



Influence of advergaming on customer buying decision

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Abstract :

The purpose of this paper is to explain and support empirically about impact on advergaming on customer buying decision in all three stages i.e. pre, during and post purchase. Advergaming can be described as advertising technique where games are used as a means of advertising.

Data collected from 213 student respondents, who had mobile advergaming experience by Self-administrated questionnaire. Correlation and excel is implemented for data analysis.

The findings of this study are important managerial implications as in all three stages what information customers looks can help company to study with help of questionnaire and design its advertisement as per that to push customer to action i.e. actual purchase, it might be first time or repeat purchase.

Through advergaming society can be educated regarding social issues, products value to improve lifestyle and safe handling of product.

Index Terms –Advergaming, Customer Buying Behavior, Strategies, Component

1. Introduction

Digitalization was always an important topic of discussion among businessmen and academicians. Due to COVID-19(lockdown & social distancing), acceptance of this ICT has grown with very fast pace. It is not limited to youth but even accepted by older generation in India. The three major factors behind this are (i) increase in number of internet users (795.18 million to 825.30 million i.e. 3.79% from December 2020 to March 2021 as per Telecom Regulatory Authority of India-TRAI disclosed on 27th August 2021 and India is the second largest Internet user country in the world), (ii) smart phone sale have significantly accelerated in last few years(150 million smartphones sold during 2020 in India) and (iii)duration of spending time on mobile has also increased to approximate 5 hours per day i.e. 4times increased from last year and India is top in average time spend on smartphones. All this is because recreation activities were limited to digital platform during COVID 2019. The outcome can be seen as gaming industry have expanded very fast and wildly to \$930 million and ranked one in the world (published Feb 2021). According to KPMG, Indian gaming market will grow to 113% by 2025. So, Gaming Industry is in lime light now. The main objective of firms is to make target market aware, then influence their attitude and finally to buy the product (Chukwu, Kanu and Ezeabogu2019). Advertisers are always looking for innovative and effective channels to communicate with their target audience. New and effective channel is emerging through gaming process. The process which includes advertising and gaming is refers to Advergaming (DinkoJukic 2019). Advergaming is the online/offline video games which contains a specific brand with aim to market it (Alina Irina 2013, Sharma 2014). Marketers are attracted to implement advergaming for their promotion strategy. This have given a momentum to study various aspects of advergaming. Especially to study, its influence on customer buying behavior process -Pre, During & Post purchase Behaviors. Thus, objective of this research are (i)to study current trends in Advergaming in India (gender preference, component preference, mode preference, platform preference and particular game preferred), (ii) to identify the components of Advergaming favorable and unfavorable w.r.t. customer taste and preference in gaming and, (iii)to study the influence of advergaming on consumer buying behavior process i.e. pre, during and post purchase.

2. Literature Review

2.1 Advergaming

Advergaming is the process to communicate company's information related to logo, brand, product features, benefits to customer i.e. player of the game (Sharma M., 2013). It combines the integrated marketing communications with entertainment element of game (DINKO 2019, Joaquin, José, Carla, Lisa, 2015). It is a video game developed around the brand (Wise et al., 2008, Chen & Ringel, 2001) and advertisement helps to impact the viewer mind (Katke, 2007). It is deserved superior consideration within exclusive entertainment presentations (Okazaki & Yagüe, 2012). Thus, advergaming is online/offline video game designed with motive to communicate brand message to target audience to have desired results.

This is an opportunity to build pleasurable content in an advertisement for the brand establishment and recall (Wise, Bolls, Kim, Venkataraman, Meyer, 2008 and Wise, Bolls, Kim, Venkataraman, Meyer, 2008). Advergaming is considered as one of the best tool for advertisement as it helps advertise to expose customer

for more duration and to specific brand. This results in high brand recall and desired result. Desired contains of advergaming for its successful implementations are as follow:

(i) Ethics: It is very importance content of advergaming. If false message is incorporated in game about brand, then it affects brand and game uses both adversely. Ethical concerns used in video games as a promotional tool has an effect on both attitude toward advergaming and the presence of brands so advertisers should be careful when trying to use advergaming as “advertising in disguise” (Joaquin, José, Carla, Lisa,2015). Advertiser should ensure that content of ads is clear, correct, relevant and concrete (Eshra&Beshir, 2019).

(ii) Do not disturb speed: Virtual reality and digital marketing have a unique feature that contributes to the reality of the game itself and brands are extremely desirable in virtual reality (DINKO JUKIĆ 2019). But it annoys or irritates the game player (target audience) if it disturbs the speed or continuity of the game.

(iii) Enjoyment: Crucial ingredient of advergaming is enjoyment / entertainment to mind by achieving business objective (Haider & Shakib, 2018). Entertainment has the ability to fulfill an audience's need for relaxation, digression, aesthetic enjoyment or emotional enjoyment (Huq et al., 2015). Recreation is main motive behind using the mobile (James et al., 2016) and video game (Eshra&Beshir, 2019). Feeling of joy and pleasure are important features of the game (DINKO, 2019).

(iv) Connection: The game player must feel connected with the brands advertisement he exposed to. It is said that advergaming induces to educate consumers about the benefits, specialties and identity features of the products in general (DINKO 2019).

Research has been carried in this area from long time but it has various dimensions yet to explore. This is the significant mode of communication from business to consumer. In previous research Advergaming has been considered alone of powerful tools for brand recall and brand positioning. Few research carried out in its implication on whole customer buying behavior process. It means from awareness to repeat purchase.

2.2 Consumer Buying Behavior

Consumer buying behavior refers to the mental, emotional and physical efforts customer bears to select, purchase, use and dispose of products and services for satisfying their need and want (Wilkie, 1995; Schiffman& Kanuk, 2009 ; CHUKWU, Kanu and Ezeabogu,2019). It involves individuals or groups activities to choose, buy, operate products, services, concepts or experiences to gratify their needs and desires (Eshra&Beshir, 2019). Consumer behavior involves the psychological processes that consumers go over in recognizing their needs, finding ways to solve these needs, making purchase decisions, interpret information, make plans, and implement these plans (Anderson & Golden, 1984; Madhavan, Chandrasekar, 2018). Thus, Consumer buying process starts from feeling deprived of anything and putting all effort to acquire the product which can satisfy that particular need or want. For better understanding of consumer buying decision process marketers need to analyze what consumer buy, where they buy, how and how much they buy, when and why they buy (James et al, 2016 ;Eshra&Beshir, 2019). Buyer decision process has five steps: need recognition, information search, evaluation of alternatives, purchase decisions and post-purchase behavior (Ofosu, 2013 ;Eshra&Beshir, 2019).

2.3 Consumer Buying Behavior and Advertisement

Companies spend major part of their budget on advertisement for promoting their products/services. These advertisement stimulus consumers buying behavior (Abideen&Latiff, 2011; CHUKWU, Kanu and Ezeabogu,2019). The main purpose of advertising is to impact on buying behavior (Kumar& Raju,2013).The advertising has great impact on customer for buying product and create awareness (Bymolt, Claasen, & Brus,1998; Kumar & Raju,2013). Advertisement even influences perception, attitude, life style and culture of country (Latif &Abideen, 2011 ; CHUKWU, Kanu and Ezeabogu,2019). The purchasing funnel is a marketing model explains how effective marketing communication push the customers to action – actual purchase (Alina Irina 2013). Customers have more positive attitudes toward the advertisements have positive attitudes and higher purchase intentions toward the brand (Shamadasani, Stanaland, and Tan, 2001 ;Wise, Bolls, Kim, Venkataraman, Meyer, 2008).

Thus, Advertisement is a dominant and leading weapon in all marketing tools due to its positive impact on consumers buying behavior. Customer actions can be influenced positively with attractive advertisements.

2.4 Advergaming and Consumer Buying Behavior

Advertising helps to inform; to persuade; to teach; and to entertain target customers about the brand(M Sharma. 2013).The advergaming is a significant innovative advertising tool for brand communication (Winkler and Buckner,2006 ; Wise, Bolls, Kim, Venkataraman, Meyer, 2008). A modern, creative and innovative advertising strategy shows an important role in accelerating sales of a company, building the positive relationship, spreading the awareness and developing the perception of a consumer (Eshra&Beshir, 2019). Combining advertising purposes with entertainment factors drives better consumers' attention, enhancing interest, create desire and encourage action (Alina Irina 201;Huizinga, 2016;DINKO 2019). Advergaming is emerging as significant promotion tool for young target customers (Terlutter& Capella, 2013; Joaquin, José,Carla,Lisa,2015). Due to internet evolution, popularity of video game the virtual world of gaming is gaining momentum (sharma,2014). In digital era mobile phones have a big role in our life (Eshra&Beshir, 2019) Internet is becoming a new way to shop, successfully integrated e-commerce in their marketing activities and mobile marketing has emerged as exciting opportunity that will enable them to reach their consumers (Sunderaraj, 2018). Without intermediate all purchase process is completed. So online advertisement is very important decision-making factors for buyers. Adverdgaming is emerging tool in online platform with entertainment aspect.

The perception of the quality, awareness of the product and consumer opinion drives the consumer buying decision. The innovative advertisements help to frame customer perception about the brand. Advergaming has been identify as new innovative advertising strategy includes entertainment and push purchase decision making. Very few research has been conducted to analysis the effectiveness of advergaming empirically on all three stages of buying process (pre, during and post). This research paper focusing this gap try to empirically analysis the effects of advergaming on per, during and post purchase of target customers. Thus, hypothesis formulated are:

H1 :Advergaming have significant impact on Pre-Purchase Behavior

H2: Advergaming have significant impact on During-Purchase Behavior

H3: Advergaming have significant impact on Post-Purchase Behavior

Table.1. Linkage between Objectives, Hypothesis, Variables and Questionnaire

S. No.	Objective	Hypothesis	Variables	Statements in Questionnaire	
1	To study current trends in Advergaming in India (gender preference, component preference, mode preference, platform preference and particular game preferred).	NA	Gender preference, Component preference, Mode preference, Platform preference particular game preferred	Gender Do you play games on mobile/ desktop/Laptop? How much time you spend on Playing game on mobile/laptop/desktop? Mostly you play game on Laptop, Mobile, Desktop or Other. You play the game online/Offline/Both. List the game you played the most in last 1 year. Can you please list the brand name you saw during playing the game?	
2	To identify the components of Advergaming favorable and unfavorable w.r.t. customer taste and preference.	NA	Identified with critical and creative reading and open-ended questions.	How you feel to see the brand names while playing game. Level of impact of advertisement on you was high, moderate, low, neural, Negative (Please mention reason for it). How many times you bought brand product after noticing it while playing game in last one year.	
3	To study the influence of advergaming on consumer buying behavior process.	Pre-Purchase	Advergaming have significant effect on Pre-Purchase Process	Problem Recognized	Can you recall brand logo or name? Brand was attractive It was informative I like it after watching game
				Information Search	It generated excitement about product You went for searching more information about it It pushed me to online/offline store for purchasing it

				Evaluation Process	It builds positive image of brand You felt "I want it"
		During Purchase	Advergaming have significant effect on During Purchase Process.	Purchase	I purchased the product
		Post Purchase	Advergaming have significant effect on Post Purchase Process.	Satisfaction/Dissatisfaction	I am still using it Feel happy to see it in ads while playing(reinforcement).
I like to recommend to others (overall effectiveness of Advergaming)					

3. Research Methodology

The research study is empirical in nature. The Primary data is collected through self-administrated questionnaire. Questionnaire is designed in two parts. Part one consists the demographic and preferences detail. And Second part consists of advergaming related to customer buying behavior, on 5-point Likert scale (Strongly agree, Agree, Neutral, disagree, Strongly Disagree). Pilot Study was conducted to validate the reliability of questionnaire and on that basis few final alteration was done. Then, it was floated among respondents, 413 selective responses were collected. The geographical area of this research is limited to Kothrud Pune.India region Cronbach's alpha coefficient was conducted to confirm reliability and validation test of research items. Cronbach's alpha should be higher than 0.7(Cronbach's Alpha 0.94 for this study). The coefficient of determination (R^2) is calculated for each statement of questionnaire (Shown in Figure: 1). Schroer and Hertel recommend that R^2 values of more than 0.672 are highly relationship between variables and strongly significant, 0.33 are defined as moderate relationship between variable but significant, and less than 0.19 is weak. The R^2 value for statement of questionnaire are as follow : I like it after watching game($R^2=0.6$), It generated excitement about product($R^2=0.7$), you wanted to search for more information after watching it in game($R^2=0.6$), You felt "I want it"($R^2=0.6$), It pushed me to online/offline store for purchasing it($R^2=0.6$), It build positive image of brand($R^2=0.6$), I purchased the product($R^2=0.6$), I am still using it($R^2=0.8$), I like to recommend to others ($R^2=0.6$). All statements had R^2 value between 0.6 to 0.8 so it shows strong relationship. Can you recall brand logo or name ($R^2=0.4$), Brand was attractive ($R^2=0.4$), It was informative have ($R^2=0.6$)were between 0.4 to 0.5 so its also have significant level of

relationship with independent variable (Customers buying Behavior). It enables this research to proceed with an assessment of the framework of consumer buying behavior. Further R^2 value was considered collective of all statements associated specifically for Post Purchase($R^2=0.6$), During Purchase($R^2=0.6$) and Post Purchase ($R^2=0.8$) consumer Behaviors. All R^2 value outcome is equal to or more than 0.6 so its also shows significant level of relationship with variable and advergaming strong influence on customer buying behavior at all three stages of purchase. SPSS and Microsoft Excel were implemented for calculation purpose.

4. Analysis, Findings and Discussion

The most respondents were in age of 21-25 years. There was 63% male and 37% female. In survey 79% respondents had gaming experience on either of mobile/laptop/desktop. Remaining 21% were removed for further survey as did not have gaming experience. The substantial respondents were involved and familiar with gaming is the positive aspect for advergaming future. There is significant increase in playing time in last two years (1-5 hours is 58%). Due to pandemic most of time was spend at home as Mobile/ laptop etc. became tool to keep ourselves engaged. Thus, gaming industry have shown significant growth as supported by this survey also. Mobile gaming is becoming more popular since it is handy and smart phones are very economical now (88% of respondent used mobile to play games). Mostly online mode is implemented for playing games (55% of respondent – Mostly online). 84% of respondent have positive attitude towards advertisement while gaming. But advertisement should not disturb their speed and continuity. Thus, scope of advergaming is increasing in this Digi-world, PUBG, BGMI, Call of Duty, Mobile Candy Crush, LUDO and Subway are the most popular games in Indian youth.

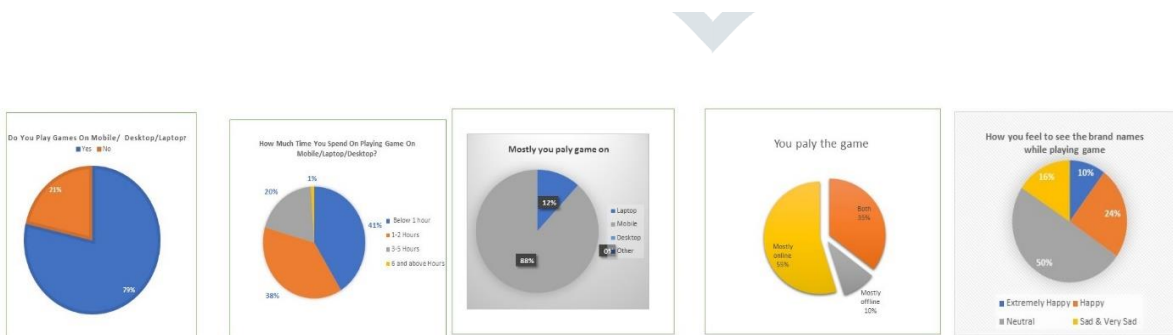


Table.2 :Level of impact of advertisement

Highly influencing	52%
Moderate influencing	38.4%
Not influencing	9.6%

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Rows	1572.08216	212	7.415481885	16.04637187	0	1.174032018
Columns	72.15023474	11	6.559112249	14.19327239	7.67037E-27	1.792745591
Error	1077.683099	2332	0.462128258			
Total	2721.915493	2555				

Items	Can you recall brand logo or name	Brand was attractive	It was informative	I like it after watching game	It generated excitement about product	You went for searching more information about it	You felt "I want it"	It pushed me to online /Offline store purchasing it	It builds positive image of brand	I purchased the product	I am still using it	I like to recommend to others
Mean	3.6	3.7	3.5	3.4	3.6	3.3	3.3	3.2	3.5	3.2	3.3	3.2
Standard Deviation	0.9	0.9	0.9	1.0	0.96	1.1	1.0	1.1	0.9	1.1	1.1	1.0

Standard deviation and mean are the most valuable index to determine variability of response in random sampling. SD must lie between plus 2 and minus 2 for acceptable result. For this study SD fulfills the criteria so again data collected is validate i.e. data is suitable for research endorsement. The influence of advertising means the power of advertisement to change consumers thinking and impression about the brand. It must push customer to action i.e., purchase. In advergaming impact of advertisement is high. So, it can be the best innovative tools to influence customer purchase decision and results into business profitability and enhance brand recall. Mobile/ laptop etc. became tool to keep ourselves engaged. Thus, gaming industry have shown significant growth as supported by this survey also. Mobile gaming is becoming more popular since it is handy and smart phones are very economical now (88% of respondent used mobile to play games). Mostly online mode is implemented for playing games (55% of respondent – Mostly online). 84% of respondent have positive attitude towards advertisement while gaming. But advertisement should not disturb their speed and continuity. Thus, scope of advergaming is increasing in this Digi-world, PUBG, BGMI, Call of Duty, Mobile Candy Crush, LUDO and Subway are the most popular games in Indian youth.

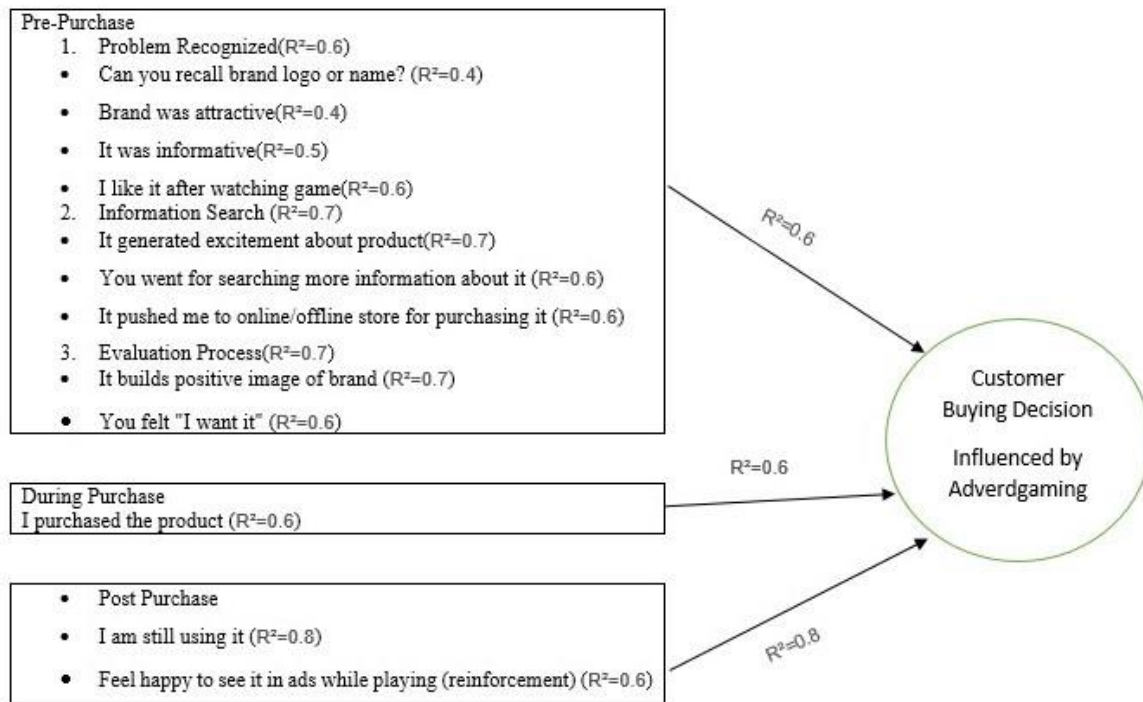


Fig 1: Framework of Customer Buying Decision Influenced by Advergaming

Activate Wir
Go to Settings

All three Hypothesis (H1:Advergaming have significant impact on Pre-Purchase Behavior, H2:Advergaming have significant impact on During-Purchase Behavior and H3:Advergaming have significant impact on Post-Purchase Behavior) are supported as each R^2 value is more than 0.3. This shows the impact of advergaming on customer decision making at three stages of purchase decision. The framework (Figure 1) developed and tested empirically will help managers to develop their advergaming strategy more focused and intensive at different purchase decision making stages, which will result in marketing success.

Conclusion

Advergaming is getting lots of momentum because it consists of a strong entertainment aspect and emerging digital life style of customers. Advergaming is one of the newest tools through which advertisers are creating entertaining experiences to engage young adults (Cicchirillo and Mabry, 2016). A wide population of Indian has a smart phone with internet connection. Due to COVID-19, digital games have become the most prominent recreational facilities in lockdown. Advergaming is the online/offline video games which contain a specific brand with aim to market it. Many researches have been conducted on advergaming brand recall potential and its content design. But very few researches have been conducted to test empirically its impact on customer purchase decision process. This research study contributes to the body of knowledge of Advergaming and its impact on Consumer Decision Making process. In all three stages of purchase customers have a need of different set of information. With the help of the framework formulated, companies can design their advertisements more specific, accurate and precise to attain the goal of advertisement. This helps companies to influence customer buying behavior successfully. As advergaming has a significant influence on customer

behavior so its marketers responsibility to be more conscious about content of advergaming. The contents must be informative same time factual and valuable. Otherwise, incorrect or untruthful information can create negativity about advergaming and it may drop its impact. Trust needs to be maintained. In social implication through advergaming society can be educated regarding products value to improve lifestyle and safe handling of product.

Limitation of study is that respondents were UG and PG students between age group of 18-25 and geographically limited to Pune. Future research can be conducted on reinforcement strategy of advergaming in post purchase stage and content of advergaming.

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