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The Effectiveness of Virtual Product Placement within the Immersive Environment

Abstract

This research investigates the impact of participants' involvement on evaluation of virtual product placement within immersive environments. An exploratory study was conducted and face-to-face, semi structured interviews were used in this research. The sample consisted of active and current Second Life users in the age group of 20-50 years old and from a range of different occupations. Results of the qualitative study indicate that high involvement with the product and deep immersion within Second Life both lead to higher perceptions of product placement effectiveness and enhanced virtual experience. A model developed from the qualitative study is presented and future research is discussed.

Key words: Virtual product placement, immersive environment, Second Life, involvement

Track: New Technologies and E-Marketing

1. Introduction

As product placement in the entertainment media has become more common, examining how people process brand messages embedded in such entertainment media has emerged as an important research topic in advertising and information-processing literature (Gupta and Lord 1998; Russell 2002; Russell and Stern 2006). In the last four decades games have changed formats and technology has advanced game realism (from 2-D to 3-D graphics) and today moving rapidly into virtual environments where there is an enormous potential reach for advertisers (Nelson, 2002). Virtual worlds allow the advertisement to appear in places where can not appear in real world (Nelson, 2002). According to Roehm and Haugtvedt (1999), interactive environments are effective as a result of allowing consumers to be actively involved in persuasion process. Despite the growth and potential of this medium little is known about the relationship between presence and involvement in this interactive environment context (Nelson, Yaros & Keum, 2006). As consumers are becoming more involved with Computer Mediated Communication, it becomes more important for advertisers to use channels such as video games and immersive virtual environments as means of delivering advertising content especially with their ability to deliver a sense of presence (Nicovich, 2005). Such ability can provide the best opportunity to advertisers to persuade consumers and affect their behaviors. To address a significant need in both academic and business domains, this research investigates the impact of participants' involvement on evaluation of virtual product placement within immersive environments, like Second Life. A background to the research problem will be given within a relevant literature review. Appropriate methodology will be provided and results will be discussed.

2. Literature Review

An important aspect of marketing communications within the online environment is product placement, also known as 'brand placement' (Ouwensloot & Duncan, 2008). Cowley and Barron (2008, p. 89) define product placement as "a combination of advertising and publicity designed to influence the audience by unobtrusively inserting branded products in entertainment programs so that the viewer is unlikely to be aware of the persuasive intent". Research has shown that product placement is much more preferable than advertisements due to the fact that "they enhance realism, aid in the development of character, generate historical subtext, and provide a sense of familiarity" (Nelson, 2002, p.80). Reverse product placement is happening in virtual worlds as products are introduced to the users of such environments before they enter to the real life due to the fact that people spend more time in virtual environments (Edery, 2006).

The virtual environment is a computer-based simulated environment where individuals can assume an identity as an avatar (Grigorovici, 2003). Such environment allows users to interact naturally with objects and other individuals within a simulated environment as well as giving an opportunity to the users to have an indistinguishable experience from normal reality (Loomis, Blascovich & Beall, 1999). The largest influence on all purchases in 10 years will be the virtual experience associated with them (Gartner Analyst Group, 2008). With the number of subscribers doubling every year, more than 10 million people spend \$10 to \$15 a month to subscribe to online 'role-playing environments'; In addition, many users spend upward of 40 hours a week in these worlds (Hemp, 2006).

Virtual environments provide users with a higher level of presence and more psychological immersion compare to traditional advertising media (Grigorovici, 2003). Presence is defined as "the subjective experience of being in one place or environment, even

when one is physically situated in another” (Witmer & Singer, 1998, p.226), while immersion is “a psychological state characterized by perceiving oneself to be enveloped by, included in, and interacting with an environment that provides a continuous stream of stimuli and experience” (Witmer & Singer, 1998, p.227). Indeed, immersive virtual environments could be more effective persuasion channel owing to their specific characteristics: presence and telepresence (Steuer, 1992; Grigorovici, 2003).

Nicovich (2005) found that, in video games, the greater the degree of felt presence, the stronger the evaluation of advertising experienced during the computer mediated communication (CMC) event. He also reported that high involvement with the CMC lead to a stronger evaluation of the communication. Finally, the degree of experience was found to mediate the relationship between level of involvement and formed advertising judgment. Involvement has appeared as an important factor in studying the effectiveness of advertising (Greenwald & Leavitt, 1984; Krugman, 1965; Ray, 1973). In fact, a high level of involvement will lead to a more positive attitude toward advertisement and the advertised brand (Nicovich, 2005; Lee, Hu & Tou, 2000). Howard and Sheth (1969) define involvement in terms of a person's needs or values, and use the term importance of purchase and involvement interchangeably. Zaichkowsky (1986) explains the level of involvement based on the interest of the consumer to the message of the advertisement and its affect on the attitude toward the brand.

Immersive virtual environments as direct experiential media also known as three-dimensional virtual worlds are artificial, interactive, computer created scenes or world within which users can immerse themselves and feel like they are part of the simulated universe (Grigorovici, 2003). They can also be a model of reality or complete fantasy. Second Life is just one of a growing number of three-dimensional virtual worlds, in which users, through an avatar, are able to play games or simply interact socially with thousands of people simultaneously.

The avatar is the most prominent online expression of people’s desire to try out alternative identities or project some private aspect of themselves (Hemp, 2006). People live in a new body and take on the identity of their avatars that are the representation of themselves in an online environment. In such worlds, having more than one avatar and gender switching is common. For instance, an unattractive, shy woman may transform herself into the sexiest man. Movies are even made in these worlds, with the help of computer game technology and role-playing of avatars.

Second Life is adult oriented most popular virtual world platform with an emphasis on social interaction. It is the Internet-based virtual world with more than 15 million residents/ avatars which has had more than doubles since January 2007. It also has a very successful economy that currently shows a millions of US dollars in monthly transactions via the Linden dollar (Second Life currency) exchange to the US dollar (Boulos, Hetherington & Wheeler, 2007). Many services are available in Second Life from virtual clothing, furniture design, event planning to real estate brokering. In Second Life, marketers can simply become residents and try marketing initiatives for free with their avatars. Moreover, many of Second Life's residents are highly involved in this place making it a potential marketing venue as there is opportunity for marketers to interact with active minds; however, there is a real danger that product placement in virtual worlds may look like a three-dimensional spam to residents (Hemp, 2006).

This research is therefore investigating the impact of virtual product placement within the immersive environment, focusing on Second Life. Evaluation of virtual product placement includes how effective it is in terms of intentions to trial and purchase, as well as the ability to recall product/brand. It also involves how authentic the experience with the virtual product placement felt for the user. Specifically, the propositions to be examined are:

- P1. Product placement involvement is likely to affect the virtual product placement evaluation in the immersive environment.
- P2. Immersion with Second Life is likely to affect the virtual product placement evaluation.
- P3. Degree of experienced presence will mediate the relationship between product placement involvement and virtual product placement evaluation.

3. Methodology

An exploratory study was conducted and face-to-face, semi structured interviews were used in this research as it was an appropriate method in terms of gaining different views of individual's personal experience and reflection of their involvement within Second Life (Stokes & Bergin, 2006; Strauss & Corbin, 1990). Seven participants that represented both gender were chosen purposively and conveniently (four females and three males). Research questions focused on the impact of user involvement on evaluation of virtual product placement within Second Life. The sample consisted of active and current Second Life users within the age group of 20-50 years old, and from a range of different occupations in order to capture various data. Interviews ranged from 40 minutes to 1 hour 30 minutes and were tape recorded with permission from the respondents.

Interview data were analyzed based on the discovery-focused approach as this research aimed to establish connection among the involvement and virtual product placement (Fossey, Harvey, McDermott, Davidson, 2002). Thematic analysis was thus conducted based on backward and forward movement between the entire data that is being analyzed and the interpretation of the data (Braun & Clarke, 2006).

4. Results and Discussion

This study examined the extent to which involvement with the product and deep immersion with Second Life leads to higher perceptions of product placement effectiveness. Further, it investigated the importance of presence in heightening these relationships. Results of the following propositions are now presented.

Proposition 1 considered involvement with the product as an impact on evaluation of product placement effectiveness. Respondents reported both low and high levels of involvement with products/brands such as Coca-cola, BMW, Vodafone, BigPond, Amazon, IBM and Giorgio Armani, for example. Findings indicate that high involvement with the product leads to higher perception of product placement effectiveness as well as higher recall of product/brand. The following highly involved respondents stated:

Coca-Cola has done an effective campaign within Second Life to penetrate the brand to consumer's mind. [Male, 32-37]

I sometimes check out the universities like Harvard Law School and they are phenomenal. [Female, 38-43]

The second proposition addressed the issue of immersion in Second Life to examine whether this impacted on evaluation of product placement. Findings show that respondents were both emotionally and rationally immersed within the environment of Second Life, and in situations where respondents were emotionally immersed within Second Life, they had higher level of involvement with products and they found the environment more immersive. More

importantly, these respondents indicated that they found the product placement believable and attractive. Further, they felt that they had an authentic experience with the product. Examples of responses are as follows:

I personally believe that since you are emotionally involved in the environment itself, you subconsciously relate to the product placement, which makes you totally believe them and makes the products more attractive to you. [Female, 26-31]

Here (Second Life) is everything from incredibly realistic experiences walk-through to walk-out fantasy and you found your slots and you say I've been here today, I want to be there tomorrow. [Female, 38-43]

However, for those who were rationally immersed, a typical comment was:

If I see any new product which I have not seen before, I cannot believe it the first time. However, in case of brands that I know, it would be easy for me to believe it. [Male, 26-31]

Finally, Proposition 3 examined the role of presence in the relationship between the extent of involvement and immersion with evaluation of product placement. Both medium and high levels of presence were reported. This appeared to be linked to visual and imaginative traits of respondents, as those who had a high level of presence described themselves in this way (for example: "I visualize things as I think" [Female, 44-49]). Overall, the majority of respondents considered that presence was important in affecting the level of their involvement, while Second Life immersion was important for heightening presence. Further, presence influenced evaluation of virtual product placement. The following statements support this proposition:

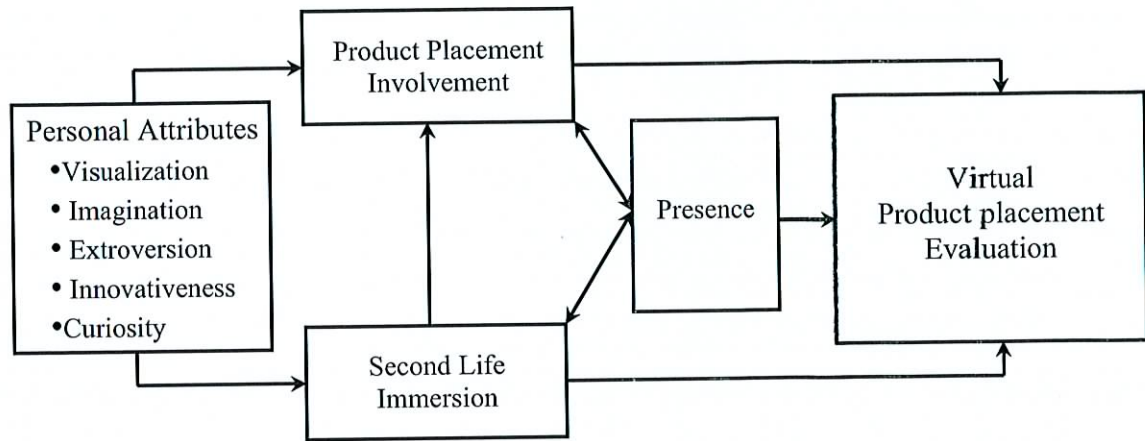
I spend ages flying around and walking around Bora Bora Island, because it was just a really lovely visual and calmly experience. [Female, 38-43]

I think the strength of the virtual experience is that you are feeling a sense of immersion into a particular landscape. So, combined with this intimacy, you feel a sense that you are in this sort of place with product around. For me there was increase in curiosity. [Female, 44-49]

The depicted scenes in Second Life are real depending on where your imagination takes you. Even the fantasy part of things and activities become more and more normal. [Male, 32-37]

Other findings that were notable related to the importance of word-of-mouth in trying out a virtual product in Second Life. It was also clear that personal attributes such as visualization, imagination, extroversion, innovativeness and curiosity were key factors in the level of product/brand involvement and Second Life immersion. Therefore the following model has been developed for testing.

Figure 1 Model of the effectiveness of product placement in the immersive environment



Source: developed for this research based on Nicovich (2005)

In this model, *personal attributes* incorporating visualization, imagination, extroversion, innovativeness and curiosity are directly related to *product placement involvement* and *Second Life immersion* (rational and emotional). *Second Life immersion* influences *product placement involvement* and both these variables relate directly to *presence* and indirectly to *virtual product placement evaluation* mediated by *presence*. Finally, *presence* directly influences *virtual product placement evaluation*. This model will be tested using structural equation modeling in future research.

5. Conclusion

Results of the qualitative study indicate that high involvement with the product and deep immersion in Second Life both lead to higher perceptions of product placement effectiveness and enhanced virtual experience. Further, it was found that personal attributes have important influences on the extent to which respondents were involved with the product/brand and were likely to be immersed in Second Life. Future research will test the model (refer Figure 1) developed from the qualitative study.

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