Chapter 14

Improving Consumer Performance and Perceived Service Quality in a New Type of Commercial Environment in 3D, Thanks to Embodied Virtual Sales Agents

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ABSTRACT

Considering the development of interactive and rich media technologies on the Internet, the present research sets up the link between a 3D commercial website and embodied virtual agents. Thanks to an experiment on a 3D commercial website, the impact of a virtual salesperson is observed on consumer performance (effectiveness in product retrieving), immersion, and satisfaction. Results highlight the immersive capacity of such a commercial environment, the positive contribution of a virtual salesperson on consumer performance and the interest in a virtual salesperson’s help with online purchases. Theoretical and managerial implications are developed and discussed.

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INTRODUCTION

Screen flatness and the impersonal character of online services are critical issues on the Internet that affect customer expectations and satisfaction (Walsh et al., 2010). Interactivity and socialization both on the Web and real life became a leitmotiv. Retailers have then looked for technological solutions addressing those issues, as past years witnessed the surge of online games, virtual worlds, and social networks. Various technological and/or marketing solutions emerged that could give an answer to such managerial and marketing preoccupations, among which two of them caught researchers’ attention.

One way of improving interactivity and giving a more “human touch” to commercial websites consists in embodying virtual agents’ presence to help customers (Wood et al., 2005; McGoldrick et al., 2008; Qiu & Benbasat, 2009). According to Qiu and Benbasat (2009), using computer-generated text-to-speech voice or 3D avatars could be a way of embodying service employees, enriching customers’ interactive experiences, and creating affective commitment in online service delivery. An interactive animated character that plays the role of an online sales assistant should provide a source of social presence and has the potential to replace interactions with “real” retail salespersons (Keeling et al., 2010). So, from Anna of IKEA to Emma of Ebay, numerous virtual agents appeared on the web to welcome Internet users or as advisers in the shopping process. However, among the variety of reasons to use the Internet channel for shopping purposes, the desire to free oneself from the pressure of a salesperson is evoked by more than half of Internet users (Laudon & Guercio-Traver, 2009). This statement raises essential questions concerning the relevance of developing and using a virtual salesperson, particularly in the context of a 3D commercial website.

Another new technological solution that can be adopted by e-retailers to enhance e-shopping experience is 3D commercial websites. That display tries to get very close to the “real” shopping experience and makes the shopping experience unique, less flat, and more compelling (Garnier & Poncin, 2009; Poncin & Garnier, 2010). Poncin and Garnier (2010) observed the specificities of experiences lived by users visiting those 3D commercial sites. Online shoppers enter a fully 3D website and are represented by an avatar that can be personalized. It is possible to visualize and manipulate item (through pictures or 3D modeling), chat online with other consumers and end the visit by purchasing selected items that will be delivered at home. Their study concludes that if the experience in this hyperreality tries to get as close as possible to a “real” experience of shopping, specificities related to the mediation by an IT interface make the shopping experience unique; this experience does not hold either to reality, to a purely virtual situation or to a dream but it possesses specific characteristics. Though, such environments are quite new for most Internet users and the study by Garnier and Poncin (2009) also pointed out the need for sales agents to increase credibility of the environment and help people feel comfortable with that technological evolution.

Goals of this chapter are to evaluate the relevance of a virtual agent salesperson on a 3D commercial website and to show how the interaction with it can improve perceived service quality and the performance of the Internet user within a brand new commercial environment. First, the literature review deals with navigation on a 3D commercial site and pursues on the interest of virtual agents. An experiment is presented, testing the benefits of interacting with a virtual salesperson on a 3D commercial website and is completed with detailed visit logbooks that bring to light the contribution of a virtual salesperson in the shopping experience. Finally, the chapter outlines key contributions, limitations, and future research perspectives on the topics.