A STUDY ON ONLINE ADVERTISING FOR HOME APPLIANCES PRODUCTS AT THANJAVUR DISTRICT

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ABSTRACT: The studies examine Online Advertising for Home Appliances Products. The implement adopted for the collection of data was the questionnaire. The questionnaire was structured based on 5-point scale of Strongly Agree, Agree, Disagree and Strongly Disagree. This study used in Neural Network Model analysis for input and output variable for overall satisfaction for the consumer. This result of the study showed that online advertising reached in Thanjavur district.

Key words: Online advertising, Home Appliances, Consumer.

I.INTRODUCTION

Online advertising, also called online marketing or Internet advertising or web advertising is a form of marketing and advertising which uses the Internet to deliver promotional marketing messages to consumers. Consumers view online advertising as an unwanted distraction with few benefits and have increasingly turned to ad blocking for a variety of reasons. Like other advertising media, online advertising frequently involves both a publisher, who integrates advertisements into its online content, and an advertiser, who provides the advertisements to be displayed on the publisher's content. Other potential participants include advertising agencies who help generate and place the ad copy, an ad server which technologically delivers the ad and tracks statistics, and advertising affiliates who do independent promotional work for the advertiser.

II.REVIEW OF LITERATURE:

Facebook, created by Mark Zuckerberg, was initially meant to connect college students
allowing them to share milestones and experiences of college life (Facebook.com). Today, Facebook has grown to be a global phenomenon permanently solidifying itself in almost all
facets of today's culture and forever changing the way the world communicates. As of March
2012, Facebook reported 901 million monthly active users, of which 80% were outside of the
U.S. and Canada, and 526 million daily active users on average (Facebook.com). In relation to
business pages, in 2010 there were more than 3 million active pages on Facebook with over 5.3
billion fans and more than 1.5 million active local business pages (Todd, 2010). Facebook
business pages will continue to grow as Emarketer analysts Hallerman, Williamson, and Elkin
(2011) report that 82% of surveyed chief marketing officers said they planned to increase social

As'ad, H. Abu-Rumman, Anas Y. Alhadid, (2014) "The Impact of Social Media Marketing on Brand Equity" Study Hypothesis: There is no significant impact of social media on brand equity of customers of Jordanian mobile services. The Study results showed a strong relationship between social media and brand equity. The definition of social media was stated as the collaboration of media and social communication in which people create share and exchange information. The study highlighted the social media marketing and the use of facebook as a branding opportunity. The study covered different fields of social media marketing: Online communication, Interaction, sharing of content, accessibility and credibility. Furthermore it emphasis on the correlation between social marketing and brand equity. This correlation attract new costumer to the firm. In addition to reminding customers about firm and working as an emotional tie to the firm. An example of the relationship between marketing and brand equity is the link and interaction between the facebook page and it is effect on the brand loyalty.
According to a study conducted by Forrester Research, younger generations are frequent viewers of online videos (Haven et al., 2006). The young demographic of this audience suggested by the Forrester report indicates YouTube may be an effective means of targeting young nightclub patrons. However, Haven et al. (2006) caution about the resource requirements of incorporating YouTube into a social media marketing strategy. Although little monetary resources are presently required to implement a YouTube campaign, substantial effort and high-quality, creative video content is essential in order for an online video marketing campaign to be effective (Haven et al., 2006).

Much of the literature suggests marketers should use social media simultaneously to complement their other online marketing strategies. Antion (2005) and Pattison (2009) also advocate using an independent website with its own domain name to reach potential customers who are not active on social media websites. The general consensus in the literature regarding the use of social media websites, as opposed to using independent websites, is encapsulated effectively by Kirby (2010), who concludes that a company-specific website should be complemented by social media tools to drive traffic to the company-controlled portal (Kirby, 2010).

The buying process is a very important process to understand, as social media and the internet make many of the buying processes more relevant and easier to complete. Kotler and Keller (2009:207) state that the buying process plays an important role in understanding how consumers actually make their buying decisions. Kotler and Keller (2009:208) states that the consumer goes through a specific five-stage buying process.

Neelika Arora has published research article entitled "Trends in Online Advertising" in Advertising Express, Dec2004. Neelika Arora," Trends in Online Advertising", Advertising Express, Dec2004.

OBJECTIVES OF THE STUDY
❖ To identify online advertising for the consumers.
❖ To measure online advertising for home appliances products in Thanjavur district.
❖ To analyze home appliances products in Thanjavur district.

SCOPE OF THE STUDY
The Contemporary study has been confined to Study on Online Advertising for Home Appliances Products. The study has been covered in whole consumer in Thanjavur District.

III.RESEARCH METHODOLOGY
The Current study was collected from primary and secondary data. Primary data have been collected from the respondents by using a fit structured, non-disguised questionnaire. Secondary data for the study were collected from books, journals, research articles, magazines, reports, newspapers and websites.

METHODOLOGY AND SAMPLING
The study was confined in Thanjavur district. From this area 160 respondents were selected from rural and urban areas of this study. Were analysis used in SPSS 20. In this study online advertising, Google+, Face book, Twitter, YouTube, Wikipedia, LinkedIn, MySpace, Pinterest, Instagram, Digg, E-Mail, Amazon, Flipkart, Olx, Tumblr, Reddit, Buffer, Snapdeal, Myntra, Shopclues, for online advertising for home appliances product analysis.

IV.DATA ANALYSIS
Neural Network architecture, used in this study, is a multilayer feed forward network using SPSS 20. The architecture which provides the best fit for the data is the network with three hidden layers and an output layer. By contrast, the definition above makes minimal demands on model structure and assumptions. Thus, a neural network can approximate a wide range of statistical models without requiring that you hypothesize in advance certain relationships between the dependent and independent variables. Instead, the form of the relationships is determined during the learning process. If a linear relationship between the dependent and independent variables is appropriate, the results of the neural network should closely approximate those of the linear regression model. If a nonlinear relationship is more appropriate, the neural network will automatically approximate the "correct" model structure.

Figure – 1
Basic Neuron Model for Overall satisfaction of the Consumer in Online Advertising for Home Appliances Products
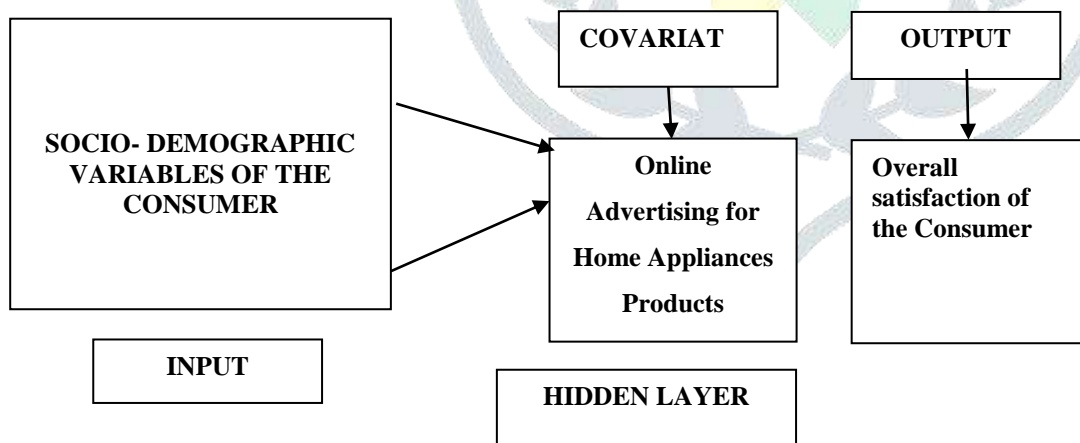
The neural network model stems from the studies on the working of human brain systems, and serves as an associative memory between the input and output patterns. These models contain many densely interconnected elements called Neurons or Nodes. The neuron has a set of "n" inputs "x"j, where the subscript "j" takes a value from 1 to "n" and indicates the source of the input signal.

Each input "x"j is weighted before reaching the main body of the processing elements, by the connection strength or weight factor "wj". (Multiplied by"wj"). In addition, it has a bias term "w"0, a threshold value that has to be reached or exceeded for the neuron to produce a signal, a non-linearity function F that acts on the produced signal (or activation) R, and an output O. The non-linearity function used in this network is the sigmoid. The sigmoid is very popular because it is monotonic, is bounded, and has a derivative: $f''(s) = kf(s)[1-f(s)]$. The model used in this work is the Feed Forward Multilayer perception, using the Back Propagation Algorithm.

> 6-Input layers
> 21-Covariates layers
> 1-Hidden layers
> 1-Output layer

All inputs are analyzed in the experimental validation part, with appropriate output results by the illustration of graphs so that the influences of the parameters of tensile strength are taken into consideration. The network information is presented in the table. The validation of the estimated NN and Experimental value illustrations is shown in Figure.

Table -1
Model Summary for Neural Network Model for Online Advertising for Home Appliances Products

Training	Sum of Squares Error	46.010
	Relative Error	.860
	Stopping Rule Used	1 consecutive step(s) with no decrease in error
	Training Time	0:00:00.08
Testing	Sum of Squares Error	43.063
	Relative Error	.864
Dependent Variable: OVER ALL SATISFACTION FOR THE CONSUMER		
Error computations are based on the testing sample.		

Source: Output generated from SPSS 20

Table -1.1
Neural Network Model for Overall satisfaction of the Consumer in Online Advertising for Home Appliances Products

Input Layer	Factors	1	Gender
		2	Age
		3	Qualification
		4	Marital Status
		5	Monthly Income
		6	Occupation
	Covariates	1	Are you watching online advertising
		2	Google+
		3	Face book
		4	Twitter
		5	YouTube
		6	Wikipedia
		7	LinkedIn
		8	MySpace
		9	Pinterest
		10	Instagram
		11	Digg
		12	E-Mail
		13	Amazon
		14	Flipkart
		15	Olx
		16	Tumblr
		17	Reddit
		18	Buffer
		19	Snap deal
		20	Myntra
		21	Shop clues
		Number of Units	49
		Rescaling Method for Covariates	Standardized
Hidden Layer(s)		Number of Hidden Layers	1
		Number of Units in Hidden Layer 1[a]	1
		Activation Function	Hyperbolic tangent
Output Layer	Dependent Variables	1	Overall satisfaction for the consumer
	Number of Units	1	
	Rescaling Method for Scale Dependents	Standardized	
	Activation Function	Identity	
	Error Function	Sum of Squares	

a. Excluding the bias unit
*Source: Output generated form SPSS 20.*

The factors of online advertising for home appliances products model parameters are modeled by using the Neural Network Method. The parameters are optimized so as to determine the set of parameters, which will influence the increase in the Overall satisfaction of the Consumer towards, Neural Networks Architecture and network information.

Table -1.2
Independent Variable importance of Neural Network Model for the Overall satisfaction of the Consumer in Online Advertising for Home Appliances Products

Independent Variable Importance	Importance	Normalized Importance
Gender	.005	4.5%
Age	.009	7.8%
Qualification	.015	13.5%
Marital Status	.022	18.8%
Monthly Income	.025	22.0%
Occupation	.023	20.3%
Are you watching online advertising	.032	28.1%
Google+	.042	36.9%
Face book	.055	48.5%
Twitter	.027	23.8%
YouTube	.114	100.0%
Wikipedia	.029	25.1%
LinkedIn	.069	60.2%
MySpace	.096	83.9%
Pinterest	.006	5.1%
Instagram	.003	2.8%
Digg	.022	18.9%
E-Mail	.061	53.1%
Amazon	.060	52.7%
Flipkart	.041	36.3%
Olx	.002	1.8%
Tumblr	.039	34.1%
Reddit	.009	7.6%
Buffer	.005	4.2%
Snapdeal	.042	37.0%
Myntra	.087	76.6%
Shopclues	.059	51.5%

Source: Output generated from SPSS 20

Figure –1.2
Normalized importance for Overall satisfaction of the Consumer in Online Advertising for Home Appliances Products
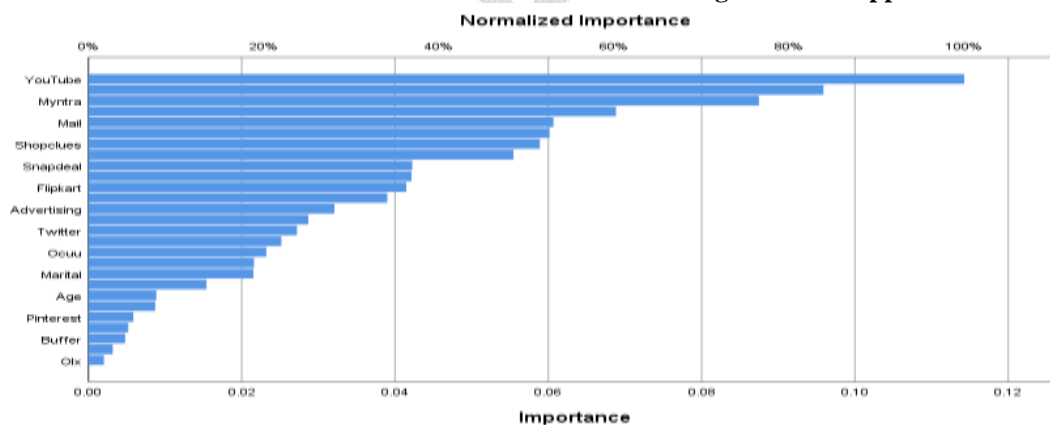
The significance grape is simply a bar chart of the values in the importance table, sorted in
descending value of importance. It appears that variables related to a consumer's stability (employ, address) and debts (creddebt, debtinc) have the most effect on how the network classifies customers; what you cannot tell is the "direction" of the relationship among these variables and the

predicted probability of default. You would guess that a larger amount of debt indicates a greater likelihood of default, but to be sure, you would need to use a model with more easily interpretable parameters

V. CONCLUSION

This study concluded for nowadays online marketing's is growth in the world for advertisement helpful to manufacturing appliances. In the online advertisement more create awareness for the people for social media in Facebook, twitter, YouTube, Wikipedia, LinkedIn, MySpace, Pinterest, Instagram, were increasing sales for the products. When using the neural network model for this chapter input and output layer for hidden. This neural network model for depended variable for overall satisfaction for the consumer's.

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