The Influence of Customized Internet Banner Ad on Attitude-Ad-Brand-Behavioural Relationship

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Abstract

This paper examines the influence of customizing banner ads to entice higher users' interactivity and sequentially builds not only positive attitudes toward the ad and the brand but also positive behavioral outcomes. It also attempts to introduce a new profiling-targeting parameter based on *psychographics* for customizing banner ad based on Internet user's individual differences according to their personality, types of goal-directed motives and preferred information processing strategies. Data was gathered through an online survey with a sample of 385 respondents. The Covariance Structural Modeling results supported a positive attitude-ad-brand-behavioral relationship. Positive attitude towards the ad generates more positive behavioral outcomes. Contrary to expectations, the results did not support the proposition that a positive brand attitude produces more positive behavioral outcomes. The findings provide evidence to support the proposition that customization of banner ads' creative and appeals (in terms of presentation modality, verbal versus visual presentation and information-rational versus entertainment-emotional appeals) based on users' individual differences in need for cognition, goal-directed motives and preferred information processing strategies effects positive attitudes toward the ad and the brand.

Introduction

The existing decision support systems and computer network literature have revealed that the Internet has created significant opportunity for customisation, one-to-one marketing and Internet advertising. It has also put an enormous pressure for acquiring customer information needed for such customisation.

Even though there are existing technologies to serve different and customized bundles of advertising messages to customers as they enter web sites, Raghu, Kannan, Rao and Whinston [27] argue that both profiling of the entering customers in real time and selecting the customized mix of offerings are a challenge. This is because the customer base for such customized advertisements is dynamic. That is, in order to provide individual users a customized offering, the profiling of customer preference requires a continuing basis of high level tracking of an individual customer's level of interaction when he/she surfs Web sites. Although there is a large amount of current and historical customer information available to assist the profiling a customized offering, the underlying behaviour of how Internet users process and use information from the Web remains largely unexplained.

Roehm and Haugtvedt [29] and Nowak, Shamp, Hollander and Cameron [22] have suggested the customisation of advertising messages presented to match consumers' responses. Customisation, from an advertising perspective, can be referred to as the extent of responsiveness to the consumer and the potential to facilitate interpersonal communication [13]. According to Heeter [13], the benefit of customisation involves simply personalising messages by inserting the customer's name at various appropriate points in the web page presentation. Many Internet advertising researchers highly recommend customisation or personalisation. However, there is little attention given to how customisation can be operationalised.

Several recent studies also show that changes in the nature of information communicable by Web advertising alters both consumer information search strategies and their decision-making processes [31] [14] [15]. Several studies indicate the moderating effect in the attitude-behavior relationship depends on the amount of cognitive effort required to form or change attitudes [12]. The next question is what types of

information are most attractive to Internet users, and what compels them to elaborate on particular information while discarding the remainder? In addition, what are the appropriate levels of exposure needed to impact consumer cognition, attitudes toward the ad and the brand? To address these issues, we propose a research model employing individual's need for cognition, goal-directed motives and preferred information processing strategy as a psychological mechanism to customise a banner ad design in order to understand how Internet banner advertising can lead to attitude change.

The Research Model

The model proposed assumes that customisation depends on segmenting consumers by profiling their individual differences in terms of their need for cognition, goal-directed motives and their preferred information processing strategies (known as behavioral variables). The customisation of the advertising message embraces their preference for informative and/or entertainment banner ads.

In Figure 1, the model begins with identifying antecedents that effect attitudinal and behavioral changes. The antecedents include need for cognition, goal-directed motives, information-processing strategies and personal involvement. The framework proposes a psychographics mechanism as a basis of customising a banner ad by segmenting Internet users based on their individual differences in need for cognition. Personality has been identified as one of the variables which moderates the strength of relationship between attitude and behavioral [9]. A motivational construct (goal-directed motives) is included as one of the important antecedents to explain both the direction of behaviour and in the context of brand information processing. Goal-directed motive is defined as Internet users' desire, willingness, interest or readiness to process brand information in a persuasive communication presented in a form of an Internet ad. An Internet ad with content that can satisfy a Internet user's goal-directed motive will be relatively easy to process, therefore elaboration of message may be enhanced. Bettman, Payne and Luce [4] have made a similar suggestion about ad message processing and elaboration in a non-Internet environment. Besides the type of Internet ad that an Internet user will be attracted to, an individual's reaction to an ad (e.g. ad/brand attitude) is also a function of his/her motivation.
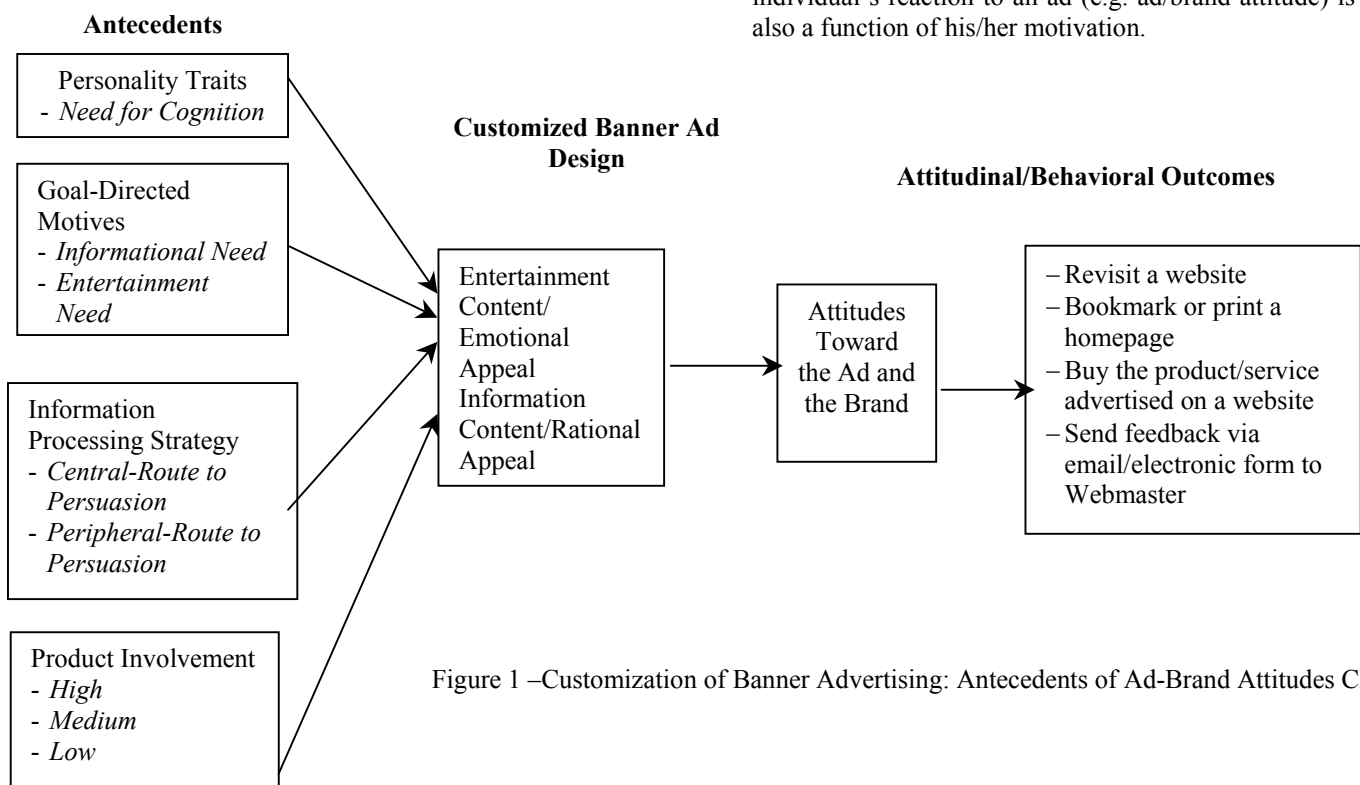
Antecedents

Figure 1 –Customization of Banner Advertising: Antecedents of Ad-Brand Attitudes Change

As opposed to the traditional method of customised banner advertising using demographics, the study presents a model that uses *psychographics* and *behavioral* variables to deliver the interactive advertising message and/or web site content that is tailored to the target audience.

For example, Rodgers and Sheldon [28] suggest that individuals who are driven to use the Internet for a particular reason such as searching or browsing are more likely to express favourable attitudes toward banner ads that correspond with that motive.

Cialdini, Petty and Cacioppo [7] and Petty and Cacioppo [25] have provided an explanation of the

moderating effects in the attitude-behaviour relation. These authors suggest that the moderating effects are related to the amount of cognitive effort an individual has been willing and/or able to expend in forming or changing attitudes. That is, attitude that are formed or changed with greater cognitive effort are more predictive of future behaviour as compared to attitudes which are formed with less cognitive effort. The Elaboration Likelihood Model of Persuasion (ELM) developed by Petty and Cacioppo [23] [25] will be used as general framework for organising and understanding the basic processes responsible for attitude change. According to ELM [25], there are two information processing strategies for attitude change - central and peripheral route processing. For example, in some circumstances, attitude formation and change results from a consumer's careful attempts to comprehend and evaluate the relevant content of ad and to integrate this new information with his/her prior knowledge into a coherent and reasoned opinion about the brand. In other situations, consumers use peripheral factors such as their feelings about the quality of the ad, the source of the ad or their current mood state as cues to assist them to decide how they feel about the advertised brand. A motivated individual tends to engage in central processing. The persuasiveness of the message basically depends on careful and in-depth consideration of the merits of the advertised product. In this case, informational aspects of the message play an important role in persuasion and peripheral cues (animated images, graphics, music or video) are less important. On the other hand, an individual who has little motivation tends to disregard the informational aspects of the message and is likely to be persuaded by peripheral cues.

Previous studies have suggested that there is a link between product category and message strategies [8] [19]. Petty, Cacioppo and Schumann [24] and Petty and Cacioppo [25] suggest that involvement (personal relevance) with an issue was directly or indirectly related to the extensiveness of the cognitive effort that consumers expend in forming or changing attitudes. The study conducted by Verplanken [32] reported the moderating effects of involvement and need for cognition in attitude-behavioral consistency. Laurent and Kapferer [17] suggest that consumer involvement effected the extent of the decision process and information search, which in turn effected the types of media to be chosen, the numbers of repetitions of ad messages as well as the quantity of information provided by the ad.

Empirical study provided by Cho [5] claimed that Internet users who are in high involvement situations, are more likely to click ads in order to request more information than those in low involvement situations. On the other hand, those who are in low involvement situations are more likely to click a banner when it is has a larger than average size banner ads. These

individuals are also more likely to click on a banner ad when it has dynamic animation. However, the study showed that there was no difference in clicking of banner ad for Internet users in the high involvement situations, regardless of the size or dynamic animation. Cho also concludes that the effect of advertising is maximized when the contents of the advertising vehicle are relevant to the product category. The effects of banner ads will be minimal where the contents of the Web site are irrelevant to the product category. Hence, a banner ad with higher relevance to the product category and the contents of the site where the banner ad is placed will generate more clicking of the banner. The study conducted by Roehm [30] confirmed that where there was matching of the tone and content of message to some aspect of a consumer then product evaluations and attitudes were enhanced and were more positive. In addition, the recent research conducted by Petty and Wegener [26] has shown that matching a communication to the functional base of an attitude that is relevant or important to a participant, can increase message scrutiny.

Recent evidence provided by Cho and Leckenby [6] suggest that simple exposure to a banner ad without clicking did not change Internet users' initial brand attitude and purchase. Furthermore, the brand attitude changes (either in the positive or negative direction) in line with their likeability of the corporate Web site, as a result of users clicking of banner ad in order to link and be exposed to the respective target ad. Furthermore, a recent study conducted by Lee and Miller [18] concluded that brand attitude would be a better of measure Internet advertising effectiveness.

Thus, in this paper, we emphasize that it is not just message content but the important combination of the message and the audience for the achievement of maximum persuasiveness. That is, the extent to which the advertising message is customised according to personality, goal-directed motives and information processing strategies of Internet users is a critical determinant of the strength of the message persuasiveness and formation/creation of attitudinal-behavioral changes. In this study, behavioural outcomes includes longer duration visit; higher frequency of repeat visit; bookmarking the web site; searching for more information about the brand; and providing feedback to advertisers or providing personal information to advertisers. This paper tests the following hypotheses, as illustrated in Figure 2.

H_1: The greater extent of perceived customisation of a banner ad, the greater extent of change in attitude towards a banner ad.

H_2: The greater extent of perceived customisation of a banner ad, the greater extent of change in brand attitude.

H_3: The greater extent of perceived customisation of a banner ad, the greater extent of change in behaviour outcomes.

H$_4$:   The greater extent of change in attitude towards a banner ad, the greater extent of change in behaviour outcome.

H$_5$:   The greater extent of change in attitude towards a banner ad, the greater extent of change in brand attitude.

H$_6$:   The greater extent of change in brand attitude, the greater extent of change in behaviour outcomes.
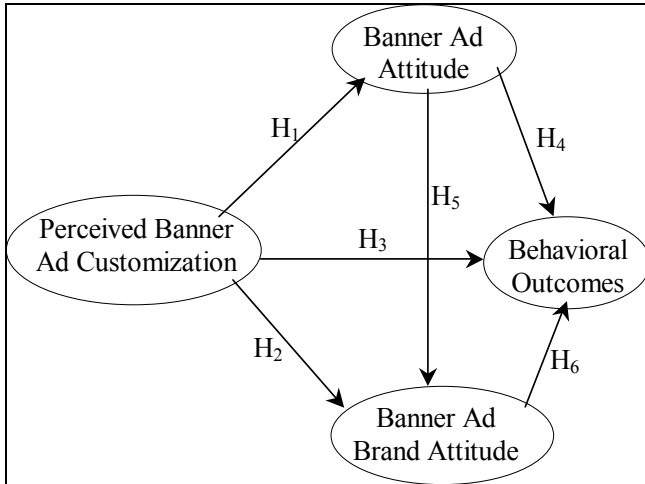

Figure 2 – Hypothesized Relationship of Perceived Banner Ad Customisation and Ad-Attitude-Brand Behavioural Relationship

In this study, familiar brands are used. A familiar brand will tend to be favored. In a previous empirical study by Ward and Lee [33], Internet users were found to be reacting more favourably to familiar brands since they prefer well-known brands. In addition, the expected click-through rate for a familiar brand was ten times higher than an unfamiliar brand. Empirical results provided by Dahlen [10] have shown that a familiar brand has a positive effect on brand attitude when exposed once or twice but wears out on multiple exposures. The author also suggests that the banner ads of familiar brands perform best on a short-term basis with relatively good initial click-through rates, but decrease rapidly after repeated exposure. The diminishing returns would likely to affect brand attitude rather than brand awareness given that in such high familiarity of the brands, brand awareness would not be expected to change. In particular, the framework showed in Table 1 was employed as guideline when designing the banner ads.

Three standard size banner ads of 460 x 55 pixels were created for this study. Each banner ad was created with different advertising theme and interactive features. The advertising objective was to determine the differences in attitudes towards the banner ad and the brand as a result of two forced exposures: first is to view and second is to click on the preferred banner ad.

Research Design And Methodology

Familiar Product/Brand	Level of Product Involvement	Goal-directed Motives	Personality Traits	Information Processing Strategies	Ad Design Principles	
					Advertising Appeal	Banner Ad
Soft drink	Low	Entertainment	Low NC	Peripheral route information processing (visual processing)	Entertainment Oriented	*Image site* Contains More Visuals and Interactive Features
Computer	High	Information	High NC	Central route information processing (verbal processing)	Informational Oriented	*Informational site* Contains More Verbal Content and Less Interactive Features
Fashion Apparel	Medium	Information and Entertainment	Medium NC	A combination of central and peripheral route information processing (Both verbal and visual processing)	More Informational and Less Entertainment Oriented	*Combined Informational and Image site* Contains More Verbal Content and Interactive Features

NC – Need for Cognition
Table 1 – Classification of Stimuli Employed In Design of Banner Ads

All banner ads contained two identical design properties with the actual company logo on the left side of the banner space and an animated actual (current) company slogan or message flashed across the centre of the banner to trigger respondent's brand familiarity. The basic structural design of the experimental banner ads was shown in Figure 3.

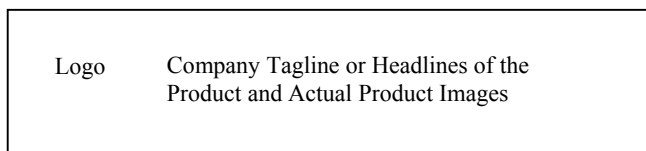| Logo	Company Tagline or Headlines of the Product and Actual Product Images

Figure 3– Design of Banner Ad

The background colour used for all banner ads (or dominant colour of the banner) was white. The exception was allowed for the soft drink banner ad because the background colour (red) used was the exact colour of the actual brand to project the psychological effect of warm, sense of novelty and entertainment. In addition, interactive features such as animated images were included in the soft drink banner ad to catalyst and initiate immediate reaction (clicking on the banner ad). Even though the computer banner ad was purposively designed as an informative banner, a blue animated butterfly was built-in as a means of instructing the respondent's attention of the product benefits. Similarly, as for fashion apparel banner, blinking words of the product attributes were flashed to ensure users' attention.

Operationalisation of Research Variables

The measurement scales used in this study were adapted from various sources to suit the specific context of Internet advertising. These measurement scales were based on valid and reliable measures found in previous research. In this study, for measuring attitudinal responses, this research utilised the scales developed by Gardner [11], Mitchell [21], Maheswaran and Sternthal [20], and Cho [5]. Since these scales developed by Gardner [11], Mitchell [21], Maheswaran and Sternthal [20] were originally administered to measure attitudes toward the ad and brand for traditional media, they were modified to apply in the context of Internet advertising. Cho's [5] scales were directly applied in this research to measure attitudes toward the target ad. As for behavioral responses, measurement scales developed by Baker and Churchill [3] was considered and compared to Cho's scale [5]. Modification was then made to tailor the scales to measure the purchase intent. A 7-point Likert scale measures all scales.

Sample Characteristics

The population for this study is Internet users. As such, there were no boundaries placed on the potential respondents since the Internet can be connected anywhere and at anytime. Two samples were drawn. Data was gathered through an online survey with a sample size totalled 385 respondents who have more than one-year Internet experience. Two samples including a working adult group and a commercial online panel were used. The first sample was recruited by using advertising flyers and emails to undergraduate business students. A professional marketing research firm, AMR Interactive Australia, using their existing online panel, provided the second sample. The panel was invited via email to participate in the study. A Web URL address was then sent to those who showed interest and willingness to participate in this study in return for a cash draw incentive.

Results

The assessment of the measurement models by the means of the exploratory and confirmatory approaches. Table 2 shows that there are 4 constructs in total. Each construct is tested for its convergent validity and discriminant validity and unidimienionality is achieved. The findings indicate that the dimensions of these constructs are conceptually and empirically acceptable with multiple goodness-of-fit indices (GFI, CFI, TLI and NFI) above the 0.90 recommended level. All variance extracted for the latent constructs are equal or greater than the conventional standard of 50 per cent. The average factor loadings on these constructs are all equal or greater than 0.70. For those factor loadings of less than 0.50 were removed, the measurement is re-specified and similar CFA are conducted for level of model fit, within construct convergent validity and within construct discriminant validity including the composite reliability and the average variance extracted. Lastly, the composite reliabilities (CR) were computed. The CR results show that all constructs have reasonably acceptable reliability. Not all CR have similar reliability Cronbach's alphas. These findings confirm that the underestimation of Cronbach's alphas is insignificant [2] and therefore it is not likely to cause any practical consequences [1].

Previous research has recommended the use of multiple indices to assess the fit of the model to the data [16]. In judging the adequacy of model fit, larger CFI, TLI and NFI values (greater than 0.90) indicate good model fit. The normed Chi-square should not be greater than 5.0 [34] to indicate a good fit. Finally, the RMSEA value of less than or equal to 0.08 indicates a good fit.

In evaluating goodness of fit, the model receives a good fit to the data. The standardised regression coefficients estimated by ML estimation together with the significance tests and the structural paths are shown in Figure 3. For absolute fit measures, the model has achieved a good fit (GFI = 0.952, normed Chi-square = 2.901 and RMSEA = 0.070).

No	Construct	No. Of Items	Reliability Tests		Validity Tests			
			Cronbach's Alpha	Composite Reliability (CR)	Average Variance Extracted (AVE)	Average Item Loading	Unidimensionality	Within-Construct Convergent Validity
1.	Perceived Banner Ad Customization	3	0.8632	0.8690	0.6913	0.8260	Satisfactory	Satisfactory
2.	Attitude Towards A Banner Ad	2	0.8629	N.A	N.A	N.A	N.A	N.A
3.	Banner Ad Brand Attitude	3	0.9224	0.9232	0.8006	0.8914	Satisfactory	Satisfactory
4.	Behavioral Outcomes	3	0.9066	0.9100	0.7725	0.8757	Satisfactory	Satisfactory

Table 2 – Summary of Psychometric Properties of Measures

Absolute Fit Measures

λ^2 / df	2.901
RMR	0.067
GFI	0.952
RMSEA	0.07

Incremental Fit Measures

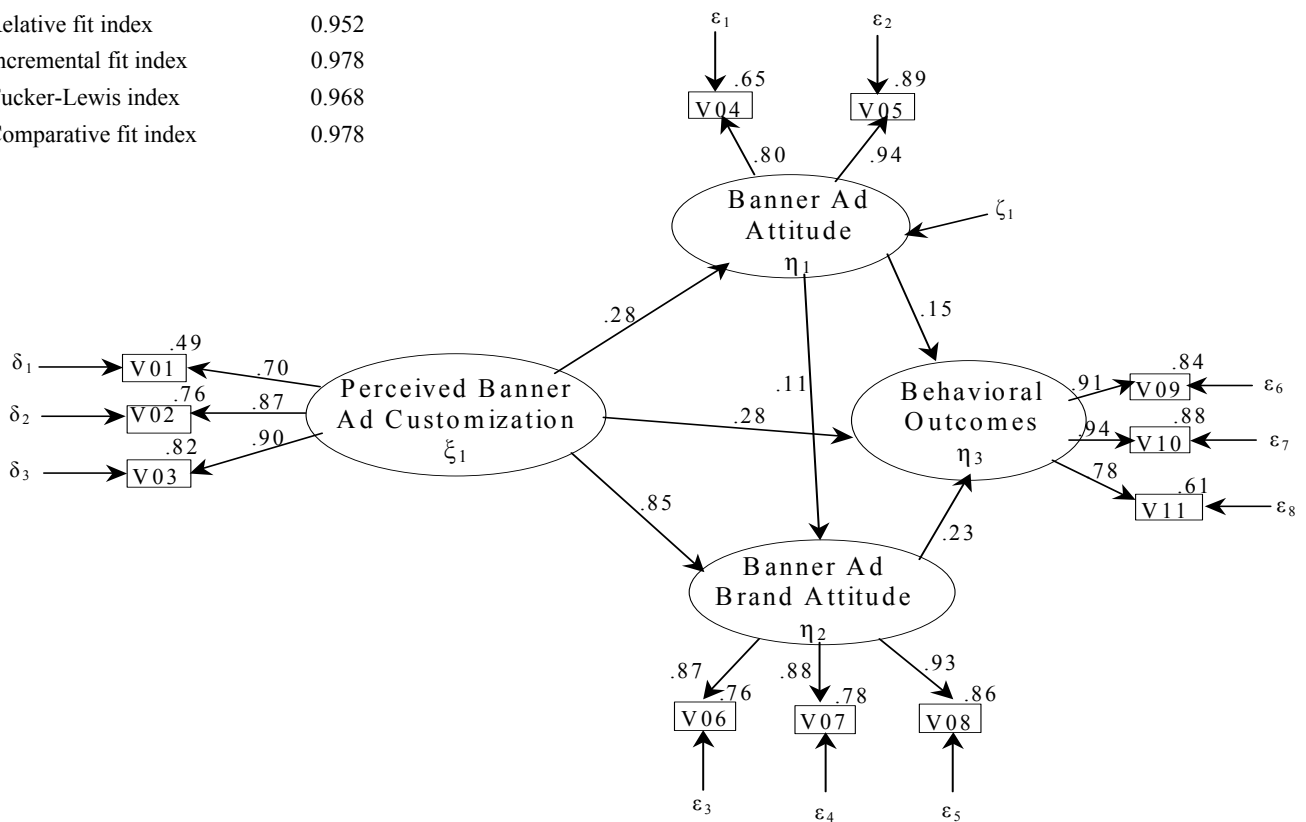|	
Normed fit index	0.967
Relative fit index	0.952
Incremental fit index	0.978
Tucker-Lewis index	0.968
Comparative fit index	0.978

Figure 4 – The CSM Results of Estimates of Banner Ad Customisation, Attitude Towards A Banner Ad and Brand Attitude

The incremental fit measures are above the 0.90 recommended levels (NFI = 0.967, TLI = 0.968 and CFI = 0.978), therefore confirming that the model has acceptable level of goodness-of-fit.

In Figure 4, the results of the CSM show that the standardized regression coefficients of all structural paths are significant except the hypothesized relationship between banner ad brand attitude and behaviour outcomes. The extent of perceived banner ad customisation has positive and significant impact on attitude towards a banner ad (β = 0.284, SE = 0.059, p-value = 0.000), banner ad brand attitude (β = 0.853, SE = 0.051, p-value = 0.000) and behavioral outcomes (β = 0.280, SE = 0.147, p-value = 0.031). Therefore, H_1, H_2 and H_3 are supported.

The relationships between the attitude towards a banner ad and banner ad brand attitude (β = 0.109, SE = 0.043, p-value = 0.002) and between attitude towards a banner ad and behavioral outcomes (β = 0.154, SE = 0.060, p-value = 0.003) are both positive and significant. Therefore, these results support H_4 and H_5. Contrary to expectation, the findings showed insignificant but positive impact of banner ad brand attitude on behavioral outcomes (β = 0.226, SE = 0.123, p-value = 0.086). H_6 is not supported.

Discussion and Conclusion

The results show that the perceived banner ad customisation is important to effect positive attitudinal and behavioral changes. The banner ad design differs in terms of either verbal or visual representations or variation of both, and is customized based on psychographic segmentation according to personality (need for cognition), goal-directed motives, level of product involvement and preferred information processing strategy to boost interactivity and enhance elaboration, persuasion and attitudinal/behavioral changes. The perceived ad customisation and ad-attitude-brand relationship were found to be significant for banner ads. These findings support the proposition made by Roehm and Haugtvedt [29] who recommended customisation of advertising messages based on consumers' personality.

This study recommends a connection between message strategy and users characteristics. The results provide evidence to support that matching the message strategy in terms of presentation modality (*verbal* versus *visual* presentation), message appeal (*information-rational* versus *entertainment-emotional*) and inclusion of interactive features (static versus dynamic animation) with users individual differences in their need for cognition, goal-directed motives and preferred information processing strategies produces positive attitudinal responses. For example, the banner ad and its respective Web sites were designed with different creative techniques so that each layout was distinctive

according to its appeal. A rational-informational appeal (information site) with persuasive argument on the product attributes was used for computer brand. While the soft drink Web site incorporated an emotional-entertainment appeal (image site) in which celebrity video clips and news were peripheral cues, the fashion apparel used a combination of both rational-informational and emotional-entertainment appeals (text and animated images) was a more persuasive than celebrity source peripheral cues presented.

The main objective of this paper is to explore and to provide evidence relevant to the debate over whether Internet advertising works well as a branding medium. This study also aims to suggest a framework to measure Internet advertising effectiveness via brand attitude change. It includes the proposition of 'customisation of a Web site design based on Web content and form in accordance to individual differences in need for cognition, goal-directed motives and information processing strategies to the functional base of an attitude (brand attitude) to increase message scrutiny, persuasion and attitude change.

Practical Implications and Future Research

The current approach for personalised ad selection is based on the demographic information, browsing and interaction history of a particular user. The research model offers advertisers and advertising agencies a new profiling and targeting parameters for automated personalised Internet advertising. The model suggests that information about user's personal differences in terms of personality traits, types of goal-directed motives and preferred information processing strategies are better-quality user information for profiling and creating automated customized and personalised ads. User information can be requested via filling out a registration form or survey. Alternatively, the ad-server (via neural network or proprietary learning methods) can analyse the user's browsing and interaction history. Cluster technique is used to classify users into need for cognition, goal-directed motives, personal relevance or preferred information processing strategy segments. Customized ads are then selected and placed to match the relevant user.

This study also offers a comprehensive model that advertisers and advertising agencies can apply when they develop an Internet advertising plan. The research model can be employed at each development stage of a plan. For example, when defining target audiences, this model offers an alternative psychographics variables such as individual differences in need for cognition and users' goal-directed motives and preference in information-processing style as segmentation variable.

This study also recommends the use of psychographic segmentation to Internet ad design. For example, message design in terms of its *'content'* and *'form'* are

based on need for cognition (high or low in need for cognition), types of goal-directed motives (information versus entertainment), type of involvement (high, medium or low), type of personal relevance (high, medium or low) and information processing strategies (central-route information processing versus peripheral-route information processing). *Content*' embraces the variations in the ad creative based on the product category and product involvement customized according to Internet users' need for cognition, goal-directed motives (information, entertainment) and information processing strategy (central-route, peripheral route) while '*form*' refers to the inclusion of interactive ad features. For example, high involvement products and services require an informational ad/site with less animation features, verbal-oriented content with textual links to satisfy information needs. Low involvement products and services require an emotional-entertainment oriented ad/site with more colourful background, graphics and images, animations, interactive features (such as chat community group and/or feedback services) to create a positive impact on Internet users' attitudes toward the ad, product and brand.

This study can be considered as an initial stage of investigation rather than a complete explanation of the phenomenon under study. The model needs further replication, extension and critical evaluation using similar product category and/or unfamiliar brands.

References

[1] Anderson, J., and Gerbing, D. W. (1988), 'Structural Equation Modelling In Practice: A Review and Recommended Twp-Step Approach,' *Psychological Bulletin*, Vol. 103, 411-423.

[2] Armor, D. J. (1974), 'Theta Reliability and Factor Scaling,' In H. L. Costner (Ed), *Sociological Methodology*, San Francisco, CA: Jossey-Bass, 17-50.

[3] Baker, M. J., and Churchill, G.A. (1977), 'The Impact of Physically Attractive Models on Advertising Evaluation,' *Journal of Marketing Research*, Vol. 14, November, 538-555.

[4] Bettman, J.R., Luce, M. F., and Payne, J. W. (1998), 'Constructive Consumer Choice Processes,' *Journal of Consumer Research*, Vol. 25 (December), 187-217.

[5] Cho, H.C. (1999), "How Advertising Works on the WWW: Modified Elaboration Model", *Journal of Current Issues and Research in Advertising*, Vol. 21, No. 1, Spring, p33-50.

[6] _____, and Leckenby, J.D. (2000), "Banner Clicking and Attitude Changes on the WWW", Proceedings of the *2000 Conference of the American Academy of Advertising*, 230.

[7] Cialdini, R. B., Petty, R. E. and Cacioppo, J. T. (1981), "Attitude and Attitude Change," Annual Review Psychology, 32, 357-404.

[8] Cutler, B., and Javalgi, R. G., (1993), "Analysis of Print Ad Features: Services Versus Products," *Journal of Advertising Research*, (March-April), 62-69.

[9] Cooper, J. and Croyle, R. T. (1984), "Attitudes and Attitude Change", *Annual Review of Psychology*, 35, 395-426.

[10] Dahlen, M., (2001), 'Banner Advertisements Through a New Lens,' *Journal of Advertising Research*, July-August, 23-30.

[11] Gardner, M. P. (1985), 'Does Attitude toward the Ad Affect Brand Attitude Under a Brand Evaluation Set?,' *Journal of Advertising Research*, Vol. 22, May, 192-198.

[12] Haugtvedt, C. P., and Priester, J.R. (1997), 'Conceptual and Methodological Issues in Advertising Effectives: An Attitude Strength Perspective,' in W. Wells (Ed), *Measuring Advertising Effectiveness*, Mahwah, NJ: Lawrence Erlbaum Associates, 53-75.

[13] Heeter, C. (1989), "Implication of new interactive technologies for conceptualising communication media use", In J. Savaggio & J. Bryant (Eds), "*The information age: Emerging pattern of adoption and consumer use*", Hillsdale, NJ: Lawrence Erlbaum Associate, 53-75.

[14] Hoffman, D.L., and Novak, T. P., (1995), 'Marketing In Hypermedia Computer-Mediated Environment: Conceptual Foundations,' Working paper, Owen Graduate School of Management, Vanderbilt University, Nashville, TM. http://www.2000ogsm.vanderbilt.edu)

[15] Klein, L. R. (1995), 'Evaluating the Potential of Interactive Media through a New Lens: Search versus Experience Goods,' Paper Presented at the *Conference on Telecommunications and Information Markets* (COTIM-95), Newport, Rhode Island, USA, November 5-8.

[16] Kline, R. B., *Principles and Practice of Structural Equation Modelling*, New York: Guilford Press, 1998.

[17] Laurent, G. and Kapferer, J., (9185), "Measuring Consumer Involvement Profile," *Journal of Marketing Research*, 22(1), 41-53.

[18] Lee, K., and Miller, K. E. (2003), "A Positive Attitude-Ad-Brand Relationship By Customising Banner Ad Design – An Empirical Study," *ANZMAC 2003 Conference*, University of South Australia, Australia, Forthcoming

[19] Liebermann, Y., and Flint-Goor, A. (1996), "Message Strategy by Product-Class Type: A Matching Model*,"* *International Journal of Research in Marketing*, 13, 237-249.

[20] Maheswaran, D., and Sternthal, B. (1990), 'The Effects of Knowledge, Motivation and Type of Message on Ad Processing and Product Judgements,' *Journal of Consumer Research*, Vol. 17, June, 66-73.

[21] Mitchell, A. A. (1986), 'The Effect of Verbal and Visual Components of Advertisements on Brand Attitudes and Attitudes Towards the Advertisement,' *Journal of Consumer Research*, Vol. 13 (June), 12-24.

[22] Nowak, G.J., Shamp, S., Hollander, B., Cameron, G.T. (1999). 'Interactive Media: A Means for More Meaningful Advertising?' In Schuman, D.W. & Thorson, E. (Ed), '*Advertising and the World Wide Web*,' Lawrence Erlbaum Associates, Inc., Publishers, Mahwah, NJ.

[23] Petty, R.E., and Cacioppo, J. T. (1981), *Attitudes and Persuasion: Classic and Contemporary Approaches*, Dubuque, LA: Brown.

[24] _____, _____, and Schumann, D. (1983), "Central and Peripheral Routes to Advertising Effectiveness: The Moderating Role of Involvement," *Journal of Consumer Research*, 10, 135-146.

[25] _____, and _____ (1986), "The Elaboration Likelihood Model of Persuasion", *Advances in Experimental Social Psychology*, Vol. 19, p123-205.

[26] _____, and Wegener (1998), 'Matching Versus Mismatching Attitude Formations: Implications for

Scrutiny of Persuasive Message,' *Journal of Personality and Social Psychology Bulletin*, Vol. 24, No. 5, 227-240.

[27] Raghu, T. S., Kannan, P. K., Rao, H. R., Whinston, A. B., (2001), 'Dynamic Profiling of Consumers for Customized Offerings over the Internet: A Model and Analysis,' *Decision Support Systems*, Vol. 32, 117-134.

[28] Rodgers, S., and Sheldon, K.M. (2000), 'Predicting Banner Effects by Knowing We Motives,' *Working paper, University of Minnesota, School of Journalism and Mass Communication*.

[29] Roehm, H.A., and Haugtvedt, Curtis P. (1999), 'Understanding Interactivity of Cyberspace Advertising,' In Schuman, D.W. & Thorson, E. (Ed), '*Advertising and the World Wide Web*,' Lawrence Erlbaum Associates, Inc., Publishers, Mahwah, NJ.

[30] _____ (1999*), Persuasion and The New Media: Interactive Marketing Communications and Attitude Change Processes*, Unpublished Thesis, UMI Company.

[31] Steward, D. W., and Ward, S., 'Media Effects on Advertising,' in Jennings Bryant and Dolf Zillman (Ed), *Media Effects – Advances in Theory and Research*, Lawrence Erlbaum Assocaites, Inc., 315-363.

[32] Verplanken, B. (1989), "Involvement and Need for Cognition as Moderators of Beliefs-Attitude-Intention Consistency," *British Journal of Social Psychology*, 28, 115-122.

[33] Ward, M. R., and Lee, M. J. (2000), 'Internet Shopping, Consumer Search and Product Branding,' *Journal of Product and Brand Management*, Vol.9 (1), 6-20.

[34] Wheaton, B., Muthen, B., Alvin, D. F. and Summers, G. F. (1977), 'Assessing Reliability and Stability in Panel Models,' In D. R. Herse (Ed), *Sociological Methodology*, San Francisco, CA: Jossey-Bass, 84-136.