Brain Inspired Visual Effects and Animation Psychological Computing Impact in Indian Television Advertisement Pre and Post 2000s

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Abstract. Technology in its immense boom in the last decade has made us aware of a lot of ways to increase consumer potential and engagement with different products in various spheres and aspects of production. Taking this idea forward, the main idea of this study is to identify the major visual effects facets being used and how they contributed towards consumer engagement. In this regard, a pilot study was done and then questionnaire has been prepared which was completed by 369 participants between the age group 18-60 years. Hence the main aim of this work is to use statistical data to understand how the last decade has proved beneficial for the Advertising industry through the use of visual effects Statistical analysis is used to interpret the data.

Keywords. Cognitive Science, Brain Inspired Animation, Television Advertisement, Performance Measurement

1. Introduction

The idea of graphic design is vast. Generally, people have an idea of graphic design, but people may have different ideas about the same thing which can be portrayed by different medium of art. Advertising is a form of communication used to sell products and services to the targeted audience. An animated character can become the face of a brand in India. A suitable space has been created for animation and VFX in the advertisement world because of its scope to evolve and adapt to creativity. VFX is very appealing to the younger audiences because it connects quite well with them. Due to easy availability of technology, VFX is frequently used as compared to 10 years ago. Visual effects domain is based on new technologies. new technologies offer a new way of re telling an old story. The rapid development of digitalization in the mid-90s brought about a new phenomenon by making use of new technologies in telling stories.

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It is evident that many advertisers have started using graphics and extensive use of visual effects in the recent past one decade.

According to the 2020 September report by KPMG on Media and Entertainment Sector it is seen that Animation, VFX and post-production segment revenue is confidently rising from financial year 2016. Overall Revenue increased to 62 Billion in FY17 from 53 Billion in FY16, it increased to 74 Billion in FY18 and 88 Billion in FY19. In the past four years Overall Revenue almost doubled from 53 Billion in Financial year 2016 to 101 Billion in Financial Year 2020.

Table 1. Animation, VFX & Post-Production Revenue in Billion (INR) from the FY 2016 to 2020.

Financial Year	FY-16	FY-17	FY-18	FY-19	FY-20
Animation, VFX & Post-Production Revenue in Billion (INR)	53	62	74	88	101

This research paper should not be mistaken as a software-specific guide, but should be viewed as a critical overview of how VFX has evolved the Advertisement industry.

2. Research Methodology

TV Audience can be classified into two categories 18-30 age group and 31-60 age group where 18-30 age group are young citizens born after 1990 and 31-60 age group could be slightly old mentality age group born before 1990. VFX is assumed as very appealing to young audiences because it has a lot of popular culture references. At present VFX in India is much easier to produce than 10 years ago with the Advancement in Computer technologies and availability of new software’s which are comparatively easy to use and run on the modern-day super computers.

We have conducted survey of about 369 participants from four different cities which is geographically closely located in four different directions from central India, that is Hyderabad, Mumbai, Patna and Guwahati between the age group of 18 to 60 years. Pilot study was done by interacting with small sample of people from the four places which are selected for the study to understand if VFX in advertising plays a role in product persuasion of a particular brand? And to know what are the products which people of that place commonly use and if the advertisement is shown on TV? Majority of them responded saying advertising does play a role in brand persuasion and three products Colgate (toothpaste), Surf (Washing powder) and Lipton Tea (dip tea) were shortlisted to study the role of VFX and Animation in TV advertising.

Links of Old advertisement in which VFX was not much used and New Advertisement from the past few years which has significant use of VFX was selected for all three products Colgate, surf and Lipton tea. Survey was forwarded to Around 162 participants from the Mumbai city, 77 participants from Hyderabad, 80 participants from Patna and 50 participants from Guwahati from the age group of 18-60 years. People who use all the three products Colgate, surf and Lipton tea were given the

online google forms survey during which the participants had to watch the old video and new video embedded in the google forms and take the survey.

3. Result and Analysis

As per the Figure 1, we can see that of total 162 participants from Mumbai, 108 participants are Female and 54 participants are Male. Out of 77 participants from Hyderabad 35 participants are Female and 42 participants are Male.

Figure 1. Graphical representation of number of participants from different place.

Out of 80 participants from Patna 40 participants are Female and 40 participants are Male. Out of 50 participants from Guwahati 30 are Female and 20 participants are Male.

Figure 2. Graphical representation of number of participants from different cities and how many people prefer Colgate old advertisement and how many prefer Colgate New advertisement.

As per Figure 2 we can see that of total 162 participants from Mumbai, 96 participants prefer Colgate New advertisement and 66 participants prefer Colgate Old advertisement. Out of 77 participants from Hyderabad 39 participants prefer Colgate New advertisement and 38 participants prefer Colgate Old advertisement. Out of 80 participants from Patna 41 participants prefer Colgate New advertisement and 39 participants prefer Colgate Old advertisement. Out of 50 participants from Guwahati 30 participants prefer Colgate New advertisement and 20 participants prefer Colgate Old advertisement.

Figure 3. Graphical representation of number of participants from different cities and how many people prefer Surf old advertisement and how many prefer Surf New advertisement.

As per Figure 3, we can see that of total 162 participants from Mumbai, 120 participants prefer Surf New advertisement and 42 participants prefer Surf Old advertisement. Out of 77 participants from Hyderabad 43 participants prefer Surf advertisement and 34 participants prefer Surf Old advertisement. Out of 80 participants from Patna 52 participants prefer Surf New advertisement and 28 participants prefer Surf Old advertisement. Out of 50 participants from Guwahati 29 participants prefer Surf New advertisement and 21 participants prefer Surf Old advertisement.

Figure 4 shows total 162 participants from Mumbai, 90 participants prefer Lipton Tea New advertisement and 72 participants prefer Lipton Tea Old advertisement. Out of 77 participants from Hyderabad 51 participants prefer Lipton Tea advertisement and 26 participants prefer Lipton Tea Old advertisement.

Figure 4. Graphical representation of number of participants from different cities and how many people prefer Lipton Tea old advertisement and how many prefer Lipton Tea New advertisement.

Figure 5. Age group of participants who agree that advertisement with VFX increase customer engagement towards the product

Out of 80 participants from Patna 47 participants prefer Lipton Tea New advertisement and 33 participants prefer Lipton Tea Old advertisement. Out of 50 participants from Guwahati 32 participants prefer Lipton Tea New advertisement and 18 participants prefer Lipton Tea Old advertisement. We can clearly see that age group of 18-30 are more interested in watching TV Advertising with VFX when compared to age group of 31-60.

4. Conclusion and Future discussion

The research examines the physiological impact of VFX advertisements on the viewers. The result suggests that due to the improvement of VFX, the advertisements have now become more interactive. I divided the consumers in two groups and got the result, the younger age groups' engagement of product is higher than the older age groups. The older age groups were habituated to watch the advertisement of the last decade. In this type of advertisement, the effect of VFX was not much. But recently aired advertisement of the same products attracts consumer more because nowadays all the advertisements are mostly done with the help of Visual effects. VFX will have a great future as it associates the viewers with the product. So, they want to consume more. It will increase the demand of the product and thus the economy of the country will rise.

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