

## INVESTIGATING ATTITUDE TOWARDS ONLINE ADVERTISING ON SOCIAL MEDIA - AN EMPIRICAL STUDY

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### ABSTRACT

*Over the past few years, social networking has become popular and account for a major chunk of the time internet users spend online. With the increase in online users, advertisers are tempted to explore & exploit social networking sites as a new advertising delivery vehicle. Moreover, advertisers increasingly recognized the potency of social community in terms of interactivity which includes shopping experiences, personalized selections, wide information search and greater convenience. This study makes an attempt to decipher the embedded attitude of the customers towards online advertising on the social community sites. It further investigates the instrumentality of key discriminating attributes configuring attitude on the premise of customers' proclivity for online advertising. Nevertheless, the study renders scope to test the supremacy of online advertising over other conventional media for advertising. The study advanced in the paper would provide enough insights to the marketers, advertisers, and strategy makers at the top of the organizational pyramid for framing strategy to maximize the favourable impact of advertising on a spectrum of mass media.*

### INTRODUCTION

In the wake of economic, the Indian economy has witnessed a noteworthy growth in information technology. This is supported by the fact that till March 2011, India has registered 18% rise in Active Internet Users among urban cities, amounting to 65 million across in country (IAMAI, 2011). The rate of penetration of internet in urban and rural areas up to some extent is commendable and phenomenal. In addition, the telecom service providers have been introducing internet at the affordable prices across the geographical areas they operate in. However, the rural areas remain relatively unexplored and deserve attention. The impetus is chiefly attributed to the growing attention of the consumers to stay online at work and home. The increase in online users, paved opportunity for the marketers to reorganize its traditional vehicles of communication and make use of internet as a marketing medium for possible communications. Internet advertising defies the basis features of traditional advertising in the sense that consumers' role remains passive in the entire course of exposure. Thus, advertisements are deliberately endowed on

with relatively no choice to the consumers. In contrary, internet advertising allows customer to exercise control over advertising exposure (Schlosser et al., 1999). Since Internet advertising is chiefly navigated by the desire of consumers, hence it entails to develop understanding about the dynamic component of behaviour which is attitude, a cardinal driver of advertising exposure. Lutz (1985) opined that getting insights about consumers' attitudes are important because they possibly influence their exposure, attention, and reaction to individual advertisement. Moreover, a growing body of literature suggests that most of the research has been directed to assess the consumers' perception and usage of the internet and its service. Miller (1996) based upon a piece of research explored consumers' attitudes toward on-line service and on purchasing online by (Gupta, 1995; GVU, 1999). A scant scholarly observation suggests the study on attitude towards Web usage (Gupta, 1995; GVU, 1999; Hammonds, 1997; Hoffman, Kalsbeek and Novak, 1996) and recall of the sites visited by (Diaz, Hammond and McWilliam, 1996). It has been observed that research has been conducted hitherto

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in the areas which include effect of banner ads on brand judgments (Briggs and Hollis, 1997); and awareness of the Internet itself (Fawcett, 1995). However, relatively less effort has been made so far to measure the attitude towards the internet advertisement of the consumers in social media. Moreover, Communication through user-centric social media such as Face book, Twitter, LinkedIn and You Tube is prospering and gaining momentum. The growth of social media is chiefly attributed to the desires for connectedness, social interaction, entertainment, convenience, information and in some cases professional advancement. The rapid growth of online social networking communities has caught the attention of advertisers that hope to find new ways to harness these communities for their advertising purposes (Hart 2007). Little academic research addresses the concerns held by community organizers about how to convince users to be more receptive to advertising in online social communities (Zeng et al., 2009).

Against this backdrop, the present study attempts to examine empirically the customers' attitude towards online advertising in social media based upon scale items for assessing the value of advertising proposed by Ducoffe (1996). It further, investigates the instrumentality of scale items to discriminate the customers on the continuum of responsiveness to online advertisements.

Following the introduction section, the remainder of the paper is organized as follows. Second section provides an extensive related literature review. The next section deals with the research methodology & data source which chiefly includes development of hypotheses, identification of survey pool, adoption & administration of questionnaire. The following section focuses on the results & analysis of the study. The final section concludes the paper.

#### LITERATURE REVIEW

Ducoffe (1995) observed that value of advertising could be assessed by four factors which include informativeness, deceptiveness, irritation and entertainment. Each of these factors has been found cardinal in past research on consumer reactions to individual advertising. Advocating in the same line, Aaker et al. (1990) concluded that informative, entertaining, and dislikeable are the key factors that explain attitude towards advertising.

Fernandez (2000) further validated the importance of "informativeness" for evaluating the attitude towards advertising which more likely result in a purchase situation. Moreover, users need quick access to the information in the content they are accessing (Kaasinen, 2003).

Customers' feeling of enjoyment associated with advertisements play the greatest role in accounting for their overall attitudes toward them (Shavitt et al., 1998). A high degree of pleasure and involvement during interaction with computer-based media leads to concurrent subjective perceptions of positive affect and mood of the consumer (Hoffman and Novak, 1996). In contrary, when advertising resorts to techniques that leads to annoyance, offence, insult or exceedingly manipulative, there is greater possibility that customers will find it irritating (Ducoffe, 1996). Another point of possible annoyance is unwanted messages, commonly known as spam (Dickinger et al., 2004). Spam intrudes into consumers' privacy and stifle consumer acceptance.

Brackett et al (2001) based upon a study observed that advertising credibility is significantly relevant to advertising value of web advertising. Credibility of an advertisement is influenced by different factors, especially by the company's credibility and the bearer of the message (Goldsmith, Lafferty and Newell, 2000, Lafferty, Goldsmith and Newell, 2002). But it is also influenced by the advertising medium. Marshall et al (2003) found out that a message on the Internet achieves less credibility than a printed message unless the message is communicated by a strong brand. If consumer do not trust the media then they are less likely to pay attention to it. Further, Haeckel (1998) identifies several dimensions of interactivity: number of entities involved, degree of contingency, frequency of exchange, degree of sensory involvement, degree of cognitive involvement, types of entities involved, content being exchanged, degree of synchronicity, and types of media involved. Alba et al. (1997) suggested that interactive communication is characterized by three factors which includes multi-way (it involves two or more actors), immediate (responses occur within seconds), and contingent (response of one actor follows directly and logically from the action of another). Zeng et al. (2009) extended the study and focused specifically on social factors relating to user

perceptions and responses to advertising via social networks, finding that responses to advertising in this context depended on perceptions of advertising relevance and value, as well as being influenced by social identity and group norms.

#### RESEARCH METHODOLOGY

This section discusses a phase-wise development of comprehensive methodology, which chiefly involves selection of attributes, development of hypotheses, identification of survey pool, designing and pretesting of questionnaire, and data collection.

##### Phase I: Selection of Attributes

In the present study, Ducoffe (1995) dimensions for assessing the value of advertising have been used to investigate the attitude towards online advertising in social media. The dimension corresponds to 'deceptiveness' has been used interchangeably with 'credibility' as presence of one characteristic connotes the absence of others. Moreover, the scale items have respecified based upon the suitability of the current study. The respecified scale items along with the notation used to explain the scale items for the current study are shown in the table-1.

##### Phase II: Development of hypotheses

The following hypotheses were developed and further subjected to empirical testing:

H<sub>1</sub>: The customers have favourable attitude towards online advertising on social media correspond to respecified constructs.

H<sub>2</sub>: The constructs/ scale items explaining attitude towards online advertising significantly discriminate the customers on the continuum of responsiveness to online advertisements on social media.

##### Phase III: Survey pool and data collection

The current study has been conducted on the undergraduates and postgraduates students of selected universities in Udaipur city. Although students samples have limitations as they are more homogeneous than a sample from general population, and thus are ideal samples for testing theoretical predictions about the relationship among variables (Calder, Phillips, Tybout, 1981). Through an email invitation, respondents received hypertext link of an online survey. The request to respond was solicited from 128 respondents and finally 100 of them had responded which gives a response rate of

78.12%. Despite the fact that internet surveys have the poorest response rates, even lower than e-mail surveys (Malhotra, 2007), a high rate of response in this study can be attributed to two factors: (1) The questionnaires were directed to educated students and such people are generally motivated to respond in studies of academic interest. (2) The respondents were repeatedly reminded through phone calls and emails to return the filled in questionnaires.

In order to test the hypotheses, a questionnaire was developed using five point Likert Scale (1 for strongly disagree and 5 for strongly agree) on respecified scale items of Ducoffe (1995) and further, tested for appropriateness through a pilot study. The responses were sought from students of selected universities sporadically. Based on the problems surfaced during the pilot study, followed by necessary rectifications, the finally corrected questionnaire was advanced to conduct survey.

The scale reliability was tested by deploying the statistical test 'Cronbach's alpha' to the responses finally received from 100 respondents. The Cronbach's alpha covering the overall responses was found to be 0.618, which is considered a good sign of reliability of the questionnaire. Table 2 describes the reliability analysis of the scale corresponding to each variable.

#### RESULTS & ANALYSIS

This section deals with the testing of hypotheses by using appropriate statistical tools. SPSS-19 software has been used for the purpose of analyzing responses gathered as discussed in Section III.

##### Testing of hypothesis H<sub>1</sub>

H<sub>1</sub>: The customers have favourable attitude towards online advertising on social media correspond to respecified constructs.

In order to test the hypothesis, the responses were gathered on five points Likert Rating scale corresponds to each chosen scale item. The statistical significance of the data has been tested using Student's "t" test at 95% confidence level. Here, the populations mean ( $\mu$ ) has been assigned the value 3 (three) which, corresponds to the "no opinion" category of the five point agreement/disagreement scale (Likert Rating Scale) for each scale item.

Mathematically, H<sub>0</sub>:  $\mu = 3$ , H<sub>1</sub>:  $\mu > 3$  (right tail test)



By exploring the summary statistics presented in Table 3, it is apparent that respondents have expressed a tendency towards favourable attitude on each scale item as mean value exceeds three (scale value) in all cases except one i.e. "authenticity" scale item. The output of the 't test' in the table 4, reveals that no significant gap exists between the hypothesized test value with the calculated sample statistics for the attributes configuring attitude towards online advertising which includes supply more information, enjoyable, entertaining, authentic, trustworthy, offending and misleading ( $t_{MIN} = -1.224$  at  $p = 0.224 > 0.05$ ,  $t_{ENI} = 1.00$  at  $p = 0.320 > 0.05$ ,  $t_{ENT} = .665$  at  $p = 0.508 > 0.05$ ,  $t_{AUT} = -0.675$  at  $p = 0.513 > 0.05$ ,  $t_{TWO} = 1.434$  at  $p = 0.155$ ,  $t_{OFF} = 1.043$  at  $p = 0.299$  and  $t_{MLE} = 1.267$  at  $p = 0.212$  respectively) at 5% level of significance. Thus, the attitude towards online advertising on social media corresponds to the above tested items tends to be unfavorable and dichotomous. The respondents have exhibited favourable attitude to the rest of the scale items. However, relatively a significant positive gap has been observed for the items which indicate that online advertising helps in purchase decision and results in lower price products ( $MD_{PDE} = 0.280$  and  $t = 2.812$  at  $p = .006 < .05$  and  $MD_{LPP} = 0.290$  and  $t = 2.821$  at  $p = 0.006 < .05$ ) at 5% level of significance.

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##### Testing of hypothesis H<sub>2</sub>

H<sub>2</sub>: The constructs/ scale items explaining attitude towards online advertising significantly discriminate the customers on the continuum of responsiveness to online advertisements on social media.

The primary objective of hypothesis H<sub>2</sub> is to identify the attribute(s) that validates the group membership, formed on the continuum of responsiveness to online advertisements on social media. The respondents were categorized into two group, viz., occasional and frequent viewers. The binary logit analysis was used to identify the discriminating variable(s) by comparing two important groups. The respondents were asked to display their degree of agreement/disagreement on statements corresponding to each variable explaining attitude towards online advertising. A 5-point rating scale indicating degree of agreement/disagreement was used to get responses.



**Table 1**  
Respecified Scale Items Measure Attitude towards Online Advertising

Dimensions of Ducoffe (1995)	Respecified scale items for the current study	Notation
Advertising Value	1. Online advertising helps in purchase decision.	PDE
	2. Online advertising results in lower price products.	LPP
Informativeness	3. Online advertisements supply more information	MIN
Entertainment	1. Online advertisements are entertaining.	ENT
	2. Online advertising is enjoyable.	ENJ
Irritation	1. Online advertising is disturbing.	DIS
	2. There is too many online advertising.	MAD
Deceptiveness/ Credibility	1. Online advertisements are offending.	OFF
	2. Online advertisements are misleading.	MLE
	3. Online advertisements are trustworthy.	TWO
	4. Online advertisements are authentic.	AUT
	5. The promises are kept on internet advertisements.	PRO

The outcomes of binary logit analysis are described in Table 5.

The estimated coefficients for the independent variables are estimated using the logit value as the dependent measure. The model formulation is as follows:

$$\ln[\text{Prob.}(Y=1)/(1-\text{Prob}(Y=1))] = b_0 + b_1(\text{PDE}) + b_2(\text{LPP}) + b_3(\text{MIN}) + b_4(\text{ENJ}) + b_5(\text{ENT}) + b_6(\text{MAD}) + b_7(\text{DIS}) + b_8(\text{AUT}) + b_9(\text{TWO}) + b_{10}(\text{PRO}) + b_{11}(\text{OFF}) + b_{12}(\text{MLE})$$

Prob. ( $Y = 1$ ) is the probability of the frequent browsers of online advertisements on social media.

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**Table 2**  
Reliability Analysis - Scale (Alpha)

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
PDE	35.0000	25.253	0.438	0.565
LPP	34.9900	23.949	0.559	0.539
MIN	35.4300	23.015	0.520	0.537
ENJ	35.1600	25.873	0.272	0.597
ENT	35.2000	23.859	0.453	0.555
MAD	34.6200	31.208	-0.146	0.675
DIS	34.8800	33.440	-0.313	0.705
AUT	35.3500	24.593	0.463	0.557
TWO	35.1500	25.664	0.451	0.566
PRO	34.9500	26.290	0.421	0.574
OFF	35.1800	27.846	0.184	0.612
MLE	35.1700	28.567	0.139	0.618

**Note:** Reliability Coefficients: No. of Cases =100; No. of Items =12; and Alpha =0.618

**Table 3**  
One-Sample Statistics

Scale Items	N	Mean	Std. Deviation	Std. Error Mean
PDE	100	3.2800	0.99575	0.09957
LPP	100	3.2900	1.02784	0.10278
MIN	100	2.8500	1.22578	0.12258
ENJ	100	3.1200	1.20000	0.12000
ENT	100	3.0800	1.20336	0.12034
MAD	100	3.6600	1.10298	0.11030
DIS	100	3.4000	1.12815	0.11282
AUT	100	2.9300	1.06605	0.10661
TWO	100	3.1300	0.90626	0.09063
PRO	100	3.3300	0.84154	0.08415
OFF	100	3.1000	0.95874	0.09587
MLE	100	3.1100	0.87496	0.08750

**Table 4**  
**One-Sample Test**

Scale Items	Test Value = 3					
	t	df	Sig. (2-tailed)	Mean Difference (MD)	95% Confidence Interval of th Difference	
					Lower	Upper
PDE	2.812	99	0.006	0.28000	0.0824	0.4776
LPP	2.821	99	0.006	0.29000	0.0861	0.4939
MIN	-1.224	99	0.224	-0.15000	-0.3932	0.0932
ENJ	1.000	99	0.320	0.12000	-0.1181	0.3581
ENT	0.665	99	0.508	0.08000	-0.1588	0.3188
MAD	5.984	99	0.000	0.66000	0.4411	0.8789
DIS	3.546	99	0.001	0.40000	0.1762	0.6238
AUT	-0.657	99	0.513	-0.07000	-0.2815	0.1415
TWO	1.434	99	0.155	0.13000	-0.0498	0.3098
PRO	3.921	99	0.000	0.33000	0.1630	0.4970
OFF	1.043	99	0.299	0.10000	-0.0902	0.2902
MLE	1.257	99	0.212	0.11000	-0.0636	0.2836

a. If weight is in effect, see classification table for the total number of cases.

**Table 5**  
**Logistic Regression**  
**Case Processing Summary**

Unweighted Cases <sup>a</sup>	Percent	
Selected Cases Included in Analysis	100.0	100
Missing Cases	0.0	0
Total	100.0	100
Selected Cases	0.0	0
Total	100.0	100

**Dependent Variable Encoding**

Original Value	Internal Value
Occasionally	0
Frequently	1



Classification Table<sup>a,b</sup>

Observed		Predicted		
		Category		Percentage
Category		Occasionally	Frequently	Correct
Occasionally		54	0	100.0
Frequently		46	0	0.0
Overall Percentage				54.0

a. Constant is included in the model.

b. The cut value is 0.500

**Block 0: Beginning Block**

Variables in the Equation

	B	S.E.	Wald	df	sig.	Exp(B)
Step 0 Constant	-0.160	0.201	0.639	1	0.425	0.852

Variables not in the Equation

Step 0 Constant	Score	Df.	Sig.
PDE	37.207	1	0.000
LPP	38.582	1	0.000
MIN	16.780	1	0.000
ENJ	3.102	1	0.078
ENT	6.591	1	0.010
MAD	0.0624	1	0.804
DIS	0.152	1	0.042
AUT	3.737	1	0.053
TWO	30.994	1	0.000
PRO	8.022	1	0.005
OFF	3.909	1	0.048
MLE	0.000	1	0.989
	61.128	12	0.000

**Block 1: Method = Forward Stepwise (Likelihood Ratio)****Omnibus Tests of Model Coefficients**

	Chi-square	Df.	Sig.
Step1 1Step	45.961	1	0.000
Block	45.961	1	0.000
Model	45.961	1	0.000
Step2 1Step	24.106	1	0.000
Block	70.068	2	0.000
Model	70.068	2	0.000
Step3 1Step	6.953	1	0.008
Block	77.021	3	0.000
Model	77.021	3	0.000

**Model Summary**

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	92.027 <sup>a</sup>	0.368	0.492
2	67.921 <sup>b</sup>	0.504	0.673
3	60.968 <sup>b</sup>	0.537	0.718

a. Estimation terminated at iteration number 5 because parameter estimates changed by less than .001.

b. Estimation terminated at iteration number 6 because parameter estimates changed by less than .001.

**Hosmer and Lemeshow Test**

Step	Chi-square	Df	Sig.
1	2.573	3	0.462
2	5.595	6	0.470
3	11.448	7	0.120

Contingency Table for Hosmer and Lemeshow Test

		category = 0		category = 1		Total
		Observed	Expected	Observed	Expected	
Step 1	1	2	1.978	0	0.022	2
	2	27	26.235	1	1.765	28
	3	10	12.113	7	4.887	17
	4	15	13.159	30	31.841	45
	5	0	0.516	8	7.484	8
Step 2	1	14	13.910	0	0.090	14
	2	13	13.478	1	0.522	14
	3	10	8.165	0	1.835	10
	4	7	8.060	3	1.940	10
	5	2	3.641	6	4.359	8
	6	4	3.232	4	4.768	8
	7	4	3.281	21	21.719	25
	8	0	0.233	11	10.767	11
Step 3	1	9	8.963	0	0.037	9
	2	9	9.820	1	0.180	10
	3	10	9.506	0	0.494	10
	4	10	8.984	0	1.016	10
	5	9	8.609	3	3.391	12
	6	2	4.867	9	6.133	11
	7	4	1.964	6	8.036	10
	8	1	1.048	14	13.952	15
	9	0	0.238	13	12.762	13

Classification Table<sup>a</sup>

Observed	Predicted				
	Category		Percentage		
	Occasionally	Frequently	Correct		
Step 1	Category	Occasionally	39	15	72.2
		Frequently	8	38	82.6
	<b>Overall Percentage</b>				77.0
Step 2	Category	Occasionally	44	10	81.5
		Frequently	4	42	91.3
	<b>Overall Percentage</b>				86.0
Step 3	Category	Occasionally	48	40	88.9
		Frequently	6	6	87.0
	<b>Overall Percentage</b>				88.0

a. The cut value is 0.500



Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1 <sup>a</sup>	LPP	1.791	0.352	25.865	1	0.000	5.997
	Constant	-6.281	1.285	23.894	1	0.000	0.002
Step 2 <sup>b</sup>	PDE	1.657	0.402	16.994	1	0.000	5.245
	LPP	1.710	0.446	14.728	1	0.000	5.528
Step 3 <sup>c</sup>	Constant	-11.579	2.243	26.640	1	0.000	0.000
	PDE	1.545	0.410	14.233	1	0.000	4.688
	LPP	1.327	0.456	8.476	1	0.004	3.770
	TWO	1.141	0.475	5.777	1	0.016	3.130
	Constant	-13.463	2.580	27.235	1	0.000	0.000

- a. Variable(s) entered on step 1: LPP.  
b. Variable(s) entered on step 2: PDE.  
c. Variable(s) entered on step 3: TWO.

Model if Term Removed

Variable	Model Log Likelihood	Change in -2 Log Likelihood	Df	Sig. of the Change	
Step 1 <sup>a</sup> LPP	-68.994	45.961	1	0.000	
Step 2 <sup>b</sup>	PDE	-46.014	24.106	1	0.000
	LPP	-45.944	23.967	1	0.000
Step 3 <sup>c</sup>	PDE	-39.803	18.638	1	0.000
	LPP	-36.424	11.879	1	0.001
	TWO	-33.961	6.953	1	0.008

**Assessing Overall Model Fit**

Three statistical measures are used in assessing the overall fit of a logistic regression model. The first statistical measure is the chi-square test for the change in the -2LL (Log Likelihood) value from the base model. Smaller the value of -2LL indicate better model fit (Hair et al, 2007). In the present model, the change in -2LL value is reduced from the base model value of 45.961 to 6.953. This increase in model fit is statistically significant at 0.05 level ( $p=0.008<.05$ ).

The second statistical measure is the Hosmer and Lemeshow measure of overall fit. This statistical test measures the correspondence of the actual and predicted values of the dependent variable. In this case, better model fit is indicated by a smaller difference in the observed and predicted classification (Hair et al, 2007). In the present model,

the chi-square value is 11.448, is not significant at  $p = 0.120 > 0.05$  i.e. no significant gap exists between the actual and predicted values of the dependent variable. Thus, a non-significant value indicating that the model fit is acceptable.

The third statistical measures are Cox and Snell  $R^2$  the Nagelkerke  $R^2$ . In the present model, these values are 0.537 and 0.718 respectively. In combination, they indicate that the present regression model accounts for more than one-half of the variation between the groups of respondents, which deemed practically significant in this situation.

**Statistical Significance of the Coefficient**

The logistic coefficient for Purchase decision support / PDE ( $B = 1.545, p = .000 < .01$ ), Lower price products/ LPP ( $B = 1.327$  at  $p = .004 < .01$ ) and Trustworthy/ TWO ( $B = 1.141$  at  $p = .016 < .01$ ) and

## Variables not in the Equation

		Score	Df.	Sig.	
Step 1	PDE	22.209	1	0.000	
	MIN	2.556	1	0.110	
	ENJ	0.251	1	0.616	
	ENT	0.563	1	0.453	
	MAD	0.001	1	0.969	
	DIS	0.376	1	0.540	
	AUT	0.026	1	0.873	
	TWO	12.561	1	0.000	
	PRO	0.174	1	0.677	
	OFF	0.925	1	0.336	
	MLE	0.001	1	0.975	
	Overall Statistics		32.499	11	0.001
	Step 2	Variables			
MIN		0.953	1	0.329	
ENJ		0.00	1	0.978	
ENT		1.389	1	0.533	
MAD		0.000	1	0.993	
DIS		0.211	1	0.646	
AUT		0.329	1	0.566	
TWO		6.679	1	0.010	
PRO		0.000	1	0.987	
OFF		0.000	1	0.997	
MLE		0.0531	1	0.818	
Overall Statistics			2.267	10	0.268
Step 3		Variables			
	MIN	0.034	1	0.854	
	ENJ	0.148	1	0.701	
	ENT	0.001	1	0.979	
	MAD	0.610	1	0.435	
	DIS	0.012	1	0.914	
	AUT	3.080	1	0.079	
	PRO	0.571	1	0.450	
	OFF	1.314	1	0.252	
	MLE	0.465	1	0.495	
	Overall Statistics		6.958	9	0.642

the constant ( $B_0 = -13.463$  at  $p = .000 < .01$ ) are significant at the 0.01 level based on the statistical tests of the Wald statistic. Thus, the final regression model includes Purchase decision support, perception for lower price products and trustworthiness as key factor that discriminates the consumer's attitude on continuum of responsiveness to online advertisements on social media. The positive sign suggests that as the value of variables increases, the predicted probability will increase, thus increasing the likelihood that a customer will have favourable attitude and categorized as belonging to frequent browsers of online advertisements on social media.

**CONCLUSION**

Presently, the growth in Active Internet Users among urban cities is phenomenal. Moreover, Communication through user-centric social media such as Face book, Twitter, LinkedIn and You Tube is prospering and gaining momentum. The growth of social media is chiefly attributed to the desires for connectedness, social interaction, entertainment, convenience, information and in some cases professional advancement. The rapid growth of online social networking communities has caught the attention of advertisers that hope to find new ways to harness these communities for their advertising purposes (Hart 2007). This study makes an attempt to decipher the embedded attitude of the

customers towards online advertising on the social community sites. It further investigates the instrumentality of key discriminating attributes configuring attitude on the premise of customers' proclivity for online advertising. The study reveals that Online advertising helps in purchase decision and results in lower price. The frequent browsers demonstrated a strong favourable attitude towards online advertisement on the social media which they chiefly attributed to the trustworthiness for social media. Moreover, the frequent browsers hold favourable attitude for online advertisement due to the fact that it supports purchasing decisions and results in lower price products.

#### REFERENCES

- Aaker, D. (1990), "Brand extensions: the good, the bad and the ugly", *Sloan Management Review*, Vol. 31 No. 4, pp. 47-56
- Alba, Joseph, John Lynch, Barton Weitz, Chris Janiszewski, Richard Lutz, Alan Sawyer, and Stacey Wood (1997), "Interactive Home Shopping: Consumer, Retailer, and Manufacturer Incentives to Participate in Electronic Marketplaces." *Journal of Marketing*, Vol. 61, pp. 38-53.
- Alexandre B. Lopes And Dennis F. Galletta (2006), "Consumer Perceptions and Willingness to Pay for Intrinsically Motivated Online Content", *Journal of Management Information Systems*, Vol. 23, No. 2, pp. 203-231.
- Ann E . Schlosser, Sharon Shavitt, Alaina Kanfer, (1999), "Survey of Internet Users' attitudes toward Internet Advertising", *Journal of Interactive Marketing*, Vol. 13, No. 3, pp 34-54
- Brackett, L. K. and Carr, B. N. (2001), "Cyberspace Advertising vs. Other Media: Consumer vs. Mature Student Attitudes", *Journal of Advertising Research*, Vol. 41, No. 5, pp. 23-33
- Briggs, R. & Hollis, N. (1997), "Advertising on the Web: Is There Response Before Click-Through?", *Journal of Advertising Research*, Vol. 37, pp 33-45.
- Calder, B.J.; Phillips, L.W.; and Typout, A.M (1982), "The concept of external validity", *Journal of Consumer Research*, Vol. 9, No. 3, pp. 240-244
- Diaz, A., Hammond, K., & McWilliam, G. (1996), "A Study of Web Use and Attitudes Amongst Novices, Moderate Users and Heavy Users" , working paper no. 96-806, Centre for Marketing, London Business School.
- Dickinger, A., P. Haghirian, J. Murphy and A. Scharl (2004), "An Investigation and Conceptual Model of SMS Marketing". 37th Hawaii International Conference on System Sciences (HICSS-38), Vol. 31
- Ducoffe, R. H. (1995), "How Consumers Assess the Value of Advertising", *Journal of Current Issues and Research in Advertising*, Vol. 17, pp. 1 -18.
- Ducoffe, R. H. (1996), "Advertising Value and Advertising on the Web", *Journal of Advertising Research*, Vol. 36, pp. 21 -36
- Fawcett, A. W. (1995). "Interactive Awareness Growing" , *Advertising Age*, Vol. 66, No. 20.
- Fernandez, K. V. and Rosen, D. L. (2000), "The effectiveness of information and color in yellow pages advertising", *Journal of Advertising*, Vol. 29 No 2, pp. 61-73.
- Goldsmith, R. E., B. A. Lafferty and S. J. Newell (2000), "The impact of corporate credibility and celebrity credibility on consumer reaction to advertisements and brands", *Journal of Advertising*, Vol. 29, No. 3, pp 43-54
- Gupta, S. (1995), "HERMES: A Research Project on the Commercial Uses of the World Wide Web" , Available at: <http://www.umich.edu/s/gupta/hermes> accessed on 10-march 2012
- GVU (1999), "GVU's WWW User Surveys", [http://www.cc.gatech.edu/gvu/user\\_surveys](http://www.cc.gatech.edu/gvu/user_surveys), accessed on 10-Dec-2012
- Haeckel, S. (1998), "About the nature and future of interactive marketing", *Journal of Interactive marketing* Vol. 12 No. 1, pp. 63-71
- Hair, Bill Black, Barry Babin, Rolph E. Anderson, Ronald L. Tatham (2007), *Multivariate Data Analysis* , 6th Edition, Pearson Prentice Hall



- Hammonds, K. H. (1997), "Who's Doing What On-Line", Available at: <http://www.businessweek.com/1997/18/b352514.htm>.
- Hart, Kim (2007), "Online Networking Goes Small, and Sponsors Follow," The Washington Post, December 29, D01.
- Hoffman, D. L., Kalsbeek, W. D. & Novak, T. P. (1996). "Internet and Web Use in the United States: Baselines for Commercial Development. Special Section on Internet in the Home", Communications of the ACM. Vol. 39, pp 36-46
- Kaasinen, E. (2003), "User Needs for Location-aware Mobile Services", Personal and Ubiquitous Computing, Vol. 7, pp 70 - 79
- Lafferty, B. A., R. E. Goldsmith and S. J. Newell (2002), "The dual credibility model: The influence of corporate and endorser credibility on attitudes and purchase intentions", Journal of Marketing Theory and Practice, vol. 10, No.3, pp 1-12.
- Lutz, Richard J. (1985), "Affecting and cognitive antecedents of attitude towards the Ad: a conceptual framework", Psychological Processes and Advertising Effects: Theory, Research and Application, Linda Allowred and Andrew Mitchell, eds, Hillsdale, NJ.
- Malhotra Naresh (2007), Marketing Research- an applied orientation, 5<sup>th</sup> edition, Pearson Prentice Hall
- Marshall, Roger & Woon Bong, Na (2003), "An Experimental Study of the Role of Brand Strength in the Relationship between the Medium of Communication and Perceived Credibility of the Message", Journal of Interactive Marketing, Vol 17, No.3, pp. 75-79
- Miller, C. (1996), "Studies: Consumer On-Line Interest Leveling Off", Marketing News, Vol. 30, No. 7
- Report on Internet in India (I-Cube) 2011, Internet & Mobile Association of India (IAMAI), 2011, Available at [indiagovernance.gov.in/download.php?filename=files/internet.pdf](http://indiagovernance.gov.in/download.php?filename=files/internet.pdf), accessed on 12-Feb-2012
- Shavitt, S., Lowrey, P. M. & Haefner, J. E. (1998), "Public Attitudes Toward Advertising: More Favorable Than You Might Think", Journal of Advertising Research, pp 7-22.
- Wang Chingning, Zhang Ping, Choi Risook, and D. Eredita Michael (2002), "Understanding Consumers Attitude Toward Advertising", Human-Computer Interaction Studies in MIS- Eighth Americas Conference on Information Systems, pp. 1142-1148
- Zeng, F., Huang, L., Dou, W., (2009), "Social factors in user perceptions and responses to advertising in online social networking communities", Journal of Interactive Advertising, Vol. 10, No. 1, pp 1-13