

## **Influence of Computer Games as an Advertising Medium on Brand Associations**

**Andrey KOSTOV**

University of Economics - Varna

kostov.andreev@gmail.com

### **Abstract**

The relevance of this paper is related to both the evolving personalization and the increasing opportunities for interactivity in the entertainment and marketing industries, as well as the diminishing role of television as a source of entertainment and information. This decreasing trend is important for marketers because less viewing time equals less chance of consumer impact through ads. The object of this research are video games as a channel for advertising messages and the subject matter is their influence on the brand associations of the advertised brands. For the purposes of this study, an experiment was developed involving three groups of respondents with the following structure: The first part is a photograph of a car and participants in the experiment must select three of the eleven possible car descriptions indicated. The second part of the experiment is a video clip, different for the three groups, which contains the same message for the three groups. The third part of the experiment gathers information about brand associations created and recalled through the ad clip. Free-text and multiple-choice questions are used. The last part assesses respondents' attitudes towards computer games and advertising messages in different environments. The study aims to analyze whether the contextual link between advertising content and the medium in which it is displayed has a beneficial effect on the brand associations of the promoted product. The experiment proved that the advertising environment influences brand associations when there is a contextual connection, overall pace and emotion of the advertising message. Subsequent research on the topic can further the results by using eye tracking technology to refine the results.

**Keywords:** brand associations, computer games, product placement.

**JEL classification:** M31.

### **1. Brand associations**

Brand associations can be defined as any single thing in the mind of consumers associated with a brand. (Aaker, 1991) Any idea, thought or image associated with a brand can be treated as a brand association. (Kunkel, Funk, & Hill, 2013) According to researchers in this field, brand associations serve as a starting point in the minds of consumers and help to create brand value (Chen, 2001). Brand associations can be formed by several means (Juneja, 2015):

- Clients who contact the organization and its employees;
- Advertising;
- Publicity by word of mouth;
- The price at which the brand product is sold;
- Celebrity Associations
- Product quality;
- Products and services offered by competitors;
- The product category to which the brand belongs;
- Points of sale;

Also, the formation and differentiation of brand associations can be based on demographic factors such as gender, age, race and income, on psychographic factors such as career attitudes, environment and more. An example of this is the fact that women have a more positive attitude and tendency to make a purchase when the brand they are interested in has associations associated with a social cause (Rohit & Panda, 2018). Analyzing the origins of brand associations is the basis for building better segmentation strategies, which would lead to

more effective marketing communication. Brand associations are classified into three main categories: attributes, benefits and attitudes (Keller, 1993). Attributes describe the characteristics of a product or service, i.e. how the user explains their product and what it represents. Attribute brand associations can be grouped into several categories. The first product-related, which is defined as the necessary ingredients for a product to function and serve in a way sought by consumers. Non-product related attributes are defined as external aspects of a product or service that are related to its purchase and / or consumption. Benefits represent the value that consumers place on a product character, what customers actually think a product or service can do for them. The benefits are grouped mainly into three groups. The first, the functional benefits, are related to product consumption and correspond to product-related attributes - basic motivations such as the need for security. Emotional benefits are related to the emotions and thoughts consumers have when using a product or service. Symbolic benefits are non-productive and characterize social approval (Stanimirov, Zhechev, Pavlova, & Palamarova, 2018). Brand attitudes are defined as the overall assessment of the brand and as such are often the basis for consumer behavior. These attitudes can be associated with both functional benefits and non-product and symbolic benefits. In developing the relationship between brands and consumers, the latter form brand associations based on product attributes. Subsequently, after long-term use, marketing activities and other factors, brand associations associated with the benefits of the product or service occupy a major place in the customer's memory. An example of this is loyalty to the sports team (Kunkel, Daniels, & Karg, 2019). Initially, users remember the style of play, the qualities of the athletes and other characteristics of the team, and after several years, when they witnessed more games, consumers associate their team with victories, the joy of winning a trophy, etc. Brand associations are described by four main characteristics: propriety, strength, uniqueness and consistency. (Keller, 1993) The benefits of a brand association are the result of the success of the company's marketing program. If consumers do not consider an attribute important to them, they will not evaluate it, therefore creating favorable associations is directly related to the degree of importance that consumers attach to the attributes. Also, in order to properly analyze brand associations, their application must be considered on a case-by-case basis. The ability to communicate with a store representative is a plus only when the customer needs one. A consumer who avoids contact with store representatives and does not want communication with a person would not appreciate this attribute favorably. The strength of a brand association depends on how the information is received by the user and how it is stored as part of the overall brand image. This is a combined quantity that is a function of the amount of decoded information and the quality of the information, i.e. how the user views the brand knowledge they have acquired. When an association is associated with only one brand, it is unique, so long as it is not affiliated with a competitor. The homogeneity of the associations is observed when they are shared with a large part of the market. In addition to the above characteristics, brand associations may also have other characteristics - ambiguity. It is most often manifested in cases of transfer of associations to brand extension. (Kim & Yoon, 2013) It is defined as the potential for multiple interpretations of overall product quality. If a user encounters unrelated characteristic, it would be difficult to build positive brand associations. Brand extensions that share or have strongly associated associations with the parent brand would have lower levels of ambiguity. This feature can have no effect on consumers, as long as key brand associations are rejected. Another way to increase the value added by the brand is through the use of secondary associations. These secondary associations can link the brand to various sources such as the company itself, through branding strategies, to countries or other geographical regions, to the origin of the product and to distribution channels or even to other brands. (Kotler & Keller).

## 2. In-game advertisement

Business models in the video game industry represent the set of strategies by which a company creates a product and develops its value. Osathanukul's classification groups the models based on consumer accessibility and how the company generates revenue (Osathanukul, 2016). The first group of models is user-focused - it looks at the ability for users to access most of the content of a video game. The Pay-to-Play model is traditional for the industry. It requires users to make a payment to get fully functional content. There are three variants of the model - one-time payment, subscription, payment plus subscription. The last of the three varieties is commonly used in MMORPGs [Massive Multiplayer Online Role Playing Games] where the original content is provided for a one-time fee, but over a period of time, company customers have to pay a certain amount of subscription fees (on a monthly, quarterly or yearly basis) to be part of the game world. Unlike P2P, the Free-to-Play model provides functional and standalone content to users at no cost. Using ads as a monetization tool is called In-Game Advertising (IGA). Products that are wholly or partially funded by advertising will display advertisements to their sponsors through billboards, banners, backgrounds and other elements in the video game. This model is popular with free mobile games and in sports and racing video games where advertising space can easily be included along the track / terrain. Marketers have three types of IGAs available: static, dynamic ads and advergames. Static video game ads are elements of a digital product that promote real-world goods or services. They are part of the game itself and are not subject to change. An example is the Energizer batteries in the Alan Wake computer game. (Mago, 2015) Players collect realistic-looking copies of new batteries and their packaging, meet billboards with the logo and advertising messages of the new Energizer product, and even display its product qualities. The targeting allowed by static ads is directly related to the target audience of the video game (RapidFire, 2019). In contrast to the above, Dynamic In-game Advertising / DIGAs allow various advertisements to be displayed via game elements (for example billboards). The third variant of video game ads is the so-called advergames or advertising games. They differ from static and dynamic ads in that the entire game is designed to promote a product or service. It does not create a product to entertain consumers and finance it (wholly or partially) through ads, but creates a digital product that is part of the company's branding strategy and a secondary benefit is the entertainment of potential customers (Carollo, 2019).

## 3. Overlay advertisements

Overlay Ad is a promotional message that is placed on another medium. This type of ad can use a corporate logo or photos, as well as moving text. They can be solid or transparent. They are most commonly used on television but also when broadcasting videos on online platforms. (Schnotz, 2017) This format can also be used in online video broadcasting platforms. (althos.com, 2010).

## 4. Methodology

An experiment involving three groups of respondents has been developed for the purposes of this paper. The first group is control group and the second and third are experimental. The experiment consists of four parts (sections). The first part is a photo of a car (2015 Mitsubishi Lancer Evolution) and participants in the experiment should choose three of the eleven possible car descriptions (color, model, size, etc.). This part seeks to segment the respondents by their knowledge of cars and their brands and by their overall perception of light vehicles. This is important because brand associations created by a person describing a car simply as "white" would be different from another describing it as a model and type of body. The second part of the experiment is a video clip, different for the three groups, with an average

of one minute and thirty-five seconds, containing a thirty-second ad starting at thirtieth seconds, with 16:9 aspect ratio, and occupying 10, 42% of the total viewing area. For all three groups, the advertisement is the same - a video presentation of the Mitsubishi Eclipse Cross on the occasion of the car victory in the "Car of the Year" category for 2019 at RJW. The control group used a clip of a race between VW Golf R and Subaru WRX. The video has a similar context to the advertisement, shows sports cars, just like the promoted ones and the aggression of the race is in sync with the aggressive tone of the short advertisement. The first experimental group watches a clip from Forza Horizon 4, in which the player competes race for time. Here again, there is a connection between the content of the video and the advertising in it - sports cars, aggression in the form of a race and a photorealistic gameplay. The third group is watching a video of the game Battlefield V. The game is a visually realistic representation of World War II events. It is again characterized by extremely detailed graphics. In the segment used again aggression was present, but not through sports cars; there is no contextual link between the video and the promoted content.

The study aims to analyze whether the contextual link between advertising content and the medium in which it is displayed has a beneficial effect on the brand associations of the promoted product. In order to accomplish this, several characteristics (content of the advertising message, content of the advertising environment, emotion of the advertising message and emotion of the advertising environment) are used and data from an experiment are analyzed. Tasks directly related to the purpose of the study were set:

- To examine how respondents perceive cars - as a colored vehicle or as a machine, with a model and characteristics capable of carrying passengers from one point to another. In this way, to determine the respondent's interest in the automotive industry.
- To survey respondents' associations with Mitsubishi cars.
- To investigate whether there is a relationship between the perception of cars and brand associations.
- To investigate whether the contextual link between advertising content and the content of the advertising environment influences brand associations.

Hypotheses:

- H1: The relationship between advertising and the medium in which it is distributed helps to reinforce positive brand associations.
- H2: Preferred video game genres influence the formation of positive brand associations.

## 5. Results

The first step in analyzing the results of the survey is to form groups of respondents based on how they would describe the car. This division will highlight respondents who are interested in cars and have knowledge of them and those who are not interested. This is important for the following analysis because brand associations are the product of consumer tastes, which in turn are partly shaped by the overall perception of the world. Through the question "How would you describe this car to a friend / girlfriend?", the respondents indicated their interest in cars by the definitions given by them. The author's thesis is that those more familiar with the automotive industry would say "Mitsubishi, Lancer and Sedan," while everyone else would use the more general definitions, like "White, Expensive and Big". The division of respondents is done by filtering the answers to this question and placing them in two groups:

- "Interested" - those who have indicated two or three of the functional answers;
- "Disinterested" - those who have indicated zero or one of the functional answers

When analyzing the results of the question "In your opinion, which of the following words best describes the car shown in the ad slot?", Four associations stand out:

- Expensive: 66% of the respondents;
- Quick: 82% of respondents;
- Sports: 46% of the respondents;
- Aggressive: 69% of the respondents;

**Table 1. Distribution by brand associations and groups**

Group		Expensive		Quick		Sport		Aggressive	
Control group	Interested – 8	6	60%	5	50%	1	10%	6	60%
	Disinterested – 2	2	20%	2	20%	2	20%	2	20%
	<b>Total</b>	<b>8</b>	<b>80%</b>	<b>7</b>	<b>70%</b>	<b>3</b>	<b>30%</b>	<b>8</b>	<b>80%</b>
Experimental group 1	Interested – 2	2	20%	2	20%	2	20%	2	20%
	Disinterested – 8	6	60%	7	70%	5	50%	4	40%
	<b>Total</b>	<b>8</b>	<b>80%</b>	<b>9</b>	<b>90%</b>	<b>7</b>	<b>70%</b>	<b>6</b>	<b>60%</b>
Experimental group 2	Interested – 3	0	0%	3	30%	1	10%	2	20%
	Disinterested – 7	3	30%	5	50%	3	30%	5	50%
	<b>Total</b>	<b>3</b>	<b>30%</b>	<b>8</b>	<b>80%</b>	<b>4</b>	<b>40%</b>	<b>7</b>	<b>70%</b>

Source: Author

The four associations correspond, in part or in full, to the content of the advertising message and the environment in which it is distributed. In order to properly evaluate the impact of the advertising environment on brand associations, it is necessary to look at the results by groups and subgroups. The primary division is by which video they viewed, and the subsequent segmentation is based on the first question in the survey cards - their interest in the automotive industry. In the first association ("Expensive") there is a coincidence of the number of respondents in CG [Control Group] and EG1 [Experimental Group] who stated that this word describes the promoted car - 80%. In contrast, only 30% of EG2 indicated this answer. This difference can be explained by the contextual differences between the promotional videos shown to the different groups. In the first two we have a race and a sports car, which suggest that they have higher prices than conventional models. Also, in the video shown on EG2, no elements can be found that stimulate the creation and highlighting of the Expensive Association. The Quick Association - 70% of the control group indicated that this word describes the vehicle from the ad slot, 90% of the first experimental group and 80% of the second experimental group stated the same answer. Despite the similar results, it is again possible to discover the impact of the advertising environment on brand associations. The control group and EG1 have high values, because in their advertising environments there are competitions, and the main task in one race is to determine who is faster. Therefore, the environment helps to create or highlight the Quick Association. Also, the thirty-second promotional video of Experiment Group 2 is projected into a segment in which it is quiet; there is little action and mostly introductory captions and scenery. Against this background, Mitsubishi's fast and aggressive advertising stands out and gives a strong impression of the car's speed to the respondents. There are some interesting results with the sports association. 30% of the control group indicated that this response described the advertised car, 40% of the second experimental group and 70% of the first experimental group agreed. Here again the results can be explained by the content of the advertising environment. The duration of the control group clip is one minute and forty-one seconds. The snippet began at thirty seconds and has the same duration. In this one-minute clip, cars are introduced in the video - sporty but static. The race starts in the last twenty seconds, so respondents have only 20 seconds to create a sports association environment. The connection with this association is also hampered by the fact that the promotional video is not shown in the competition section. Unlike the control

video in Experiment Group 1, the race begins as early as the seventh second. The Aggressive Association is named by 80% of the control group, 60% by EG1 and 70% by EG2. In the results of the CG, there is again an overlay of close ways of expressing emotion (aggression, through competition). EG1 scores are lower because the racing element in the middle is more difficult to highlight because the context of the video is a competition with an aircraft that is not constantly above / to the player. The results of EG2 are also high, which can be explained by the quiet segment in which the advertisement is designed and the subsequent explicit form of aggression.

From the data presented in this question it is possible to draw the following conclusions:

- The advertising environment influences brand associations by the pace of the actions that take place in it. The difference in pace between the background (advertising environment) and the promotional content can have both a favorable and a negative impact on the perception of some of the attributes of the advertised product;

- The advertising environment influences brand associations when there is a contextual link between the content of the environment and advertising;

- The advertising environment influences brand associations when the expression of the general emotion in the background corresponds to the expression of the general emotion of the advertising message.

Based on the above analysis, it is possible to confirm Hypothesis 1 (The relationship between advertising and the medium in which it is distributed helps to validate positive brand associations.)

Hypothesis 2: Preferred video game genres influence the formation of positive brand associations.

The third hypothesis is tested by comparing the results of the following three questions:

- "In your opinion, which of the following words best describes the car shown in the ad slot?"

- "If yes - what genres (video games)?"

- "Do you have a favorite genre (video games)?"

The data shows that in all three groups the favorite genre of games is MMORPG. Only in Experiment Group 1 is there a reference to the racing genre as a favorite. However, positive brand associations were formed in each of the three groups: Expensive - 63%, Quick - 80%, Sport - 46.60%, Aggressive - 70%. Therefore, there is no reason to argue that respondents' preferences for the video game genre are related to the formation of positive brand associations. H2 is therefore rejected.

## Conclusion

Like radio until the mid-1950s, television lost its primary role as a source of information and entertainment. The informational role also provides viewers, and their number is the basis of advertising revenue. The segmentation of society, the need for personalized information and entertainment, and the desire for it to happen, are pushing television to change to meet these demands. Despite different approaches to this change, television has a static form of entertainment, i.e. pre-prepared and filmed productions of a format and content that will appeal to as many people as possible. This is where the benefits of video games stand out as a form of entertainment. They provide personalized content at a time specified by the user and in the format, they want, i.e. from viewers, people become actors. This freedom of action and pre-segmentation makes video games an extremely good communication channel with high efficiency if the communication process is designed properly. The results of the study show that the relationship between the content of the game and the ads in it can have a positive effect on brand associations. The gaming industry is an extremely powerful engine for technological

development. This industry is pushing for areas such as cryptocurrencies and artificial intelligence for various purposes - from simulating human behavior to training it to produce different digital products. Marketing science will be another area that will be influenced by the rapid development of this entertainment industry by providing the opportunity to design the most interactive communication channel to date.

## References

- AEKER, D., 1991. *Managing brand equity..* s.l.:New York: FreePress.
- althos.com, 2010. *Overlay Ads*. [Online] Available at: <http://www.althos.com/tutorial/TV-advertising-tutorial-overlay-ads.html> [Accessed 22 April 2020].
- CAROLLO, A., 2019. *What is In-Game Advertising? - Definition & Examples*, s.l.: study.com.
- CHEN, A. -. H., 2001. Using free association to examine the relationship between the characteristics of brand associations and brand equity. *Journal of Product & Brand Management*, pp. 439 - 451.
- JUNEJA, P., 2015. *Brand Positioning - Definition and Concept*. [Online] Available at: <https://www.managementstudyguide.com/brand-positioning.htm> [Accessed 22 April 2020].
- KELLER, K., 1993. Conceptualizing, Measuring, and Managing Customer-Based Brand Equity. *Journal of Marketing*, 57(1), pp. 1 - 22.
- KIM, J. & YOON, H. J., 2013. Association Ambiguity in Brand Extension. *Journal of Advertising*, Volume 42, pp. 358 - 370.
- KOTLER, P. & KELLER, K. L., 2015. *Marketing Management - Global Edition*. 15 ed. s.l.:Pearson.
- KUNKEL, T., DANIELS, J. & KARG, A., 2019. New Brands: Contextual Differences and Development of Brand Associations Over Time. *Journal of Sport Management*, Volume 33, pp. 133 - 147.
- KUNKEL, T., FUNK, D. & HILL, B., 2013. Brand architecture, drivers of consumer involvement, and brand loyalty with professional sport leagues and teams. *Journal of Sport Management*, pp. 177 - 192.
- MAGO, Z. & KNAPCOVA, J., 2015. IN-GAME ADVERTISING WITHIN ALAN WAKE AND ITS PERCEPTION. *Marketing Identity*, pp. 491 - 502.
- OSATHANUNKUL, C., 2016. A classification of business models in video game industry. *International Journal of Management Cases*, pp. 35 - 42.
- RAPIDFIRE, 2019. *Advergaming*. [Online] Available at: <https://www.rapidfire.com/portfolio/advergaming/> [Accessed 22 April 2020].
- RAPIDFIRE, 2019. *Dynamic In-Game Advertising (DIGA)*. [Online] Available at: <https://www.rapidfire.com/portfolio/dynamic-in-game-advertising/> [Accessed 23 April 2020].
- RAPIDFIRE, 2019. *Static In-Game Advertising (SIGA)*. [Online] Available at: <https://www.rapidfire.com/portfolio/static-in-game-advertising/> [Accessed 23 April 2020].
- ROHIT, D. & PANDA, R., 2018. Cause-Brand Association. *Journal of Management Research*, 18(1), pp. 13 - 26.
- SCHNOTZ, W., 2017. *What Is Overlay Advertising?*, s.l.: A-Z Central.
- STANIMIROV, E., ZHECHEV, V., PAVLOVA, D. & PALAMAROVA, P., 2018. *Brand management*. 1 ed. Varna: Science and economy.