How to Promote In-Game Advertising based on User Experience Design

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Abstract

Pretty much time we mentioned in-game advertising it always comes out with firmly against from players, but there is another voice from the game industry, JJ Richards of Massive, says that if done correctly it can not only work but enhance the overall experiences. There is also a company Tag. Which targets brand advertisers who want to get noticed by gamers without interrupting gameplay sessions, has raised 3.2 million dollars in funding. Moreover, it is expected to have over 25 million users by June 2012, according to its' board of directors, Jeffrey Lapin. In-game ads have already got noticed by many publishers and advertisers, and some games have applied the rules of advertising from the music industry and film industry into the game industry. This research is going to have a look at these existing cases and analysis them to conclude an effective way to promote advertisement without interpreting the user experiences. In terms of the methodology part, it will use netography to examine the model created, referring to the analysis of these existing cases in the game industry. The method of netography will be divided into five branches, starting with research planning, it should introduce the essential industry background and compare the advertising market between old media industry, like the film industry. It has many similar principles of the film industry, which could also be used in the game industry. Assembling these principles and examine them in games will help to improve the understanding of user experiences. It is also a good example based on to inspire innovative methods to promote advertisement in games without interpreting user experiences. Following with the entrée of the whole analysis, this part includes examples use in-game ads quite successful, its in-game ads type and its users would be the focal point of the case study. Also, it will use the referring articles of this game preview and analysis online to picture an overall impression of this example. Then the data collection is going to be an essential part of the whole research. It should give substantial shreds of evidence to support the results come out next. These numbers will help to analysis the user experiences with in-game ads. The interpretation is highly linked to the former part of the analysis. It will give advice and comments based on the analysis of these data collected. The research results of netography analysis are based on the analysis step by step from plan to ensuring ethical standards. The rules from the results are going to be examined again by building a game designing model with in-game ads, and questionnaires will gain feedback about the design. This design document will be formed by analysis of target users, target advertising product and different in-game ads promoting technology applied research and test. At last, the feedback of this model will be compared to the existing examples in the market, giving more advice and indicate the trend of this market in the future, according to the feedbacks.

Keywords: In-game advertising, netnography, 2K, user experience, recall rate.

1. Introduction

1.1 Market Bcakground

In-game advertising (IGA) refers to the use of computers, the Internet and video games as a medium for the delivery of advertising materials. IGA is one of the fastest growing forms of advertising in terms of yearly spending and anticipated growth. Video games are not only for hardcore enthusiasts in the market. Also, gaming is becoming a huge global entertainment industry and presenting a great chance for advertisers. The phenomenon offers to advertise a great chance to present itself via this kind of new media. So the new customer group of this media has a stronger purchasing willing than the other customer group. It was reported according to the research results came from *the Entertainment Software Association* (ESA 2005), the sales of PC and video game grew to $7.3 billion in 2004 in the United States. Almost half of Americans play video games, and not only kids are playing games, but also the adults, even the elder game market is a potential market for game developers. It

could be told according to the data following, 35% of video game players under the age of 18, 43% between the ages of 18 and 50, and 19% over 50 years old. There were 108 million video game players in 2004. The massive global gaming industry – with over $57 billion in revenues according to DFC Intelligence – is becoming an essential focus for media planning agencies. There is a considerable group of audiences for advertisers, and the only problems are that this group of audiences is highly sensitive to the interpret element from outside, especially commercial camping like advertising. This problem also occurs in many media industry, such as the film industry, broadcast media and television industry.

1.2 The definition of In-Game Advitising

What is In-game advertising? According to Wikipedia, In-game advertising (IGA) refers to advertising in computer and video games. IGA differs from advergaming, which refers to a game specifically made to advertise a product. In-game advertising is serving ads in the environment of a video game. However, there is still a bit different from in-game advertising based on different game genre and advertising itself. Usually, people who were working in the game industry referring to In-game advertising is dynamic in-game advertising, which is often used in 3D games, in-game ads appear in the environment of the games. For example, in many sports games, the billboards are created almost the same as the real one. As developers use realistic billboards to enhance the user experiences, which is proved, it is quite useful. However, it is a different story in a 2D game. The example of Facebook casual online game is a very typical one; the 2D game usually uses in-game advertising with its interface. It is more like a kind of UI design to suit the in-game ads for the whole game.
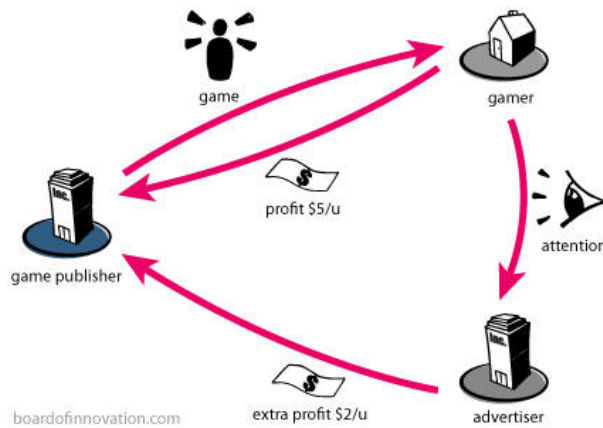

Figure 1. In-game advertising capital flow diagram.

On the other hand, In-game advertising is a powerful example of a revenue stream that has been increasingly added over the last years. For the game publishers, in-game advertising offers a significant new revenue stream that covers for part of the game development cost (which is expected to grow to $20M per title for a 7th generation console game). In-game advertising is also a business model, which is an effective way to cover the cost, especially for low budget game studios. Meantime, it will affect the game content, the immersion of the game, which is going to bring a negative effect on the sales at last.

This research paper is going to explore the relationship between in-game advertising and user experience, how to balance the two elements, pursuing the effective of in-game advertising and excellent user experiences, even improving the user experience by in-game advertising.

2. Literature Review

From 1996 to 2006, computer and video game sales in the United States grew from $2.6 billion to $7.4 billion (Entertainment Software Association, 2007). Of that $7.4 billion in sales, sport video games are one of the most popular genres, ranking second in the total number of units sold in 2006, accounting for 17% of industry sales (Entertainment Software Association, 2007). As we can see, the increasing of the game player and the booming of the market attract the advertiser. However, the problem comes out with the booming industry. The effect and efficiency of the performance of the advertisements varied in games. Moreover, it also affects the quality of the game. After reviewing many articles and research about in-game advertising, it is more reported with a bright future and inspiring data, less about how to combine the two elements perfectly. The recall rate is especially

outstanding in these researches. It took the view from the advertiser's point, exploring the recall rate of different type of brand in the designed group, male, female, children, teen and elder. In this research, the view is selected from the game, exploring the good examples, looking for the reason that the gamer accepts the in-game ads, and how the in-game ads enhance the reality of the game, even the gameplay of the game. However, the theory in traditional media advertising does not match the circumstance in the game industry. What the research cannot reach is how advertiser cooperates with the game production part. It is a vital link to the whole industry circle

2.1 Thesis

According to a Research firm Yankee Group, it predicted in 2006, in-game advertising is "poised for explosive growth" and will reach $732 million by 2010. However, at the end of 2010, it surpassed the predicted number, and the market is developing into a multi-billion dollar industry. For now, we get more figures to prove that In-Game Advertising is highly related to computer game industry development, such as, according to 85 studies from Microsoft's in-game ad serving company for PC and Xbox 360 called Massive, in-game ads were found to increase purchase intent by 24%, brand recommendation by 23% and overall brand rating by 32%.

However, I am afraid that players would not be appreciated the full of ads in games. Case in point: a recent update to the long-awaited and well-reviewed Deus Ex: Human Revolution that adds advertisements for the new Star Wars Blue-rays to loading screens, sending users into a frenzy. Their frustration is not hard to understand. To balance the profit of publisher and the user experience of players, it needs to develop the in-game ads to the best way to take care both sides, then how to design and input the ads into the game and make no ruckus. Complaints should be the point.

2.2 Argument

There are both two sides of the fact, fail of the Deus Ex: Human Revolution which added ads for new Star Wars and success of Lionsgate, which had a unique goal of engaging child and parents to promote its family film 'The Spy Next Door'. Most of the publishers welcome this kind of business model, as in-game advertising offers a significant new revenue stream that covers for part of the game development cost (which is expected to grow to $20M per title for a 7th generation console game).

Do customers really will end up buying the games because they see many ads? Also, which kind of customers will perceive the ads as an intrusion? It seems that there is seldom a specific analysis of differences between different market targets. Also, in art and technology part, it is still an individual experience from the independent project.

2.3 Methodology

As I am working in Dare to be Digital program, which is aim to make a promotion game to promote the Dare to be Digital competition, it is also a kind of in-game advertising model. I will use this game to collect data from concluding some principles, which is suitable for putting ads into a game with good user experience. Then I will use these principles to build a simulating game with in-game ads and test it with feedback to prove what I conclude. Also, I will collect figures from both good cases and bad ones to analysis the cause of the effect of the in-game ads on user experience. Combining the data I collect from the Dare to be Digital game and the resources I analysis from cases, we will get the results what could be useful to improve the user experience of in-game ads.

2.4 Proposal

The principles I concluded from analysis and Dare to be Digital will be used to create a simulating game environment with in-game ads and with a good experience and bad ones, it should contain the 2D UI and 3D scene with ads. Then to test it and find out what cause the different responses from players with the ads.

The potential innovative elements of the project is separating the market targets to fit the specific kinds of ads, and how to choose the way to input ads into games, which means how to show ads in the game in art part, in a splash screen, in character or the environment.

This research is going to start with the analysis of the demographics of Facebook, as the criteria of users are taken advantage of targeting on the right crowds through their description. Unlike search ads, Facebook Ads gives users access to tons of data so be sure to take advantage when targeting ads and use variations of text within each target for specific demographics (i.e. gender, location, age). Remember that Facebook gives users access to psychographic data such as interests, which can be used in targeting. The game on Facebook could take this advantage to get the external users who like this game, according to their age, gender and some historical information about what kinds of a game they used to play before. Here are some demographics of Facebook in the UK only to help research the targeted game player. Here are some demographics of Facebook.

The data about the Facebook demographics show more female audience than the male one in the total 30,485,180 audiences in the United Kingdom, and it takes 59.26% of the global audience. Only rely on the data

is not enough to make a business decision. It needs more trustable information to help the advertiser to decide which game is the best choice. So the data comes after the in-depth research and analysis, the age group is sorted, according to the analysis, the biggest group of the users' age is between 25 years old to 34 and the age 18 to 24 comes after. The group of people how they get the information through the tool and how often they use it. 48% of young Americans said that they find out about news through Facebook. What is more, record-breaking shows 50 million photos were uploaded to Facebook over new year's weekend. All the information above gives an advertiser a preview about the user's personal information to analysis their prefer product type and purchasing habits. It also could be applied in games, as the facebook has already launched an app centre recently, and that is very similar with the apple game form, and that is worth to be explored and compared. The example will be set in this paper is 2K Sports game series, which is still could be used the analysis on Facebook to research the 2K game, and it will come out more results that could be helpful to both game industry and advertising industry.

3. The Method of Netnography

3.1 What is Netnography?

Netnography is the branch of ethnography that analyses the free behavior of individuals on the Internet that uses online marketing research techniques to provide useful insights. The word "netnography" comes from "Inter[net]" and "eth[nography]" and was a process and term coined by Dr Robert V. Kozinets. As a method, "netnography" can be faster, simpler, and less expensive than ethnography, and more naturalistic and unobtrusive than focus groups or interviews (Kozinets, 2010), (del Fresno, 2011), based on Wikipedia. So netnography is a research methodology, which is useful for consumer and marketing research. Kozinets first introduced it in the late 1990s. In this paper, it would be used as the principal methodology to analysis the in-game advertising, which emphasis on the emotional of a player to in-game advertising and the effect to the game market.

3.2 Relationship between netnography and In-game advertising

The research on in-game advertising will be used the netnography as the methodology to explore the consumer culture related to the specific game genre. The result of this is going to support the development of in-game advertising. All of this research is based on improving the user experience and improve the effect of in-game ads at the same time. As the two steps of this research, netnography and in-game advertising development, they are highly connected.

3.3 Research Plan

Regarding the effect could be measured differently, the example of this research chooses sports game genre as its primary resources. The ads are promoted in sports games have been used for a longer time than any other game genre, and it has been tested successfully by some publishers. The increasing popularity of the sports video game genre has provided advertisers with new avenues for marketing and product placement. Sports video games, in particular, have been embraced in the marketplace, with the genre holding 40% of the console gaming marketplace.

The five-part of this research will extend the strengths of user experience by in-game advertising. Firstly, the factor might connect the user experience, and in-game advertising should be introduced. The user experience and effect of in-game advertising should not be separated, and they are an organic object.

3.4 Entrée

3.4.1 The factor effect In-game advertising

Compared to the real-life advertisement appears in many events, like a sports event, ads need to compete with many rivals at the same time, such as brands need to pay a rare chance to get maybe just 1minute long ads during the Superbowl event. In-game advertising owns the advantage that it could present one ad in limited space and also limit the times' user might find. There is a study on the effects of advertising in online games. Testing the rate of recalling of players after a 15 minutes first-person shooter PC game, and the results showed players recalled the in-game billboards at a rate higher than that produced during real-life sporting events. Another research was trying to figure out how the audience willing to accept the in-game advertising; it finds out that players generally accept in-game advertising when placed relevantly in games. All in all, the critical point to the success of in-game advertising is to improve the immersion of the game, and also keep the in-game advertising suitable for the game story and game environment atmosphere.

3.4.2 The memory of the user to the name of the brand

Except for the immersion in the game, there is another factor that affects the in-game advertising, which is the content of ads. Nelson used to use two sports game as the sample, Nelson found that the players recalled 25% to

30% of brands immediately after playing the game, and 10% to 15% of brands after a five-month delay in 2002. Besides, in Nelson's study, participants' recall for innovative brands or brands that were personally relevant to the game players, such as local brands, was more significant than their recall of standard national brands. The result above demonstrates another critical point to the in-game advertising, which is the content of ads that need to be personalized. In 2006, In-game advertising provider Massive Inc, signed up contracts with several publishers, including EA, Blizzard Entertainment, THQ, and Activision, for collecting 'anonymous' information about users, sending them to the Massive database for analysis, and downloads advertisements to be shown in the game. This news is going to indicate the trend of in-game advertising to be more personalized.

According to the experiment to the players, the advertising tactics will be set to adapt to its target user group, then test the correspond of several placements of ad brand for improving the immersion of the player. By examining the brand usage and placement, the better effect of promotion of brands could get from the research, and the better game immersion also could be improved by in-game advertising.

3.5 Data Collection

With the sports game genre chosen, the data related to the research include the data related to the game directly, and the realistic sports data also need to be examined. Both positive and negative comment could be a visible chart to demonstrate the feedback of players to the in-game ads. Also, the recall rate of in-game ads will reflect by these data. Besides that, the brand type in games should be listed and analysis.

The brand type promoted in real life of the sports, such as the ads on TV, radio and franchising product will be compared with the in-game ads. As the sports game usually launches its new vision every year, the in-game ads also changed according to the real-life sports target audience. So, the changes of a brand in the serious of this game would get attention by examining the digital about how many times the brand showed in the game process.

3.6 Data Interpretation

Through the data collection from the sports game, the main sponsor, also the advertiser could be narrow down, regarding the target customer and mainly the game player group. To balance the user experience during the game process and practice of in-game advertising, the information behind the data could use to avoid the terrible placement, which placed ads affect the game process. Selecting the appropriate target customer group must match the primary qualified game player group at first. Secondly, in-game advertising is always developing. More dynamic in-game advertising is getting used in games. The data could also give feedback about this latest form of in-game advertising. Finally, the data through the online community of this game and the linked articles reflects how in-game advertising interacts with the game itself.

3.7 Research Representation

The narrative of the game play is a vital role in improving the immersion of the game, and this is the most sensitive part of the game to stop player immersing into the game at the same time. To reorganise in-game advertising and narrative is the going to decide whether the in-game advertising work well with the game itself. Through looking at these principles of marketing, advertising and game, the suggestion of in-game advertising that how to interact with the narrative of the game could be given and the results will be used in the next case study to present and examine again.

All the results come from these principles analysis, and netnography will be tested in the sports game 2K NBA in the next part of this research. By doing the case study, it is helpful to avoid risking putting in-game advertising without theory support and the advertiser could set their product to the correct group of customers.

3.8 The Development of In-game advertising

The technology is keeping developing, and it appears dramatically, especially in the game industry. The dynamic interface, 3D IMAX game experience, they are all pushing the elements in the games need to be developed to adapt to the market. So does the in-game advertising, the visible billboard obviously could not satisfy the user has required, it could improve the game more realistically, but it is not enough now. After getting the attention of the users for the first time, the in-game advertising can hardly make it again.

In the case study next, the suggestion according to the latest technology in the game industry will be made to use in the examples, and the simulation of the influence of applying the new type in-game advertising, such as IMAX ads interacting with the player. Finally, it will be evaluated the results of the function of the new type of in-game advertising.

4. Case Study and Methodology Apply

Yang, Roskos-Ewoldsen, Dinu, and Arpan (2006) had examined in-game advertising's impact on implicit

memory in their study, the effectiveness of "in-game" advertising, which is setting an experiment to measure the memory of the brand and compare two groups. The results of this study indicated that both implicit and explicit memory was impacted by video game play. In this research, the 2K sports have been chosen as an example to measure the effectiveness of the in-game advertising on the gameplay.

Why could 2K sports be so successful in the fierce contest industry? It comprises a single development studio, Visual Concepts, which was purchased from Sega in the year 2005. 2K Sports mainly develops and publishes American sports video games such as NBA 2K series, and mainly competes with EA Sports. In terms of its specific game 2K NBA, the game beats out similar titles by goliaths Electronic Arts and Sony, and last year sold a record two million units, 40% more than in 2008. For eight years running, the 10-year old basketball franchise has been the No. 1-rated NBA simulation game, according to Gamerankings, an aggregator of game review scores. Of course, it showed very experienced in putting ads into games.

It was reported that "NBA 2K12 Offers In-Game Ads You May Enjoy Watching" by Owen Good. It applauds that the whole process gets well organised with the ads in games and is something a gamer could take pride in seeing it the first time. However, in-game advertising is going to expand its definition. Bringing brands into games is advertising, sports game stands the sports league, profoundly connects to the sports star for personalised advertising. They are everywhere in the game.

4.1 Gamer Demography

The demographics which this case selected are based on the traffic of the homepage of 2K Sports. It might be not very accurately, but it reflects the group who is interested in this kind of game. There are 35.6K times of visiting the 2K Sports website in the US. So it reaches 55,6K at 9/12/11. While the data comes from a mobile device can also tell the meaning behind the numbers.

4.1.1 Gender

There are 65% of the male who visits the home page of 2K Sports, and only 35% of female access to this site. Compared to the average digital on the Internet, it shows more popular in the male crowd than the female crowd, which male group shows 49% of the internet average, and 51% is the female group. The gender percentage outlines the advertising might be more effectively targets the male market.

4.1.2 Age

The highest number of the group reaches 27%, which stands for the age between 18-24, and the second is the group of 25-34, which comprise 20%. The lowest one is 65+. It only attributes 2% of the whole example. The age group shows the young adults could be the primary customer of the game. Also, in-game advertising should be more fashion and shinning to attractive young consumer.

4.1.3 Children in Household

51% of the users do not have any kids, and 49% of them have kids. At this point, the children in the household could indicate the purchase purpose and the capability of purchase.

4.1.4 Household Income

The composition of household income says, 63% of them own $0-50k and 23% of them have $50-100k. Only 5% of them shows $150k+ in this research. The demographics show the less affluent of the household income. It is not good news to these advertisers, because they need to light the passion for purchasing.

4.1.5 Education Level

In terms of the education level, it shows that almost half of them come from college and grad school. This group of people might have a stronger capability in shopping but less willing to purchase.

4.2 Targeting Advertising Product

There are a lot of brand signs contract with 2K Sports. It includes HP, T-Mobile, Gatorade, Spalding, and Sprite, and others. all of them could match the part of the group of the game market just as presented above. These brands are the sponsor in the real sports league. They usually come out in the sports television event, so the player would not feel inappropriate and stranger. Take Gatorade for instance, Gatorade spent less than $1 million on the effort but got a sizable return on investment, according to brand research. A majority (82%) of gamers who recalled Gatorade in the game can attribute it to a specific location in which the brand appeared, and nearly three-quarters (70%) of those who recalled it appearing in the game said they liked it as part of the experience. More critical for Gatorade, the research showed that the integration positively affected gamers' willingness to recommend the product to someone they know.

4.3 In-game Advertising Forms

The conventional method of in-game advertising is posting the ads in the billboards in the game, for the sports game, it could do what real sports event did in the game. 2K NBA does it quite well here. However, it is not enough to get enough attention from the gamers. They usually focus on the gameplay and have no time to care what the billboards say in the environment of the game. To present more times in the game, the interface of the game becomes a better choice.

In the 2K serious, they used to use Gatorade as a part of the on-court action. It created an in-game feature for "NBA 2K9" called the Gatorade Thirst Meter. It alerts users that a player is becoming dehydrated and requires a substitution and a Gatorade refill.

This is an excellent example of dynamic in-game advertising, but it has more meanings in games. It could also interact with the narrative of the game. 2K Sports offers a play mode, which is users are allowed to create a character, playing in the league, NBA. The goal of the game is to be the hall of the fame player in the league, the better performance to get in the game, the big contract will get, which means the more advertisement contract will get. Even the Jordan brands will sign as their prolocutor. This kind of in-game advertising becomes a player's career narrative.

What 2K Sports did already impress us with its' dynamic interface with in-game advertising and excellent nice looking billboards to enhance the realism of the game. However, it is believed that there are more rooms to develop in-game advertising in the narrative. As we can see, in the mode of My Player, users are allowed to select the brands of shoes, this is brilliant, but what could enhance the narrative by in-game advertising is let the player also could select which brands they want to sign in. The narrative of the game is one of the elements to improve the immersion of the game. So, let the brands working just as what it does in real life could enhance the interaction of the in-game advertising.

Dynamic in-game advertising now takes part in the game mechanic more and more. Is this a good sign of a game? It might need more tests and time to prove, but it performs well in many games, such as Need for Speed and 2K Sports. The research about effective in-game advertising could be the latest innovation subject in recent years.

Figure 5. HP logo in 2K NBA.

Figure 6. Nike Air Jordan shoes in 2K NBA.

5. Conclusion

5.1 Result

This paper gives three main methods to promote brands in games, which is the goals of in-game advertising; they are in-game interface advertising, environment in-game advertising and dynamic in-game advertising. The technology allows in-game advertising continue developing to reach the maximum effect of the brand promotion, at the same time, improving the user experience by becoming part of the game mechanics, even the part of the narrative of the game. To be the part of the narrative of the game, it usually needs the brands which have a similar spirit with the game character or the game theme. This has been mentioned above, Gatorade case, it combines its spirit, energy drink spirit, into sports game spirit. It also matches the group of the market of a sports game, a young adult with energy.

Also, this research offers a method to help analyze the market of the game to match the market of the brand. It is crucial for in-game advertising. 1) Collecting the data about the demographics of the game market. 2) Target the customer of the game. 3) Match the compare the user group between game and in-game brands. 4) Select the appropriate method to put the ads into the game. 5) Get the feedback when running the testing vision 6) Launch the game and keep in touch with the advertiser.

The results of this study demonstrated that the location of brand messages in the game influenced one's processing of embedded brand messages such that focal product placement led to the superior recall and recognition sensitivity of brands compared with peripheral placement. This difference in recall between focal brands and peripheral brands was enormous among people who typically do not play electronic games than among those who do.

5.2 Future Research

Video games are highly immersive, interactive, and visually dynamic media, and accordingly, their cognitive and physiological demands make the evaluation of in-game advertising unusually tricky. To get the demographic and analysis of the market and culture behind the data could also be hard to reach the point. So the articles related to this subject would be the primary resources instead of the original research on the case study and theory apply in the part of the example.

In this research, it hardly gets enough resources to measure the recall rate of the brands shows in games. The feedback also could not stand the primary responsibility of the market, as the number of the samples is not enough too. However, it still works through the data collected on the Internet and the other analysis firms' research results. In future research, the memory of the brands should be researched and analyzed. Hope the research could help an advertiser understand the effectiveness of in-game advertising and game developer could keep enhancing the quality of the in-game advertising both on game mechanics and game narrative. As what Jeffrey said in his article, "Metrics based on impressions and screen time may no longer be relevant or helpful when distributing advertising in the latest generation of highly immersive digital games. Instead, in-game advertising may be better measured in terms of player engagement and contextual appropriateness."

References

Ben, L and Lance, P. 2010. In-game advertising effects: examining player perceptions of advertising schema congruity in a massively multiplayer online role-playing game. Journal of Interactive Advertising, Vol 10 No 2(Spring 2010), pp. 46-60.

Kozinets, R. V., 2002. The field behind the screen: using netnography for marketing research in online communities. Journal of marketing research, 39(February), 61-72.

Dan, M. G. and Corina D. C. 2010. Experiencing interactive advertising beyond rich media: impacts of ad type and presence on brand effectiveness in 3D gaming immersive virtual environments. Journal of Interactive Advertising, Vol5 No1 (Fall 2004), pp. 22-36.

Michelle, R. N. Heejo, K. and Ronald, A. Y. 2010. Advertainment or ad creep game players' attitudes toward advertising and product placements in a computer game. Journal of Interactive Advertising, Vol 5 No 1 (Fall 2004), pp. 3-21.

Galen, C. Patrick, M. K. and Paul, M. P. 2009 Communicating with consumers through video games: an analysis of brand development within the video gaming segment of the sports industry. International Journal of Sports Marketing and Sponsorship.

Miera, L and Ronald, F. 2003. Effects of product placement in online games on brand memory. A perspective of the limited-Capacity model of attention. Journal of Advertising, Vol. 36, no. 4(winter 2007), pp. 75-90. DOI=http://doi.acm.org/10.2753/joa0091-3367360406

Suzanne, C. B., 2005. Netnography: rich insights from online research. Publiceret som tillage til insights@CBS, nr, 14, 6.

Michelle, R. N. Recall of brand placements in computer/video games. Journal of Advertising research.

Patrick, W. Yongjac, K. and Stephen, D. R. Brand recall and recognition: A comparison of television and sport video games as presentation modes. Vol 17, No 4, Sports Marketing Quarterly 201.

Tina. W, Kathy. B, 2010.receptiveness of gamers to embedded brand messages in advergames: attitudes towards product placement. Journal of interactive advertising, vol 7, no. 1, pp. 24-32.

Fernando. B, 2009. Audience manufacture in historical perspective: from broadcasting to google. Sage publications. Vol11. 133-154.