The Virtual User Shopping Experience: A Multi-Faceted Classification

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ABSTRACT

This paper defines and classifies the user shopping experience in online environments, based on the information systems and online consumer behavior literature. The five dimensions of the user shopping experience are sensory, affective, cognitive, physical, and relational.

USER SHOPPING EXPERIENCE

User shopping experience is the event that users go through with a web site's product offerings while shopping online and encompasses their participation in terms of the following: *sensory*, *affective*/emotional, *cognitive* and creative, *physical*/behavioral, and *relational* or socially identifiable with a group (Schmitt 1999, 2003). The ultimate goal of the user shopping experience is to integrate all these three experiences into a holistic experience to the consumer (Schmitt 1999, 2003). Experiences enhance the product experience through the senses (Schmitt 1999, 2003), emotions, cognition, behaviors, and relations to the product itself, stimulating both the heart and the mind (Schmitt 1999, 2003).

Sensory Experience

Sensory shopping experience is an online shopping event that stimulates as many of the five senses or modalities virtually through vision, sound, touch, smell, and taste (Schmitt 1999, 2003). Since the senses of smell and taste are hard to simulate in a virtual environment, seeing, hearing, and tactile simulations are the three senses that are potentially offered on the web. Tactile sensations can be induced via feelings of telepresence in a virtual environment or by sensory substitution (Sherman and Craig 2003). When users are in a virtual dressing room in eddiebauer.com, they feel as if they are transported to a real store or walking in a virtual mall, a sensation known as *telepresence* (Steuer 1992). *Sensory substitution* occurs, for example, when one of the senses replaces another, such as visual vs. haptic sensations. For example, users, who visually manipulate 3D objects on the screen, feel the force feedback against the mouse to convey the shape and texture of an item (Li et al. 2001; Sherman and Craig 2003).

Sensory shopping experiences include how a web site engages the senses, is perceptually interesting, and appeals to users (Schmitt 1999, 2003). The result is high-quality sensory immersion, which is an important factor in virtual environments, as well as other factors like well-designed software and interested users (Whitton 2003). Consequently, this results in more appealing shopping experiences, which are rich and vivid in multimedia and interactivity in the user interface, adding value to users. For example, amazon.com is an excellent example of a site that gives a true online experience through its interface (Schmitt 2003). The site is visually appealing and invokes a tactile sensation through its *Look Inside This Book* feature, simulating the feeling of flipping pages in a real book. Also, users achieve aural and audiovisual stimulation when they sample music CD's on amazon.com.

Affective Experience

Affective shopping experience is an online shopping event that stresses the emotional component of shopping (Schmitt 1999, 2003). This includes how a web site places users in a certain mood, makes them respond in an emotional fashion, and appeals to their feelings (Schmitt 1999, 2003). Users' range of feelings goes from somewhat positive to real joy and excitement when they interact with a pleasing web site and its product offerings. Restrictive or user-unfriendly navigation results in negative emotions and reduces the likelihood of future site revisits (Dailey 2003). Users experience entertainment as they play games or communicate with others online (Rosenbloom 2003; Swartout and Van Lent 2003).

Emotions and affective responses towards a web site or virtual environment are important to users (Agrawal and Venkatesh 2002). Sociopsychological value, comprised of shopping enjoyment and convenience, is vital to online customer satisfaction (Lee et al. 2003). For example, a vacation experience feeling occurs while someone is surfing the clubmed.com home page to book a getaway (Schmitt 1999, 2003). It focuses on a customized experience for each visitor, who is whisked away with cartoon characters to virtual villages *Village Vibes* to visit a destination beforehand, and to *Visions of a Club Med Vacation*, which is an emotional fantasy of a desired vacation (Schmitt 1999).

Cognitive Experience

Cognitive shopping experience is an online shopping event that engages users in creative and problem-solving ways, as well as impacts their thinking and brain (Schmitt 1999, 2003). These experiences include how a web site intrigues users, stimulates their curiosity, and appeals to their creative cognition (Schmitt 1999, 2003). These also include interactive features and appropriate interface metaphors in a web site, which may invoke curiosity and fascination. Rich multimedia and interactivity result in a cognitive absorption or cognitive engagement state for users (Agrawal and Venkatesh 2002). A web site is enjoyable especially when it employs a pleasing metaphor, such as likening the design of the interface to a production of a theater play (Laurel 1991) or a cyber robot theater experience (Breazeal et al. 2003). Reflect.com employs visual metaphors to allow customers to choose their own look, as they customize product features, such as color and shading of cosmetics (Haeberle 2002). Hence, metaphors and in turn the user's mental model affect the cognitive experience within the virtual environment.

Computer playfulness, or spontaneous and imaginative interactions with computers such as experimenting with new features and menu options of a piece of software, is cognitive and intellectual in nature (Webster and Martocchio 1992). When shoppers navigate and *try clothes on* using their virtual model in landsend.com, they are solving a problem of finding and matching suitable clothes into a desirable ensemble. Using these cognitive skills is important, since cognitive and emotional responses by users to a site are important predictors of return visits (Guo 2003; Koufaris 2002). In contrast to 2D product simulations, 3D requires more cognitive and affective activities due to the nature of 3D interface design and users' feelings of (tele)presence (or feelings of being transported to a virtual environment) while interacting with the products (Li et al. 2002). With user control and media richness (vividness) in web sites, users report sensations of telepresence, which subsequently affects their cognitive responses (Klein 2003).

Physical Experience

Physical or behavioral experiences show users alternatives to using or interacting with products, including changes in lifestyles and behaviors (Schmitt 1999, 2003). For example, marthastewart.com with its consistent layout of information with color scheme, navigation, and content (Van Duyne et al. 2003) makes it easy to follow fresh new ideas from an ordinary item and integrate it into exciting gardening and cooking experiences. In a state of flow or heightened concentration and joy during a task, web navigation results in increased user learning about site content, and in turn that learning leads to changes in online behavior and positive action, such as increased web site revisits (Skadberg and Kimmel 2003). Ford.com creates a customizable shopping experience where customers can come up with over 2.5 million different combinations of their own individual Ford Explorer vehicle (Gobé 2001). Physical experiences also include experiences *outside the physical body* (Schmitt 1999, 2003), as in virtual reality or navigating a web site that takes the user on a virtual experience through nature or the product itself. For example, m-three.com handles snowboarding and creates a sense of adventure through color, sounds, and animation (Gobé 2001). In terms of the interface, Li et al. (2001) define behavioral simulation as animation, customization, spatial navigation, and social simulation (using agents and avatars to interact with others).

Relational Experience

Online communication is an essential aspect of virtual environments. *Relational experience* contains elements from the other four experiences but expands to a broader perspective, beyond the individual user to include a group or a community (Schmitt 1999, 2003). This includes how a site makes users relate to and communicate with other users through the web site. Ebay.com provides a relational experience through a sense of community in an ecommerce setting. Barnes&Noble.com (bn.com) enhances the shopping experience by allowing users to add their ratings of products, such as books, and hence to share their thoughts with others. Other examples include email, forums, chat rooms, instant messaging, and egroups. These examples employ social simulation, which is online socialization using personas, agents, or avatars for communication purposes (Li et al. 2001). For example, Dell.com builds a community atmosphere through its *Dell Talk* service online tool (Kraemer and Dedrick 2001). Consumers share information and advice on their experience with computers, while Dell monitors this bulletin board for information accuracy.

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