A REVIEW OF INTERACTIVITY COMPONENT OF ONLINE ADVERTISING MODELS

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Abstract

Online advertising is a comparatively nascent phenomenon which came into existence on 24th October, 1994 with publication of a paid display AT&T web banner ad on Hot Wired, a web based magazine (Cho & Cheon, 2004; Double Click, 2005, as cited in Ha, 2008; Janoschka, 2004; Kaye and Medoff, 2001, as cited in Evans, 2009; Hyland, 2000; Interactive Advertising Bureau, 2012). Research in the field of online advertising began in 1996 with the publication of Berthon, Pitt and Watson's research paper evaluating the World Wide Web as an advertising medium in the Journal of Advertising Research. Online advertising has witnessed rapid growth during the past decade. 'Interactivity' is one of the primary differentiating factors in case of online advertising. The power accorded to the users by this interactivity component is quite significant as it has given them control over their advertising consumption. Interactivity has received special attention in the online advertising models developed by researchers in order to provide insights into the functioning of online advertising. The aim of this paper is to review different models of online advertising and understand the manner in which each of them has dealt with interactivity. This paper is based upon my unpublished doctoral thesis and draws extensively upon the review of literature review carried out for it. This review is expected to provide the groundwork for further research in the field of developing advanced online advertising models.

An Introduction to Online Advertising Models

Selling is the primary purpose of advertising. An advertisement may sell an idea, a product or a service. The phenomenon of advertising is more than five centuries old. It came into existence with the publication of first printed advertisement in English around 1472 (Wells, Burnett, & Moriarty, 2002). Since then it has gone through innumerable transformations, but the core players of the advertising arena are still the same – the advertiser; the advertised (idea, service or product) and the consumer. The advertiser attempts to attract the attention of the consumers through a creatively crafted advertising message in order to persuade them to buy the advertised idea, product or service. In terms of purpose and players involved, online advertising is similar to television advertising, radio advertising or print advertising. Interactivity is the basic differentiating feature of online advertising. Enhanced measurability is another distinctive feature of online advertising. Both these features are extensions of the medium through which online advertisements are delivered i.e. internet.

Most of the advertising models reviewed in this paper deal with either of the two aforementioned attributes of online advertising i.e. interactivity and measurability. The focus of this research paper would be on understanding the interactivity component of online advertisements. Interactivity in terms of online communications primarily refers to the 'control' users can exercise over the messages (Bezjian-Avery, Calder, and Iacobucci, 1998; Jensen,1998; Steuer, 1992; Sundar, 2008). It may also

refer to circular flow of information between the user and the communicator or the speed at which messages are exchanged between them. Several online advertising theorists have attempted to conceptualize the manner in which audiences perceive, interact or are influenced by online advertising and the role of interactivity in this process. Researchers like Steven Bellman and John R. Rossiter; Yuping Liu and L. J. Shrum; Chang-Hoan Cho; Shelly Rodgers and Esther Thorson have proposed different models to explain the consumer attitudes and behaviour towards online advertising. "The online advertising information processing models…are mostly integration of old theories with some new elements specific to online advertising" (Ha, 2008).

Modified Elaboration Likelihood Model

Chang-Hoan Cho was one of the first researchers in the field of online advertising to propose a model to explain the manner in which in audiences process online advertising. The Elaboration Likelihood Model given by Richard Petty and John Cacioppo in 1983 to explain the underlying processes bringing about attitudinal changes in the audiences and persuading them to take desired action/s was utilized by Cho in 1999 to develop his Modified Elaboration Likelihood Model to describe the process of online advertising and the manner in which audiences respond to online advertising. Cho supported the postulates of this model by carrying out an empirical research study to examine different factors affecting behaviour of internet users towards online advertising. The variables studied by Cho included extent of personal and product involvement, dimensions of the advertisement, contextual relevance of the ad with respect to the content of the website, attitude of the audiences towards the website (vehicle) and their general opinion about web advertising as a whole (Cho, 1999). In his Modified Elaboration Likelihood Model, Cho differentiated between voluntary and involuntary exposure and attempted to explain how audiences react to each of them. The model also attempted to correlate perceptions of the audiences towards the vehicle or relevance of the vehicle to explain the processing of online advertising by the audiences. The model delineated four mediated variables including relevancy, repeated exposure, attitude towards the site and attitude towards web advertising as a whole and postulated that presence of all or some of these variables may lead to a favourable response from the audiences to voluntary as well as involuntary web ad exposures. The model also explained the role of peripheral cues such as size, colour and animation in processing of web ads by the audiences. Cho referred to interactivity in terms of user action of clicking the banner; going deeper into the web site of the advertiser or bookmarking it. He suggested that these actions on the part of the users played a significant role in central as well as peripheral processing routes. However, he did not elaborate much on the effects of interactivity on temporary or permanent attitude changes. Noise variables such as low connectivity speed, excessive traffic on the web site, distractions, unfamiliarity with the issues, etc. were also accounted for in this model. "The central routes for high involvement situation and the peripheral routes for low involvement situation in ELM (Elaboration Likelihood Model) still apply in online advertising" (Ha, 2008).

The model has been able to delineate multifarious factors that determine the manner in which online advertising is processed by the internet users. But, the sample employed by Cho to provide empirical credence to the model was not representative. Cho (1999) himself pointed out this limitation of his research in the concluding remarks of the paper in which Modified Elaboration Likelihood Model was

explained. Another shortcoming of the model pertains to the fact that it tested audiences' response to the banner ads only. This is because the study was carried out during the last few years of the 20th century when banner ads were the most prevalent online ad format. Online advertising and ad formats have evolved tremendously during first decade and half of the twentieth century. Most of the online ad formats used now-a-days are loaded with rich media content. At present, even the banner ads have rich media content such as in-banner audio/video or animation. However, this does not imply that the model has lost its significance. It only implies that online advertising has evolved considerably since this model was proposed and therefore, it must be examined again in the light of all the changes that have occurred in the field of online advertising in order to uphold its validity under the changed conditions.

Interactive Advertising Model (IAM)

One year after Modified Elaboration Likelihood Model was given by Cho, Shelly Rodgers and Esther Thorson (2000) proposed the Interactive Advertising Model (IAM) to explain the process of online advertising. This model may be considered as an improvement over the previously proposed models as it took into account structural as well as functional schools of thought. This model assumes that processing of information in case of online advertising carried out in an interactive environment is dependent upon functions (of the users) and structure (of ad formats). The model may be useful in understanding the basic framework of online advertising. The Interactive Advertising Model (IAM) endeavoured to establish a connection between various postulates of existing advertising models given for conventional media with the perception and processing of interactive online advertising by the online audiences. It posits that the process of online advertising can be explicated based on the same variables which are used for explaining advertising through traditional media. The only difference is that these variables affect the process of online advertising in a more complicated manner (Rodgers & Thorson, 2000).

Rodgers and Thorson's Interactive Advertising Model proposed that users' exposure to online advertising is dependent upon their internet usage motives. The model identified four primary motives for using internet – research, shopping, entertainment and communication or socialization. These motives are dependent upon whether the users are in a serious or a playful mode while using the internet. Cognitive processing of online ads by audiences is contingent upon interactions between consumer-controlled aspects of online advertising discussed above and advertiser-controlled aspects such as ad types, ad formats and ad features. Interactions between aforementioned variables determine the effects of online ads viewed by the audiences. The audiences may ignore the ads, interact with the ads in some manner such as by clicking on them or form different attitudes towards the ads. The model summarized how advertiser-controlled variables such as ad formats and ad types affected the manner in which these ads are processed by audiences in case of online advertising.

Netvertising Image Communication Model (NICM)

Stern, Zinkhan and Holbrook (2002) proposed the Netvertising Image Communication Model (NICM). This "conceptual model of online advertising involves the presentation and formation of image in consumers' mind by taking into consideration the various message stimuli available on the

Internet" (Ha, 2008). "A netvertising image is a cyberspace media representation in which the message incorporates multiple sensory inputs as vivid stimuli that fuse entertainment and education to inspire consumer creation of mental pictures that lead to marketplace behavioural responses" (Stern, Zinkhan, & Holbrook, 2002). The NICM attempts to explain the manner in which these netvertising images are communicated to, and are responded to, by the users. The model recognizes the fact that computer mediated environment (CME) acts as a media for communication on one hand and a marketplace on the other. It also takes into account interactivity as a unique characteristic of CME. It explains the process through which stimuli provided by netvertising images initiate consumer action. Attributes such as audio-visual content, animations, vivid graphics, and entertainment quotient of netvertising images initiate cognitive processing of the images by the audiences. The perceptions and attitudes created as a result of this cognitive processing in the memory of the users lead to marketplace responses. These responses may take the form of actual purchases, increased curiosity levels in the audiences manifesting itself in the form of search for more information, increased loyalty towards the brand, etc. (Stern, Zinkhan, & Holbrook, 2002). A comprehensive definition of the netvertising images provided by this model is its unique contribution to the field of online advertising research. One limitation of the model pertains to the fact that it is not supported by any empirical data. Also, the model does not account for factors such as the effect of intrusiveness of netvertising images on cognitive processing of netvertising images or their individual differences. Nevertheless, it is still expedient in understanding the basic framework of online advertising.

Dual-Process Model of Interactivity Effects

Yuping Liu and L. J. Shrum proposed a Dual-Process Model of Interactivity Effects in an eponymous research paper published in Journal of Advertising in 2009. This model, like the Modified Elaboration Likelihood Model given by Cho about a decade ago, used the postulates of elaboration likelihood model of advertising effects in order to explain the manner in which interactivity affects information processing in case of web communications. The model was developed with an objective to explain the effects of interactivity on process of persuasion and may be used to explicate the manner in which interactive online advertising is processed by the users. It explains how individual differences and situational variables lead to variance in effects of interactivity on persuasion. The model postulates that interactivity may have facilitating or inhibiting effects in case of high-involvement users leading to positive or negative brand attitudes, respectively. Higher levels of interactivity give more control to the users and provide comprehensive information to them as and when they require it. This enables them to search for and concentrate on information most pertinent to them and therefore, leads to positive responses and formation of positive brand attitudes. However, higher levels of interactivity require greater efforts on the part of the users in order to control the flow of information. This may impede users' cognitive processing of actual brand related information, preventing them from receiving the actual information that they require and lead to formation of negative brand attitudes. In case of low involvement users, presence of interactivity will always lead to formation of positive attitudes towards the brand. This happens because mere presence of interactivity features on the website may act as a positive peripheral cue for the low involvement users. The higher levels of interactivity do not put excessive demand on cognitive resources of these users as they are not inclined to engage with the website actively. The model makes it evident that interactivity is not

always expedient in formation of positive brand attitudes. The model's basic shortcoming lies in the small sample size. Also, the idea of interactivity as a monolithic construct is flawed because different interactivity features may evoke different responses from the users. Nevertheless, the model's contribution in explaining the relationship between interactivity elements and user responses is quite significant (Liu & Shrum, 2009).

Main Model

The MAIN model was proposed by S. Shyam Sundar in 2008 to explicate the effects of technology on credibility. The model described how affordances of modality, interactivity, agency and navigability influence credibility in the digital environment (Sundar, 2008). "The MAIN model offers a fertile theoretical framework for understanding the role of technology in online persuasion, by simply changing the outcome variable from credibility to attitudes and behaviors" (Sundar, Xu, & Dou, 2012). In the year 2012, S. Shyam Sundar, Qian Xu and Xue Dou utilized the MAIN model perspective to explain the role of technology in online persuasion. They used an abridged version of the MAIN model and referred to it as the MAIN Model for Online Advertising and Marketing. The model proposes that different media of communication proffer certain affordances that affect how the consumers will perceive communications received through any particular medium. These affordances can be classified as modality, agency, interactivity and navigability. The presentation of the message in text, audio or audio-visual or a combination of all these comprises modality affordances. The users can be the creators of the content in online media. This unique characteristic of the online media relates to the agency affordances. Interactivity affordances refer to the options and the control users have regarding the manner in which they consume the content in an online environment. The navigability affordances pertain to unique navigation options provided by the online medium (Sundar, 2008). "The focus of the MAIN model lies in identifying cues in the technology of the interface that can impact user cognitions and attitudes, regardless of the content of the persuasive appeals" (Sundar, Xu, & Dou, 2012). This is the factor that distinguishes the MAIN model from the models discussed before it and is also the basic shortcoming of this model. Nevertheless, the model provides significant insights to understand the correlations between technological affordances provided by the online media and the process of persuasion.

Interactivity, message elements and action cues afforded by these elements to the users, manner of processing of advertising messages, unique characteristics of online media and the effect/s they have on online communications and behavioural or attitudinal responses of the audiences to these communications are few common elements of all the models of online advertising discussed above. According to the models reviewed above, element of interactivity is a major distinguishing factor in the context of processing of advertising messages communicated through conventional media and through online media. Interactivity may affect cognitive processing of these ads either negatively or positively. However, most models focus upon positive effects of interactivity on processing of online advertising. Responses to online advertising depend upon a number of factors such as internet motives of the users, quality of advertising messages, level of interactivity, presence of positive cues, etc. User responses to online advertising may manifest in a number of forms such as formation of certain attitudes towards the products or services advertised or research for further information regarding

them (Cho, 1999; Rodgers & Thorson, 2000; Stern, Zinkhan, & Holbrook, 2002; Liu & Shrum, 2009; Sundar, Xu, & Dou, 2012).

Discussion & Conclusion

These models efficiently provide a basic framework for understanding the functioning of online advertising.One common thread amongst all these models is presence of interacitvity as a distinguishing characteristic of online advertisements. A review of the aforementioned models makes it conspicuous that most of them have built upon already existing models of advertising with interactivity as the major distinguishing factor in the process of online advertising. According to these models, interactivity is the most powerful factor which determines how online advertising will be received and perceived by the users. Interactivity may act as a positive or a negative catalyst depending upon several factors such as involvement level of the users. Further research needs to focus on elaboration on the manner in which interactivity affects reception and perception of online advertising by the users. These models affirm that online advertising is similar to other forms of advertising in terms of reception and perception by the users in terms of cues offered. It is the presence of interactivity which makes the process more complex. The models clearly emphasise upon the prominency of interactivity component of online advertisements over other components in the context of processing of these ads. However, the models are not in consonance with each other in terms of the effects of interactivity on processing of online advertising by the users. Also, they do not elucidate the manner in which interactivity affects the perception and reception of online advertisements. Further research is needed to provide confirmation to ascendancy of interactivity over other factors. Most of these models have not been tested with larger or more diverse samples leading to some uncertainty over their universal applicability. This fact has been acknowledged by some of the researchers in their research papers. These models need to be tested with larger and more diverse samples in order to confirm their validity. Also, further research is required to be carried out in order to make sure that users also perceive interactivity as it is perceived by the researchers.

Future online advertising models should attempt to be more inclusive in their approach and desist from focussing only upon the factor of interactivity. For instance, in a developing country like India where internet is still a luxury and internet speed a big worry, interactivity may not be a very influential factor while studying the effects of online advertising and the manner in which it is received and perceived by the audiences. One peculiar factor related to online advertising is that audience are actually paying for viewing the advertisement. Also, the nature of interactivity should be in consonance with motive of the user for going online. For instance, a user going online for entertainment purposes may react more positively to interactivity cues when they fulfil his objective of getting entertainment in some way. Limited bandwith may also be a hindrance to interactivity being a positive catalyst in processing of online advertisements. Monetary barriers; slower internet speedand perceived goal impediment may prevail overadvantages of interactivity in such cases. All these variables need more elaboration in order to understand effects of interactivtiy. Therefore, it is imperative for researchers to look at the framework of online advertising holistically and endeavour to include different factors while carrying out their studies on online advertising. An inclusive approach

might expeditethe process of building more exhaustive and comprehensive models of online advertisng.

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