



Customer Inspiration via Advertising Value of Pop-Up Ads in Online Games

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Abstract. Pop-up ads in online gaming is an emerging phenomenon on the internet that provide massive opportunities for business enterprises. Despite its importance for any businesses, do gamers get inspired by pop-up ads? To answer the query, we develop the conceptual model predicting customer inspiration through perceived advertisement value of pop-up ads in the context of online games. Based on the conceptual model, we first aim to highlight the factors that can motivate gamers to interact with pop-up ads in online games and gain perceived advertisement value of pop-up ads. After that, we intend to understand the impact of perceived advertisement value of pop-up ads on customer inspiration. Our study makes several notable contributions to the literature. First, we apply and extend Ducoffe model of advertisement value in pop-up ads, especially in online games. Second, we add audio and visual aesthetic factors in the existing Ducoffe model. Third, we primarily focus on predicting customer inspiration through perceived advertisement value of pop-up ads in online games.

Keywords: Pop-up ads · Online games · Ducoffe advertising model · Conceptual model

1 Introduction

It has been observed that due to the rapid proliferation of technology, the ways of entertainment have also changed dramatically in the last few decades. According to Chaney, Hosany [1], the television is not a popular source of entertainment anymore, and games are rapidly becoming one of the favourite pastimes among people of all age groups. More than 164 million adolescents in the United States play video games, and after tremendous revenue generation of \$43.4 billion by the gaming industry in 2018 now it is a need of time to study the lifestyle of these individuals to better understand

their interest and hobbies [2]. It also forecasts that the revenue of the gaming industry will increase from \$4034 million in 2018 to \$4654 million in 2020 [3].

Now this billion-dollar industry attracts the attention of the marketers, advertising agencies and game developers, they are keenly observing new research and development activities on the advertising through the online games [4]. It has been also observed that games have a long shelf life because once the player gets involved in the game, then the player will play that game again and again [3].

Past studies mainly focused on the In-game advertising effects and people attitude towards these In-game ads [5–7]. Little attention is given to measure the advertising value of the online game pop-up ads, and what is the influence of this advertising value on user inspiration from that specific advertisement, thus the following research questions emerged;

RQ1- What are the factors that influence the advertising value of pop-up ads?

RQ2- Do gamers get inspired by the perceived advertisement value of pop-up ads?

To answer these research questions, the present study employs a framework by Ducoffe [8], that is used to measure advertising value. Specifically, this study addresses the value of online pop-up ads in video games. Ducoffe's model was the first to propose the concept of the advertising effectiveness with the antecedents of informativeness, entertainment, and irritation [9]. Later, studies have added additional variables like credibility, incentives, and personalization [10–13]. Beyond applying Ducoffe's model to the relevant gaming industry, the current study also includes two new antecedents, namely visual aesthetic and audio aesthetic, to better understand the perceived advertising value of pop-up ads in online games and its effect on gamers' inspiration.

2 Literature Review

2.1 Ducoffe Advertising Model

Ducoffe [8] developed a model (with three antecedents comprising informativeness, irritation, and entertainment) for assessing the perceived advertising value of an ad. Brackett and Carr [14] added the credibility factor in the Ducoffe advertising value model. Xu [11] conducted a study on mobile advertising and included the personalization factor in determining perceived advertising value of mobile ads. Whereas, Kim and Han [12] also applied the Ducoffe advertising model to examine the value of mobile ads. However, use many researchers have contributed to the Ducoffe model through studying the effect of perceived incentives in mobile ads and its influence on creating the perceived advertising value of mobile ads.

Even though the gaming industry is a vibrant and entertaining medium that increases the emerging importance of online games advertising, we still lack understanding about the influential factors for the effectiveness of online games advertising [15]. Ducoffe advertising model is widely discussed to measure the advertising value of different advertising medium, like SMS [16], Facebook [17], Twitter [18], and mobile advertising [11]. However, to the best of our knowledge, no study has applied Ducoffe's approach to the context of pop-up ads via online games and how it can further impact on gamers'

inspiration. Therefore, the present study further extends the Ducoffe model by including the visual and audio aesthetics to assess the perceived advertising value of pop-up ads in online games and its influence on gamers' inspiration. In particular, the visual aesthetics refer to the combination and interplay of colors and themes, whereas audio aesthetics include the sound and music in the advertisement [19].

2.2 Gamers' Inspiration

Inspiration is defined as motivational state that compels individuals to bring ideas into actualization [20]. According to the [21], inspiration is basically intrinsic motivation because and it is stimulated by external sources. Although it is always challenging to describe what is the state of inspiration and how does it trigger? However, few researchers have easily explained there inspiration level by some action or by words. Thus, inspiration can be increased with consumers perceive emotional gratification from an external source, but because inspiration reveals new possibilities or the realization of new ideas, inspiration is also positively influenced by utilitarian value [22]. Inspiration can trigger through ads [23]. An ad is a source through which individuals get inspired. Similarly, when gamers experience a pop-up ad in online game context then they gain the perceived advertisement value, which in turn inspires the gamers (such inspiration can include a videogame app installation, wom, and etc.).

2.3 Conceptual Model and Hypotheses

Advertisement-Related Informativeness Value. According to Ducoffe [24] advertisement related Informativeness is defined as the extent to which the advertising medium provides users with resourceful and helpful information. Accordingly, information delivered to them via online game pop-up ads also needs to show qualitative features like accuracy, timeliness, and usefulness for the consumer [25]. Game ads cannot be avoided, thus reach of and exposure to the gamers is guaranteed. Games have a long 'shelf life' since many players repeatedly play them over long periods of time [3]. As online game pop-up advertisements are transmitted via the internet, consumers can confirm immediately whether the information in the advertisements is correct or not [13]. This means that the more informative a consumer feels advertising is, the greater is the value advertising will hold in that consumer's mind. Thus:

H1: Informativeness of an online game advertising message is positively correlated with advertising value.

Advertisement-Related Entertainment Value. Entertainment of the ads is refers to its ability to fulfill audiences' needs for escapism, diversion, aesthetic enjoyment or emotional release; a view which is also extended from the UGT [26]. In the advertising context, entertainment is pleasurable, enjoyable, and fun to watch [9]. Ducoffe [24] also confirmed that the ability of advertising to entertain can enhance the experience of advertising exchanges for consumers. Previous studies have confirmed the growing influence of entertainment, while the main advertising channel has changed from paper advertising to online advertising [13]. Entertainment is also a crucial factor for online

game marketing. Consumers, in general, rely on the games and other mass media for escapism, diversion, enjoyment and emotional release [1]. Thus:

H2: Entertainment of an online game pop-up advertising message is positively correlated with advertising value.

Advertisement-Related Irritation. While Informativeness and entertainment are positive predictors of the advertising value model, irritation serves as a negative indicator. Irritation refers to the extent to which consumers perceive that online game pop-up advertisements are irritating or annoying, involving negative feelings toward the advertisements [24]. Consumers may feel a sense of irritation from advertisements, as they may feel annoyed or insulted while viewing them [14]. Similarly, when an ad is perceived as intrusive, this can result in negative attitudinal responses because it interrupts the gameplay and deviate the attention of the player [27]. According to [28], consumers then feel confused about the advertising and react negatively to it, and irritation caused by incomprehensible or unwanted online game pop-up advertising messages may reflect negatively on the perceived value of online game pop-up advertising. Thus:

H3: Irritation of an online game advertising message is negatively correlated with advertising value.

Advertisement Credibility. The credibility of the advertisement refers to as truthfulness and believability of professing about brands in message content of advertisement in general [9]. Previous studies have also indorsed that credibility of the advertisement has a notable effect on the advertising value [17, 29, 30]. Advertising credibility depends not only on the content of the ad, but it also influenced by other factors like the company's credibility and the holder of the message [31]. Based on these arguments, we conclude that the credibility of the online game pop-up ads has positive influence on the advertisement value of the game pop-up ads. Thus:

H4: Credibility of an online game advertising message is positively correlated with advertising value.

Advertisement-Related Incentives. According to Varnali, Yilmaz [32] incorporation of incentives in the advertising can leads towards more favorable evaluation of the campaign. Previous studies also indorsed that people who received advertisement with some incentive significantly more responsive then those who received traditional advertisement [33, 34]. In the online game ads context incentives can be in the form of monetary benefits like discounts, coupons, free gifts and non-monetary benefits such as addition of point scores, promotion to next level and bonus life points for the players. Therefore, based on prior studies, we propose the following hypothesis:

H5: Incentives of an online game advertising message is positively correlated with advertising value.

Advertisement Personalization. Earlier researches in marketing found that customers are more leaned towards ads that are customized and pertinent to their demographic, user preferences, context, and content factors [35]. According to Malheiros, Jennett [36] personalization of the online game pop-up advertisement enhance the appeal of the ad, the reason behind this is customer perceived that there is a match between his/her self and product. Personalized messages has positive effect in traditional marketing channels on advertising value [37]. In the same way personalization in the online games, pop-up ads also enhance the effectiveness of the advertising. Therefore, we propose the following hypothesis:

H6: Personalization of an online game advertising message is positively correlated with advertising value.

Advertisement-Related Visual Aesthetic. It has been observed that the visual aesthetic of the advertisement is considered to be a significant predictor of user satisfaction and pleasure [38]. The term visual aesthetic generally associated with fine art and different researcher explore this area with different approaches such as beauty, responses to product and appeal [39, 40]. The visual quality of the online game pop-up ads actually attracts the attention of the user when the user is also getting pleasure and satisfaction while watching game pop-up advertisement. Thus, it is hypothesized as follows:

H7: Visual aesthetic of an online game advertising message is positively correlated with advertising value.

Advertisement-Related Audio Aesthetic. The use of music in advertising has a long history, and it is viewed as a strong platform for creating moods in advertising The use of rich media, particularly in the advertisement leads toward the better customer experience with the ad and thus create much more favorable attitude of the customer toward the ads and enhance the effeteness of the ads [41]. According to Fernández-Martínez, Hernández-García [42] audio content (sound and music) of the online game pop-up advertisement in general help most of the time to attract the attention and further leads towards creating particular response as well. Thus, we postulate that:

H8: Audio aesthetic of an online game advertising message is positively correlated with advertising value.

Pop-Up Advertisement Value. Advertising value defines as “a subjective evaluation of the relative worth or utility of advertising to consumers” [8]. Advertising value is an actual measure of advertising efficiency, such that specific advertisements provide sufficiently, for example, information and entertainment to the customer according to their need and desire [43]. According to Logan, Bright [44], the advertising value of online game pop-up ad is also associated with uses and gratifications theory: For example, players watch an advertisement for different gratification seeking motives like entertainment, informativeness, and incentives. An ad is a source of inspiration for individuals [23]. Gamers experience a pop-up ad in online gaming environment and gain the perceived advertisement value from the ad, which in turn becomes a source of inspiration for

gamers (it may match with their needs and desires that can further influence them to download the videogame or any behavioral action). Thus, we hypothesize in Fig. 1 that;

H9: A positive association exists between the advertisement value of an online video-game pop-up ad and gamers' inspiration.

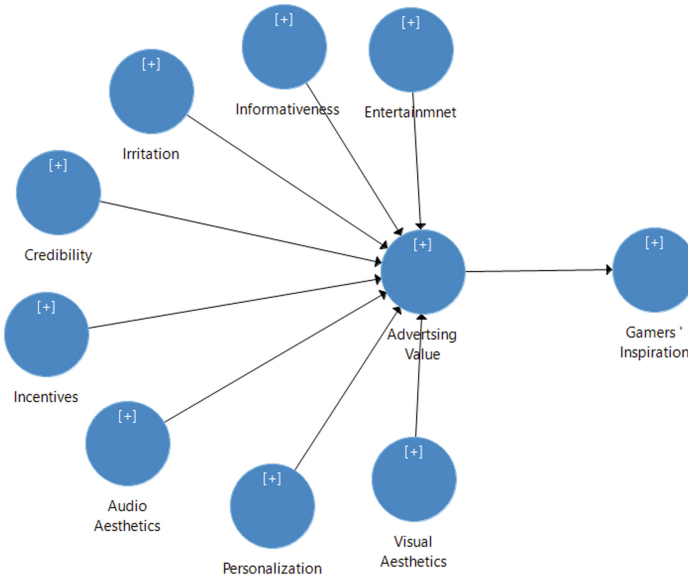


Fig. 1. Advertising model for pop-up ads in online games

3 Discussion

In this study, we have witnessed the importance of pop-up ads in online games. However, prior studies on pop-up ads in videogame environment lacks the implementation of advertising model to assess the role of factors affecting the perceived advertisement value of pop-up ads in online games, which in turn influences the gamers' inspiration. In this study, we initially proposed two research questions; what are the factors that influence the advertising value of pop-up ads? Do gamers get inspired by the perceived advertisement value of pop-up ads? To answer these questions, we have reviewed prior studies on Ducoffe model since the year 1995. We have found its implications in various platforms like Facebook, twitter, YouTube, smartphones etc. [9, 17, 18, 45]. Besides, these researchers have extensively used informativeness, irritation, entertainment factors and also added the importance of credibility, personalization, and incentives to assess the advertising value of an ad.

Our critical evaluation of prior studies on Ducoffe model, revealed that no study has yet investigated the factor affecting perceived advertisement value of pop-up ads in online games and its further effect on gamers' inspiration. Therefore, we apply the Ducoffe

model and further extend the model through the addition of audio and visual aesthetic dimensions. Such dimensions have potential to examine the perceived advertisement value of pop-up ads in online games, which in turn contributes to gamers' inspiration. Gamers' inspiration is state which can compel any players to convert ideas (gain through pop-up ads) into action (that can include, videogame app installation, word-of-mouth, referrals etc.)

4 Contribution and Future Research

This study contributes to the theoretical knowledge in several ways. For instance, we extend the use of Ducoffe model to assess the advertising value of pop-up ads in online games [8, 24]. Audio and visual aesthetic variables are added in the Ducoffe advertising model, especially in the context of pop-up ads in online games [8, 24]. We further assess the role of perceived advertising value of pop-up ads in predicting gamers' inspiration and we also extend the notion of inspiration that inspiration comes from the source i.e., pop-up ads in online games [23]. This study is conceptual in nature and there is a dire need for another study that can empirically extend the study model. The concept of inspiration can be applied to other advertising avenues like youtube, social media sites, and vehicle ads.

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