Chapter 11
Impact of Flow and Brand Equity in 3D Virtual Worlds

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ABSTRACT

This research is a partial test of Park et al.'s (2008) model to assess the impact of flow and brand equity in 3D virtual worlds. It draws on flow theory as its main theoretical foundation to understand and empirically assess the impact of flow on brand equity and behavioral intention in 3D virtual worlds. The findings suggest that the balance of skills and challenges in 3D virtual worlds influences users' flow experience, which in turn influences brand equity. Brand equity then increases behavioral intention. The authors also found that the impact of flow on behavioral intention in 3D virtual worlds is indirect because the relationship between them is mediated by brand equity. This research highlights the importance of balancing the challenges posed by 3D virtual world branding sites with the users' skills to maximize their flow experience and brand equity to increase the behavioral intention associated with the brand.

INTRODUCTION

Earmarking the next development in the Internet, 3D virtual worlds (3DVWs) are providing significant potential for marketing and branding. Companies that have created a presence in 3DVWs, such as Second Life, include Adidas, NTT DoCoMo, Sony, Reuters, Cisco Systems, IBM, Dell, Sun Microsystems, Mazda, Nissan, Pontiac, and Warner Brothers. Figure 1 shows examples of virtual sites in Second Life created and owned by businesses.

3DVWs are characterized by 3D space in computer-generated environments where users interact and navigate in the space through their avatars, which are digital, simulated representa-

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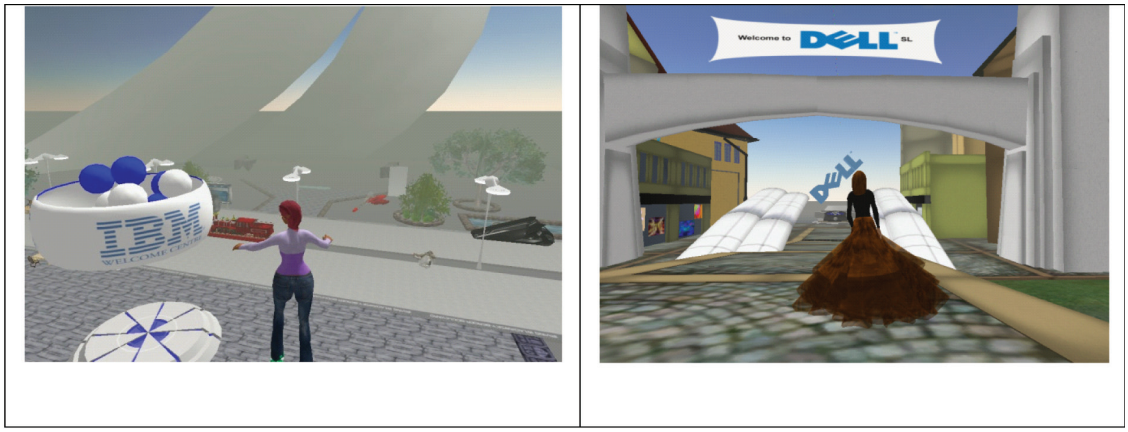
Figure 1. 3DVW Sites of IBM (Left) and Dell (Right)



tions of themselves. Through their avatars, users can navigate freely in the space, create and manipulate objects in the space, and interact and collaborate with other avatars in the shared space (Davis, Murphy, Owens, Khazanchi, & Zigurs, 2009; Eschenbrenner, Nah, & Siau, 2008; Ives & Junglas, 2008; Park, Nah, DeWester, Eschenbrenner, & Jeon, 2008).

Many of the activities that are conducted on the 2D Web can also take place in 3DVWs, and, in some instances, with enhanced capabilities being offered by 3DVWs. For example, customers can view and interact with virtual products. They can find relevant information on products and services, and interact with customer service representatives whose avatars are online. Also, they can customize and order virtual products and services.

3DVWs, however, are not just an extension of the 2D Web because the capabilities of 3DVWs can far exceed those of the 2D Web. For example, Dell's 2D Web site allows visitors to customize a computer before purchasing it, but it does not provide a way for them to see exactly what the computer looks like. In Second Life, however, a visitor can not only customize a computer, but can also view a virtual copy of the computer that is the same size, shape and color as the real product (Brandon, 2007). Visualization of products is a key strength of 3DVWs (Ives & Junglas, 2008). For example, Coldwell Banker offers 3D tours through virtual models of real-world homes (Burselm, 2007) and Pontiac allows test driving of automobiles in Second Life (Brandon, 2007).

Although extensive business opportunities may exist with this new medium, to generate the greatest return on investment in 3DVWs, it is important for businesses to understand how to maximize customers' experiences and provide the ultimate experiences for them. In other words, businesses need to understand how to engage customers in this new, experiential environment and, in particular, in their 3DVW sites. For example, companies are creating innovative branding activities, such as games and interactive demonstrations, on their 3DVW sites to involve and engage customers in the branding experience (Park et al., 2008). However, they may not be capitalizing on the appropriate set of affordances offered by the 3DVW environment to provide the best experience for maximizing profitability.

Park et al. (2008) provide a list of such potential affordances in 3DVWs that can be used by companies to create positive user experiences to enhance branding. Companies can capitalize on these affordances in their 3DVW branding sites to engage customers for extended periods of time. These experiences can assist in enhancing branding opportunities, which include creating interest