

EFFECTIVENESS OF VIDEO ADVERTISEMENTS IN FREE MOBILE GAMES IN THE GENERATION Z MARKET SEGMENT

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Abstract: This work analyses the effectiveness of video advertisements in free mobile games in the generation Z market segment. GenZ is the last demographic segment that has been differentiated and from marketing perspective GenZ is the most important age segment, since this is the new wave of consumers. They are also called “the selfie generation”, “digital locals”, “generation Like”. Despite the different names, these are people born between mid 90’s of XX century and those born in the early 2000’s. They are defined by their vast entanglement with the new technologies, like cloud and block chain technologies and especially social networks. The Gen Z’s grew in a world filled with more frequent economic and financial crisis, terrorist attacks and a whole new understanding about gender, national and religious identity. Like their predecessors, the millennials, Gen Z are basically living online. They are sharing almost every part of their life through social media platforms, buying goods from all over the world via e-commerce websites, even partially running their businesses via smartphones. Thanks to the shift of the technological paradigm we have more powerful devices in our pockets which allow us to do more things than basic phone communication. Because of this shift the mobile entertainments gains more followers every year with the abundance of free games and applications.

The current paper is focused on video advertisements in free mobile games and their ability to convert watchers to consumers. A quantitative research will be conducted in order to assess the ability of video ads in free mobile games to convert watchers in to users. The questionnaire will consist of two parts – first will be a series of questions that aim to gather information about the respondents willingness of watching video ads and their conversion potential and the second half will be a demographic and psychographic picture of the respondents. This paper analyses the responses of 173 respondents from 14 different countries. The main thesis is that they have low probability of following video advertisement in free mobile app or free mobile game and convert, because: 1) the majority of video ads in free mobile games are a currency, in other words one viewed ad is traded for in-game currency (Offer Wall Ads) So if a player is so invested in a game to “trade” fifteen to forty-five seconds of his life for a in-game advancement, the advertisement would have a hard time to convince him to try a new experience (new free mobile game) 2) Most of the video ads and banners in free mobile apps and games obstruct in some way the normal app use or just part of the display. Because of that big segment of free app users express negative emotions and based on those emotions the free app users create negative associations with the advertised content.

Important part of the success of this paper is to correctly define the term effectiveness. This paper aims to assess the effectiveness of video ads as an income source for free mobile games and apps. The author assesses the effectiveness by comparing several variables – likelihood that a consumer will watch and convert from this type of advertisement and their reaction at different situations when such marketing communication is initiated. The author formulated three hypotheses: 1) The respondents are more likely to open a page of an app, when the ad they took the information is in free mobile app and not a game; 2) The respondents don’t watch more than ten seconds of video ad in free mobile game (with average length of 30 seconds) 3) Its more likely that the respondents to convert watching a video ad in free mobile game.

Keywords: marketing communications, mobile applications, effectiveness, generation Z, video advertisements.

1. INTRODUCTION

With the continuous development of technologies and their performance capabilities combined with the ever decreasing prices of smartphones the total number of user of mobile internet is increasing drastically. For the last five years there is a clear trend of increasing penetration of this technology, and an example for this is that in 2014 the mobile internet users are 48,8% of all smartphone users and four years later in 2018 their numbers escalate to 61,2% (Statista, 2018). Also half of the internet traffic (51,2%) is funneled through mobile devices (Statista, 2018). There is big differences between the usage in different continents – the biggest traffic is in Asia (65,18%), and smallest in South America (33,51%). For the first quarter of 2018 Google Store gave to its users access to 3,8 million apps and 94,24% of those were free of charge. The number of new free mobile apps is increasing because of the freemium business model and thanks to this model, those apps can generate solid income streams. This can be achieved because: 1) users can support the developers via crowdfunding platforms or with donation; 2) micro transactions for buying cosmetics, in-game currency or for unlocking functions hidden behind so called paywall; 3)

Ads – the developers can allocate advertisement spaces in their products or connect them to different advertisement servers. It is common practice to add “Remove advertisements” feature.

The expenses for online video ads are constantly expanding – in 2016 in France 417 million euro were paid for ads. Between 2010 and 2014 in USA, the video ads expand their part of the whole video consumption with almost 30% (Statista, 2018).

The data shown above gives clear insight on the importance of this element of the marketing communication and the need of additional researches in this field. This paper aims to analyze the effectiveness of online video ads and more specifically, those in free mobile applications and games. The significance of the researched topic correlates with the other research limitation – generation Z. GenZ is the last demographic segment that has been differentiated and from marketing perspective GenZ is the most important age segment, since this is the new wave of consumers, with their own income. This means that all marketing specialist need to adapt to the changing market, because “The positioning is an organized system of finding a window to the consciousness. It’s based in the conception that the communication can be achieved only at the right time and right circumstances.” (Ries & Trout, 1980). This paper has the following restrictions – all respondents must be Generation Z smartphone users and free mobile apps and games users. With these limitations the author aims to analyze the conversion ability of online video ads in free mobile apps and games, aired while someone is using the application. With this paper the author defends the thesis, that users aren’t willing to follow video advertisement and convert because: 1) the majority of video ads in free mobile games are a currency, in other words one viewed ad is traded for in-game currency (Offer Wall Ads) So if a player is so invested in a game to “trade” fifteen to forty-five seconds of his life for an in-game advancement, the advertisement would have a hard time to convince him to try a new experience (new free mobile game) 2) Most of the video ads and banners in free mobile apps and games obstruct in some way the normal app use or just part of the display. The subject of this paper are online video ads in free mobile applications and games and its topic is their ability to successfully inform the target audience about a product and thanks to that knowledge to initiate conversion event.

Important part of this research is the preliminary definition of effectiveness and why the author uses it. Efficient is defined as *acting or producing effectively with minimum waste, expense, or unnecessary effort*. On the other hand, effective is an adjective that means *“having an intended or desired effect”* (Writing Explained, 2020). As the research aim to analyze conversion ability of video advertisements, as an income stream for app developers, the author uses the term “effectiveness”. It is assessed by comparing the likelihood of watching and reacting accordingly to this type of marketing message by users in different situations.

The research paper aims to complete several tasks: 1) to find out is there a connection between the situation in which a video ad is shown and the reaction of the respondents (shown while using the free app; shown so the users can get a reward; shown after predefined time playing a free mobile game) 2) to investigate the likelihood of watching a video advertisement in free mobile game and app. Despite the frequent inability to cancel a video ad until their end (5-45 seconds), users can turn their gaze of their screens. Also, the paper aims to evaluate their bearing threshold concerning the frequency of those ads.

This topic generates increasing scientific interest in the academic marketing field. In 2016, in Turkey, was conducted a research aimed to analyze the users attitude toward advertisements in social media and mobile applications) (Turkey is the seventh country in the world by facebook users)(Aydin, 2016). Aydin uses Facebook Ads as subject of his research, representing all advertisements in social media. The results of this paper conclude that as a whole the Turkish users have negative attitude towards those advertisements (only 10% of all respondents had positive attitude towards Facebook Ads and only 14% towards mobile advertisements) Besides that the respondents share their angst towards the inability to remove advertisements in Facebook. In April 2018, research team from Yahoo Labs, published a paper, in which they analyze the connections between content and design of advertisement and its influence on users perceptions (Goyal, Bron, Lalmas, & Cramer, 2018). They note that it is important for users the presence of video advertisements. The difference with their research and this one is that the Yahoo Lab team analyzes video advertisements as part of the native format and not Offer Wall.

2. FREEMIUM BUSINESS MODEL

The freemium business model is gaining more followers in the last decade. The development of mobile technologies gives developers the ability to create different by design and features applications and present them to the users without any initial payments. The model is used in different areas – for example cloud storage. Dropbox offer 2 gigabytes free storage at the price of registration with email. Besides this the company offers subscription plan that expands the storage up to one terabyte. Thanks to the “testing” free subscription in 2017 alone Dropbox acquired 11 million paid subscribers and 500 million free ones (Gu, Kannan, & Ma, 2018). This model is introduced by Fred Wilson and later popularized by Chris Anderson. It is described as parallel offering of free and paid version of one

product. The free plan offers basic functionality that satisfies the majority of users. The paid version of the product offers full functionality and, in many occasions, additional features and advantages (in games) and removing of advertisements. From consumers point of view this model gives them the ability to try and use a product and by trying users are more susceptible to upgrading their free plan. One of the key differences between free and paid versions is in the ad spots in free plans.

3. MOBILE MARKETING

The mobile marketing consists of all marketing communication activities via mobile devices, aiming to promote products or services (De Pelsmacker, Geuens, & Van den Bergh, 2013).

The mobile advertisement ecosystem is consisted of three types of participants: 1) Publisher, who uses ad spots in his application to generate income; 2) Advertiser, who pays the publisher (developer) to generate him impressions; 3) Advertising network, which connects both parties; Most of the developers connect their apps with ad networks in order to partially finance their endeavor. After that they incorporate ad libraries in their applications and when an advertisement request is send by the network (when a specific conditions are met), the application opens an advertisement from the library. When the ad is played an information about the event is send back to the ad network and thus an impression is generated. This process is important for the developers because advertisers are paying them based on impressions count. All mobile advertisements are distributed in five different categories: 1) Offer wall – page that offers rewards advertisement watching with in-game content; 2) Pop-up – Generates a new window over the application graphic interface 3) Notification – Delivers marketing communication via the messaging (notification) device features; 4) Floating – Uses small movable window overlaying the GUI; 5) Embedded – Those ads are part of the application.

4. THE AIDA MODEL IN THE CONTEXT OF VIDEO ADVERTISING

The AIDA model is an acronym for the earliest attempt to model the effect of marketing communications. Recommended as one of the most appropriate methods for planning online advertising campaigns (Vassileva, 2015). The four steps in the model are: 1) Awareness - Creates brand awareness or affiliation with a product or service; 2) Interest - Generates interest in the benefits of the promoted service or product and sufficient interest to encourage the potential buyer to seek further information; 3) Desire - Desire for the product or service; The stage at which the user stops liking the product and begins to desire it; 4) Acton - Call to Action (CTA) - Inviting the user to interact with the company, i.e. download an app / booklet, initiate a purchase or start a conversation

The model can be adapted to cover the stages through which the video ad goes: Awareness stage - The first 3 seconds of a user's contact with a video ad message in a free app or game, - "Video view" (The author uses metrics used by Facebook and Instagram). There are significant differences between different social networks and their definition of what video viewing is. Facebook and Instagram use the third second as a preview tag, while YouTube uses the thirtieth second. The differences in this example stem from the length of uploaded videos on the respective networks. The maximum length of an Instagram video is 60 seconds and the minimum is 3 seconds (This paper excludes the InstagramTV function, because of the possibility of removing the feature by the developers). The minimum length of a video on Facebook is 2 seconds and the maximum is 240 minutes. The standard maximum video length for YouTube is 15 minutes, but up to 12 hours may be uploaded. Interest stage - The stage of viewing the video ad, in which interest in the advertised content is generated and the address receives information. If it is sufficient and if the content meets the user's criteria for quality, it arouses his curiosity. Desire Stage - The stage where the interest in the content being advertised exceeds the user's desire to continue interacting with the free mobile app or game. Action Stage - Visiting the landing page and / or performing a specific desired action. Based on this split and the average length of video viewing, the reason for the ineffectiveness of the video ad can be theorized.

5. GENERATION Z

Generation Z is the last age segment that has been differentiated. They are also called "iGen", "Gen Z", "post millennials", etc. Despite the different names these are the people born in the mid-90s and early 2000s (Think with Google, 2020). Their other names are "Selfie generation", "Digital locals" and "Generation like" wich is a refferance to their entanglement with technologies and in particular social media. This generation is growing in a world with frequenter economical and financial crysis, terrorist attacks and complete shift in the meaning of gender, nationality and religious affiliation (Williams, 2015). Representatives of this generation are more conservative in terms of their long-term investments and commitments, like higher education (Center for Generational Kinetics, 2017). They prioritize solid job foundation, good (in relative terms) salary and education at work, which can give them faster career development. Just like the millennials, Generation Z spend much of their time online in social media or e-commerce websites (Desai & Lele, 2017). Other specific trait that they have is their desire for quick and

easy access to information. This is the generation of the new wave of consumers with their own income streams. Because of that, every organization who aims to hold their market share or expand it should focus on those individuals and learn their behavioral traits.

6. METHODOLOGY AND HYPOTHESES

This paper analyses the answers of 173 respondents from 14 different countries. The survey is conducted online and consists of two parts with total of 23 questions. The first part has 18 closed questions and five point Likert scale based (1- Strongly Disagree, 2 – Disagree, 3 – Neutral, 4 – Agree, 5 - Strongly Agree) This section of the questionnaire aims to gather information about the respondents likelihood to view a video advertisement in free mobile game or application and would they engage with the promoted content. The second part of the survey consists of six questions that will describe the respondents in the following analysis (gender identity, age, nationality, attitude towards smartphones and video advertisements in free applications. This research tests three different hypothesis:

H1: The respondents are more likely to open a page of an application when they see an advertisement in free mobile application and not in a mobile game.

H2: The respondents will not watch more than 10 seconds of video advertisement, shown in a mobile game (average length of the advertisement of 30 seconds)

H3: It is likely for the respondents to follow advertisement when it is a condition to win an in-game prize.

7. RESULTS

The survey results are presented by groups of questions designed to provide information about the respondent's profile, their use of free mobile apps and games, and their attitude towards video ads in them. The gender distribution of the survey respondents is as follows - 52% men, 41% women and 7% of the respondents identified themselves as having a different gender. As the study aims to examine the behavior of Generation Z representatives, all respondents are between the ages of 17 and 21, with a median age of 19. The questionnaires are also representative of a total of 14 countries, from three continents (North America, Australia and Europe) and 10 of them are part of the European Union. In addition to supplementing the demographic profile of respondents, the purpose of this question is also to provide data to verify that there is a statistically significant relationship between respondents' attitudes towards video ads in free mobile applications and games and their content and well-being in their state. The last part of the respondents' profile is their attitude towards their smartphones. From the gathered data, we can summarize that respondents use their "smart" devices from 1 to 3 hours a day and identify them as rather an important part of their day. These questions are important because the limited time spent using a smartphone during the day is directly related to the number of opportunities for users to receive an advertisement. In addition, the perceived importance of the device is related to how the message recipients will respond to the information they are provided. According to the survey, it became clear that respondents would cease using the app if it required a periodic review of video advertising messages. This is a concern for advertisers because, according to the data, the window in which marketers can reach their target audience is very small. This trend is also not unique to one gender - Women (47/71), Men (59/90), Other (11/12) The purpose of any advertisement in a free app or game is to convert the viewer. Although conversions can take many different forms (lead generation, sales, app installs, etc.) marketers aim to interact with the advertisement and the addressee. Because of this fact, the study raises two questions that aim to gather information about the initial interaction between users and ads. Two cases are considered:

- Unsolicited user offering an advertising message for reward in the application used;
- Requested by the user promotional message for reward in the application used;

Unsolicited offering of an advertisement message is a situation where, under certain conditions (unsuccessful / successful end of a level, loss of life, opportunity to double points, etc.). The player is given the opportunity to view an advertisement clip, through a banner or pop-up that takes up most of the screen of the device, lasting from 10 to 60 seconds and receiving a game reward.

In this first case, the respondents are more likely to be negative about unsolicited advertising messages. In defense of this statement are the values of the arithmetic mean of the answers received from question 5 - 2.45(How many of those free games that you use daily have video advertisements?) and the cumulative percentage of negative answers ("Disagree" and "Rather disagree") 50.8%. The second situation considered is user-requested advertisement in the form of a button or option in the game itself. In this situation, the user can play quietly without having to view the advertisements. In case he wants to win a prize / game bonus, his application offers him the opportunity to view an advertisement clip. This situation is more favorable since the arithmetic mean of Question 9 (I will watch a video ad that will give me a prize in a free mobile game.) Is 4.04, i.e. in the positive spectrum of the scale. From the

comparison of the answers we can conclude that users of free mobile games are more likely to look at advertisements that will bring them game dividends if they reach them on their own.

The following comparison is related to the interaction of users with advertising messages in two different playback environments - free mobile applications and free mobile games.

As the results show, consumers' attitude toward interacting with the video ads, no matter how they reach them, is negative (2.11 for free mobile applications, and 1.82 for free mobile games). This data shows that in the second step of the adapted AIDA model, many potential users are dropping out. The mean values are as follows:

- Even If an app is beneficial for me, I will uninstall it if there are periodical video advertisements. - 3.02
- I had installed an app or a mobile game that I saw in a video ad in a free app or mobile game. - 2.90
- I understand why there are advertisements in free mobile apps and games. - 3.84

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

1. Respondents have a neutral attitude towards a mutually beneficial exchange of actions - the developer receives a reward because the user has viewed an advertisement and the second receives a free and finished product;
2. The survey respondents have a neutral attitude towards the one-time payment for using a free application without advertising materials in it;
3. Respondents rather understand why there are advertising materials in free apps and games;

When broken down by gender through a cross table, it is clear that male respondents are better able to understand why there are ads in free applications (66%) than women (52%). The significance of this question stems from the frustration that accompanies the viewing of advertising messages. If the user is aware of the "deal" that goes between him and the developer of the free app or game, then his initial negative reaction to the ad would be less. This, in turn, is a plus for advertisers because it increases the chances of the advertisement to convert.

A cross-table showing the relationship between age distribution and the answers to Question 14 "I don't mind free mobile games requiring me to watch video ads to play." shows a disproportionate trend between the age of the respondent and the answers to Question 14. The average of the answers to Question 15 (If I had to choose between a video ad and a banner that could not be removed in a free mobile application or game, I would prefer the second option) is 4.10. This may be due to the reluctance of users to interrupt their use of the application, even for a short time. According to data from this question, respondents estimate that it is better not to use 100% of the screen area of their smartphone and risk unintentional clicking of a banner, which action can bring them to a retargeting audience than to watch a maximum length video of 60 seconds.

Respondents are more likely to follow an advertisement if it is related to the content of the application they are using or the game in which they saw the advertisement. The statement is based on the average of the answers to Question 18 ("I would be more interested in advertising in a free mobile app if it corresponds to the content of the app") of 4.20. This can be confirmed indirectly through the development of in-app ads and the contextual targeting they are based on. There is a weak relationship between the two variables (Respondent country and propensity to buy an app to remove ads in it) from the survey data and correlation tests. The author uses GDP per capita as a measure of respondents' wealth and purchasing power.

Respondents surveyed have a neutral, rather negative, overall attitude towards video ads in free mobile applications and games. They prefer banners that don't interrupt their work and would stop using an app if there were many ads blocking them. However, they are reluctant to pay a lump sum to remove the promotional content. From the data collected, we can also conclude that video ads in this type of apps and games can be used not for conversion purposes, but rather for brand awareness campaigns, primary recruitment for the purpose of creating similar audiences that subsequently used for retargeting.

Hypothesis 1: Respondents are more likely to open an app page when the video ad is in a free app rather than a game. This hypothesis is confirmed because, from the data presented above, respondents are more likely to interact with a video advertising message displayed in a mobile application (Arithmetic mean on question 6 - 2.11(Every time when the opportunity arises I watch a video ad that will give me a prize in the free mobile game that I am playing)) than in a mobile game (Arithmetic mean on question 7 - 1.82(While I am using a free mobile app and a video ad is shown to me I will engage with the advertised content)). However, the two values are in the negative spectrum of the Likert scale, which means that the respondents would rather not interact in either.

Hypothesis 2: Respondents do not watch more than 10 seconds from a video ad displayed in a mobile game. (with a 30 second average message duration) This hypothesis is also confirmed because the survey respondents tend to look away from the screen during the advertisement (Average arithmetic on question 9 - 4.47(I will watch a video ad that will give me a prize in a free mobile game.)) and could close it most recently (question 10 arithmetic mean 4.49 (When a video ad is played on my phone I turn my sight away until the end of the commercial.); most video ads allow it to be interrupted after the tenth of a second). They are also more negative about the idea of looking beyond the seconds needed to end the ad to learn more about advertised content when it is shown during a game. However,

they would be more interested in the content of the ad in a free mobile app or game if the content corresponds with the content of the app used.

Hypothesis 3: Respondents tend to follow an advertisement message when it is conditioned to receive a prize in a free game. The hypothesis is rejected because respondents from Generation Z would not have opened the promoted link from the video ad (Average arithmetic on question 7 - 1.82). Nevertheless they would have watched the ad if it had provided them with a prize in some form (Average arithmetic to question 8 - 4.04(While I am playing a free game and a video ad is shown to me I will engage with the advertised content)).

8. CONCLUSION

Mobile technology and video, as a way of delivering a message, will continue to be an indispensable part of each brand's marketing tools, for two main reasons:

- Consumption of communication and multimedia equipment follows a trend of development aimed at enlarging devices, increasing accessibility and limiting the necessary acquisition costs. This trend creates a prerequisite for the increasingly rapid development of smartphones and all related technologies;
- Consumers are swarmed by advertisements that forcibly broadcast them from any screen. The development of video recorders, the influencer culture, and video-sharing applications allow us to theorize a future development of video advertising, in which it will not only deliver information but experience and emotions and completely displace the traditional structuring of advertising.

Each emerging generation is both an opportunity and a threat to business. The dangers they bring with them are related to the creation of new conditions that products, services and organizations must meet, as well as the disappearance of different businesses as a result of the change in the behavioral characteristics of their users. However, the new generation also brings with its opportunities to open new markets, link and restructure current ones, creating more sustainable and productive formations.

Future research on the topic may more closely trace whether there is a link between respondents' income and their willingness to pay a one-time fee or ad removal fee. It is also possible to compare generation Z with their millennial predecessors, since the two generations have significant behavioral differences.

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