# The Ability of Branded Online Games to Build Brand Equity: An Exploratory Study

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## ABSTRACT

In light of the relative failures of the early forms of online advertising, many marketers are experimenting with advergames as a method of reaching the growing crowds that are turning to the Internet for entertainment. While this new advertising media offers much promise, its efficacy has yet to be thoroughly proven. Past research into interactivity, long exposure times, and positive attitudes towards an advertisement, things that are typically garnered by advergames, has shown that these attributes generate increases in brand equity for the advertised product. This study tested the relative abilities of advergames and banner advertisements to generate ad recall, a common measure of brand equity. Advergames were found to generate significantly higher rates of recall, a finding that supports the notion of their advertising effectiveness, and the need for further research into this phenomenon.

#### Keywords

advergames, online advertising, brand recall

## INTRODUCTION

A growing trend toward turning off the television and tuning in to the Internet is forcing many marketers to enter a relatively unexplored advertising arena where the best methods of reaching and influencing customers are as yet unknown. Studies have found that many Internet users spend their online time playing video games, a realization that has led some major marketers to launch into a new marketing format that merges games with advertisements into a hybrid form of branded entertainment called "Advergames". This new advertising format appears promising, but little research has been conducted that proves its effectiveness or justifies its widespread adoption.

## LITERATURE REVIEW

#### Growing Use and Acceptance of the Internet

Broadband access, along with recent advances in digital compression technologies, are leading to entirely new media-rich forms of online entertainment, many of which incorporate interactivity. The widespread availability of these new leisure activities is contributing to a growing trend of consumers seeking entertainment online and spending less time with the traditional media,

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television in particular [7, 8]. In order to continue to reach these consumers, businesses are being forced to reallocate some of their advertising efforts to the Internet and to find new methods that will continue to expose these people to their marketing messages.

Just as more people are spending their leisure time online, a greater portion of the Internet population is becoming comfortable with new forms of entertainment available there, particularly video games. Websites providing video games that are playable online can now expect to be visited by as many as a million different individuals during a six-month period [16]. According to Nielsen//NetRatings [19], one out of every three Americans that spent time online during May of 2004 played games at a gaming Website. Of these 46 million people, the most represented demographic group were females between the ages of 35 and 49. A similar study conducted by OpinionPlace found that women over the age of 40 spend 41 percent of the time that they are on the Internet playing online games; a total of almost 9 hours of game time per week [16]. The importance of these findings to marketers is considerable, as it suggests a potential method of capturing the attention of this demographic group, which is widely recognized for its substantial purchasing power and marketing relevance [1].

## Poor Results of Online Advertisements

Over the past decade, advertisers have been seeking an effective method of reaching these online consumers, with only marginal success. Studies investigating the viewing behavior of visitors to Websites have utilized eye-tracking devices to discover that the average individual looks at less than half of all banner advertisements to which they are exposed, a fact that appears to stem from an intentional avoidance of the ads [5, 9]. Advertisements that people purposely avoid viewing simply do not have an opportunity to make an impression.

In an effort to force consumers to view their online ads, marketers next turned to more intrusive methods such as pop-ups, interstitials, and pop-unders, all of which have been found to be even more disliked than traditional banner ads. Comparative analysis of consumer opinions of different online ad formats determined that over 90 percent of users have a negative attitude toward pop-up ads versus less than 40 percent for banner ads [10]. A similar study found that these intrusive ad formats are regarded as distracting, irritating, and even insulting, resulting in very negative attitudes that have the potential to actually damage a viewer's impression of a brand [5]. It should be noted that negative consumer reactions to these forceful persuasion attempts is exactly what would be expected according to past research on reactance theory and advertising [6, 14]. This theory and its supporting studies suggest that the more blatantly aggressive an advertisement is, the more likely viewers are to disregard the ad and to develop negative impressions of both the advertiser and the advertisement itself.

## Concept of 'Advergames'

Into this promising online world, full of opportunity but devoid of effective advertising vehicles, enters the "advergame". An advergame is an online video game that has brand related images and/or themes embedded within it, and that is presented free of charge to the general public via a Website. As marketers have begun to catch on to the idea, Websites containing advergames have been published by a diverse variety of corporations and non-profit organizations. Increased spending on this advertising format is expected to continue into the future, rising from \$77 million in 2002 to \$230 million by 2007 [21].

Part of the appeal of this type of advertising is the amount of time that game players spend

interacting with an advergame and being exposed to the marketing message. Several factors such as age, gender, type of game, and involvement with the brand or product category have an influence on the duration of the average visitor's experience, which has been shown to range from 5 to more than 35 minutes [13, 16]. The sheer quantity of time that a logo or concept can be placed before the consumer stands in stark contrast to the strict time constraints of traditional 30 or 60 second television or radio executions.

Despite the potential advantages of this new medium, there are those that point out that its actual effectiveness has yet to be scientifically proven and that the promise of this format may be greater than the results it can deliver. The paucity of published research on advergames and related forms of online branded entertainment is increasingly being mentioned in the industry, just as spending on these formats is continuing to grow [13, 15, 20]. While the effects of advertisements used in the traditional media have been well researched and documented, the same effects have not been well researched or documented in this new medium.

#### **Relevant Research**

Past research into attitudes towards interactive advertisements and the long-term impact of extended exposure to a marketing message tends to favor the conclusion that advergames have a substantial potential to generate favorable brand equity.

Dynamic Logic, an independent research firm that specializes in measuring the effects of online advertising, has produced several studies suggesting that visually stimulating and interactive forms of advertising are more effective at brand building on the Web. A 2002 study comparing different ad types [12] found that advertisements that involved animations and/or interactivity were twice as effective as ordinary banner ads at generating message association, a component of brand equity. In a subsequent study [11], interactive ads were compared to non-interactive ads to determine their relative merits across five different components of brand equity (aided brand awareness, online ad awareness, message association, brand favorability, and purchase intent). In every case the interactive ads outperformed their static cousins. These studies suggest that a highly interactive and animated advertising format could be expected to have a greater impact on brand equity than a traditional banner advertisement.

Raney et al [20] suggested that the emotional arousal generated by a branded interactive format positively increases an individual's attitude toward the advertisement to which they are exposed. The results of the study showed that greater degrees of interactivity with an advertisement produced higher levels of appreciation for the ad itself and for the Website on which it was deployed. Most advergames are very interactive and also benefit from the special attribute of leaving the actual marketing message (typically a brand logo) in the background as a peripheral stimulus. Research has found that the less time a person that enjoys an advertisement spends thinking about the actual marketing message itself, the more they will like the advertisement [18]. These studies indicate that playing an advergame could be expected to result in a high level of appreciation for the advertisement itself, an affective condition that could lead to increased appreciation of the brand being advertised.

While little published research has directly examined online advergames, several studies involving traditional media have found suggestive correlations between an individual's enjoyment of an advertisement and positive increases in brand attitude, preference, recall, and purchase intentions. Brown and Stayman's [4] meta-analysis of the formation and consequences

of attitudes toward advertisements found that appreciation of an ad does indeed lead to a greater appreciation of the brand, but cautioned that this relationship should not be over-emphasized because of the myriad other elements that play a role in brand attitude. Many studies have been more conclusive in their findings that positive attitudes toward an advertisement impact overall purchase intentions and brand attitudes [2, 3, 17, 22]. All of these research findings pertain to advertisements deployed using the traditional media (television, radio, newspaper, etc.), but if their results are also valid in the online world, then we have strong arguments in favor of the idea that an enjoyable advergame will have a positive impact on many of the traditional measures of brand equity.

There also remains the serious potential that simple repetition and the building of a sense of familiarity may enable advergames to effect a positive change in brand attitudes. Zajonc and Markus [24] present conclusions that argue that an advertisement does not need to be informative or persuasive in order to change attitudes. The repetitive nature of a branded form of entertainment will expose the individual to the brand stimulus (logo, brandmark, etc.) over and over for an extended period of time, and this will in turn build up a sense of familiarity. Familiarity itself, in turn, results in a positive affective reaction to subsequent exposure to that brand. In this regard, it is the extended length of continuous and repeated exposure possible through the advergame format that could give these advertisements a distinct advantage over other forms of advertising.

#### Summary

Although advergaming is a new advertising format that has several positive attributes, it suffers from a lack of verified effectiveness. The format is structured in a way that seems to preclude it from the weaknesses of earlier forms of online advertising. The marketing message is embedded in the game itself, eliminating the potential that people will simply avoid looking at the ad, such as is the case with banner ads, and the games do not intrusively force themselves upon anyone like "pop-up" ads. People who play these game/advertisements do so because they are enjoyable, and enjoyment of an ad has been shown to lead to positive changes in consumers' attitudes towards a brand. However, research is needed to establish whether or not the use of these games can indeed help advertisers build brand equity in the marketplace.

In an exploratory attempt to gain some insight into the research question, this study tested advergames and banner ads to compare their relative strengths in building one particular component of brand equity - the ability of a consumer to remember an advertisement after being exposed to it, also known as advertising recall. Based on the past research that was reviewed, the hypothesis tested was that an advergame would yield higher recall scores for the advertised product than would a banner ad placed on a Webpage above a similar game that did not have an advertisement integrated into its content.

## **METHODOLOGY**

#### Sample

A sample composed of online game players was recruited through open invitations placed in the community forums of several online game sites. One hundred and eight individuals registered for the study, with only thirty-seven seeing it through to completion. However, since all of the recruited individuals play online games regularly (as evidenced by their exposure to the invitation to participate and their answer to a qualifying question), this small sample was deemed acceptable for an exploratory study of this nature.

#### Procedures

The actual survey was administered online using a Webpage and could be filled out by participants at their leisure while in their own homes. The respondents began by following hyperlinks to two different online games. The order in which these games were presented was randomized each time the survey was administered. This was done to control for any recency effect whereby a respondent might be more (or less) likely to recall an advertisement depending on the length of time that had elapsed since exposure to that execution. Both of them were variations on an easily learned puzzle/strategy type game called "Bejeweled", a popular game that was expected to be familiar to at least a portion of the respondents. The experimental unit contained an M&Ms branded game while the control unit contained a non-branded game that had a banner advertisement displayed prominently above it.

After playing both of the games, the respondents were asked to list any of the products, types of products, brands, or brand names that they remembered seeing advertised while playing the two games. This unaided recall question was followed by an aided (recognition) question in which the respondents were shown a collection of ten banner advertisements and brand logos and asked to indicate any they remembered seeing. The collection of ads that was presented contained an M&M's logo and the banner ad that was displayed above the control game along with many ads that were not seen by the respondents. The order in which the ads were displayed was randomized for each individual.

## Findings

When asked to name any advertising that was seen while playing the games, only 3 percent of the respondents were able to recall the banner ad, while 32 percent mentioned the advergame brand. When provided with the selection of ads to choose from, 14 percent were able to identify the banner ad they had seen, while 57 percent remembered the advergame brand. The total percentage of respondents that were able to recall the banner ad through either the unaided or aided prompt was 16 percent, whereas 68 percent recalled the advergame brand, as depicted in Figure 1.

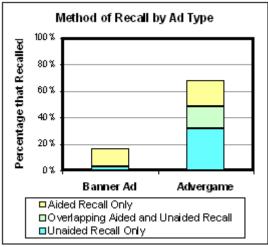


Figure 1: Recall rates by advertising vehicle.

Analysis using a paired t-test clearly demonstrated that in both recall contexts (aided and unaided) the advergame generated a higher degree of brand recall than the banner ad (t=4.53, p=0.0009), thus supporting the hypothesis. The sample used in this study is rather small and was

recruited using a convenience sampling method, but if these differences in recall are even remotely accurate, then we have strongly suggestive evidence that advergames do indeed generate a higher rate of advertising recall than banner ads.

The results of this study are promising in terms of the possible efficacy of advergames as an advertising format, but there are many possible mitigating factors to consider. In addition to the non-representative sample discussed above, other factors could include the respondents' degree of derived entertainment from the different games, the length of time spent on each Website, respondents' possible knowledge of the purpose of the study, prior exposure to the Websites and/or the advertisements, intentional avoidance of the ads, distractions external to the study, and the familiarity of the respondents with these different ad formats. Future studies should be careful to consider these extraneous factors.

#### CONCLUSION

The results of this limited study of the relative merits of advergames versus a more traditional form of Internet advertising are very promising and offer many opportunities for future research. Based on previous studies indicating the many potentially positive attributes of this medium, recall scores that were more than four times greater than those earned by banner ads were surprising, but not entirely unexpected.

Advergames avoid many of the pitfalls that other preceding forms of online advertising have fallen into and offer a positive and enjoyable experience for visitors to a company's Website, as well as for the marketers that are trying to reach these people. As the population of online entertainment seekers continues to grow, and marketers continue to be faced with the challenge of reaching their advertising objectives via the Internet, we can expect to see more and more companies turning to this unique new form of "advertainment" to exploit its rich potential as a marketing vehicle. Online advertising expenditures are growing at an exceptional rate, increasing by 24% during 2004 to reach \$7.4 Billion [23]. As the industry grows, advertisers are grasping for any new techniques or tactics that can provide them with even slight advantages over their competition. Advergaming is proving itself to be a very good vehicle for marketing messages, but much research will be needed to guide and support this advertising medium so that it can reach its greatest potential effectiveness and efficiency without simply becoming more clutter that consumers try to avoid.

#### REFERENCES

1. Bartos, R. Marketing to women around the world. Harvard Business School Press, Boston, 1989.

2. Batra, R., & Ray, M. "Affective responses mediating acceptance of advertising," in Journal of Consumer Research vol. 13, no. 2 (September 1986), pp.234-250.

3. Biel, A. L. "Love the ad. Buy the product? Why liking the advertisement and preferring the brand aren't strange bedfellows after all," in Admap vol. 26 (September 1990), pp.141-54.

4. Brown, S. P., & Stayman, D. M. "Antecedents and consequences of attitude toward the ad: A meta-analysis," in Journal of Consumer Research vol. 19, no. 1 (June 1992), pp.34-52.

5. Chan, A., Dodd, J., & Stevens, R. "The efficacy of pop-ups and the resulting effect on brands – A white paper by bunnyfoot universality," available from http://www.bunnyfoot.com/bunnyfoot\_popup.pdf (2004), accessed 26 September 2004.

6. Clee, M. A., & Wicklund, R. A. "Consumer behavior and psychological reactance," in Journal of Consumer Research vol.6, no.4 (March 1980), pp.389-406.

7. Dawidowska, K. "Surfing 9-to-5," in American Demographics vol. 24, no.5 (May 2002), p.20.

8. Disney Online. "New study reveals internet is the medium moms rely on most," available from http://corporate.disney.go.com/wdig/online\_releases/2004/2004\_0308\_wdig.html (2004), accessed 1 October 2004.

9. Dreze, X., & Hussherr, F. "Internet advertising: Is anybody watching?," in Journal of Interactive Marketing

vol.17, no.4 (Autumn 2003), p.8.

10. Dynamic Logic. "Consumer perceptions of various web ad formats," available from http://www.dynamiclogic.com/na/research/btc/beyond\_the\_click\_mar2004\_part3.html (2004), accessed 25 September 2004.

11. Dynamic Logic. "Interactive ads yield better than average results in getting consumers closer to the point of purchase," available from http://www.dynamiclogic.com/na/research/btc/beyond\_the\_click\_dec2003.html (2003), accessed 25 September 2004.

12. Dynamic Logic. "Rich media campaigns twice as effective at lifting brand message association," available from http://www.dynamiclogic.com/beyond\_0602.php (2002), accessed 25 September 2004.

13. Fattah, H., & Paul, P. "Gaming gets serious," in American Demographics vol.24, no.5 (May 2002), pp.38-44.

14. Friestad, M., & Wright, P. "The persuasion knowledge model: How people cope with persuasion attempts," in Journal of Consumer Research vol.21, no.1 (June 1994), pp.1-32.

15. Kim, H. "Madison ave. melds pitches and content," in Advertising Age vol.73, no.40 (7 October 2002), pp.1-5.

16. Mack, A. M. "Gaming scores with advertisers," in MediaWeek vol.14, no.26 (28 June 2004), pp.18-21.

17. Mackenzie, S., Lutz, R., & Belch, G. "The role of attitude toward the ad as a mediator of advertising effectiveness: A test of competing explanations," in Journal of Marketing Research vol.23, no.2 (May 1986), pp.130-144.

18. Madden, T. J., Allen, C. T., & Twible, J. L. "Attitude toward the ad: An assessment of diverse measurement indices under different processing 'sets'," in Journal of Marketing Research vol.25, no.3 (August 1988), pp.242-252. 19. Nielsen//NetRatings. "Online games claim stickiest web sites, according to Nielsen//NetRatings," available from http://www.nielsen-netratings.com/pr/pr\_040616.pdf (2004), accessed 15 September 2004.

20. Raney, A. A., Arpan, L. M., Pashupati, K., & Brill, D. A. "At the movies, on the web: An investigation of the effects of entertaining and interactive web content on site and brand evaluations," in Journal of Interactive Marketing vol.17, no.4 (Autumn 2003), pp.38-53.

21. Solman, G. "Wow factor about to spike for ads in online games," in Adweek vol.45, no.21 (24 May 2004), p.11. 22. Shimp, T. "Attitude toward the ad as a mediator of consumer brand choice," in Journal of Advertising vol.10, no.2 (1981), pp.9-17.

23. TNS Media Intelligence. "U.S. advertising market shows strong growth in 2004," available from http://www.tns-global.com/corporate/Doc/0/EV24JGKKLP14F6P75GDR492J52/050308%20-

%20TNS%20MI%202004%20Recap%20Final.pdf (2005), accessed 28 March 2005.

24. Zajonc, R. B., & Markus, H. "Affective and cognitive factors in preferences," in Journal of Consumer Research vol.9, no.2 (September 1982), pp.123-132.