		Promotion
Site speed				Characteristics
Findability/accessibility				

Figure 3 Web experience functionality factors: literature references of usability elements



categories neither reflects any hierarchical ranking nor is meant to be associated with any particular steps of the decision-making process.

illustrates the complexities online marketers face in their effort to optimize their customers' Web experience; creating a successful online presence means developing a comprehensive and customer-oriented virtual proposition addressing a wide variety of issues and delivering the maximum possible effect, the utmost Web experience.

Web experience taxonomy

The three main building blocks of the Web experience, their sub-categories and components are listed in Table I. The Table

Practitioners should learn and understand the parameters affecting the customer experience before they design and built their online venture.

Figure 4 Web experience functionality factors: literature references of interactivity elements

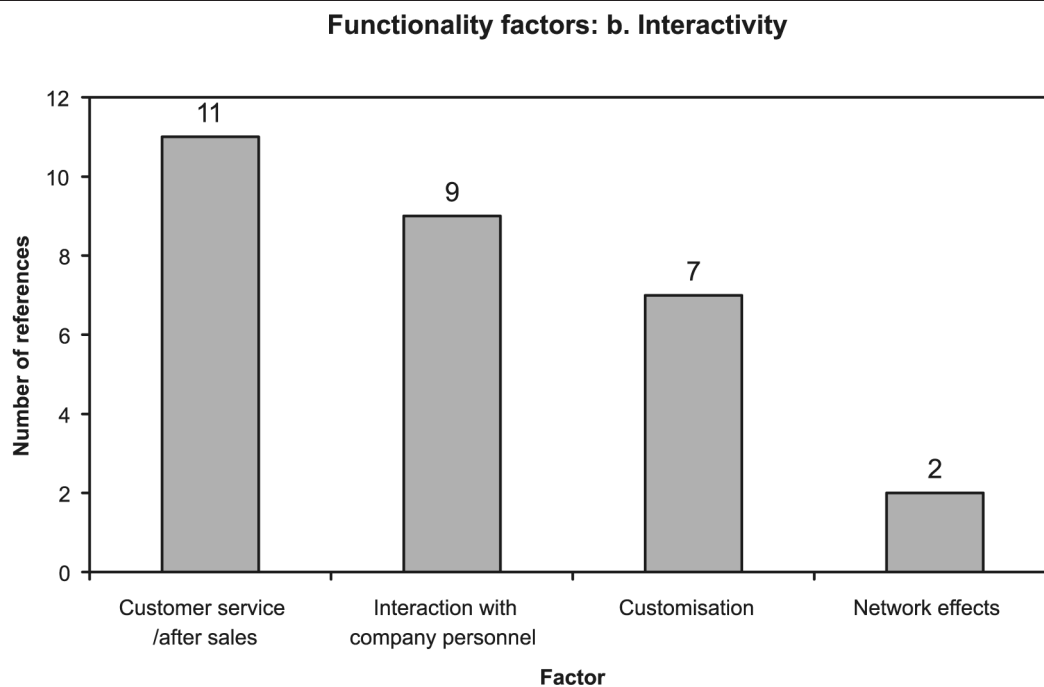
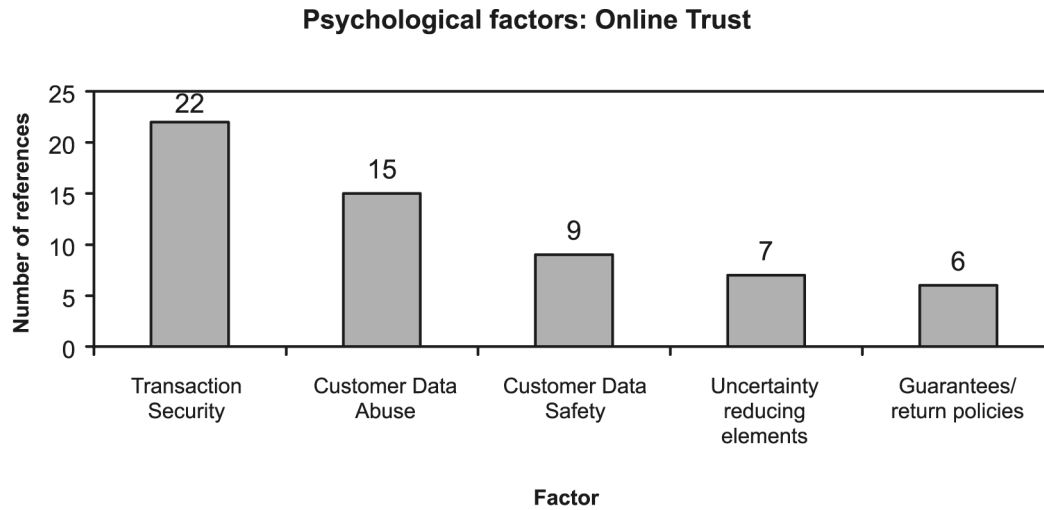


Figure 5 Web experience psychological factors: literature references of trust elements



Yet deciding the right combination of Web experience elements is not an easy task, the specific buying conditions, the customer's experience and needs can shift the importance among the different elements as influencers of the buying process. Two examples underlining this point:

- (1) The significance of the Web experience elements can differ depending on the buying situation, the type of online customers targeted by the Web site as well as the client's intentions visiting the site. It can be argued for example that potential online buyers consider the transaction security and the fulfillment process much more essential issues than Web site visitors who are merely interested in

product prices or general company information.

- (2) The effects and importance of the different Web experience elements can vary, depending on whether customers are new to the Web site or frequent visitors. The present study attempts no explicit distinction here but one could assume that retaining online customers requires a positive Web experience plus many other things. Online customer relationship management and online customer retention are currently also subjects of vigorous academic research (Ha *et al.*, 2002; Shankar *et al.*, 2003; Grewal *et al.*, 2003).

Figure 6 Web experience content factors: literature references of aesthetic elements

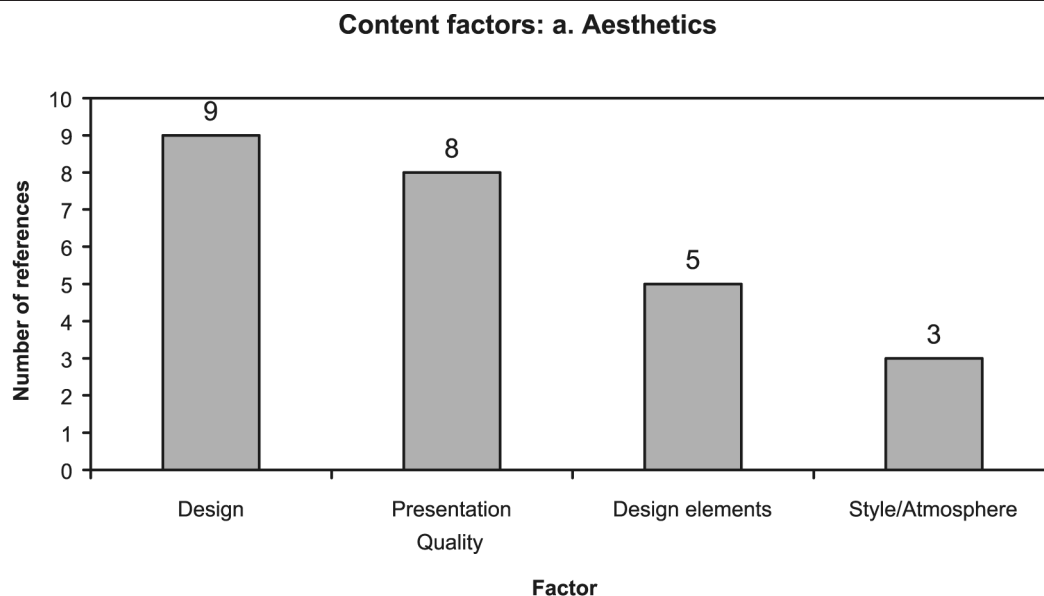
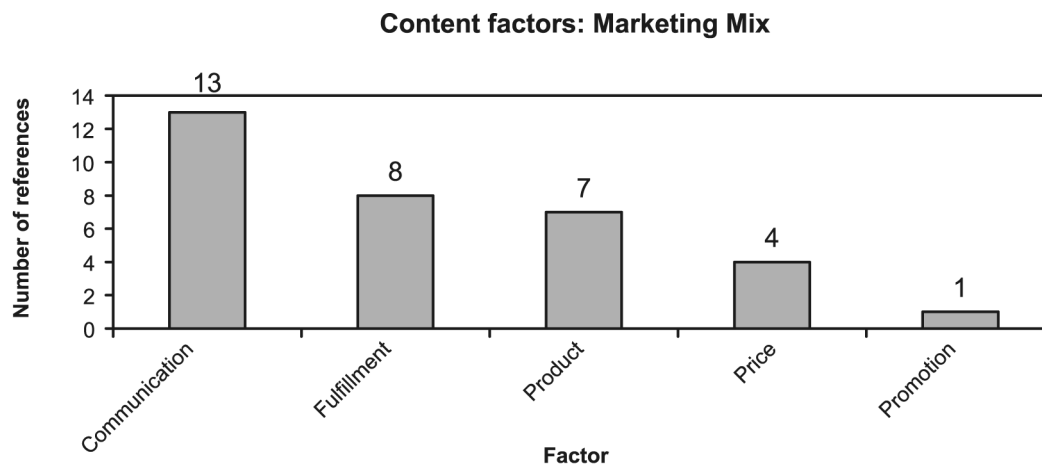


Figure 7 Web experience content factors: literature references of marketing mix elements



The main building-blocks of the Web experience

The Web experience components per category (functionality factors, psychological factors and content factors) and sub-category (usability, interactivity, trust, aesthetics, marketing mix) and the total number of literature references on are illustrated in Figure 2.

Usability and trust are the issues more frequently found to influence the Web consumers' behavior but as mentioned earlier the number of references should not be seen as indicative of the relative importance of the Web experience elements. These elements should be not considered in isolation but rather as a collection of parts of the dynamic online interface, addressing simultaneously diverse needs of the online consumer, in different stages of the buying process and in different ways.

Functionality factors

Usability and interactivity are the two components of Web site functionality. These factors are frequently referred to in the literature as closely associated with success or failure of Web sites, by directly and profoundly influencing the online consumer's experience. Slow, dysfunctional Web pages and poor interactivity prompt most online customers to look for alternatives, since time saving and shopping convenience are important motives to do business online for the majority of Internet users.

Usability

Nah and Davis (2002) define Web usability as "the ability to find one's way around the Web, to locate desired information, to know what to do next, and, very importantly, to do so with minimal effort. Central to this idea of usability are the important concepts of ease of navigation and search" (Nah

and Davis, 2002, p. 99). Usability is considered as an important quality criterion of information systems (Preece *et al.*, 1994) and Web sites (Osterbauer *et al.*, 1999). Elements enhancing the Web site usability are the convenience of using the site, the loading speed of the pages, the information structure etc. Creating a user-friendly Web site not only requires high quality, state-of-the-art technology but also thorough knowledge of the needs and characteristics of the potential Web site user.

Usability of Web sites has been constantly improving over the years (Internet Confidence Index, Yahoo /AC Nielsen, 2002, American Customer Satisfaction Index (ACSI), 2003) not only because online firms and Web designers gain more experience but also as a result of technological developments. Broadband connectivity – more than 20 per cent of Web users have a broadband connection in the USA in 2003 – and new programming tools have contributed to faster loading times saving valuable customer time[2]. The usability components and the number of literature references per component are illustrated in Figure 3.

The different components of usability in short:

- *Convenience*: research indicates that convenience is a prime motivator for Web customers to stop and interact with online vendors. Customers associate convenience with easy and fast information browsing, shopping and settling of the online transaction; Web designers must try to understand how their customers are likely to perform these activities online and adjust their procedures accordingly.
- *Site navigation, information architecture and search facilities/search process*: online customers expect easy site navigation and easily accessible information. Search engines

providing fast and reliable results helping customers to quickly locate information in the site, must be part of every well-designed commercial Web site.

- *Site findability and accessibility*: most Web consumers are searching for products and services by means of search engines and online directories. It is very important that site designers apply a consistent search engine strategy so that online consumers can easily find the site. Web sites must be furthermore accessible by users making use of different types of Web browsers.
- *Site speed*: online customers expect fast loading Web pages. Web designers must keep in mind that the average time customers per page viewed is low and steadily diminishing over time (Cockburn and McKenzie, 2001).
- *Ordering/payment processes*: cumbersome and lengthy processes required for ordering and settling online transactions are still one of the most important sources of customer irritation, loss of goodwill and interrupted online transactions. A balanced approach is necessary so that Web sites remain simple to use and secure at the same time.

Interactivity

The interactivity of Internet allows online vendors to enhance the Web experience by presenting the customer with more personalized services and facilitating interaction with other online users willing to share experiences and suggestions. Interactivity therefore can be seen as underpinning two of the basic elements of the Internet revolution, namely personalization[3] and networking[4]. Interactive elements are contributing to a positive customer experience by reducing uncertainty during the online transaction and the cognitive dissonance afterwards. Elements enhancing interactivity are facilities allowing interaction with vendors in case customers have questions or difficulty to use the site, online help-desks for technical assistance or support. Networking and the possibility of establishing contacts with other users by means of active or passive interfaces (user's forums, chat-rooms or bulletin boards) are also factors enhancing the Web site interactivity (see Figure 4).

The Interactivity components are divided in two categories:

- (1) Interactivity with the online vendor.
- (2) Interactivity with other Web users.

Customer service/after sales service online, interaction with company personnel and customization are components of interactivity between customer and online vendor. Web customers expect next to convenient shopping and support in case of problems with products or

services purchased. Good organized online or offline helpdesks, efficient reverse logistics, quick response to e-mail complaints and inquiries are some of the issues where marketers and Web designers must focus their attention. As in the case of usability, good knowledge of customer profiles and needs are of vital importance for the designers of these online services.

Network effects were considered in the 1990s as a major Internet innovation in communication, likely to bring about customer empowerment and dissemination of market knowledge through interaction between online clients. Yet the number of recent literature references to Users' Forums, Bulletin Boards, Chatrooms, Guest books – typical vehicles of online C2C interaction – as essential Web experience elements is rather limited. More research is necessary in order to assess the exact role and effects of such elements as well as the trends in this area. This is because of changing Web technographics (Forrester Research, 2003) and technological innovation seem to support new forms of C2C interaction, often allowing consumer interaction and transactions outside the traditional or even the "classic" online trade environment. Online consumer auctions, online bartering, virtual classifieds (Cravatts, 2003) or entirely new forms of peer-to-peer (P2P) interaction without clear commercial objectives (music files exchange, Web-logging) are forms of virtual interaction gaining fast popularity and fields of intensifying online commercial and non-commercial activity (Lee, 2001).

Psychological elements: online trust

Online trust is one of the issues researchers, as well as practitioners, frequently associate with the success or failure of online ventures. According to Harris Interactive (2001) around 70 per cent of the US Web users are seriously concerned about the safety of their personal information, transaction security and misuse of private consumer data. Subjects like hacking, fraud, spam and online scams frequently make headlines, raising security concerns as well as skepticism and mistrust. The physical distance, lack of personal contact and the anonymity of the Internet are also factors further increasing the consumers' anxiety and risk perceptions. Online firms, especially those lacking strong brand recognition and physical presence, should not underestimate the importance of trust as a Web experience element.

The multi-dimensional character of online trust makes it a complicated issue and despite considerable research attention several online trust issues are still very little explored. A study of Grabner-Kräuter and Kaluscha (2003) underlines the complexity of this subject. Based on an

extensive review of research work done in this field these researchers identified trust constructs reflecting "...both institutional phenomena (system trust) and personal and interpersonal forms of trust (dispositional trust, trusting beliefs, trusting intentions and trust-related behaviors ...)" (Grabner-Kräuter and Kaluscha, 2003, p. 783).

Online marketers should identify elements enhancing or undermining trust among potential customers and try to understand how those can affect the online customer's perceptions. This knowledge is valuable for including the right mix of trust-establishing elements in the Web site and creating the proper organizational infrastructure – technological, organizational as well as managerial – needed for delivering this mix. Next to Web site trust-enhancing elements, the "off-line" vendor image and reputation have been often found to be critical enablers of virtual interactions and transactions by lowering the transaction risk threshold and reducing customer anxiety.

For Web pure-plays the question of winning customer trust must be a central issue when designing their Web site. Addressing trust-related issues is also possible by pursuing synergies with marketing activities taking place in the physical marketplace. An interesting question in the debate around gaining the consumer's trust online is the effect of third-party approvals and endorsements (Verisign, Truste, WebTrust, Trusted Site Seal, etc.) on abating the consumer's risk perception (Lin *et al.*, 2001; Loebbecke, 2003)

Multi-channel firms with well-established reputation, brands or products usually have a serious advantage against online novices and startups. High levels of brand awareness and good reputation make it easier for customers of physical firms to trust them online, reducing the online customers' demands for credibility or integrity credentials. (Hoffman *et al.*, 1999; Lee, 2002; Kim *et al.*, 2003; Nah and Davis, 2002; Madu and Madu, 2002; McKnight *et al.*, 2002; Joines *et al.*, 2003; Russo, 2002).

The psychological factors affecting online trust are illustrated in Figure 5.

The different elements of the online trust in more detail are:

- *Transaction security and customer data safety are principal concerns of online customers purchasing products or services online.* Service disruptions, hacking into online vendors' databases and display of customer data on clandestine Web sites are frequent Internet incidents asking for constant vigilance by online firms.
- *Clear ordering, payment and refunding procedures as well as concrete customer policies, good communication and strict security help customers face online transactions with more confidence.*

Online vendors can also win security-minded customers by offering multiple payment alternatives, something though not always feasible (ex. customers overseas).

- *Customer data abuse.* A critical question for privacy-minded customers is whether personal data known to online firms is used for any type of commercial purposes against their knowledge and will. This is a growing concern among Internet users confronted daily with an explosive growth of spam, fraud and online scams (Harris Interactive, 2001). Web vendors should allow online customers to opt for possible follow-up activities and ask always the customer's clear permission for any further use of data for commercial purposes.
- *Guarantees and return policies.* Like in traditional business, product guarantees offered by Web firms are powerful tools for gaining competitive advantages, raising the level of customer trust and reducing the online transaction anxiety. Clear policies outlining product returning procedures and compensation in case of dissatisfaction with the product have been found to have a positive effect on online vendors' credibility.
- *Uncertainty reducing elements.* Components of uncertainty reducing elements are "frequently asked questions" (FAQs) and conflict-resolution policies. Allowing easy access of online customers to this type of information enhances trust but also reduces the number of inquiries of customers with questions on such issues.

Content elements

The content factors are divided into two categories:

- (1) Aesthetics.
- (2) Marketing mix.

Aesthetics

Special attention must be paid to aesthetics, not only because aesthetic elements are often important indicators of online vendor quality (Vrechopoulos *et al.*, 2000) but also form the main clue of vendor and Web site credibility for the majority of Web users (Fogg *et al.*, 2002).

Aesthetics embrace the artistic and creative elements of the online presentation, aiming at a pleasing appearance or effect (*Merriam-Webster's Online Dictionary*, n.d.). These elements communicate the Web site's atmosphere, something important for attracting online customers by inducing positive and powerful motives for visitors to stop, explore and possibly interact with the site.

Traditional retailers are well aware of the fact that a positive experience of new customers entering their shop is an important factor in

their decision to stay or leave; the atmosphere[5] is a major retailing quality evidence affecting his/her impression about a sales outlet and defining the customer's further actions and behavior (Donovan and Rossiter, 1982; Lewison, 1994; Boekema *et al.*, 1995; Rousey and Morganosky, 1996; Jobber, 2001; Kotler, 2003).

Research suggests that aesthetics influence online and traditional shoppers in similar ways, underlying the importance of these elements as success factors in online retailing (Vrechopoulos *et al.*, 2000; Madu and Madu, 2002; Kim *et al.*, 2003; Nua Internet Surveys, 2002). In practice low quality Web sites are the rule rather than the exception on the Internet marketplace (Interactive Bureau (IAB), 2003).

The aesthetic elements of the Web experience are illustrated in Figure 6.

Design and style/atmosphere of Web sites are elements quite crucial in shaping the online experience and the buying decision making process. Like shoppers in traditional shops, for first-time Web site visitors these elements are particularly important. But unlike traditional shoppers online consumers spend much less time in Web shops they visit. Given the very limited time the average Internet users spend on browsed pages when searching for information or products online[6] the design and atmosphere of Web sites must attract the attention and capture the interest of the online customer in a very short time.

There is furthermore strong evidence that the Web site design is one of the most important factors communicating the online firm's credibility, something crucial for transacting online. A study of Stanford University among 2,440 respondents meant to identify features of Web sites that online customers usually associate with the site's credibility, found that 46.1 per cent of them consider the design look as the most important credibility cue followed by information design/structure (28.5 per cent) and information focus (25.1 per cent) (Fogg *et al.*, 2002).

Presentation quality refers generally to the customer's total impression on the Web site. It is frequently mentioned as an important motivator for consumers to stop and interact with the site.

Design elements specifically mentioned in the literature as contributing to the Web experience are the domain name, colors and site layout.

Marketing mix

Several researchers have been focused on the impact of marketing mix elements on the behavior of Web users searching the Internet or buying products and services online. Researchers agree that the marketing mix's 4Ps – including fulfillment – are essential contributors to the Web experience. The ongoing debate on the value of the marketing

mix as the toolkit of conventional marketing (Dixon and Blois, 1983; Grönroos, 1994; Gummesson, 1997; Goldsmith, 1999) underlines though the fact that more research is needed in order to define its exact role of the Ps as part of the online content and online marketing in general.

The marketing mix elements and the relevant literature references are depicted in Figure 7:

- *Communication.* The literature references on this aspect refer to the quality of information provided about the firm's products, the clarity of selling conditions and the delivering terms. Information can to a certain degree compensate the lack of physical contact with the product, reducing the online consumer's uncertainties.
- *Fulfillment.* With the exception of digitized products (music, software, e-books, etc.) easily delivered online, for all other types of products offered online the order fulfillment and product delivery do not coincide with the placing the online order. The way online vendors follow up orders and deliver products has an immediate impact on the willingness of customers to order and more importantly, to return to the Web site for business in the future. Alternative payment methods, fast delivery, flexible delivery options and order tracking are frequently mentioned elements of the fulfillment process.
- *Product elements affecting the Web experience are the online brands and product assortment, product features and product presentation.* Online vendors can in some cases improve the customer experience by enhancing their product presentation by means of 3D or other high-tech methods.
- *Price.* The number of literature references of the price as an input influencing the online consumer's behavior is limited. Next to that, research on the role and importance of the online price contradicts the predominant belief that price is the main motivator for consumers when choosing a particular Web site. And while most online consumers would insist that low price is their major motive to buy online products, facts do not seem to confirm this. Research based on click-through analysis indicates that only 8 per cent of Web users in North America are aggressive price hunters and only 30 per cent of purchasing managers identify lower prices as the key benefit of buying online (*The McKinsey Quarterly*, 2001). Factors found in the literature associated with the price as part of the Web Experience are the price level, the online promotional actions or discounts and the price transparency.

- *Promotion.* This element is also rarely found to be one of the essential ingredients of the Web experience, the number of relevant literature references is rather limited. Specific promotional elements mentioned in the literature as enhancing the Web experience are free extra services, sales promotions and incentive programs.

Issues for further research

Given the complex, dynamic and continuously evolving character of the Internet is obvious that the Web experience is an issue with a multi-faced and dynamic character. New methods, technologies and tools for enriching and enhancing the online experience are frequently emerging as a result of technological advancements, market trends or as a response of Web vendors to the changing online population. Analyzing the structure and dynamics of the Web experience goes beyond the scope of this study but some questions requiring further research have been already mentioned in this paper. A summary of the most important ones:

- What is the exact role and weight of the Web experience elements as influencers of the buying behavior and what Web experience elements are crucial for the different stages of the online decision making process?
- What is the influence of the Web experience elements on the shopping behavior of new or returning customers?
- What Web experience elements are important for different types of Web sites?

Last but not least, considering the dynamic character of the virtual marketplace, it is necessary that research attention should be focused on the way technologies delivering new forms of communication, interaction and virtual experience affect the needs, perceptions, attitudes and buying behavior of online consumers.

Conclusions and implications

Research on the buying behavior and the factors influencing the decision-making process of online consumers has revealed similarities as well as differences between them and the traditional customers. The uncontrollable factors (external and personal ones) affecting consumer behavior are similar for both types of consumers. The tools however used by traditional and online marketers in order to influence the buying behavior of their customers are not quite the same. In the case of traditional consumers the 4Ps of the marketing

mix are considered as the main controllable tools influencing the buying behavior. Research indicates that in the case of the Web consumer a set of elements experienced during the virtual interaction are indeed the controllable factors affecting the online buyer.

This study identifies the main constituents of the online experience or Web experience as being:

- the functionality of the Web site that includes the elements dealing with the site's usability and interactivity;
- the psychological elements intended for lowering the customer's uncertainty by communicating trust and credibility of the online vendor and Web site; and
- the content elements including the aesthetic aspects of the online presentation and the marketing mix.

These three sets of factors are the main online marketing tools under the control of the e-marketer.

Despite the fact that a good deal of research has been done on identification of the individual components of the Web experience during the last five years, little attention has been paid in integrating this research endeavor. This study, based on an extensive review of research published during the last six years, identifies and classifies these Web experience components in a framework emphasizing their extend, variety and interdependence. The study also underlines the fact that knowledge as to the exact way these factors interact with each other as well as their individual weight and importance is still very limited.

The Web experience framework can be useful to both practitioners and academics; it could help online marketers and Web site designers to identify issues requiring special attention when designing and building their online firm or evaluating their existing online venture. For academic researchers this classification could be a basis for the formulation of new hypotheses and research questions leading to better mapping of the online consumer's behavior. The framework could also be the basis of further research focused on better understanding of the nature and weight of the Web experience elements, either in isolation or in interaction with each other and in different virtual market settings.

The proposed classification also has limitations: some of the factors included in this framework have presumably received relatively more research attention than others as indicated by the number of papers found to deal with these particular elements. It will be premature to draw any conclusions as to the importance of each of these elements or to relate them directly to any steps of the buying process on the basis of this study. It is also possible that factors not included in the

classification can be important elements of the Web experience yet neglected by researchers so far.

Finally, the Web experience must be regarded as a dynamic and evolving subject rather than a static one; developments in the virtual marketplace, changing customer technographics and technological innovation will present e-marketers with new tools and methods for enhancing their customers' online experience. In that respect this study depicts the current picture of the research done thus far, a good starting point for further research in the direction of developing a comprehensive theory on the online buying behavior.

Notes

- 1 Recognizing the influence of the Web experience on the online consumer, many companies have even been appointing, for some time already, the so-called customer experience managers, responsible for the online marketing, site development, and content (McKinsey & Company, 1999).
- 2 The online user spends today on average more than one hour less online than in 1999 (Forrester Research, 2003).
- 3 Personalization includes the ability of the Web firm to tailor its services, online offer and sometimes even the prices to individual customers.
- 4 Network effects refer to elements facilitating interaction with other customers either actively (ex chat rooms) or passively (ex bulletin boards).
- 5 Shop atmosphere is made up by a combination of different components like colours, lighting, lay-out and service personnel.
- 6 Cockburn and McKenzie (2001) found that the most frequent average time that people stop on a Web page was approximately one second and that stops of more than ten seconds were relatively rare.

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Appendix. Literature references on Web experience elements

Functionality factors

Usability

(1) Convenience

- Vellido *et al.*, 2000
- Nicholson *et al.*, 2001
- Goldsmith R.E, Goldsmith E.B. 2002
- Russo, J.E., 2002
- Morganosky M.A., Cude, B.J., 2000
- Foucault B.E., Scheufele D.A., 2002
- Childers *et al.*, 2001
- Koufaris *et al.*, 2002
- Madu and Madu, 2002
- Joines *et al.*, 2003
- Liu and Arnett, 2000
- Wan, 2000
- Liang and Lai, 2002

- Song and Zehedi, 2001
- Fogg *et al.*, 2002
- (2) *Information architecture*
 - Falkou *et al.*, 1999
 - Li *et al.*, 2002a
 - Daugherty *et al.*, 2003
 - Nah and Davis, 2002
 - Shih, 1998
 - Wikström *et al.*, 2002
 - Li *et al.*, 2002b
 - Childers *et al.*, 2001
 - Koufaris *et al.*, 2002
 - Madu and Madu, 2002
 - Liu and Arnett, 2000
- (3) *Site navigation*
 - Nah and Davis, 2002
 - Tsang *et al.*, 2002
 - Kim *et al.*, 2003
 - Fogg *et al.*, 2002
 - Childers *et al.*, 2001
 - Koufaris *et al.*, 2002
 - Madu and Madu, 2002
 - Cockburn and McKenzie, 2001
 - Liang and Lai, 2002

Interactivity

- (1) *Customer service/after sales*
 - Lee, 2002
 - van Winkel and van Montfort, 2002
 - Lowengart and Tractinsky, 2001
 - Vellido *et al.*, 2000
 - Butler and Peppard, 1998
 - Falkou *et al.*, 1999
 - Jarvenpaa, S.L. Grazioli, S., 2002
 - Foucault B.E., Scheufele D.A., 2002
 - Cho and Park, 2001
 - Joines *et al.*, 2003
 - Wan, 2000
- (2) *Interaction with company personnel*
 - van Winkel and van Montfort, 2002
 - Madu and Madu, 2002
 - Liu and Arnett, 2000
 - Kim *et al.*, 2003
 - Lee, 2002
 - Liebermann and Stashevsky, 2002
 - Falkou *et al.*, 1999
 - Song and Zehedi, 2001
- (3) *Customization*
 - Falkou *et al.*, 1999
 - Jarvenpaa, S.L., Grazioli, S., 2002
 - Nah and Davis, 2002
 - Russo J.E., 2002
 - Song and Zehedi, 2001
 - Joines *et al.*, 2003
 - Liu and Arnett, 2000
- (4) *Network effects*
 - Song and Zehedi, 2001
 - Wikström *et al.*, 2002

- (5) *Search facilities/process*
 - Liang and Lai, 2002
 - Madu and Madu, 2002
 - Lowengart and Tractinsky, 2001
 - Nah and Davis, 2002
 - Koufaris *et al.*, 2002
 - Wan, 2000
- (6) *Site speed*
 - Lightner and Eastman, 2002
 - Liebermann and Stashevsky, 2002
 - Kim *et al.*, 2003
 - Shih, 1998
 - Madu and Madu, 2002
 - Cockburn and McKenzie, 2001
 - Liu and Arnett, 2000
- (7) *Findability/accessibility*
 - Falkou *et al.*, 1999
 - Wikström *et al.*, 2002
 - Koufaris *et al.*, 2002
 - Kim *et al.*, 2003
 - Schoenbachler and Gordon, 2002
 - Madu and Madu, 2002
 - Cockburn and McKenzie, 2001
- (8) *Ordering/payment process*
 - Lee, 2002
 - Kim *et al.*, 2003
 - Cho and Park, 2001
 - Wan, 2000
 - Falkou *et al.*, 1999
 - Liu and Arnett, 2000

Psychological factors

Transaction security

- Lee, 2002
- Reicheld, F.F. and Scheffer, P., 2000
- Liebermann and Stashevsky, 2002
- Dennis *et al.*, 2002
- Jarvenpaa, S.L., Todd P.A., 1997
- Swaminathan *et al.*, 1999
- Song and Zehedi, 2001
- Vellido *et al.*, 2000
- O'Cass and Fenech, 2003
- Suh and Han, 2002
- Butler P., Peppard J., 1998
- McKnight *et al.*, 2002
- Hoffman *et al.*, 1999
- Nah and Davis, 2002
- Morganosky M.A., Cude B.J., 2000
- Schoenbachler and Gordon, 2002
- George, 2002
- Madu and Madu, 2002
- Liao Z., Cheung M.T., 2001
- Liu and Arnett, 2000
- Wan, 2000
- Liang and Lai, 2002

Customer data misuse

- Lee, 2002

- van Winkel and van Montfort, 2002
- Nah and Davis, 2002
- Liebermann and Stashevsky, 2002
- Hoffman *et al.*, 1999
- Suh and Han, 2002
- Butler P., Peppard J., 1998
- McKnight *et al.*, 2002
- Prabhaker P.R., 2000
- Jarvenpaa, S.L., Grazioli, S., 2002
- Joines *et al.*, 2003
- Schoenbachler and Gordon, 2002
- Foucault B.E., Scheufele D.A., 2002
- George, 2002
- Madu and Madu, 2002

Customer data safety

- Hoffman *et al.*, 1999
- Butler P., Peppard J., 1998
- McKnight *et al.*, 2002
- Prabhaker P.R., 2000
- Jarvenpaa, S.L., Grazioli, S., 2002
- Hoffman *et al.*, 1999
- Foucault B.E., Scheufele D.A., 2002
- Madu and Madu, 2002
- Liang and Lai, 2002

Uncertainty-reducing elements

- Lee, 2002
- Grabner-Kräuter and Kaluscha, 2003
- Jarvenpaa, S.L., Grazioli, S., 2002
- Nah and Davis, 2002
- Madu and Madu, 2002
- Liu and Arnett, 2000
- Song and Zehedi, 2001

Guarantees/return policies

- Lee, 2002
- Dennis *et al.*, 2002
- Jarvenpaa, S.L., Grazioli, S., 2002
- Nah and Davis, 2002
- Madu and Madu, 2002
- Song and Zehedi, 2001

Content factors

Aesthetics

(1) *Design*

- Nah and Davis, 2002
- Vrechopoulos *et al.*, 2000
- Kim *et al.*, 2003
- Wikström *et al.*, 2002
- Madu and Madu, 2002
- Cho and Park, 2001
- Liu and Arnett, 2000
- Wan, 2000
- Fogg *et al.*, 2002

(2) *Presentation quality*

- Lightner and Eastman, 2002
- Kim *et al.*, 2003
- McKnight *et al.*, 2002
- Madu and Madu, 2002

- Cockburn and McKenzie, 2001
- Liu and Arnett, 2000
- Liang and Lai, 2002
- Song and Zehedi, 2001

(3) *Design elements*

- Tsang *et al.*, 2002
- Vrechopoulos *et al.*, 2000
- Madu and Madu, 2002
- Li *et al.*, 2002a, b
- Daugherty *et al.*, 2003

(4) *Style/atmosphere*

- Vrechopoulos *et al.*, 2000
- Childers *et al.*, 2001
- Koufaris *et al.*, 2002

Marketing mix

(1) *Communication*

- Kim *et al.*, 2003
- Prabhaker P.R., 2000
- Li *et al.*, 2002a, b
- Daugherty *et al.*, 2003
- Nicholson *et al.*, 2001
- Nah and Davis, 2002
- Russo J.E., 2002
- Morganosky M.A., Cude B.J., 2000
- Wikström *et al.*, 2002
- Madu and Madu, 2002
- Joines *et al.*, 2003
- Liu and Arnett, 2000
- Wan, 2000

(2) *Fulfilment*

- Lee, 2002
- Liebermann and Stashevsky, 2002
- Hoffman *et al.*, 1999
- Dennis *et al.*, 2002
- Madu and Madu, 2002
- Cho and Park, 2001
- Wan, 2000
- Liang and Lai, 2002

(3) *Product*

- Lee, 2002
- Lowengart and Tractinsky, 2001
- Vellido *et al.*, 2000
- Madu and Madu, 2002
- Cho and Park, 2001
- Lightner and Eastman, 2002
- Wan, 2000

(4) *Price*

- Swaminathan *et al.*, 1999
- Joines *et al.*, 2003
- Wan, 2000
- Song and Zehedi, 2001

(5) *Promotion*

- Song and Zehedi, 2001