



The Demographic Characterisation of E-Advertisement

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Abstract

E-Advertisement is still at infancy stage in India although traditional advertisement has been witnessing changes at significant speed. Business Houses, Promoters and Advertisers have now changed their advertising strategies by incorporating e-Advertisement in their promotion campaign as slowly and steadily e-Advertisement's benefits has brought e-Advertisement at the center stage. This research paper focuses on Internet based e-advertisement and studies **association between** various demographic variables and the preference of e-advertisement by collecting data from 98 respondents using self-administered questionnaire wherein different statistical tools have been applied for analyzing the collected data. The demographic variables such as gender, age, qualification, annual income and average time spent online were used in this study. Chi-Square test was used to analyse the result.

Keywords: E-advertisement, gender, age, qualification, annual income.

Introduction

e-Advertising is a paid, non-personal and targeted form of communication (audio or visual or both) through electronic medium by an identified sponsor with a sole objective to promote a Product (good, service or idea) and persuade the designated viewer/receiver to acquire such a Product. The e-advertising term is broadly categorized on the basis of types of advertising which includes Search Engine Advertising, banner advertising, Social Media Advertising, email advertising, online video advertising and additional types of advertising. e-Advertisement has evolved to become a key factor in which companies started achieving significantly fair returns for their products and services. These advertisings appear on the internet more often than traditional advertising media such as television and newspapers.

The main factors which are influencing the growth of e-advertising market are increased focus on digital media, cost effective, smart phone penetration and rising numbers of advertisers on social networking sites. Statistics shows that India is ranked second with 692 million Internet Users with China at first rank with 1050 million Internet Users (source: statista.com).

The main factor that is restraining the growth of e-advertising are lack of skilled personnel and still use of tradition advertising factors such as television and newspapers.

Demographic Characterisation

Demography is defined as the statistical data about the characteristics of the population such as age, gender, income, educational qualification, occupation, marital status and other similar parameters. Thus *Demographic Characterisation* is a description of the distinctive nature or features of any entity based on any of its demographic parameters stated above. In context of this research paper, *Demographic Characterisation* intends to study how such demographic parameters are associated with e-Advertisement.

Literature Review

Abd Aziz et al (2008) in his research paper "*Exploring consumers attitude towards Web advertising and its influence on Web Ad usage in Malaysia*" stated that, the advancement in technology leads as to make use of internet in each and every part of our lives, which results to spent most of the time in internet. This develops enhanced potentials and paves way for internet users

to engage in online advertising. Therefore, advertising in online enable the marketers to reach their consumers through internet. Also it helps to create awareness about their products, services, and to improve sales in the future.

Belch and Belch(1998) in his book *“Advertising and Promotion: An Integrated Marketing Communications Perspective”* states that one of the unique advantage of online advertisement is that it is comparatively cheaper than traditional media advertisements. A wider range of target audience and geographical areas can be easily reached through online advertisements.

It was inferred from the findings of this Research Paper that online advertising has an upper hand over traditional media advertisements when it comes to the cost of advertisements, reach for targeted audience and also of geographical areas. It can also be inferred that since relatively larger audience and greater geographical areas can be reached on same budget comparatively with the traditional advertisements, the cost of online advertisement comes down thereof.

Lori D. Wolin, Pradeep Korgaonkar, (2003) in their Paper *“Web advertising: gender differences in beliefs, attitudes and behavior”* attempted to observe that if gender differences are apparent in beliefs, attitudes and behaviors associated with Web Advertising and if so, to assess the strength of these differences in addition to flexibility of interactivity research in comparison to Traditional Advertising. The findings from this Paper indicate that male versus female hold more positive beliefs and less negative beliefs about Web Advertising relative to more traditional media. Advertisers may direct advertisements on Web for males and on traditional media such as Radio, Newspaper and Magazines for females.

It was inferred from the findings of this Research Paper that when it comes to Website behavior choices, males are more likely to choose functional and entertainment sites while females are more likely to choose shopping sites. Also, as Females were found to be more concerned about privacy, thus Marketers must concentrate to convert Visitors (to a Website) Females to Purchaser Females.

Dennis A. Pitta (2010) in his article *Trends in Online Advertising* discussed various features and benefits that the website

socialmedia.com possesses. But interestingly, it has pointed out one key impact which the social media advertising in general has lined up against the traditional advertising. According to the Author, the social media approximates a two-way one-to-one marketing message. The description is complex, but it is accurate.

According to the Paper, the Social media offers a word of mouth rich message to a relevant audience, which is the one-to-one element. In addition, it allows advertisers to monitor consumers’ reactions to the message: the two-way element.

Kelly, Kerr and Drennan(2010) in their research paper *“Avoidance of advertising in social networking sites: The teenage perspective”* this study suggest that teenagers have very high levels of advertising avoidance and are skeptical towards advertising on their online social networking sites. They have an inherent distrust of commercial messages in the online social networking environment; however they are extremely trusting with the information that they disclose online.

It was inferred from the findings of this Research Paper that advertisements floating on the social media platform(profiles) of Teenagers have nil effect on them as far as transition from viewing advertisements to making actual purchase is concerned. Such advertisements tend to irritate the Teenagers who have inclination towards avoiding such advertisements rather than viewing those advertisements are concerned. Since Teenagers are comparatively more Internet savy than their older counterparts, they are more acquainted with purpose and intent of such advertisements and therefore have a distrust towards them.

Research Methodology

The study highlights the impact of demographic variables on e-advertising. This research is a quantitative research and it is normally conducted with a questionnaire, and it has emphasis on testing. The quantitative data is based on meaning derived from the collected data and analysis is performed through the use of SPSS statistical software.

Data Collection: The data collected for the study include primary data. The data has been collected via survey using a structured questionnaire based, which intends to seek information about the demographics,

attributes and liking of e-advertisements of the respondents.

The data collection method is basically a structured survey includes (i) designing the survey tool i.e. the questionnaire, and (ii) distributing or mailing the questionnaire to potential respondents. Pilot test is a small-scale study use to refine and improve further confirmatory study. By conducting pilot test, researchers will be able to assure that the respondents understand the questionnaire the researchers intended to carry out (Saunders et al. 2012). A pilot study has been further conducted with 20 respondents.

Sampling Method: The sample size considered for the research was 98. Both male and female participants of all the age groups have been selected to avoid gender and age imbalance. One of the requirements to participate in this survey was that the participant must be aware of e-advertisement.

Research Objective:

1. To study the association of gender, age, qualification, annual income and average time spent online on preference of e-advertisement.
2. To analyse the reason behind the existing association.

Data Analysis and Result

The details regarding the collected data was understood by the reasoning application called “analysis of data”. The main purpose of data analysis is to answer the research problem by examining the data and the model by assigning facts and figures. The specific problem was resolved by taking use of the highlighted necessary information from the collected data. The primary data collected through the research was analysed using the statistical tools in SPSS software. Chi-Square Test was conducted using SPSS to check the association between e-Advertisement and various demographic variables viz. Gender, Age, Qualification, Annual Income and the Average Time Spent on the Internet.

H_{A1}: There is association between Gender and preference of e-Advertisement

Table 1(i): Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Gender * preference for e-Advertisement	98	100.0%	0	0.0%	98	100.0%

Table 1(ii): Gender * Preference for e-Advertisement Crosstabulation

			preference for e-Advertisement			Total
			Yes	No	Neutral	
Gender	Female	Count	13	2	13	28
		Expected Count	12.9	6.3	8.9	28.0
		% within Gender	46.4%	7.1%	46.4%	100.0%
		% within preference for e-Advertisement	28.9%	9.1%	41.9%	28.6%
	Male	Count	32	20	18	70
		Expected Count	32.1	15.7	22.1	70.0
		% within Gender	45.7%	28.6%	25.7%	100.0%
		% within preference for e-Advertisement	71.1%	90.9%	58.1%	71.4%
Total	Count	45	22	31	98	
	Expected Count	45.0	22.0	31.0	98.0	
	% within Gender	45.9%	22.4%	31.6%	100.0%	
	% within preference for e-Advertisement	100.0%	100.0%	100.0%	100.0%	

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.806 ^a	2	.033
Likelihood Ratio	7.588	2	.023
Linear-by-Linear Association	1.049	1	.306
N of Valid Cases	98		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 6.29.

From the Table 1(iii), Chi-Square test statistics of value 6.806 (significance value .033<0.05). Therefore, it indicates that Null Hypothesis is not accepted. It means Alternative Hypothesis (H_{A1}) is accepted at 95% confidence level. Henceforth, it is established that there is significant association between gender and preference of

e-advertisement. From table 1(ii) it is clear that 46.4% females prefer, 46.4% remain neutral and 7.1% females donot prefer e-advertisement. Whereas 45.7% males prefer, 25.7% remain neutral and 28.6% males donot prefer e-advertisement.

H_{A2} : There is association between Age and preference of e-Advertisement.

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Age * preference for e-Advertisement	98	100.0%	0	0.0%	98	100.0%

			preference for e-Advertisement			Total
			Yes	No	Neutral	
Age	18-29	Count	21	7	11	39
		Expected Count	17.9	8.8	12.3	39.0
		% within Age	53.8%	17.9%	28.2%	100.0%
		% within preference for e-Advertisement	46.7%	31.8%	35.5%	39.8%
	Above 29	Count	24	15	20	59
		Expected Count	27.1	13.2	18.7	59.0
		% within Age	40.7%	25.4%	33.9%	100.0%
		% within preference for e-Advertisement	53.3%	68.2%	64.5%	60.2%
Total	Count	45	22	31	98	
	Expected Count	45.0	22.0	31.0	98.0	
	% within Age	45.9%	22.4%	31.6%	100.0%	
	% within preference for e-Advertisement	100.0%	100.0%	100.0%	100.0%	

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.712 ^a	2	.425
Likelihood Ratio	1.717	2	.424
Linear-by-Linear Association	1.095	1	.295
N of Valid Cases	98		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 8.76.

From the Table 2(iii), Chi-Square test statistics of value 1.712 (significance value $.425 > 0.05$). Therefore, it indicates that Null Hypothesis is accepted. It means Alternative Hypothesis (H_{A2}) is rejected at 95% confidence level. Henceforth, it is established that there is no significant association between age and preference of e-advertisement. From table 2(ii) it is clear

that 53.8% people of age group 18-29 prefer, 28.2% remain neutral and 17.9% donot prefer e-Advertisement whereas people of age group above 29, 40.7% prefer, 33.9% remain neutral and 25.4% donot prefer e-Advertisement.

H_{A3} : There is association between Qualification and preference of e-Advertisement.

Table 3(i): Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Qualification preference for e-Advertisement *	98	100.0%	0	0.0%	98	100.0%

Table 3(ii): Qualification * preference for e-Advertisement Crosstabulation

			preference for e-Advertisement			Total
			Yes	No	Neutral	
Qualification	<=Graduate	Count	15	8	10	33
		Expected Count	15.2	7.4	10.4	33.0
		% within Qualification	45.5%	24.2%	30.3%	100.0%
		% within preference for e-Advertisement	33.3%	36.4%	32.3%	33.7%
	>Graduate	Count	30	14	21	65
		Expected Count	29.8	14.6	20.6	65.0
		% within Qualification	46.2%	21.5%	32.3%	100.0%
		% within preference for e-Advertisement	66.7%	63.6%	67.7%	66.3%
Total	Count	45	22	31	98	
	Expected Count	45.0	22.0	31.0	98.0	
	% within Qualification	45.9%	22.4%	31.6%	100.0%	
	% within preference for e-Advertisement	100.0%	100.0%	100.0%	100.0%	

Table 3(iii): Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.101 ^a	2	.951
Likelihood Ratio	.101	2	.951
Linear-by-Linear Association	.005	1	.944
N of Valid Cases	98		

0 cells (0.0%) have expected count less than 5. The minimum expected count is 7.41.

From the Table 3(iii), Chi-Square test statistics of value 0.101 (significance value $0.951 > 0.05$). Therefore, it indicates that Null

Hypothesis is accepted. It means Alternative Hypothesis (H_{A3}) is rejected at 95% confidence level. Henceforth, it is established

that there is no significant association between qualification and preference of e-advertisement. From table 3(ii) it is clear that for people with qualification less than equal to graduate, 45.5% people prefer, 30.3% remain neutral and 24.2% donot prefer e-Advertisement whereas people with

qualification above graduate, 46.2% prefer, 32.3% remain neutral and 21.5% donot prefer e-advertisement.

H_{A4}: There is association between Annual Income and preference of e-Advertisement.

Table 4(i): Case Processing Summary

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Annual Income * preference for e-Advertisement	98	100.0%	0	0.0%	98	100.0%

Table 4(ii): AnnualIncome * preference for e-Advertisement Crosstabulation

			preference for e-Advertisement			Total
			Yes	No	Neutral	
Annual Income	<=6 Lakhs	Count	17	6	10	33
		Expected Count	15.2	7.4	10.4	33.0
		% within AnnualIncome	51.5%	18.2%	30.3%	100.0%
		% within preference for e-Advertisement	37.8%	27.3%	32.3%	33.7%
	>6Lakhs	Count	28	16	21	65
		Expected Count	29.8	14.6	20.6	65.0
		% within AnnualIncome	43.1%	24.6%	32.3%	100.0%
		% within preference for e-Advertisement	62.2%	72.7%	67.7%	66.3%
Total	Count	45	22	31	98	
	Expected Count	45.0	22.0	31.0	98.0	
	% within AnnualIncome	45.9%	22.4%	31.6%	100.0%	
	% within preference for e-Advertisement	100.0%	100.0%	100.0%	100.0%	

Table 4(iii): Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	.771 ^a	2	.680
Likelihood Ratio	.779	2	.677
Linear-by-Linear Association	.313	1	.576
N of Valid Cases	98		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 7.41.

From the Table 4(iii), Chi-Square test statistics of value 0.771 (significance value 0.680>0.05). Therefore, it indicates that Null Hypothesis is accepted. It means Alternative Hypothesis (H_{A4}) is rejected at 95% confidence level. Henceforth, it is established that there is no significant association

between annual income and preference of e-advertisement. From table 4(ii) it is clear that for people with annual income less than equal to 06 lakhs, 51.5% people prefer, 30.3% remain neutral and 18.2% donot prefer e-Advertisement whereas people with annual income more than 06 lakhs, 43.1% prefer,

32.3% remain neutral and 24.6% do not prefer e-advertisement.

H_{A5}: There is association between Average Time Spent Online and preference of e-Advertisement

	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Average Time Spent on Internet * preference for e-Advertisement	98	100.0%	0	0.0%	98	100.0%

			preference for e-Advertisement			Total	
			Yes	No	Neutral		
Average Time Spent on Internet	>= 2 hours	<=2 Hours	Count	10	12	15	37
			Expected Count	17.0	8.3	11.7	37.0
		% within Average Time Spent on Internet	27.1%	32.4%	40.5%	100.0%	
		% within preference for e-Advertisement	22.2%	54.5%	48.4%	37.8%	
	< 2 hours	>2 Hours	Count	35	10	16	61
			Expected Count	28.0	13.7	19.3	61.0
		% within Average Time Spent on Internet	57.4%	16.4%	26.2%	100.0%	
		% within preference for e-Advertisement	77.8%	45.5%	51.6%	62.2%	
Total			Count	45	22	31	98
			Expected Count	45.0	22.0	31.0	98.0
			% within Average Time Spent on Internet	45.9%	22.5%	31.6%	100.0%
			% within preference for e-Advertisement	100.0%	100.0%	100.0%	100.0%

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.750 ^a	2	.013
Likelihood Ratio	8.986	2	.011
Linear-by-Linear Association	6.021	1	.014
N of Valid Cases	98		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 8.31.

From the Table 5(iii), Chi-Square test statistics of value 8.750 (significance value $.013 < 0.05$). Therefore, it indicates that Null Hypothesis is not accepted. It means Alternative Hypothesis (H_{A5}) is accepted at 95% confidence level. Henceforth, it is established that there is significant association between Average Time Spent Online and preference of e-advertisement. From table 5(ii) it is clear that for people whose Average Time Spent is less than equal to 02 hours 27.1% people prefer, 40.5% remain neutral and 32.4% females donot prefer e-advertisement. Whereas people whose Average Time Spent is more than 02 hours 57.4% prefer, 26.2% remain neutral and 16.4% donot prefer e-advertisement.

From the above results it is clear that only gender and average time spent online has association with preference of e-advertisement. Percentage of females not preferring e-advertisement is very less than the percentage of male and the reasoning that was arrived at in respect of this observation was that males get more irritated by the disturbance created by the untimely bombardment of e-advertisement, threat of virus and infringement of privacy while females remains more neutral towards it. The same reason was observed in people who spent less time on internet. They had their own argument that they come online to fetch some information or for work purpose and get distracted by the over bombardment of advertisements.

Conclusion

The advent of technology, its ever increasing penetration in people's life and ever decreasing time available with the individual to perform outdoor activities has become the trigger point for inception of e-Advertisement which in turn is steadily and in unnoticeable fashion replacing the traditional Advertisement. It is also providing Businesses altogether new dimension and platform to span its wings in the form of e-Advertisement which has wider reach than Traditional Advertisement.

From the Statistical analysis performed on the data obtained from the Questionnaire, it has been concluded that the demographic variables such as gender and average time spent online has some association with the preference of e-Advertisement. Whereas demographic variables such, as age, qualification and

annual income has no association with the preference of e-advertisement.

These findings can help businessmen and advertisers to segment their audience demographically and target advertisement at specific groups of people to maximize the likelihood of their advertisements. This will also help them to understand and accordingly invest their resources more effectively in designing e-Advertisements that are result oriented for them. In other words, business can develop more effective e-Advertisement campaigns to promote and should stop the unnecessary bombardment of advertisement.

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