

Marketing in the 22nd Century: A Look at Four Promising Concepts

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Abstract: Marketers have always used technology to advance their art. As the end of the first decade of the twenty-second century nears, it is already apparent that technological advances will continue to change how marketing is practiced. This study looks at how four promising innovations may impact marketing in the future. Specifically, this study discusses how two advertising practices-advergaming and product placement-will increase in importance due to socioeconomic and technological factors such as the growing popularity of online games and digital video recorders DVRs.

Key words: Advergaming, product placement, digital video recorders DVRs, eye-tracking, nueromarketing

INTRODUCTION

Marketers have always used technology to advance their art. Recently, researchers have used structural-equations marketing to explain how consumers used shop-bots on the internet (Gentry and Calantone, 2002; Kalliny, 2009) and models for forecasting new product a doption (Gentry *et al.*, 2006; Gentry and Calantone, 2007). As the end of the first decade of the twenty-second century nears, it is already apparent that technological advances will continue to change how marketing is practiced. This study looks at how four promising innovations may impact marketing in the future. Specifically, this study discusses how two advertising practices-advergaming and product placement-will increase in importance due to socioeconomic and technological factors such as the growing popularity of online games and digital video recorders DVRs. These distinct examples, advergaming and product placement, were selected because the authors believe that they are the response to a growing difference in entertainment consumption between the affluent and the poor in industrialized nations. Online advertising supported entertainment, such as advergaming, is growing rapidly among those who are willing to expose themselves to more advertising in exchange for free or subsidized entertainment. This bargain is more attractive to those with less disposable income as they have fewer entertainment options. Product placement is becoming more and more important, especially for reaching wealthier consumers, as the affluent have many more options for ad free media consumption. The study further discusses two relatively new tools for evaluating how well these and other marketing practices work: eye-tracking and neuromarketing.

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Before discussing advergaming and product placement, a review of advertising forms may prove helpful. Advertising forms are important tools that relate directly to advertising issues such as intrusiveness (Edwards *et al.*, 2002; Li *et al.*, 2002) irritation (Aaker and Bruzzone, 1985; Raymond and Greyser, 1968) and ad avoidance and effectiveness (Speck and Elliott, 1997a, b). Previous literature has shown that the duration of 10 and 20 sec ads was found not to be related to perceptions of intrusiveness. An important difference between television ads, pop-up ads and advergaming is the time exposure. Several researchers (De-Pelsmacker *et al.*, 1998; Fennis and Bakker, 2001; Fritz, 1979) have studied irritation in television commercials and in pop-up ads (Edwards *et al.*, 2002). Previous research is inconsistent regarding irritation effect in advertising. For instance Fritz (1979) found that irritating advertising is better remembered than non-irritating advertising, while Aaker and Bruzzone (1985) argued that high irritation levels are associated with a decrease in advertising effectiveness. Previous research; however, appear to be in consensus that irritation is an antecedent to the formation of attitudes toward the ad (Aaker and Bruzzone, 1985; Wang *et al.*, 2002).

Causes of ad irritation can generally be classified into three categories: advertisement content, execution and placement. Raymond and Greyser (1968) found that ads are perceived as annoying or irritating if their content is deceitful, exaggerated, confusing, or insults the viewer's intelligence. Second, ads are considered irritating if they are poorly executed. Poorly executed ads can be irritating if they are too loud, too long, or too large (Aaker and Bruzzone, 1985; Raymond and Greyser, 1968). Third, ads can result in consumer irritation when there are too many ads or when the same ad appears too frequently Raymond and Greyser, 1968. The most serious consequence of irritating ads is that consumers are likely to avoid them. Most of the previous research has focused on survey research and very little has been done on the physiological reactions of consumers.

PROBLEMS WITH TRADITIONAL ADVERTISING

The values and advantages of advergaming and product placement may also be seen by pointing out the shortcomings of traditional methods of advertising such as TV, newspaper and radio advertising. Traditional advertising faces numerous serious challenges that are difficult to overcome. These challenges are summarized as follows:

- Consumers are exposed to a tremendous number of advertisements on a daily basis which makes it impossible to give significant attention to most of them and this number is expected to continue to increase in the future. This is truer than ever before due to the various venues available to advertisers. No matter how useful or how interesting a piece of advertising is, the customer has neither the time nor the mental resources to dedicate sufficient attention to it
- The majority of advertising is presented to consumers when they are not shopping for products or services being advertised. This makes it even more difficult for consumers to pay attention, retain or respond to these advertising. In addition, these advertising messages are viewed to be less relevant to the consumer during the time the consumer is exposed to them. Aaker *et al.* (1992) found up to 80% of an ad's score on recall and/or persuasion measures is a function of background variables such as whether or not people are interested in the product category being advertised

- The cost of advertising and particularly TV advertising is fairly high so companies limit the length and frequency of airing those commercials; therefore, the time the consumer is exposed to these commercials is very short.

CONSUMER ATTITUDE TOWARD ADVERTISING

It is probably safe to say that the majority of consumers do not consider the nature of most advertising to be worth their attention or time. Several authors (Alwitt and Prabhaker, 1992; Zanot, 1981) investigated consumers' attitudes toward advertising in the United States over an extended period of time found that the general attitude of the public toward advertising is negative. Although, this criticism is usually directed at the tactics advertisers employ and not at the institution of advertising itself (Sandage and Leckenby, 1980), it does impact the attitudes of consumers toward advertising in general. This poses a serious problem for marketers because advertising effectiveness is believed to be rooted in the view that advertising messages are potential communication exchanges between advertisers and consumers. This communication exchange is central to marketing success (Bagozzi, 1975; Houston and Gassenheimer, 1987). The exchange assumes that both parties give and receive something of value in order for both parties to be satisfied. The main objective of the advertiser is to sell or create a positive perception toward the product or service. To the consumer, the value of advertising is achieved when advertising matches or exceeds their expectation.

The negative perception of consumers toward advertising has been significantly impacted by irritation felt toward the bombardment of daily advertising. For example, Raymond and Greyser (1968) found the main reason for people's criticism of advertising has to do with annoyance or irritation caused by either the number or type of advertising directed at consumers. This irritation is believed to lead to a general reduction in advertising effectiveness (Aaker and Bruzzone, 1985). Irritation is often caused by techniques that are perceived to annoy, insult, offend or overly manipulative to consumers and as a result consumers develop a negative attitude toward it.

ENTERTAINMENT

The now considerable body of research on *Aad* originated in the contrasting notion that pleasant or likable advertising is thought to have a positive impact on brand attitudes Mitchell and Olson (1981). In a related vein, uses and gratifications research has demonstrated that the value of entertainment lies in its ability to fulfill audience needs for escapism, diversion, aesthetic enjoyment, or emotional release McQuail, 1983. As the value of media entertainment is regularly acknowledged see for example: The Economist, 1989 and as advertising is a significant portion of media content, the ability of advertising to entertain can enhance the experience of advertising exchanges for consumers (Alwitt and Prabhaker, 1992). This was confirmed in Ducoffe's mall-intercept study which reported a substantial, significant and positive correlation of .48 between multiple-item measures of entertainment and advertising value. These three factors-informativeness, irritation and entertainment-were the starting point for explaining how consumers assess the value of advertising. The resulting structural equation model based on the survey data accounted for about 50 percent of the variability in advertising value ratings (Ducoffe, 1995). In the follow-up laboratory experiment, Ducoffe, 1995 exposed subjects to individual advertisements and asked them to complete a version of the questionnaire that was revised for copy testing purposes. This

experiment, focusing on the respective influences of informativeness and entertainment, reinforced earlier survey results as both main effects proved to be statistically significant predictors of the value of individual ads. Evidence thus far supports the conclusion that these perceptions impact assessments of the value of advertising in general as well as the value of individual advertisements.

Advergaming and product placement provide alternative venues for advertisers where consumers may not be as negative toward advertising. This can be achieved when the product's name or image become part of the game the consumer is playing or when a hero utilizes the product during a movie. The consumer is likely to be more positive toward these forms of advertising compared to the traditional forms.

ADVERGAMING

Advergaming is the practice of using games, particularly computer games, to advertise or promote a product. Advergaming is the inclusion and delivery of advertising messages through electronic games. The main objectives of this technique are to build brand awareness, offer product information, drive traffic to web sites and provide a means to compare similar products. Advergaming's ultimate objective is to develop lasting exchange relationships with customers (Hernandez and Minor, 2003), through an immersive and entertaining experience.

Because the entertaining experience of electronic games is believed to enrich the relationship between user and the advertised brand (Saunders, 2001), advergaming is gaining recognition among advertisers. Advergaming is a growing method for reaching many younger consumers, especially those whose limited resources encourage them to pursue relatively inexpensive or free entertainment options. The increasing popularity of this medium and the unique capability to maintain players' full attention during the time the game is being played, is increasing corporate interest in advergaming. According to Buss (2003), Leviathan Games Inc., a Seattle-based creator of video-game-type contests online, has seen sales grow by 250% in the last two years of Buss's study. The co-founder of Leviathan Games Inc., Wyeth Ridgway stated, Obviously you're not going to meet your entire audience with an online computer game, but you're meeting a very targeted portion and one that, on a product-by-product basis, could be the exact people you're most interested in meeting... Our forecast for 'advergames' is that it'll be part of every advertising campaign that large companies do at some point in the future. This illustrates the great potential for advergaming and how companies are using technology to reach consumers via an entertaining experience. Advergaming is becoming so popular that the US Army has built a video game to promote cultural awareness among soldiers (Moody, 2005). Toyota developed a racing game called Toyota Adrenaline and used it to help launch a line of cars. Snider (2003) reported that, video games have become nearly as much a part of college life as textbooks and midterms. As Fig. 1 shows, the brand name is inserted as part of the game to increase brand visibility and retention.

Several models of ad attitude have been proposed and tested to explain the relationship between ad attitude and brand attitude in traditional advertising contexts (Brown and Stayman, 1992). Although, some researchers (Chen *et al.*, 2002) have attempted to extend the concept of attitude toward the ad to websites, advergaming has not received an adequate attention in research due to its newness.

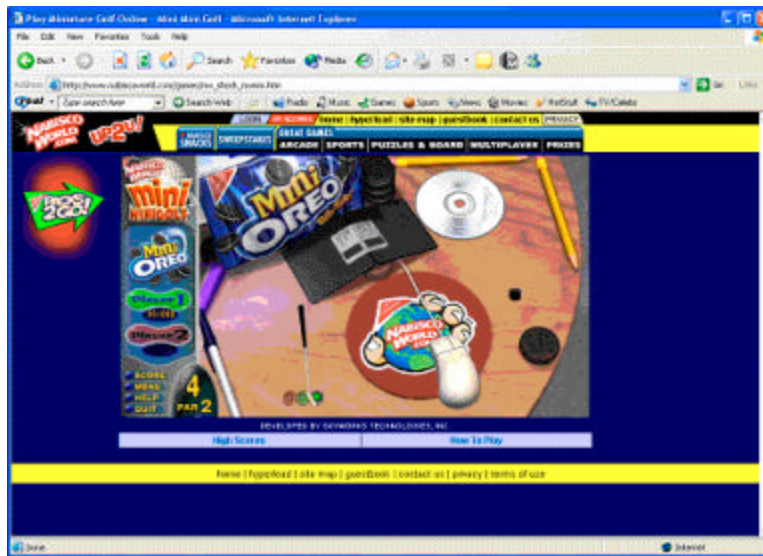


Fig. 1: Example of advergame screenshot. Game Mini MiniGolf game B http://www.nabiscoworld.com/games/nw_shock_nwmm.htm

PRODUCT PLACEMENT

Product placement is hardly a new development. Entrepreneurs saw the opportunity from the very invention of moving pictures. Newell *et al.* (2006) delightful summary of the beginning of product placement documented instances of paid product placement in Europe by the Lumiere brothers in 1896 and provided American examples from Edison films from 1897 and beyond.

While, the practice of product placement is well established, more research is needed to determine both the impact of product placement and to determine what factors increase the effectiveness of product placement. It is clear that product placement may be effective in some situations. In addition to anecdotal stories such as the famous use of Reese's Pieces in E.T. the Extra-Terrestrial, more researchers are conducting empirical research to measure the effectiveness of product placement. Auty and Lewis (2004) found that children were much more likely to consumer a certain brand of soda after viewing a movie where the hero drank that brand. Perhaps the best summary to date on the effectiveness of product placement is (Reijmersdal *et al.*, 2009) meta-analysis. They found 147 studies on product placement published in peer reviewed journals between 1981 and August 2008. Of these, (Reijmersdal *et al.*, 2009) then analyzed a subset of 57 empirical studies. The known factors that make product placement effective are beyond the scope of this study and have been well covered by (Reijmerdsdal *et al.*, 2009). However, their general finding that more than half of the studies on brand placement effects were published in the last five years documents the growing importance researchers are placing on product placement.

Increased interest in product placement is not limited to just researchers. In fact, researcher interest may be increasing in response to marketing practice. According to PQ Media (2010), spending on product placement grew every year from 1975-the first year they

started measuring it-through 2008. In 2009, both global and US spending on product placement dropped for the first time 0.8 and 1.3%, respectively, probably due to the current international economic malaise. Even with the downturn, global spending on product placement in 2009 was \$54.58 billion, with \$24.63 billion of that being spent in the United States. Based on spending in the early part of this year, PQ Media predicts that 2010 will be another record year for product placement expenditures, growing 5.3% from 2009.

WHY IS PRODUCT PLACEMENT INCREASING SO QUICKLY?

The need for product placement will continue to dramatically increase as changes in society provides wealthy consumers with more and more ways to consume content while avoiding traditional advertising. Affluent consumers now regularly bypass commercials in three distinct methods for their home video consumption. First, consumers watch movies and unique television shows on subscription channels such as HBO. The final episode of *The Sopranos*, viewable only in the 29-30 million homes with subscriptions to HBO, was watched by 11.9 million people (Associated Press, 2007). It was the second most watched program on television that week, with more viewers than all but one show on the major networks. This is all the more impressive when one considers that at that time the major networks were available in approximately 111 million homes and thus had well over threefold the number of potential viewers. The authors predict that this disproportionate share of ad free viewing of premium television content compared to standard advertising supported network fare will continue to grow in the twenty-second century, especially among affluent consumers. Currently the three most popular premium advertising free subscription services in the US are HBO in approximately 29 to 30 million homes, Showtime approximately 18 million subscribers and Starz about 17 million households (Stelter, 2010). Interpreting these numbers is not an exact science as some overlap the same household may subscribe to HBO, Showtime and Starz as part of a premium viewing package and each subscription includes multiple channels for example, one of the authors currently receives eight HBO channels as part of his cable package.

Second, consumers will continue to purchase advertising free video content in every increasing numbers. Nash (2010) estimated that in 2009 Americans purchased just over 1.4 billion movie theater tickets alone and another 1.3 billion DVD/Blu-ray titles for home viewing. Other than a few previews at the beginning of the movies which are easily bypassed on most disc players, this represents almost twenty-four billion dollars that people spent on advertising-free video consumption.

The videogame industry is comparable in size to the television industry. In contrast to the previously discussed advergaming model, purchased video games for consoles are another growing method for consumers to participate in ad-free entertainment. According to J. Mazel, an industry analyst at VGChartz personal correspondence, July 15, 2010 approximately 275 million titles were sold in 2009 for various console systems in the United States 594 million units for the entire world. These numbers do not consider the titles bundled with the consoles themselves of which 34 million were sold in the US last year, 89 million consoles sold worldwide nor PC software titles. Mazel stated that the typical console owner buys approximately three games per year and that the typical new game is played about 30 h. Thus, the average gamer spends at least 90 h a year pursuing advertising free video entertainment. This is a very conservative estimate as it does not include time spent on older games, game rentals, downloaded titles, nor other ad-free entertainment options.

Finally, the growing adoption of digital video recorders DVRs will continue to enable those willing and able to pay for the service to fast forward through commercials. According to K. Rutkowski of the Consumer Electronics Association personal correspondence, July 15, 2010, DVRs are in 35% of US households as of mid 2010. DVRs can work in two ways; they can simply fast forward, or zip, through the commercials at a rapid rate as the most popular US brand, Tivo, currently works or they can skip the commercials entirely as the line of ReplayTV DVRs did. The ReplayTV option worked by skipping a set amount of time that could be determined by the user. One of the authors used to own a ReplayTV unit and would fall into an unconscious pattern of clicks for particular television viewing. For example, after just a few experiences with recording Show A, the author would hit the skip button four times at each commercial break to completely skip all advertising and continue watching the show with virtually no interruption. As technology advances, smart DVRs will be developed that will recognize the difference between commercials and the show and will automatically skip the commercials on recorded shows. Consumers clearly desire this feature. Ferguson and Perse (2004) found that DVR owners who skipped ReplayTV or fast forwarded Tivo through commercials reported significant increases in television viewing enjoyment, television viewing satisfaction and received greater entertainment benefits from watching television. The latest version of the Tivo, the Premiere, also includes a 30 sec skip button.

Previous research (Bellman *et al.*, 2010; Gilmore and Secunda, 1993; Stout and Burda, 1989) documented that fast forwarded advertisements provided significantly weaker effects compared to full attention regular speed commercials. However, there was one positive finding for advertisers. The researchers found that the diminished impact of fast forwarded was almost neutralized if the viewer had previously viewed the advertisement at least once. They theorized that the zipped fast forwarded ad helped the viewer recall the previously viewed commercial.

Thus, the case for increased product placement rests upon multiple trends among those with large disposable incomes to purchase advertising-free entertainment. In terms of passive video consumption, well over thirty million households subscribe to premium ad free television content. Sales of movie tickets and DVD/Blu-ray title purchases are in the billions and this does not include rentals. Over 275 million units of console game software were purchased by Americans in 2009 and 35% of US homes now have a DVR. It is clear that there is a large and growing market for advertising free television service for those with the discretionary income to enjoy it. Product placement is a viable mechanism for marketers to reach this affluent population as they enjoy these ad-free entertainments.

EYE-TRACKING

Eye-tracking research is based upon the assumption that if one may observe where a respondent places his visual attention, one may better understand where the respondent places his mental attention. This is not a new assumption; researchers have been tracking eye movements and publicizing their theories on the subject for almost three centuries e.g., (Porterfield, 1737; Delabarre, 1898; Dodge, 1900, 1907; Nixon, 1924; Yarbus, 1967; Pieters and Wedel, 2004).

What is relatively new is the use of video-based machines to track eye movements for researchers. These machines were very expensive when first developed as they required extensive computing power to calculate the point of regard visual attention in real-time from viewing respondent eye features such as corneal reflections and the pupil center. However,

as Moore's Law progressed, the cost of these devices has now reached the point that it is very feasible for marketers and market researchers to utilize them.

EYE-TRACKING ASSUMPTIONS AND TERMINOLOGY

In Duchowski (2003), an eye tracker can only track the overt movement of the eyes, however, it cannot track the covert movement of visual attention. Thus, in all eye tracking work, a tacit but very important assumption is usually accepted: we assume that attention is limited to foveal gaze direction, but we acknowledge that this may not always be so. In theory, a respondent's mental attention may be elsewhere instead of where his visual focus is. He may be lost in thought and not paying attention to his vision. Or he may be deliberately using his peripheral vision. However, neither of these can be currently measured, so researchers have to assume that visual attention is a good proxy for mental attention. In practice, this has worked well.

Researchers who wish to utilize eye-tracking research do not need to invest an inordinate amount of time to become expert oculographers. However, a basic understanding of the terminology is necessary so a few commonly used terms are provided (Gentry, 2007).

Fixations	: Minor eye movements around a point of interest. These minor eye movements are needed to keep points of interest in focus
Duration	: The amount of time that a viewer spent viewing an object <i>per</i> fixation
Exposure	: The cumulative time that a viewer spent viewing an object. In two cases this number will be identical to the duration when the number of fixations on the object is 0 or 1. For all other cases, the exposure is the sum of all durations for the object
Hotspot	: A visual indicator of the areas that received the most fixations, either by quantity or by time
Point of Regard POR	: The object of visual attention and presumed object of mental attention.
Saccades	: Rapid eye movements changing the fovea to a new location of interest.
Scanpath	: The observed pattern of eye movements over an image.

Lee *et al.* (2007) defined neuromarketing as the application of neuroscientific methods to analyze and understand human behavior in relations to markets and marketing exchanges. Neuroscientific methods would be those that allowed researchers to directly study cortical activity while the subject was exposed to marketing stimuli. Direct methods include the use of recent techniques such as positron emission tomography PET, magnetoencephalography MEG and functional magnetic resonance imaging fMRI. However, older and less expensive techniques such as electroencephalography EEG and galvanic skin response GSR are also tools available for neuromarketers. The GSR goes by several terms, including electrodermal activity EDA and skin conductance responses SCR. While the term neuromarketing was first coined in 2002 by Lewis and Bridger (2005), researchers have been studying the brain's response to marketing stimuli since at least 1969. Researchers at General Electric conducted electroencephalogram EEG studies to determine how viewers reacted to television commercials (Krugman, 1971).

Relatively little of the latest neuromarketing research is being published. As Lee *et al.* (2007) explained, most of this research is commercially sensitive, so those conducting this research keep the results for themselves and their clients. However, some interesting research has been published in peer reviewed journals. McClure *et al.* (2004) used fMRIs to discover a higher preference for Coke over Pepsi when the brands were identified and that people processed the two brands differently in their minds. When an image of a Coke can preceded Coke delivery, significantly greater brain activity was observed in the DLPFC, hippocampus and midbrain. . . . equivalent knowledge about Pepsi delivery had no such effect; indeed, no brain areas showed a significant difference to Pepsi delivered with or without brand knowledge. While, the full implications of this research are still being discussed, marketers could use this information to understand the Coca-Cola's marketing of the Coke brand effectively causes noticeable activity in consumers' brain activity and their competition's efforts have yet to reach this point. Gakhal and Senior (2008) employed galvanic skin response GSR testing to measure the relative importance of celebrity status vs. physical attractiveness and found that celebrities evoke more of a psychophysiological response than unknown but attractive models. The fact that this celebrity effect was driven by the right hemisphere of the brain suggests that the processing of fame is underpinned by emotive processes more so than the processing of beauty. Stoll *et al.* (2008) used fMRIs to measure the difference in brain activity when subjects were exposed to attractive and unattractive packaging. They found that attractive packages triggered brain activity in areas related to visual attention, memory and reward-related areas. In contrast, unattractive packages are accompanied with activity changes in brain areas associated with the perception of research conflict, uncertainty, disgust and expected risk. Plassmann *et al.* (2008) were able to use fMRIs to confirm multiple theories that price acted as a signaling tool. Subject tasted what they thought were five different wines that were available at five different price points when in fact only three wines were tested. Wine 1 was tasted twice, once as a \$5 wine and again as a \$45 wine. Wine 2 was tasted twice as a \$10 wine and a \$90 wine. Wine 3 was tasted once as a \$35 wine. Subject reported enjoying the higher priced wines more than the lower priced ones and the fMRI showed an increase in their blood-oxygen-level-dependent activity in medial orbitofrontal cortex, an area that is widely thought to encode for experienced pleasantness during experiential tasks. While this finding probably did not surprise any marketing practitioners, it upset a basic assumption in economics that the experienced pleasantness EP from consuming a good depends only on its intrinsic properties and on the state of the individual. The study clearly found the perceived price of a good also affects the experienced pleasantness of consumption.

Neuromarketing holds great promise for allowing researchers to better understand human behavior and to help marketers increase the efficiency of marketing practices. However, the current costs of neuromarketing and the need for collaboration between market and medical researchers to conduct neuromarketing research are serious challenges that will have to overcome in order for neuromarketing to become a valuable tool for 22nd century marketers.

SUMMARY

The authors forecast a growing divide in how consumers obtain and view content. More affluent consumers will enjoy advertising free content through premium services, purchasing ad-free media and through DVRs which will become better at bypassing commercials as technology advances. Product placement will become more vital for reaching wealthier

consumers, especially those whose ample resources allow them to consume many advertising-free entertainment options. While the authors are confident in their prediction that the need and use of product placement will continue to grow, research is needed to determine both the impact of product placement and to determine what factors increase the effectiveness of product placement. As Auty and Lewis (2004) pointed out, almost every article now being published on the subject notes that product placement has suffered relative neglect at the hands of researchers.

Less affluent consumers will be exposed to more advertising by watching advertising support content through traditional television channels as well as through the internet. This internet consumption will also include adver gaming. More and more marketers will use techniques such as eye-trackers and neuromarketing to measure and improve the effectiveness of product placement and advertisements placed around a video or a game adver gaming.

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