

Brand Placements in Computer and Video Games: An Overview and Research Questions

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Abstract

Despite the size and growth of the computer and video gaming industry – as well as the increasing use of the medium for the placement of advertising and product placement – researchers have neglected this area. By drawing on existing literature and research in similar and related areas of film product placement, sponsorship and interactivity, the authors present a conceptual overview and identify areas for research.

Keywords: product placement, sponsorship, interactivity, video games

Introduction

Electronic gaming is a multi-billion dollar industry, with computer and video game software sales alone worth \$7 billion in 2002. It is estimated that 60 million video game systems will be sold in the United States by 2005 (Swann, 2002). Sixty percent of Americans over six play computer and video games, with the average age of a player being 28. Nearly half are women, and the majority of players do so with friends and family (Interactive Digital Software Association, 2003). These games are played on television consoles and computers with three-dimensional, colour images. They present a networked, interactive and increasingly immersive environment which some speculate is becoming a very powerful marketing medium (Nelson, 2002).

Not surprisingly, this has begun to attract the attention of advertisers intent on avoiding the clutter associated with other, more traditional media. Half of the top twenty-five video games now feature a licensed player or branded product and it is predicted that by 2005, video game product placements will generate \$705 million (Bannan, 2002; Nelson, 2002). Despite this rapid growth of product placements in video games, little is known about the effectiveness of this communication technique and little research has been conducted to determine its effects. In this paper we review the broad literature of product and brand placement generally and the specific area of placement in games. We also examine related areas of sponsorship and interactive media to identify further areas for examination by researchers.

Product Placement

Product placement is a hybrid message classified along visual, auditory and plot dimensions (Russell, 2002). Its use is intended to influence brand attitudes, increase brand awareness, increase sales, and overcome the problems of clutter, zipping and zapping inherent in traditional advertising (Avery & Ferraro, 2000; Nelson, 2002; Pechmann & Shih, 1999; Russell, 2002). Product placements are attractive because they offer a greater reach than traditional advertisements, along with an opportunity to demonstrate brands in natural environments, and imply endorsement when an actor or character uses the product (Nelson,

2002). An additional advantage lies in multiple exposure through rerun and video rental (Avery & Ferraro, 2000; Balasubramanian, 1994). There is evidence however that consumers are less accepting of product placement when there is too much repetition, commercial motivations are obvious, or when ethically charged products are used (DeLorme & Reid, 1999; Gupta & Gould, 1997).

High levels of recall and recognition have been found for brands placed in movies, with those involving visual and verbal identification performing better (Balasubramanian, 1994; DeLorme & Reid, 1999). Recall however is generally a poor predictor of persuasion, because memory and attitude change are influenced by modality of placement presentation and the degree of connection between the brand and a show's plot (Russell, 2002). Memory improves when modality and plot connection are incongruent, but incongruent placements adversely affect brand attitudes. That is to say: when a product placement does not fit with the plot of a show and is an unexpected focal point, viewers tend to raise their cognitive defences (Friestad & Wright, 1995; Russell, 2002). Likely audience perceptions of 'fit' across key characteristics on product/ medium/ communicator/ message dimensions are important for the success of product placements (Balasubramanian, 1994). We return to the issue of fit below, but now turn to product placement research in relation to video games.

Placement in Games

Only one major study of this phenomenon has been reported in the literature, that of Nelson (2002). That study offers insights regarding the type of game most suited to product placements. It also investigates the effectiveness of product placement in car racing games, using free recall measures posed directly after game play and after a five-month delay.

Attitudes toward product placements were found to be positive. Game players do not consider the practice deceptive, or believe that it impairs or interrupts game playing. They thought product placements could enhance the realism of the game although this depended on the game genre and scenery. Results indicate that the suitability of placements is contingent on how well the context of the game matches reality, with poorly placed and unrealistic advertising detracting from the game experience.

The majority of players in Nelson's first experiment recalled brands directly after game play - both the brands of cars they drove and brands appearing on billboards. In addition, the reasons stated for choosing car brands in the game point to potential carry-over effects into the real world (and vice versa) (Nelson, 2002).

In a second study, Nelson (2002) examined the short- and long-term effectiveness (recall) of local versus national brands in a game context. While passive/background billboards and advertisements were featured within the game, players could not select their brand of car as in the first study. After a five-month delay, players typically could recall a number of products, in addition to, or rather than brands. Novel brands fared best in terms of short- and long-term recall, and local brands fared better than national brands. Brand familiarity as well as brand name size did not appear to be factors in recall.

The results of Nelson's study demonstrate that players, even upon playing a game for the first time or for only a limited amount of time, are able to recall brands in games both in the short- and long-term. The findings point to several areas for recall superiority demonstrating that

brand usage/appearance seems to be an important consideration. The results also show that when a brand is a major part of game play and the consumer is actively involved, short-term recall is enhanced (Nelson, 2002). A brand's relevance may be particularly important for long-term recall thus highlighting the importance of fit.

Sponsorship

As well as product placements, games can feature brand appearances in the form of product banners and billboards. In this sense, billboards are like a form of virtual sponsorship, in some instances replicating the sponsorship that appears in reality. For example, in the video game *Gran Turismo*, some of the billboards on the side of the racetrack represent the same brands on billboards at real races. Both fit and billboard research are found in discussions of sponsorship. We now turn our attention to that area.

The two most commonly cited reasons for a firm to engage in sponsorship are to: 1) increase brand awareness and, 2) improve brand or corporate image (Gwinner 1997; Gwinner and Eaton 1999). Often, both are suggested in conjunction (e.g., Gardner and Shuman 1988). Occasionally, the intention is stated as an exploitation of the sponsorship association for (unspecified) marketing communications purposes (e.g., Cornwell and Maignan 1998; Otker 1988). Regardless of objectives, research to date has tended to focus on areas such as management practice, recall and recognition, corporate image, and purchase intention effects (for a complete discussion, see Cornwell and Maignan 1998; Meenaghan 2001).

This literature has also explored the concept of fit. Cornwell, Pruitt and Van Ness (2001) found that under a condition of high fit, sponsorship of a winning vehicle and driver in auto racing had a stock price effect. In addition, Speed and Thompson (2000) found that fit was a major determinant of consumer attitudes toward the sponsor.

Evidence has been presented to show that an individual's reported involvement with a sport will enhance or amplify the effect of a sponsorship (Celsi and Olson 1988; dYdewalle, Vanden Abeele, Van Rensberger, and Coucke 1988; Pham 1992) but this has been disputed (Lardinois and Derbaix 2001). There is also evidence that an individual's involvement with a product will lead to enhanced and stronger levels of brand attribute perception and brand commitment (Warrington and Shim 2000; Zaichkowsky 1985; Zaichkowsky 1986), yet a study by McDaniel (1999) found that a match-up between event and product involvement had no effect on brand attitude or purchase intention.

We now turn our discussion to the Internet and the related concepts of interactivity, stickiness, flow, presence and virtual experience which have relevance in a video game context.

Internet

On the world wide web consumers are active participants in an interactive exercise (Hoffman & Novak, 1996) whereby they have more control over the messages they receive and the ability to customise them (Liu & Shrum, 2002). In this sense, the internet is similar to a video game in that game players are also active participants in an interactive environment.

It has been claimed that one of the most important elements of a web site is its ability to provide pre-purchase information, allowing consumers to view different product features, assess possible product attribute combinations and/or compare competitive offerings (Balabanis & Reynolds, 2001). High information control in e-commerce environments has been found to improve consumer decision quality and knowledge (Ariely, 2000). A video game is also capable of providing this type of information such as in the cases of Gran Turismo, the F1 GP series and Moto GP series, which allow players to choose the type of vehicle they wish to drive, and read specifications relating to each make and model of car. Need for Speed Underground also includes performance comparisons for vehicle accessories (eg. Wheels, tyres, suspension, brakes etc).

The greatest allure of the internet to marketers is its promise of interactivity. Some researchers have claimed that interactivity has no significant affect on customer satisfaction (Liu & Shrum, 2002) and can be detrimental to advertising effectiveness (Bezjian-Avery, Calder & Lacobucci, 1998). Other studies have found however that interactivity can facilitate deeper cognitive processing and improved learning which makes it more likely that messages will be better understood and remembered (Liu & Shrum, 2002). The benefits provided by active control, two-way communication and synchronicity on the web can also result in increased self-efficacy beliefs, less stress and higher satisfaction (Dellaert & Kahn, 1999; Liu & Shrum, 2002). The internet, like a video game, engages the audience in the communication process which leads to higher user involvement (Liu & Shrum, 2002).

The internet not only has similar characteristics to a video game, but can also act as a medium for them. The concepts of stickiness and flow are relevant here. Stickiness, or the ability of a website to attract and hold viewers' interest, is particularly evident in gaming sites (Hamman, 2000), providing more opportunity to deliver messages (Bhat, Bevans & Sengupta, 2002). Flow, which is characterised by a seamless sequence of responses facilitated by machine interactivity, is possibly the reason people spend a large amount of time on these sites. Flow has been found to result in increased learning, exploratory and participatory behaviours, positive subjective experiences and a perceived sense of control (Hoffman and Novak, 1996).

Consumers are able to experience psychological states on the internet because the web creates a sense of presence (Hoffman and Novak, 1996) which is associated with increases in interactivity and vividness (Steuer, 1992), and results in more positive and enduring attitudes (Coyle and Thorson, 2001). Presence is being enhanced with the emergence of online 3D and rich media advertising, which is more interactive in nature and allows consumers to experience products prior to consumption (Rewick, 2001). This creates a phenomenon called virtual experience (Klein, 1998) which has been suggested to consist of more active cognitive and affective activities; to increase knowledge and persuasion (Kim and Biocca, 1997); influence consumers' product knowledge, brand attitude and purchase intention; and create more positive brand attitudes than 2D marketing messages (Li, Daugherty & Biocca, 2002). By creating compelling online virtual experiences, advertisers can engage consumers in an active, user-controlled product experience which can potentially enhance the value of product information (Li, Daugherty & Biocca, 2002). To capitalise on the benefits of a virtual environment, fast food restaurant McDonald's has integrated its products into a video game whereby players can direct their characters to eat Big Macs and french fries (Richtel, 2002). While presence has been recognised as a product of all media (Lombard & Ditton, 1997) the most compelling presence is generated by virtual reality (Biocca, 1997). The existence of presence and virtual reality in a gaming context is recognised.

Ideas for Future Research and Conclusions

The lack of empirical research into the use of product placement in electronic gaming leads to a number of research questions based on the above for further research that will lead to greater academic and practitioner understanding of the practice.

1. Do video game players have positive perceptions of the use of product placement in games?
 - 1a. Do video game players consider the practice of product placement in games to be deceptive?
 - 1b. Do video game players believe that product placement impairs or interrupts game play?
2. Are attitudes toward product placement in video games mediated by the realism of the game genre/setting?
3. Are attitudes toward product placement in video games mediated by the degree of fit between the product and game setting?
4. Does the location of the ad affect the level of recall of products placed in video games?
5. Does product placement in a video game have an effect on the player's intention to purchase that product?
6. Does product placement affect players' attitude toward brands placed in video games?
7. Does product placement have an effect on the placed brands' corporate image?
8. Does involvement in the video game affect the level of cognitive processing of advertising messages within the game?
 - 8a. Does involvement in the video game affect the level of knowledge of brands placed within the game?
 - 8b. Does involvement in the video game affect the level of recall of products placed within the game?
9. Does recall of peripheral product placements differ between an active participant (the player) and a spectator (the observer)?
10. Offline v Online gaming – is there a difference? (Person to machine V person to person interactivity)

This paper has provided a summary of the research related to brand placements in video games, and has drawn on product placement, sponsorship and internet research to contribute to the discussion on the possible effects of this new form of communication. There are many questions relating to the impact of brand placements in video games that cannot be answered by the existing body of literature. With the increased number and diversity of people playing games however, it is expected that the number of brand appearances in this media will grow, thus calling for academic research to validate their inclusion. This paper has highlighted some areas for investigation that will aid in this pursuit.

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