



# A new advertising effectiveness model for corporate advertising web sites

## A relationship marketing approach

Fotini Patsioura, Maro Vlachopoulou and Vicky Manthou  
*Department of Applied Informatics, University of Macedonia,  
Thessaloniki, Greece*

### Abstract

**Purpose** – The purpose of this paper is to present an effectiveness conceptual framework to evaluate the overall performance of corporate advertising web sites towards the multiple advertising, promotional and relationship marketing objectives of their establishment. Specifically, communication, feedback and customer support policies are examined in order to identify their contribution in creating or influencing advertising “effects”.

**Design/methodology/approach** – Data from a questionnaire-based survey of 160 undergraduate and postgraduate students within the department of applied informatics are used to accomplish greater understanding of their perceptions and requirements towards the factors in question.

**Findings** – Findings reveal significant dimensions of the participants’ behaviour based on their actions, activities, preferences and intentions. Also, the outcomes show a great impact of the relationship marketing qualitative factors in question on specific advertising effectiveness indicators.

**Research limitations/implications** – The stimulus materials are limited to two corporate advertising web sites. Further testing to a wider sample of advertising stimulus of different product categories is required.

**Practical implications** – Effectiveness measures provide to practitioners a factual demonstration of consumers’ use and intended use regarding functions and features incorporated by corporate advertising web sites and enable the optimisation of their execution.

**Originality/value** – The paper introduces a new conceptual framework to support the contribution and significance of relationship marketing factors on the overall performance of corporate advertising web sites. This should be a useful approach for both academic researcher and practitioners.

**Keywords** Internet, Advertising, Advertising effectiveness, Relationship marketing

**Paper type** Research paper

### Introduction

Corporate advertising web sites are considered to be the key format of internet advertising and so far the main medium of an organisation to inform consumers about their products and services, build its brand image and influence in order to enhance purchase intention (Hwang *et al.*, 2003). Over the last decade corporate advertising web sites have evolved from simple advertising content carriers to advanced integrated and interactive multimedia applications that incorporate multiple promotional, advertising and communication strategies. Effectiveness measures and evaluations on performance regarding corporate advertising or commercial web sites provide insight on consumers’ requirements and perceptions and also generate rules and guidelines for successful web site design and development by the practitioners.



The goal is to enhance usability, navigability and interactivity which are considered to be the dynamics of web site advertisements. However, it is always important to identify “what matters the most” to those exposed to corporate web sites. Previous research on corporate web sites’ evaluation have proposed several methods, frameworks or sets of criteria to address quality factors and issues on web sites’ performance (Fitzpatrick, 2000; Constantinides, 2004; Lee *et al.*, 2005; Oppenheim and Ward, 2006). Some of the frameworks presented in the literature were also benchmarked or used as benchmark designs to evaluate corporate web sites within specific company types or of specific product categories, web sites within industry groups or across domestic, local communities and the global online environment (Simeon, 1999; Kim *et al.*, 2003; Merwe and Bekker, 2003; Jenamani *et al.*, 2006; Hong, 2007; Ahmed *et al.*, 2006) in order to optimize and accomplish performance excellence (Welch and Mann, 2001).

Specifically, regarding attempts on effectiveness measurements of this corporate advertisement format, research was focused mainly in their ability to fulfil advertising objectives and goals. The questions raised are whether these measures address the problem, as they do not take under consideration the corporate advertising web sites’ role as integrated relationship marketing mediums.

The aim of this paper, based on a thorough analysis of the approaches adopted by the existing effectiveness models, is to present a new conceptual framework that includes existing and new criteria to measure the overall effectiveness of corporate advertising web sites in terms of advertising and relationship marketing.

### **Effectiveness of advertising web sites**

The first attempts to evaluate web site as an advertising medium were significantly affected by academic research in traditional advertising. Specific indicators of advertising effects and evaluation criteria used in traditional advertising media such as advertising content, organisation of content and message strategy like entertainment and irritation (Ducoffe, 1996; Brackett and Carr, 2001), were “borrowed” and applied to measures of web site advertising effectiveness (Pavlou and Stewart, 2000). Although useful, this approach is inadequate to produce complete measures as it fails to take under consideration the unique characteristics of the medium (such as interactivity, unlimited time and space to communicate messages, navigability) and the active role of consumers during their visit at a corporate advertising web site (Hoffman and Novak, 1996; Novak and Hoffman, 1997; Hwang *et al.*, 2003).

The need for differentiation led to the identification and study of new quality factors and dimensions closely related to the capabilities of this new form of advertising. Chen and Wells (1999) based on the intermediate advertising effect of “attitude toward the ad” (McKenzie *et al.*, 1986; Mackenzie and Lutz, 1989), introduced “attitude toward the site” as an indicator of web site advertising effectiveness and studied three factors as its main contributors: informativeness, entertainment and organisation. Dahlen *et al.* (2003a, b) proposed time and activity spent on advertising web sites as significant indicators of effectiveness based on their positive correlation to brand attitude. A lot of attention was also given to “interactivity” as it is an important structural factor of this form of advertising which affects the exposure of the audience to the advertising content and its attitude toward the site and the brand (Ghose and Dou, 1998; Coyle and Thorson, 2001; Liu and Shrum, 2002; Macias, 2003).

Effectiveness measures led to web site evaluations that used methods such as qualitative interviews, user testing, benchmarking and even log analysing, pursuing to generate a well-established general approach for web sites' performance measurement. Specifically, benchmarking enabled user behaviour analysis across web sites of different product offerings (Jenamani *et al.*, 2006) or the testing of specific criteria across specified web sites (Misic and Johnson, 1999; Welling and White, 2006; Gibb and Matthaiakis, 2007). Comparative analysis of an evaluation framework or effectiveness model on a sample of web sites of specified or different corporation and product types or marketing strategy allows the improvement of their performance based on specific factors, features and functions (Huang *et al.*, 2006).

Based on advertising web sites' effectiveness past research, it is evident that the majority of the effectiveness models were based on the isolation and analysis of variables strictly related to advertising objectives, such as quality of content and message strategy and do not incorporate or examine qualitative factors related to relationship marketing such as communication, feedback and customer support policies in terms of advertising effectiveness. Therefore, it seems essential to conceptualise and study both advertising and relationship marketing criteria in order to define the factors that contribute to the overall effectiveness of corporate advertising web sites.

### **A relationship marketing approach**

Relationship marketing is about retaining customers by improving communication, customer data collection and customer service quality (Kolesar and Galbraith, 2000; Wang *et al.*, 2000; Rowley, 2005). Practitioners and academics shift their focus to examining factors and functions based on the unique characteristics of the web that enable effective online relationship with customers and partners (O'Tool, 2003; Szmigin *et al.*, 2005). Keating *et al.* (2003), emphasizes on the significance of both service and relationship quality across online environment. However, so far companies adopting the internet for promotional reasons have not taken fully advantage of the web's ability to develop and support effective interactions with their customers (O'Leary *et al.*, 2004). Specifically, in case of corporate advertising web sites, little attention has been given to their role as integrated relationship marketing mediums. However, it is evident that most corporate advertising web sites incorporate functions to improve customer satisfaction and enhance customer retention. According to Boisvert and Caron (2006) several types of web sites including promotional and transactional web sites could be "relational" web sites, "oriented toward the development of relationships with customers". One important element of relationship marketing framework within a corporate web site is the establishment of a dialogue (a two-way communication) between the company and the customers with the use of multiple online communication functions (Szmigin *et al.*, 2005; Huang *et al.*, 2006). Gathering feedback as in obtaining and extracting information from the customers is also important for effective interactive relationships (Geissler, 2001; Wisner and Corney, 2001). Consumers should be motivated but also be able to communicate opinions, comments and complaints effortlessly using appropriate facilities within the web site Wisner and Corney, 2001; Huang *et al.*, 2006). In addition, customer support as in problem solving policies and after-sale services is considered to be an important component of interactive activities even for corporate sites that do not operate as

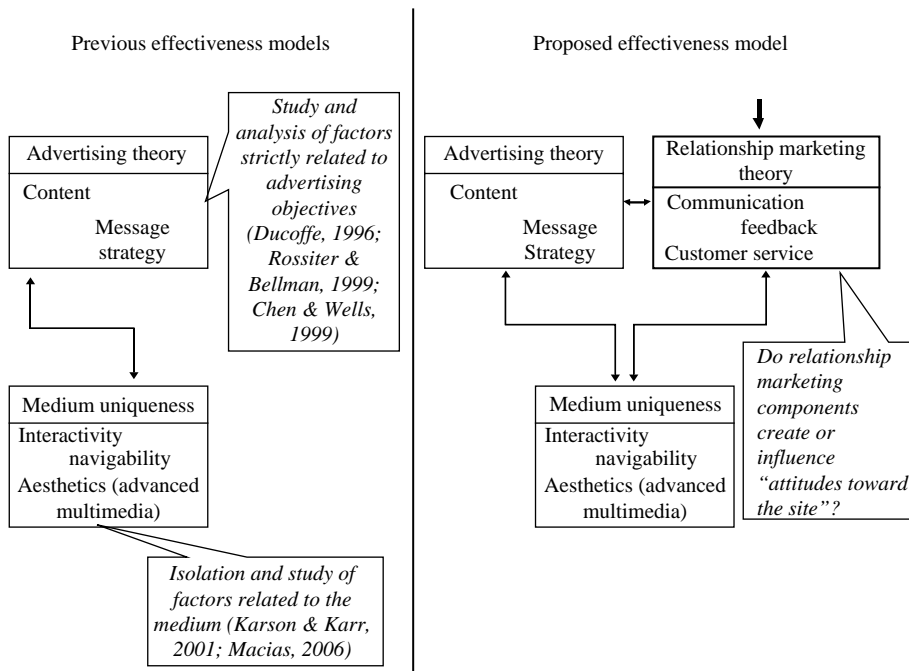
distribution channels of products and services (Levenburg, 2006). The main question raised in terms of corporate web site effectiveness is whether relationship marketing components create or influence “attitudes toward the site”? Also, should effectiveness be measured beyond “advertising concept” and does relationship marketing strategy affects in any way the overall performance of corporate advertising web sites?

**Proposed framework**

This paper introduces a new effectiveness model for corporate advertising web sites to conceptualise and empirically test relationship marketing strategy and practice applied to the online environment. However, the proposed model does not support the idea of isolating one, two or at the most three variables, in order to examine thoroughly their contribution to specific advertising “effects”. The main idea was to develop a comprehensive conceptual measurement model of criteria to evaluate the overall performance of a corporate advertising web site towards the multiple advertising and relationship marketing objectives of their establishment. The model extends existing research on advertising web sites effectiveness, by incorporating factors already tested and validated and by introducing new factors that apply to relationship marketing theory (Figure 1).

More specifically, the proposed model is grounded on the following acknowledgments:

- corporate advertising web sites should fulfil general and specific advertising objectives such as providing information and building images for companies and their brands;



**Figure 1.**  
Research question

- the majority of advertising web sites incorporate activities and processes of relationship marketing that could affect consumers' attitude toward the site and the brand; and
- unique characteristics of the medium such as, navigation, design, and interactivity contribute to the communication of promotional content and determine the overall performance of the advertising web sites towards their multiple promotional and communication functions.

On the whole, it conceptualises several integrated criteria to investigate in terms of advertising effectiveness their contribution and significance towards specific objectives of advertising and relationship marketing strategies, taking into account the unique characteristics of the internet as the medium that supports their operation (Table I).

Each criterion was analysed to features and functions, which define their concept and describe their application in order to better understand consumers' behaviour during their visit and determine their way of evaluating the site's performance toward each criterion (Figure 2). This enabled the capture of the impact of the main quality dimensions of each criterion based on the consumers' requirements and intentions.

The validity and importance of each criterion were examined in relation to their contribution to creating or influencing intermediate and primary communication effects of advertising (Figure 3). Intermediate effects refer to reactions and actions that represent a positive or negative response to the advertising web site such as: "attitude toward the site" (Chen and Wells, 1999) which was measured in terms of "revisiting intention", "word of mouth intention" and "overall opinion of the site". Primary communication effects include "attitude toward the brand" and "brand purchase intention" (Percy and Rossiter, 1997).

Criterion	Definition
<i>Advertising policy</i>	
Advertising content	The capability to promote products, services and the company with the use of information and media
Advertising message quality	The capability to communicate and enhance the advertising message of company's promotion strategy
<i>Relationship marketing policy</i>	
Communication	The capability to operate as a communication channel between consumers and the company
Feedback	The capability to collect information regarding the consumers' needs, preferences, attitudes and behaviour within the site
Customer support	The capability to provide services to facilitate visit and purchase
<i>Medium characteristics</i>	
Design	The capability to present in an ease and attractive way the information provided
Navigation	The capability to facilitate information search and gathering
Interactivity	The capability to combine interactive functions to enhance communication, joyfulness and personalisation of content

**Table I.**  
Definition of criteria

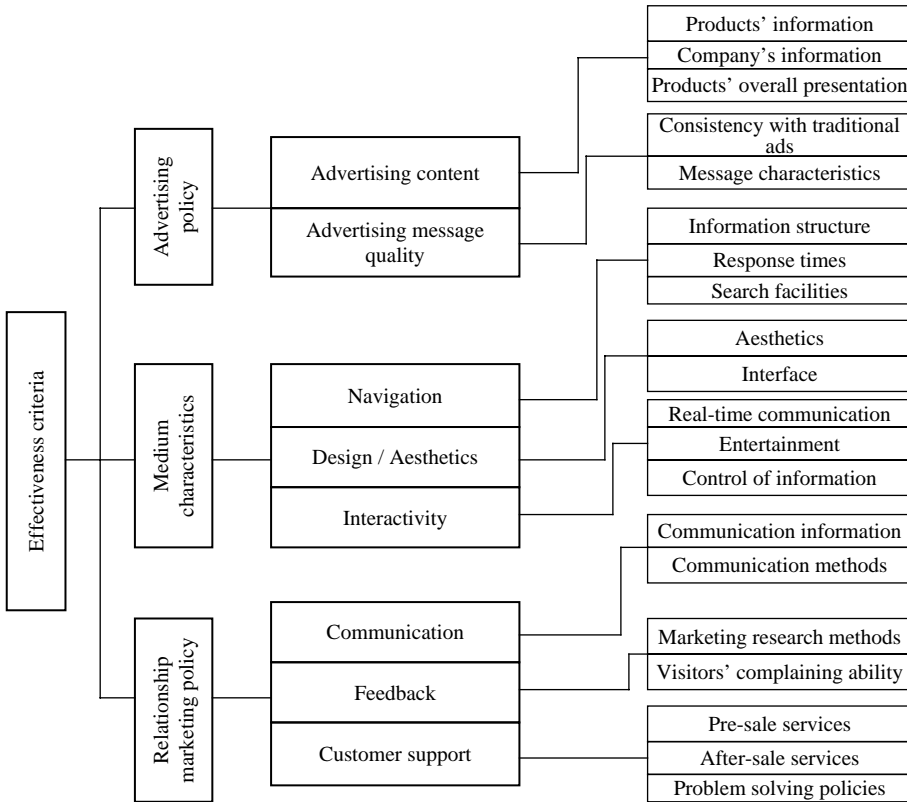


Figure 2. Analysis of the criteria

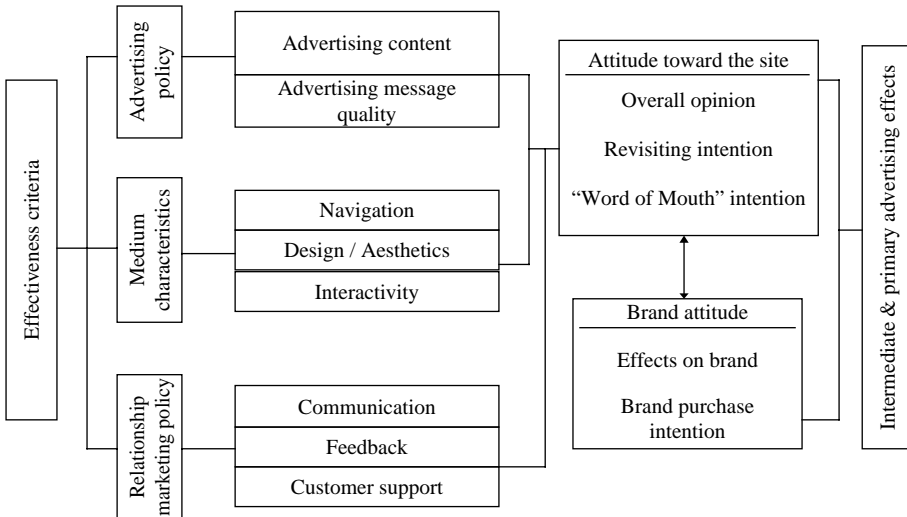


Figure 3. The main concept of the proposed framework

**Methodology**

The proposed web site effectiveness framework was benchmarked to two corporate web sites of different advertising message strategy. This would enable a comparative analysis of the subjects' requirements and perceptions towards the web sites' performance. It was a safe way to identify common grounds and strong differences of users' behaviour across web sites promoting different product and company types or applying different strategy to attract and retain users. Data were collected through a questionnaire-based survey.

*Advertising stimulus*

Real domain web sites were chosen as advertising stimulus to validate the proposed model based on their adequacy to the advertising format in question (Table II). In addition, the selected web sites were representatives of the two main categories of web site advertising (informational and transformational advertising) in order to address issues like product involvement impact and hedonic and utilitarian dimensions towards advertising effectiveness based on prior research (Rossiter and Bellman, 1999; Rodgers, 2002; Zhou and Bao, 2002; Hwang *et al.*, 2003).

*Sample*

A total of 160 undergraduate and graduate students within the department of applied informatics of University of Macedonia participated in the survey. A student sample was selected opposed to general population based on their predictive and analytical validity of consumer behaviour analysis in traditional and internet marketing and advertising research under specific circumstances (Hampton, 1979; Yavas, 1994; Rosner, 1996; Korgaonkar and Wolin, 1999; Danaher and Mullarkey, 2003). Subjects were between the ages of 21-30 and matched the average profile of Greek Internet User and Shoppers (National Statistical Service of Greece, 2005). All participants stated to be familiar with both brands of the selected web sites. This enabled the investigation and examination of the web sites' performance effect on "attitude toward the brand".

*Procedure*

The survey took place at one of the university's computer laboratory. Participants were divided in groups of four and were randomly assigned to browse for at least five minutes one of the two web sites (80 participants review site A and 80 participants review site B). After their brief exposure to the specific site, participants were asked to fill in the same questionnaire containing 37 questions. The participants were supervised in order to ensure that each subject completed the survey at the indicated time and way, and handed in a qualified questionnaire.

	Site A	Site B
Company	Greek	Multinational
Site type	Brand web site	Corporate web site
Products	Chocolate products	High technology products
Product type	Low-involvement	High-involvement
Communication/message strategy	Transformational	Informational
Main objective	To "entertain"	To "inform"

**Table II.**  
Advertising stimulus

Statistical analysis

Descriptive statistics and correspondence factorial analysis (AFC) (Papadimitriou *et al.*, 1998; Papadimitriou and Koutsoupias, 2000; Markos *et al.*, 2006) were used for the questionnaires' statistical analysis. The method of AFC allows the analytical description of data tables of large dimensions that correspond to qualitative variables. In addition, it represents effectively the differences and correspondences of the qualitative factors in question (Papadimitriou, 2007). In order to define the level of importance of contribution for each qualitative factor of the proposed framework COR and CTR (relative and absolute contribution) indices were used that reproduced factorial axes and first factorial planes (formed by the two first factorial axes). More specifically, the AFC was applied to seven selected Burt tables (generalised contingency tables) in order to examine specific factors of the proposed model in isolation, but also towards to the advertising effects variables (overall opinion, revisiting intention and purchase intention, etc) in order to detect and interpret relationships among the criteria and advertising effects of the proposed model. Figures 4 and 5 shows an example of the results produced by the application of the specific method and illustrate a graphical representation (first factorial planes) of the results produced by the AFC application for the criterion "Advertising Content" (Figure 4) and its contribution to advertising intermediate effects (Figure 5).

Measures

Table III presents the dimensions and scales that were used to measure the depended variables (advertising effectiveness indicators) of the proposed model (Table III). For all variables a single item three point scale was used in order to facilitate the application of the AFC method and produce less but clear measures for each variable.

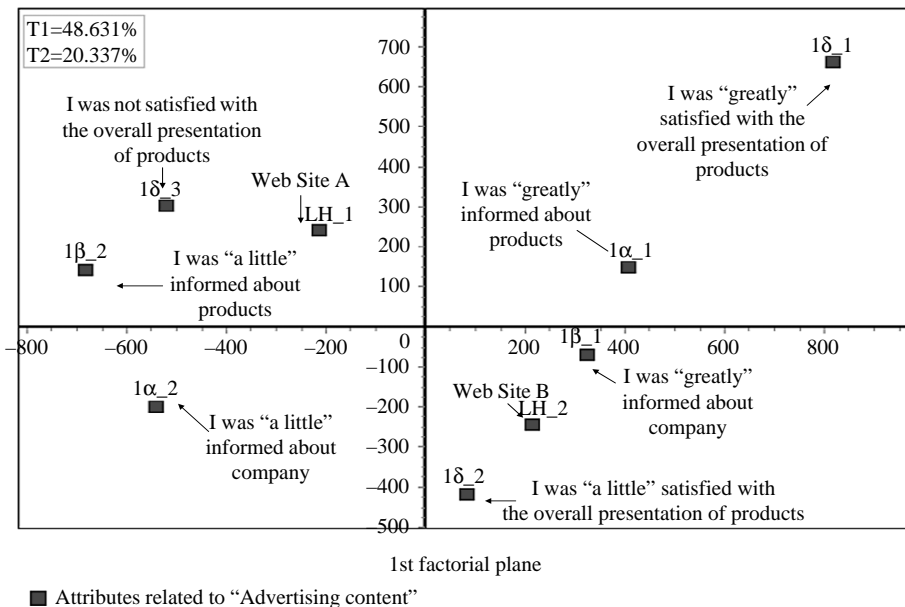
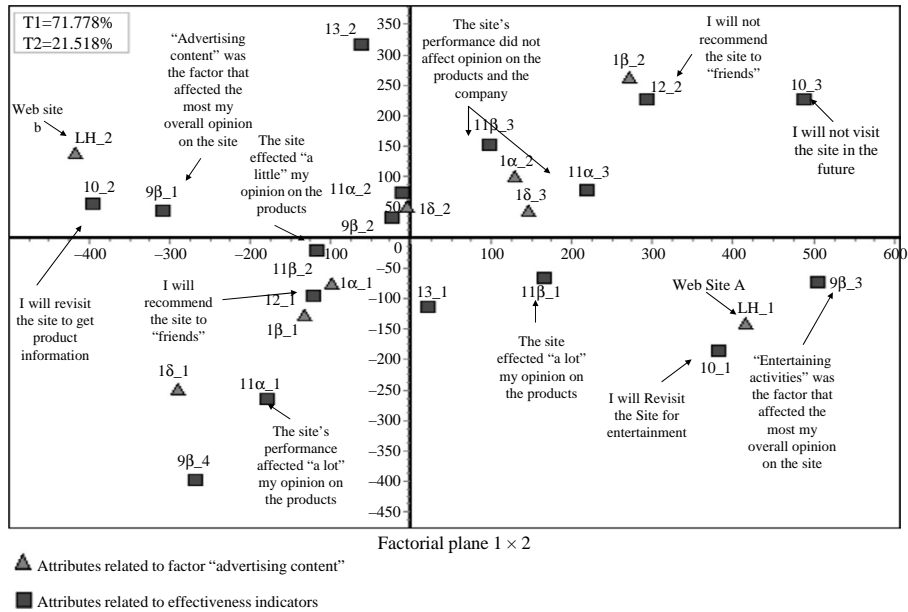


Figure 4. Results AFC – factor in question "Advertising content"





**Figure 5.** Results AFC – factor in question “Advertising content” towards advertising effect indicators

Advertising effectiveness indicators/depended variables	Measurement definition
Attitude toward the ad (Chen and Wells, 1999; Bruner and Kumar, 2000)	Overall opinion of the site A single-item (negative/positive) three point scale
	Revisiting intention A single item (definitely will not revisit the web site/definitely will revisit the web site) three point scale
	“Word of Mouth” intention A single item (definitely will not recommend the web site/definitely will recommend the web site) three point scale
Effects on brand	Effects on products/services A single item (the site definitely not affected by opinion on the products/the site definitely affected by opinion on the products) three point scale
	Effects on the company A single item (the site definitely not affected by opinion on the company/the site definitely affected by opinion on the company) three point scale
Brand purchase	Brand purchase A single item (definitely will not buy/definitely will buy) three point scale

**Table III.** Definition of advertising effectiveness indicators measures

**Results and discussions**

The extended questionnaires’ statistical analysis allowed the quantification of the qualitative factors in question and produced a great amount of data, which could not be presented explicitly. Therefore, the main conclusions based on the data analysis are presented.

*Descriptive statistics*

The outcomes revealed significant dimensions of the participants' behaviour based on their actions, activities and preferences during their visit. General assumptions were drawn in relation to specific qualitative factors of the proposed model that supported results of prior academic research regarding the use of corporate advertising web sites:

- participants show a significant interest in gathering information about the products and the company;
- ease of navigation is always of great importance;
- aesthetics is also of great significance and consistency of design with advertisements in traditional media creates a familiarity which was welcomed by the majority of the participants;
- real-time communication is a requirement for participants who reviewed site B, while entertainment is a requirement for participants that reviewed site A;
- communication with the company through the site is not an option unless specific reasons call for it or limited time and effort is required;
- the majority of the participants are willing to participate in surveys conducted through the web site;
- it seems that participants are more willing to complain than make positive comments about the site or the products and the company; and
- pre-sale services like problem solving policies, information gathering and search are more important to the participants than after-sale services such as return policy.

*AFC results*

The application of the AFC method provided a graphical representation of the main correspondences and differences of the variables examined. Specifically, it is evident from the results of AFC application supported the that participants' requirements and beliefs should not be studied independently to the web site's communication and advertising message strategy, which is mainly formed by the product category. It is also clear that different factors such as, advertising content, communication, feedback, customer support, interactivity and aesthetics affect differently the participants that reviewed different sites.

More specifically, regarding the contribution of the qualitative factors included in the proposed conceptual framework, results show that:

- advertising content and marketing relationship qualitative factors influence significantly "attitude toward the ad" and "word of mouth intention" but contribute differently with reference to the two types of advertising web sites;
- dimensions of interactivity such as entertainment and online communication contribute to "attitude toward the site" and "revisiting intention" but differently to different sites;
- communication and feedback contribute the least to effectiveness indicators of web site advertising but only because they are considered to be implicit processes by the participants; and
- navigation and aesthetics contribute to "attitude toward the site".

Concerning the intermediate and primary advertising effects:

- There is a positive relationship among intermediate effects. Participants that reacted positively to the site stated that they will revisit the site in the future and will inform their friends about their experience. Also it should be noted that the majority of the participants, who formed a negative “attitude toward the site”, stated that they will not revisit the site and will not talk to their friends about their experience.
- There is a positive relationship between “attitude toward the site” and “brand attitude”. Participants with positive “attitude toward the site” stated that their experience influenced their overall attitude toward the company and its products.
- There is no strong relationship between “attitude toward the site” and “brand purchase intention” for the participants who viewed web site A.

In the aggregate, the results provide a general insight on the participants’ behaviour and identify how it is differentiated between the two main web site advertising types. It is clear that the proposed model applies differently to different types of corporate advertising web sites.

#### *Discussions*

The generalisation of the results produced by the empirical application of the proposed conceptual model is limited by a number of factors. The sample used in this study is only composed of Greek students, thus generalisations on the entire population of internet users are definitely questionable. However, quality dimensions of the sample were taken under consideration. The stimulus materials were limited to two corporate advertising web sites representing the two main formats of informational and transformational advertising and different product categories. This supports the validity of the results, but further testing to a wider sample of advertising stimulus of different product categories is required to extent the generalisation of the results. Some of the choices made in how to measure the depended variables (advertising effects) of the proposed framework also limits this study. All measures were limited to single items dimensions and certain measures (effects on brand) were not developed and tested by other researches, therefore additional analysis and testing is needed.

#### **Conclusions and future research**

Because effectiveness of web site advertising is a complex and multidimensional concept, future research should focus on determining the features and functions that enhance their overall performance beyond strict advertising theory. Despite the different definitions of advertising effectiveness (Cook and Kover, 1997), it is a common statement that effectiveness is about fulfilling advertising goals. However, corporate advertising web sites are established not only to communicate advertising content, but also to meet specific relationship marketing objectives such as communication, feedback processes and customer service policies.

The proposed conceptual model suggests that quality factors related to relationship marketing could be significant contributors to advertising effects under specific circumstances. Primary research results advocate that advertising and relationship marketing factors are both contributors to intermediate advertising effects. In addition their contribution could be strongly influenced by the consumers’ requirements and needs.

Also, they differ in contribution and significance across different types of corporate advertising web sites.

To further extent this research additional measures are needed to weight the dimensions of the qualitative criteria included in the proposed model and develop a scoring model to measure the effectiveness of corporate advertising web sites. However, this study offers an insight on the effects of relationship marketing factors on the overall performance of this corporate advertising format and supports its dynamics as an integrated marketing tool.

## References

- Ahmed, A.M., Zairi, M. and Alwabel, S.A. (2006), "Global benchmarking for internet and e-commerce applications", *Benchmarking: An International Journal*, Vol. 13 Nos 1/2, pp. 68-80.
- Boisvert, H. and Caron, M. (2006), "Benchmarking web site functions", *Benchmarking: An International Journal*, Vol. 13 Nos 1/2, pp. 174-89.
- Brackett, L. and Carr, B. (2001), "Cyberspace advertising vs. other media: consumer vs mature student attitudes", *Journal of Advertising Research*, Vol. 41 No. 5, pp. 23-9.
- Bruner, G. and Kumar, A. (2000), "Web commercials and advertising hierarchy-of-effects", *Journal of Advertising Research*, Vol. 40 No. 2, pp. 35-42.
- Chen, Q. and Wells, D. (1999), "Attitude toward the site", *Journal of Advertising Research*, Vol. 39 No. 5, pp. 27-37.
- Constantinides, E. (2004), "Influencing the online consumer's behaviour: the web experience", *Internet Research*, Vol. 14 No. 2, pp. 111-26.
- Cook, W. and Kover, A. (1997), "Research and the meaning of advertising effectiveness: mutual misunderstandings", in Wells, W.D. (Ed.), *Measuring Advertising Effectiveness*, University of Minnesota, Lawrence Erlbaum Associates, Mahwah, NJ, pp. 12-24.
- Coyle, J. and Thorson, E. (2001), "The effects of progressive levels of interactivity and vividness in web marketing web sites", *Journal of Advertising*, Vol. 30 No. 3, pp. 65-77.
- Dahlen, M., Rasch, A. and Rosengren, S. (2003a), "Love at first site? A study of website advertising effectiveness", *Journal of Advertising Research*, Vol. 43 No. 1, pp. 25-33.
- Dahlen, M., Rosengren, S. and Shulakov, N. (2003b), "Keeping visitors and communication effects in site", paper presented at World Wide Audience Measurement Audience, Los Angeles, CA.
- Danaher, P. and Mullarkey, G. (2003), "Factors affecting online advertising recall: a study of students", *Journal of Advertising Research*, Vol. 41 No. 4, pp. 252-67.
- Ducoffe, R. (1996), "Advertising value and advertising on the web", *Journal of Advertising Research*, Vol. 36 No. 5, pp. 21-35.
- Fitzpatrick, R. (2000), "Additional quality factors for the world wide web", available at: [www.comp.dit.ie/rfitzpatrick/papers/2RF\\_AQF\\_WWW.pdf](http://www.comp.dit.ie/rfitzpatrick/papers/2RF_AQF_WWW.pdf) (accessed 10 March 2003).
- Geissler, G. (2001), "Building customer relationships online: the web site designers' perspective", *Journal of Consumer Marketing*, Vol. 18 No. 6, pp. 488-502.
- Ghose, S. and Dou, W. (1998), "Interactive functions and their impact on the appeal of internet presence sites", *Journal of Advertising Research*, Vol. 38 No. 2, pp. 29-43.
- Gibb, F. and Matthaiakis, I. (2007), "A framework for assessing web site localisation", *The Electronic Library*, Vol. 25 No. 6, pp. 664-78.
- Hampton, G. (1979), "Students as subjects in international behavioural studies", *Journal of International Business Studies*, Vol. 10 No. 2, pp. 94-6.

- Hoffman, D.L. and Novak, T.P. (1996), "Marketing in hypermedia computer-mediated environments: conceptual foundations", *Journal of Marketing*, Vol. 60, pp. 50-68.
- Hong, B. (2007), "A survey of web site success metrics used by internet – dependent organisations in Korea", *Internet Research*, Vol. 17 No. 3, pp. 272-90.
- Huang, W., Le, T., Li, X. and Gandha, S. (2006), "Categorizing web features and functions to evaluate commercial web sites: an assessment framework and an empirical investigation of Australian companies", *Industrial Management & Data Systems*, Vol. 106 No. 4, pp. 523-39.
- Hwang, J., McMillan, S. and Lee, G. (2003), "Corporate web sites as advertising: an analysis of function, audience, and message strategy", *Journal of Interactive Advertising*, Vol. 3 No. 2, pp. 12-32.
- Jenamani, M., Mohapatra, P. and Ghose, S. (2006), "Design benchmarking, user behaviour analysis and link-structure personalization in commercial web sites", *Internet Research*, Vol. 16 No. 3, pp. 248-66.
- Keating, B., Rugimbana, R. and Quazi, A. (2003), "Differentiating between service quality and relationship quality in cyberspace", *Managing Service Quality*, Vol. 13 No. 3, pp. 217-32.
- Kim, S., Shaw, T. and Schneider, H. (2003), "Web site design benchmarking within industry groups", *Internet Research: Electronic Networking Applications and Policy*, Vol. 13 No. 1, pp. 17-26.
- Kolesar, M. and Galbraith, R. (2000), "A services-marketing perspective on e-retailing: implications for e-retailers and directions for further research", *Internet Research: Electronic Networking Applications and Policy*, Vol. 10 No. 5, pp. 374-84.
- Korgaonkar, P. and Wolin, L. (1999), "A multivariate analysis of web usage", *Journal of Advertising Research*, Vol. 39 No. 2, pp. 53-68.
- Lee, S., Katerattanakul, P. and Hong, S. (2005), "Framework for user perception of effective e-tail web sites", *Journal of Electronic Commerce in Organisations*, Vol. 3 No. 1, pp. 13-34.
- Levenburg, N. (2006), "Benchmarking customer service on the internet: best practices from family businesses", *Benchmarking: An International Journal*, Vol. 13 No. 3, pp. 355-73.
- Liu, Y. and Shrum, L. (2002), "What is interactivity and is it always such a good thing? Implications of definition, person, and situation for the influence of interactivity on advertising effectiveness", *Journal of Advertising*, Vol. 31 No. 4, pp. 53-64.
- MacKenzie, S. and Lutz, R. (1989), "An empirical examination of the structure antecedents of the attitude toward the ad in an advertising pretesting context", *Journal of Marketing*, Vol. 53, pp. 48-65.
- MacKenzie, S., Lutz, R. and Belch, G. (1986), "The role of attitude toward the ad as a mediator of advertising effectiveness: a test of competing explanations", *Journal of Marketing Research*, Vol. 23 No. 2, pp. 130-43.
- Macias, W. (2003), "A beginning look at the effects of interactivity, product involvement and web experience on comprehension: brand web sites as interactive advertising", *Journal of Current Issues & Research in Advertising*, Vol. 25 No. 2, pp. 31-44.
- Markos, A., Menexes, G. and Papadimitiou, I. (2006), "Η παραγοντική Ανάλυση μέσω του Λογισμικού C.H.I.C Analysis" ("The Correspondence Factorial Analysis (AFC) with the utilization of C.H.I.C Analysis Software"), paper presented at 19th Panhellenic Conference in Statistics of Greek Statistical Institute, Kastoria (in Greek).
- Merwe, R. and Bekker, J. (2003), "A framework and methodology for evaluating e-commerce web sites", *Internet Research: Electronic Networking Applications and Policy*, Vol. 13 No. 5, pp. 330-41.

- Misic, M.M. and Johnson, L.K. (1999), "Benchmarking: a tool for web site evaluation and improvement", *Internet Research: Electronic Networking Applications and Policy*, Vol. 9 No. 5, pp. 383-92.
- National Statistical Service of Greece (2005), *National Survey Regarding the use of Information Technology and Communication*, General Secretariat of National Statistical Service of Greece, Athens, available at: [www.statistics.gr](http://www.statistics.gr) (accessed 12 May 2006).
- Novak, T. and Hoffman, D. (1997), "New metrics for new media: toward the development of web measurement standards", *World Wide Web Journal*, Vol. 2 No. 1, pp. 213-46.
- O'Leary, C., Rao, S. and Perry, C. (2004), "Improving customer relationship management through database/internet marketing", *European Journal of Marketing*, Vol. 38 Nos 3/4, pp. 338-54.
- Oppenheim, C. and Ward, L. (2006), "Evaluation of web sites for B2C e-commerce", *Aslib Proceedings: New Information Perspectives*, Vol. 58 No. 3, pp. 237-60.
- O'Tool, T. (2003), "E-relationships – emergence and the small firm", *Marketing Intelligence & Planning*, Vol. 21 No. 2, pp. 115-22.
- Papadimitriou, I. (2007), *Data Analysis: Factorial Correspondence Analysis, Hierarchical Cluster Analysis and other Methods*, 1st ed., Topothito, Athens.
- Papadimitriou, I. and Koutsoupias, N. (2000), "Correspondence factorial analysis (AFC) software", *Proceedings of the 13rd Panhellenic Conference in Statistics of Greek Statistical Institute, Florina*, pp. 417-26.
- Papadimitriou, I., Hadjikonstantinou, G., Drymbetas, E. and Karagiannis, S. (1998), "La convergence Européenne. L' application de la methode de l' A.F.C. sur l' evolution des principales variables monétaires et réelles des pays-membres de l' union Européenne", *Proc. 47ème Journées sur l' Aide Multicritere à la Décision, Thessaloniki*.
- Pavlou, P. and Stewart, D. (2000), "Measuring the effects & effectiveness of interactive advertising: a research agenda", *Journal of Interactive Advertising*, Vol. 1 No. 1, pp. 5-25.
- Percy, L. and Rossiter, J. (1997), "A theory-based approach to pretesting advertising", in Wells, W.D. (Ed.), *Measuring Advertising Effectiveness*, University of Minnesota, Lawrence Erlbaum Associates, Mahwah, NJ, pp. 267-81.
- Rodgers, S. (2002), "The interactive advertising model tested: the role of internet motives in ad processing", *Journal of Interactive Advertising*, Vol. 2 No. 2, pp. 27-43, available at: [www.ijad.org/vo2/no2/Rodgers](http://www.ijad.org/vo2/no2/Rodgers) (accessed 17 March 2005)
- Rosner, H. (1996), "Trapping students in the web", *Brandweek*, Vol. 37 No. 16, pp. 50-2.
- Rossiter, J. and Bellman, S. (1999), "A proposed model for explaining and measuring web ad effectiveness", *Journal of Current Issues & Research in Advertising*, Vol. 21 No. 1, pp. 13-31.
- Rowley, J. (2005), "Building brand webs: customer relationship management through the Tesco Clubcard loyalty scheme", *International Journal of Retail & Distribution Management*, Vol. 33 No. 3, pp. 194-206.
- Simeon, R. (1999), "Evaluating domestic and international web site strategies", *Internet Research: Electronic Networking Applications and Policy*, Vol. 9 No. 4, pp. 297-308.
- Szmigin, I., Canning, L. and Reppel, A. (2005), "Online community: enhancing the relationship marketing concept through customer bonding", *International Journal of Service Industry Management*, Vol. 16 No. 5, pp. 480-96.
- Wang, F., Head, M. and Archer, N. (2000), "A relationship-building model for the web retail marketplace", *Internet Research: Electronic Networking Applications and Policy*, Vol. 10 No. 5, pp. 424-38.
- Welch, S. and Mann, R. (2001), "The development of a benchmarking and performance improvement resource", *Benchmarking: An International Journal*, Vol. 8 No. 5, pp. 431-52.

Welling, R. and White, L. (2006), "Web site performance measurement: promise and reality", *Managing Service Quality*, Vol. 16 No. 6, pp. 654-70.

Wisner, J. and Corney, W. (2001), "Comparing practices for capturing bank customer feedback: internet versus traditional banking", *Benchmarking: An International Journal*, Vol. 8 No. 3, pp. 240-50.

Yavas, U. (1994), "Research note: students as subjects in advertising and marketing research", *International Marketing Review*, Vol. 11 No. 4, pp. 35-43.

Zhou, Z. and Bao, Y. (2002), "Users' attitudes toward web advertising: effects of internet motivation and internet ability", *Advances in Consumer Research*, Vol. 29, pp. 71-8.

**Corresponding author**

Fotini Patsioura can be contacted at: [fotpat@uom.gr](mailto:fotpat@uom.gr)

To purchase reprints of this article please e-mail: [reprints@emeraldinsight.com](mailto:reprints@emeraldinsight.com)  
Or visit our web site for further details: [www.emeraldinsight.com/reprints](http://www.emeraldinsight.com/reprints)

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.