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GAME IN THE GAME: EXAMINING IN-APP ADVERTISING IN MOBILE SPORTS GAMES

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ABSTRACT

The purpose of this study is to examine in-app advertisement within mobile games and the content of the advertisement. The universe of this study is sports game applications under games category in Apple Store. The sample is 32 sports games that were selected by random sampling method among popular games listed under sports category in Apple Store. Determined advertisements were analysed with the content analysis method. As a result of the research; it has been determined that sports games that are examined under mobile applications, primarily contain in-app advertisements for strategy, shopping, casino and bank applications, and games. Accordingly, more than half of the ads in evaluated mobile sports games were about mobile games and in-apps about mobile sports games were less. When in-app games were investigated in terms of appearance on screen, the great majority of mobile sport game ads were interstitial ads. As a conclusion; in spite of the changes in entertainment concept as a result of the developments in mobile technology, it has been determined that sport is used as direct or indirect marketing material as it is in the approach of traditional sports marketing. The implications from this research include a better understanding of how in-app advertising is being used to sports marketing and marketing communication.

Keywords: Mobile games. In-app advertising. Mobile sports games.

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INTRODUCTION

Modern societies had been evolved with a transformation process from industrial societies towards post-industrial societies due to the digitalization of the world in line with technological developments (Manovich, 2001). With the digitalized world, this evaluation was directly affected from various factors in social and societal life. Signs of this digital relationship between producer and consumer are mainly visible on mass communication tools (Kozlenkova et al, 2017; Russo & Simeone, 2017; Brozovic, 2015). In line with these developments, Internet has become one of the indispensable elements where users can realize all things (communication, electronic newspaper and news reading, shopping, banking operations, sharing via social media, watching film, playing games etc.) as well as becoming fundamental needs with economic and instant transfer property (Armstrong et al., 2000; Yellowless & Shayna, 2007; Isaac et al., 2017). Additionally, it is emphasized that Internet is an important factor to improve life quality of individuals with opportunities offered for leisure time (Leung & Lee, 2005; Newman, Tay & Diener, 2014). Regardless of time and place, Internet had the property to structure perceptions without the boundary of time and place (Figge, 2004; Yengin, 2015: 49; Garris & Mishra, 2015; Bauer et al. 2005) where the usage is not only limited to computers but also provides important opportunities to make life easier with mobile device integration (Lee, 2007; Chae & Kim, 2003; Fuksa, 2013). Development of mobile internet had changed communication processes around the world and societies and institutions were forced to comply with this change (Fuksa, 2013). Widespread use of mobile devices led mobile devices to be used first in all operations and this enabled culture called "Mobile First" (Bunce, 2016). Today, most popular mobile devices are smartphones with 2.6 billion users (Newzoo, 2017). Individuals see phones as the fundamental way to communicate with the rest of the world and carry those devices with them. Such that, most users state that it is almost impossible to image a world without a mobile phone (Krum, 2010). Such devices that offer numerous properties to users creates unique opportunities for the enterprises as well. In this sense, mobile marketing is the most important activity to reach customers, influence those customers, and create a value. In general terms, mobile marketing is using marketing communication channels to promote goods, services, or ideas on mobile environment (Leppaniemi et al., 2006; Scharl, Dickinger & Murphy, 2005). Mobile Marketing Association (MMA, 2008) defined mobile marketing as: 'the use of mobile media as an integrated delivery of content and a direct communication tool in cross-media marketing communication programs'.

Traditional marketing is insufficient under conditions of this period and competition conditions. At this point, mobile marketing should be emphasized by the businesses that want to create a competitive advantage and create loyal customer base by meeting customer demands in correct way. At the same time, it is stated that firms that are unable to understand mobile marketing or integrate the activities in the business have high chance to stay behind the competition (Krum, 2010: 27; Rowles, 2014; Pasqua & Elkin, 2013). Yuan and Cheng (2004) explained distinctions and importance of mobile marketing activities and traditional marketing. These could be stated as customers always carrying mobile phones with them and keeping mobile phones open all day, one-to-one communication opportunities and positive effect on customers, customers can answer posts later, customers can have audio and visual communications, and marketing managers could offer different activities. Mobile marketing tools were classified by MMA (2013) as follows:

- *Mobile video, display or audio ads*: Mobile display ads and are an effective way to engage customers and prospects. There are a number of different formats for mobile displays ads. The MMA has a recommended Universal Mobile Ad Package UMAP to make it easier for marketers to create mobile ads for smartphones, feature phones, and tablets. Additionally, there are rich media formats, mobile video as well as mobile audio ads, all used to drive deeper brand engagement and revenue.
- *Mobile websites*: This is a version of the desktop website that has been specifically designed to be compatible with mobile devices. Mobile websites deliver an engaging and streamlined mobile experience that appeals to a mobile visitor who is using their smartphone or tablet to connect with brand.
- *Mobile applications (mobile apps)*: Not to be confused with mobile websites, mobile apps are software programs that can be downloaded on a smartphone or tablet. Apps can be used by brands to educate, entertain, engage and/or sell products to users.
- *Response codes:* According to CMBInfo.com, 50% of smartphone users have scanned QR codes and 18% have made a purchase as a result. There are a number of different kinds of response codes, the most

common of which are QR codes, Microsoft TAGs, ScanLife, SPARQCodes and others.

- *Mobile Search Marketing:* Mobile Search, like desktop search, is a powerful way to connect consumers with brand. It is important to note that search behavior and motivations can differ in the mobile environment as well as the fact that search results will appear differently on mobile devices vs. a desktop or laptop.
- *SMS and MMS:* Short Message Service (SMS) and Multimedia Message Service (MMS) are systems that enable brands to send texts or rich media (graphics, video, audio) to customers.
- *Location-Based Marketing (LBM):* There are two sub-categories of LBM which include Location-Based Services like Foursquare, SCVNGR and WHERE as well as Location Based Advertising which uses mobile display ads to geo-target prospects within a certain location.
- *Near Field Communications (NFC):* Similar to BlueTooth, NFC uses a small chip embedded in a phone to connect wirelessly to another chip embedded in a kiosk, point-of-purchase poster, debit card terminal or turnstile.

Using correct mobile marketing tools are regarded as important to reach objectives of firm and providing consistency (Rowles, 2014: 9; Pasqua & Elkin, 2013: 2). Mobile applications are the most common way of mobile application and mobile tools are first tools for user interaction. Newest and most up-to-date mobile devices (cell phones, tablets etc.) uses mobile applications to access various information about users. Additionally, users are searching to select suitable application among millions (Wang, 2017).

Nowadays, mobile games as a popular culture product within the scope of mobile applications have become one of the most important mobile marketing and advertising tools. At this point examine in-app advertisement within mobile games become important. The purpose of this study is to classify in-app advertisement appearance types in mobile sports games and evaluating the content of these advertisements.

THEORETICAL FOUNDATIONS

Khalaf (2016, 2017) reported that between 2014-2015 time spend by individuals in America on mobile device had increased 117% while the time increased 69% through 2015-2016. Parallel to this, mobile application use percentage was 58% through 2014-2015 and 11% through 2015-2016. 2017 data of the same company indicated that American consumers are spending 5 hours per day on mobile applications (Khalaf, 2017). Similar results are visible in research of Nielsen (2015) company. Accordingly, monthly time spend on mobile applications of an individual had increased 69% in two-year period and exceeded monthly 37-hour. Deloitte Global Mobil Consumer Survey (GMCS, 2016) results comprising of 30 countries including Turkey and 49 thousand participants indicated important data regarding mobile device use in Turkey. Survey indicated that due to dynamic and young population of Turkey, the country is among one of the highest smartphone addiction countries. Users in Turkey check their phone in every 15 minutes and the country has overtaken Russia, England, Germany, and France. Data obtained from survey showed how important mobile device and applications are for users and firms. It is stated that users use mobile applications in daily activities such as access information, socialize, learning and following trends, shopping, banking transactions, and payments, communication activities (Ho & Syu, 2010; Ickin et al., 2012; Hsiao, 2017). It is possible to analyse mobile applications under games, social networks, entertainment, and finance categories (Hung et al., 2015). Nysveen et al. (2005) showed that although consumers use all services on mobile devices, entertainment and game services are primarily selected. Primarily selecting entertainment and game services digitalized free time concept that had different application area in different periods and integrated to mobile applications (Spracklen, 2015). This situation that offers bilateral opportunities caused games as popular culture products inside mobile applications to be preferred. Additionally, mobile games as important representatives of changes in consumer market have become an activity preferred by new generation and it is important to determine the effect of technology on consumer (Becker, 2007; Carbonara, 2014).

Mobile games could be defined as game applications that could be played on portable, wireless devices such as smartphones and tablets (Jeong & Kim, 2009). As Apple Store is offered to consumers after iPhone brand was launched in 2007, new generation mobile games started to replace simple console games of 10-15 years ago with insufficient content and graphic property. Mobile game market has expanded by directly affecting from Internet use and presented to consumers in various forms (Goggin & Spurgeon, 2007). Since 2016, mobile applications correspond to 82% revenue of mobile games and has 56-billion-dollar global size and it is expected to have 65-billion-dollar market as of 2020 (Newzoo, 2017). It could be stated that mobile games have an important place for all activities regarding mobile marketing as

most of the incomes of firms in mobile marketing activities consist of ads and other part consist of in-app sales that limited number of users (Brustein, 2013; Hao, Guo & Hasey, 2016). As widespread use of Internet and output of mobile technological developments, popularity of smartphones created ground for mobile games/applications in sports with fitness, information, and event (Kang, Ha & Hambrick, 2015). Applications in the sports category in 2015 had shown 53% increase since 2014 and became the fastest developing category (Richter, 2015).

Increased number of consumers playing mobile games increased mobile ad incomes. In-app advertisements that are defined as one of the mobile marketing tools and integrated to mobile applications in the simplest form has become largest growing fields in social commerce (Bhave, Join, & Roy, 2013; Cheung & To, 2017). It is stated that in-app ads indicate purchasing intent, brand recommendation behaviors, and general positive brand ranking (Sivaramakrishnan, 2014).

VenturaBeat survey in 2016 on 176 game developer firms supports these data. According to research results, in-app ads had become the most common methods of advertisement to monetize mobile games (Koetsier, 2016). Verberckmoes et al. (2016) stated that in-game ads in the sport theme games that had intense competition and contest are more effective to reach the consumers in a targeted way.

In this context, it could be commented that sport themed mobile games are more effective than other game and application content. In the light of these information, by using content analysis methodology, this exploratory research aims to examine in-app advertisement within mobile games and the content of the advertisement.

METHOD

Purpose of this research was to classify in-app screening types in mobile sports games and evaluating content of these advertisement. The universe of this study is sports game applications under games category in Apple Store. The sample is 32 sports games that were selected by random sampling method among popular games listed under games/sports category in Apple Store. The games are selected with the help of 3 researchers and played each selected games for 30 minutes and advertisements are investigated. Advertisements were analysed with the help of content analysis method. Content analysis is one of the most important and rapidly developing research techniques of social science and this research had been regarded as representatives of texts, symbols, and statements that will be interpreted (Neuendorf, 2002:1; Krippendorff, 2004a). Riffe, Lacy, and Fico (2014) stated the importance of using content analysis in researches regarding change in mass communication tools and communication forms. At this point, classification of data obtained from in-app games and identifying contents became a noteworthy scientific analysis for mobile sports applications.

Games included in the universe of this study were categorized by researchers in terms of content analysis method based on the type of appearance of advertisements. Since there is no similar research in this field and there is no coding table, coding table based on in-app advertisement format was created. Accordingly, coding type and content of analysed in-app advertisements were as follows:

Interstitial ads: "Interstitials in-game apps are usually full-page ads displayed in between the flow of gaming sessions, forcing players to view the ad for some time before forwarding them to the next session" (Chou & Wang, 2016).

Expandable ads: "Expandable ads are those ads that expand in size with comprehensive information about the brand on the same page" (Bhave, Join & Roy, 2013). When a user chooses to engage with a click-to-expand ad (i.e., by clicking the ad) the ad then expands to the center of the page.

Detailed and well-structured coding table created in content analysis enables measuring category, levels, and in other words all structure. Coding table should have a clear statement, instructions, and examples. All these properties increase the safety of coding and reliability of coders (White and Marsh, 2006). Krippendorff Alpha coefficients (KALPHA-α) were calculated to evaluate reliability between coders in the research. Alpha coefficients were obtained by subtracting 1 from the result obtained by dividing observed inconsistency and expected inconsistency values (Krippendorff, 2004:223-224). Accordingly, in this study, alpha value (α) was calculated as 1 (α=1). Researchers state that the reliability coefficient between coders should be .80 or higher (Miles & Huberman, 1994: 64; Neuendorf, 2002: 142-143; Patton, 2002).

Krippendorff (2004: 223) stated that alpha coefficient (α)=1 gives perfect harmony between pointers. Accordingly, inter-coder reliability in this study was accepted as reliable.

RESULTS

A total of 106 advertisements were identified in 32 games that constituted the sample of this study. However, some of these advertisements are duplex (repetitive) advertisements. Accordingly, when repetitive advertisements were excluded from the study, the total number of advertisements is 49. Within 49 advertisements, the most common advertisement is a strategy game (30.61%), the second most common is shopping applications (14.28%), and the third one is casino games (12.24%).

Table 1 Game Genres of examined in-app ads

Game Genre	Number of Analysed Games	Playing Duration
Football	11	30 min.
Basketball	4	30 min.
Billiards	2	30 min.
Golf	2	30 min.
Horse Race	2	30 min.
Tennis / Table tennis	2	30 min.
Wrestling / Box	2	30 min.
Archery	1	30 min.
Fishing	1	30 min.
Running	1	30 min.
Paintball	1	30 min.
Bowling	1	30 min.
Ice hockey	1	30 min.
Car race	1	30 min.
Total Game	**32**	

As shown on Table 1, most of the games in this research consisted of football games (34.37%). Basketball games were second (12.5%). Each game was played for 30 minutes and basic categories were created based on ad content, types, and number of views. These data were presented in Table 2.

Table 2 Content of in-app ads and number of views on the screen

Ad Content	Application / Game	Number of Views
Strategy	Game	15
Shopping	Application	7
Casino	Game	6
Bank	Application	4
Football	Game	2

Family	Game	2
Lifestyle	Application	2
Race	Game	2
Bowling	Game	1
Archery	Game	1
Basketball	Game	1
Friendship	Application	1
Navigation	Application	1
Action	Game	1
Role Playing Game (RPG)	Game	1
Productivity	Application	1
Assistant	Application	1
Total Ad		**49**

As seen on Table 2, whether analysed in-app ads were in relation with another game or different application were evaluated. 34.61% of ads in mobile games in this study were about another application and 65.29% were about another mobile game.

Table 3 Content of application/game and appearance type on the screen

App/ Game Content	Appearance types of in-app advertisements		App/ Game Content	Appearance types of in-app advertisements	
	Interstitial Ads.	Expandable Ads.		Interstitial Ads.	Expandable Ads.
Strategy 1		✓	Casino 4		✓
Strategy 2	✓		Casino 5		✓
Strategy 3	✓		Casino 6	✓	
Strategy 4	✓		Bank 1	✓	
Strategy 5	✓		Bank 2	✓	
Strategy 6	✓		Bank 3	✓	
Strategy 7	✓		Bank 4	✓	
Strategy 8	✓		Football 1	✓	
Strategy 9	✓		Football 2	✓	
Strategy 10		✓	Family 1	✓	
Strategy 11		✓	Family 2	✓	
Strategy 12		✓	Lifestyle 1	✓	
Strategy 13		✓	Lifestyle 2	✓	
Strategy 14	✓		Race 1	✓	
Strategy 15	✓		Race 2	✓	
Shopping 1	✓		Bowling		✓
Shopping 2	✓		Archery		✓
Shopping 3	✓		Basketball		✓

Shopping 4	✓		Friendship	✓	
Shopping 5	✓		Navigation	✓	
Shopping 6	✓		Role Playing Game (RPG)		✓
Shopping 7	✓		Productivity	✓	
Casino 1	✓		Assistant	✓	
Casino 2	✓		Action	✓	
Casino 3	✓		**TOTAL**	**49**	

Table 3 indicates content of advertisement in applications and games and statistics of how those advertisements were shown on screen. Regardless of the content, it was determined that advertisements in applications and games were screened without desire of the users. In limited number of games, users can view ad content on demand. In the strategy category, 70% of ads were interstitial and 30% of ads were expandable. In casino category, 67% of in-apps were interstitial ads and in football, family, and race categories, 100% of in-apps were interstitial ads. Similarly, 100% of ads in the shopping category were interstitial ad.

DISCUSSION

Individuals prefer playing mobile games in smart and portable environment to entertain themselves in leisure, escape from intense-tiring routine, and to have fun. The benefits of mobile games such as socializing and interacting with other players cause individuals to play more mobile games. It is stated that individuals actively or passively accept free time activities as part of meaningful search in life, thus, positively change their life quality (Iwasaki, 2007). In line with technological developments, mobile games that improve in terms of content replaced free time activities. In addition to seeing mobile games as the future of entertainment, these games should be regarded as sector with marketers (De Vallois, 2016). In these terms, the results of this study supported that advertisement contents in mobile sports games are an important topic regarding marketing communication.

It was determined that advertisements in analysed mobile sports games were mainly strategies content games (30.61%), other mobile sports games (22.44%), shopping applications (14.28%), casino type games (12.24%), and banking applications (8.16%) respectively. Accordingly, the frequency of mobile sport game advertisements was higher than other applications (65.29%).

Verberckmoes et al. (2016) stated that in-game ads in sport theme games that had intense competition and contest are more effective to be delivered to consumer in desired way. In the same way, the findings of Logan's research (2017), suggest that advertise on game apps is an opportunity to affect consumers there is an opportunity to advertise effectively on game apps. Accordingly, it could be commented that sport themed mobile games are more effective than other game and application content. It could be stated that this information has similar property with the data of this study. Additionally, advertisements within mobile games that are integral part of mobile marketing concept are accepted as marketing components for brands as well as a communication channel with brand. It is stated that with this channel, online communities play an effective role to create perception regarding the brand (Okazaki et al., 2007). Likewise, Yüce et al. (2018) revealed that individuals spend plenty of times with mobile games and it can be an almost negative impact on them. It can be stated that this situation can create an advantage to brands for the reach of the consumers if set a course effective strategy. Using correct mobile marketing tools are regarded important to reach objectives of firm and providing consistency (Rowles, 2014: 9; Pasqua & Elkin, 2013: 2) causes different sectors to use the power of sports on mass communication. Accordingly, as 34.61% of advertisement in analysed mobile games were related with other sector or application (bank, friendship, navigation, lifestyle etc.), it is indicated that mobile sports games are used as marketing tools for other type and content of application and games.

When competitiveness/competition perception created with sport is combined with high demand for mobile sports games, it could be commented that advertisement in these games can have higher possibility to reach larger audience and change (purchasing) behavior. Additionally, as in-app advertisements are the most common advertisement type to monetize mobile games proves importance of advertisement in mobile sports games (Koetsier, 2016; Hao, Guo & Hasey, 2016).

Based on the obtained information, advertisement on the screen are mainly in the mandatory category. Accordingly, it was determined that analysed in-app ads were 77,552% of mobile sport game ads were interstitial ad, and 22.448% were expandable ad. It was also determined that advertisements in-game categories which have the highest in-app ad number were 65.625% interstitial and 34.375% expandable. Although in-app interstitial advertising is used as advertisement strategy for businesses, it could be commented that these advertisements have no positive perception among consumers (Ying, Korneliussen & Grønhaug, 2009). Gui, Nagappan & Halfond (2017) investigated views of users regarding in-app advertisements and stated that frequency of in-app ads, duration of ad, and location of ad on the screen were commonly complaint. Khalid et al. (2015) emphasized similar complaint regarding in-app ads. Moore, Stammerjohan and Coulter (2005) stated that consumer reactions can be different based on content and advertisement similarities where Chou and Wang (2016) stated that this was not only about content, but all visual elements played an important role. Therefore, form and content of preferred in-app advertisement become important.

According to the 2017 U.S. Mobile App Report by comScore (2017), 18-24 years old individual in America spend average of 3.2 hours per day on mobile applications where individual between 25-34 years old spend average of 2.6 hours per day. The same report also stated that 70% of individuals between 18-24 years old and 61% of individual between 25-34 years old use mobile applications when they are using their mobile devices. Additionally, individuals stated that smartphones will be useless without applications. Accordingly, as mobile games are the most preferred applications by both firms and users and as these games are frequently preferred by young individuals, it is important to consider needs, desires, expectations, and lifestyles of this audience when developing in-app advertisement strategies. Hanley and Boostrom Jr. (2011) emphasized that mobile advertisements are holistic marketing communication strategy and stated that encouraging elements of the most important points should be present for young people to watch these advertisements or access the link of the advertisement. Nielsen (2011) survey reported that 21% of individuals discover new applications from advertisements in other applications. Likewise, Kim, Lin & Sung (2013) revealed that mobile game applications are frequently used in various methods to brand integration.

Based on this data, it could be stated that in-app advertisement in mobile games should have promotive elements to meet the expectations of individuals. As 65.29% of in-app games in analysed mobile games were related with another mobile game and consisted of entertainment elements, the findings support this idea.

As a result, since using sports as marketing element is one of the commonly used marketing strategies, in line with developments in technology, changes in the sense of entertainment enables seeing games in mobile environment as new marketing environment. Although such changes bring different formations, consumer-based approaches and strategies should continue to exist. In short, although marketing and marketing communication players change, rules of the game remain the same.

Recommendations for Future Studies

The implications from this research include a better understanding of how in-app advertising is being used to sports marketing and marketing communication.

The study sample is 32 sports games that were selected by random sampling method among popular games listed under games/sports category in Apple Store. This sample may not be fully representative of all sports game. In addition, the sampling unit can be selected other mobile gaming platforms (Google Play etc.). Repetition of this study can be done with a larger sample. In this way, in-app strategies and contents of much more mobile games can be revealed. This may contribute to the future of brands to determine more effective marketing strategies. Also, similar studies can be carried out in order to determine the positive or negative effect of in-app advertising strategies on mobile game consumers.

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