

## AN EMPIRICAL STUDY ON CONSUMER'S PERCEIVED VALUE AND ATTITUDE TOWARD ADVERTISING

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### ABSTRACT

In the e-CRM environment, Internet based advertising is an important mechanism that enterprises use to communicate with customers. Existing studies suggest that the following four factors contribute to consumers' perceived value and attitude toward advertising: entertainment, irritation, informativeness, and credibility. We believe that interactivity is another factor that influences consumers' perceptions. The present study extends the existing literature by (1) introducing interactivity as another contributory factor, and (2) measuring consumers' perceived value and attitude toward advertising for different purposes (brand building and directional advertising) and different media (traditional and Internet-based). The findings (1) support a research model on perceived value and attitude toward advertising; (2) demonstrate that interactivity is a necessary factor that contributes to consumer attitude toward advertising; (3) indicate some differences between traditional advertising and Internet-based advertising; and (4) suggest that advertising value may not be a mediator between the antecedents and advertising attitude.

**Keywords:** e-CRM, Internet-based advertising, traditional advertising, consumer perception, advertising value, attitude toward advertising, interactivity

### INTRODUCTION

Internet based advertising has become an important marketing channel for companies to build their brands, to convey information, or to promote business transactions. These are important processes of e-CRM. As such, understanding what consumers think about online advertising, such as their perceived value and attitude toward Internet advertising, has important implications to e-CRM. There are two limitations in current studies on online advertising: some confusion between advertising value and attitude, and a lack of differentiation between the purposes of advertising purposes. These have made the studies hard to compare or interpret. Some treat advertising value and attitude as the same construct (Alwitt & Prabhaker 1994; Chen & Wells, 2000; Bezjian-Avery et al. 1998); while others consider them as different concepts thus different constructs. Advertising purposes can be classified into two categories: brand building and directional (Fernandez and Rosen, 2000; Lohse and Rosen, 2001). Brand building advertising is synonymous with product advertising and is commonly seen in traditional mass media, including TV, radio, magazine, and newspaper. Directional advertising is designed to help potential buyers locate interesting information (Fernandez, 1995). Such different natures of advertising purposes could have significant impact on consumer perceptions of advertising value and attitude. In this study, we first define advertising value and attitude, and then examine consumers' perceived value and attitude for different advertising purposes. We extend a research model on advertising values and attitudes, and empirically test and compare this model using 290 participants.

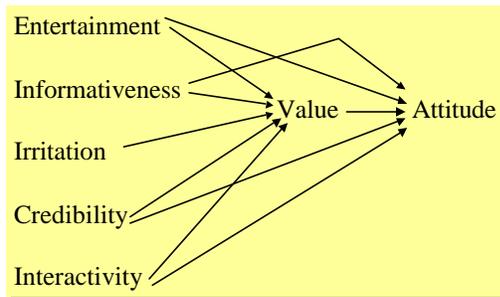
### A MODEL OF PERCEIVED VALUE AND ATTITUDE TOWARD ADVERTISING

Attitude toward advertising (Aad) is a multidimensional construct with numerous definitions (Heath and Gaeth, 1994). However, pinpointing attitude toward the advertisement as an affective response to advertisements has been a popular indicator for measuring the effectiveness of advertising (Srull 1990; Brown and Staymen 1992). On the other hand, advertising value is defined as a cognitive assessment of the advertisements (Ducoffe 1995). Ducoffe (1995) develops a framework for predicting consumer's value and attitude toward advertising. Entertainment, informativeness, and irritation are identified as factors contributing to consumers' evaluations of advertising values and thus attitude toward advertisements. Ducoffe (1996) then applies the model to the Web environment. Without distinguishing the two types of advertising purposes, he confirms previous results and finds that attitude toward Web advertising is directly dependent on advertising value. Furthermore, advertising value is dependent on perceived levels of entertainment, informativeness, and irritation.

Brackett and Carr (2001) further validate Ducoffe's model and extend the model to include credibility and consumer demographics. Credibility is directly related to both advertising value and attitude toward advertising. Demographic variables such as college major and gender are shown to affect only attitude toward advertising. Again, Brackett and Carr do not separate brand building from directional advertising purposes.

One of the many differences between traditional and online advertising is the level of interactivity a consumer may experience with an advertisement. Studies find that interactivity is a factor that may affect consumer perceptions on advertising value and attitude (Cho and Leckenby, 1999; Wu, 1999). Thus it is reasonable to believe that interactivity should be another antecedent to advertising value and attitude. Interactivity is an under defined concept. Among the many definitions, there are three dominant ways of defining interactivity: human-human interaction, human-message interaction, and human-computer interaction (Cho and Leckenby 1999; Sukpanich and Chen, 2000). In a similar vein, Sukpanich and Chen (2000) classify interactivity in the Web environment into three categories: machine interactivity, content interactivity, and personal interactivity.

The focus of our study is on machine interactivity and content interactivity. Specifically, interactivity is measured by two-way communication (or vividness), control, frequency of exchange, and customization. Since active engagement from the user is a prerequisite for the interaction to exist, we incorporate degree of cognitive involvement as another measurement. Figure 1 depicts our framework of consumer's perception on advertising value and attitudes. Interactivity may affect both value and attitude in positive ways.



**Figure 1. Extended Model of Advertising Value and Attitude**

## RESEARCH METHOD

The purpose of the study is to identify a consumer's general perceptions on advertising value and attitude. Perceptions are usually self-reported. For this study, a self-reported survey was conducted at a major northeastern university in US. Participants were 303 college students from 13 undergraduate and graduate classes. A total of 12 advertising examples (or advertising scenarios) were chosen to represent different advertising purposes (brand building vs. directional advertising) and media (traditional vs. Internet based). The reason of using advertising examples is to put the participant's mind into a specific purpose with a specific advertising medium when responding to the questions in the survey. Thus there were a total of 12 versions of the survey. They used the same instruction and content except where the specific example was stated. A total of 290 usable surveys were analyzed. The average age of these 290 participants was 23 with a standard deviation of 5.7. Among the participants, 20% were in freshmen/sophomore classes, 55% junior/senior, and 25% graduate and doctoral. In addition, 33% were females, 54% white, 26% Asian, and 20% of African-America, Hispanic, Native America, and multi-racial all together. These participants had an average of 6.3 years (std 2) of Internet experience, and spent an average of 22 hours (std is 15) on the Internet per week. When asked for the primary reason for using the Internet, 50% of the participants reported for information, 23% for entertainment, and 27% for both information and entertainment.

## DATA ANALYSIS AND RESULTS

Factor analyses confirmed the loadings of three antecedents (entertainment, informativeness, and credibility). One item within the original irritation construct, "confusing," did not load with the rest of the irritation items and was dropped from the consequent analyses. Factor analyses also confirmed the loadings of the six items for Interactivity.

## Testing the Model

Structured equation models were used to test the model in Figure 1. Figure 2 depicts the empirical model demonstrated by the 290 surveys. All pathways are significant at  $p < .01$  or less. This result is consistent with that of Ducoffe's (1996) in terms of the relationships between the three antecedents (informativeness, entertainment, and irritation) to value and attitude. In terms of Brackett & Carr's model, our analysis confirms the significant pathways credibility has with value and attitude but does not confirm the direct relationship between informativeness and attitude. Our model in Figure 2 also shows that interactivity has rather strong positive correlations with informativeness, credibility, and entertainment, and a negative correlation with irritation. Interactivity is an antecedent to attitude, but not to value.

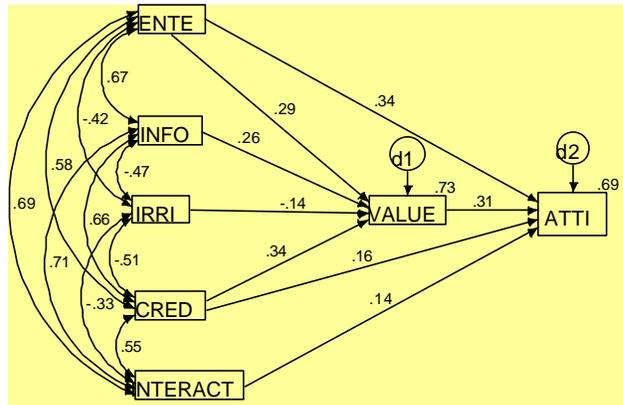
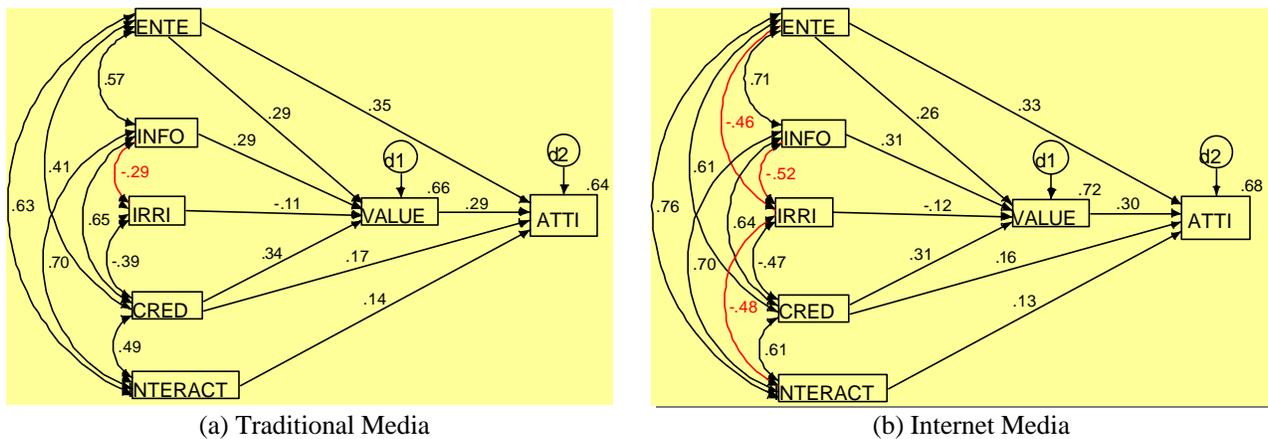


Figure 2. Empirical Model of Advertising Value and Attitude

## Comparing the Traditional and the Internet-base Media Advertising

Among the 290 surveys, 140 were about traditional media and 150 Internet based. Using structured equation models to examine these two groups of data reveals the models in Figure 3. As the models indicate, there are no significant differences on the relationships between the five independent variables and value, and between Entertainment, Credibility, Interactivity, Value and Attitude. The differences lie with the correlations between the independent variables. For example, there is no significant correlation between Entertainment and Irritation for the traditional media, but a negative one for the Internet media. It is the same between Interactivity and Irritation. Also, the correlation between Information and Irritation is enlarged (negatively) for the Internet media.

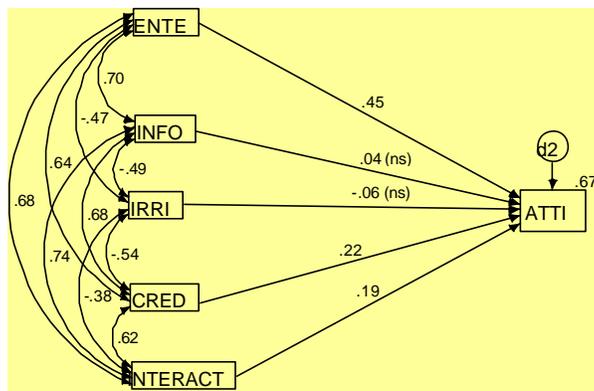


(a) Traditional Media  
(b) Internet Media  
Figure 3. Empirical Models of Traditional Media and Internet Media Respectively

## A Model of Advertising Attitude

Ducoffe (1996) proposes that advertising value and advertising attitude are highly associated. Therefore, a consumer who assesses advertising to be valuable is expected to generate favorable attitude. In this sense, Advertising value is positioned as one of the antecedents (or predictors) of Attitude toward Advertising. Both Ducoffe and Brackett & Carr's studies find that entertainment would directly impact advertising attitude. Ducoffe (1996) attributes this to the affective component of both constructs that are not captured by advertising value. However, this interpretation of affective component does not explain why irritation, an affective component, does not directly relate to attitude. The fact that entertainment, credibility, and interactivity directly contribute to attitude may suggest that advertising value does not mediate the relationships between the four antecedents and advertising attitude due to reasons other than differences between affective vs. cognitive components. This fact also indicates that the model alone does not clearly show the relationships between the four independent variables and attitude.

To investigate the contributing factors of attitude toward advertising, we reexamined the model in Figure 2 by removing the value construct, resulting in the model in Figure 4. The Aikake Information Index (AIC) was 40 for the model in Figure 4, and 51 for the model in Figure 2. Figure 2 has a squared multiple correlation (SMC) of .69, whereas Figure 4 has an SMC of .67. These results suggest that leaving value out of the model causes little reduction in the variance accounted for and provides a more parsimonious and clearer model for advertising attitude. Note that informativeness and irritation have very minimum influence (non-significant) on attitude, which suggest that if one's purpose is to investigate consumers' attitudes toward advertising, only entertainment, credibility, and interactivity should be considered as the antecedents to attitude.



**Figure 4. Empirical Model of Advertising Attitude (Value Removed)**

## DISCUSSIONS AND CONCLUSION

Our findings show that entertainment, credibility and interactivity directly contribute to favourable consumer attitudes and that interactivity has strong associations with all other independent variables. Interactivity of the Internet and Web technology has the potential to win favourable consumer attitudes, which is of great importance to successful online advertising and e-CRM strategies. Our findings also indicate that advertising value is not a mediator between the antecedents and advertising attitude. If the purpose of a study is to test consumer attitude toward advertising, then using a parsimonious model is better to illustrate the relationships between attitude and other factors. For example, informativeness does not contribute to attitude at all. On the other hand, however, if advertising value is also the purpose of a study, then the model in Figure 2 is useful.

In this research, we take a consumer's perspective and examine consumers' perceptions of different types of advertisements. This is an important angle to study e-CRM where consumers interact with enterprises in the digital environment. Our study contributes to a better conceptual understanding of consumers' perceptions by validating and extending existing frameworks. Meanwhile, this study also provides practical suggestions on what to consider when developing enterprises' online ads or online presence to better serve consumers' needs.

(References are available upon request.)