

Full Length Research Paper

Right website model (RWM): Selecting the right website for publication of internet advertisements

Kambiz Heidarzadeh Hanzaee¹, Mehdi Behboudi^{2*} and Allahyar Ardakani³

¹Department of Business Management, Science and Research Branch, Islamic Azad University, Tehran, Iran.

^{2,3}Department of Business Management, School of Management and Accountancy, Islamic Azad University, Qazvin Branch, Qazvin, Iran.

Accepted 1 August, 2011

This study embarks to answer the question "what is the most appropriate website for publishing a display ad on the World Wide Web?" The key features identified in this regard included: electronic service quality, user-based (user-centered) design, electronic business model, interactivity, and website involvement. This research considered each of the extracted features to design and evaluate the conceptual model of the right website selection. In addition, a specific methodology was designed for operationalizing the model on the basis of TOPSIS fairness from and closeness to the ideal. According to this mechanism, the model of right website selection is presented. Finally, this research conducted a case study to evaluate the performance of the model.

Key words: Internet advertisement, right website, innovative methodology, electronic satisfaction, electronic services quality.

INTRODUCTION

The internet is increasingly turning into an advertising channel and advertising expenses increased by 19% in 2006, offline advertising expenses only increased by 2% (Weisman, 2006). In addition, the growth rate of expenditures allocated to internet advertising reached 20.8% in 2008 (Zenithoptimedia, 2009). The number of websites registered by 2006 totaled over 65.4 billion, which includes the prefixes .edu, .gov, .org, and .com (Zooknic Internet Intelligence, 2006). Considering the potential recognized with the web, the number of businesses and organizations that have accepted websites as information and communication channels has increased (Chen et al., 2008). According to the internet advertising bureau (IAB) (2009), the income gained from internet advertising in 2008 amounted to 23.4 billion dollars that, compared to 21.2 billion dollars in 2007, experienced a 10.6% growth. The share of each type of internet advertising, from the total income is as following, search engines, 45%; display advertisements, 24%; recruitments or classified

advertising, 13%; lead generation, 7%; and reach media, 7%. As was mentioned, display ads, which are forms of advertisement that need space in the host websites, constituted more than 24% of internet advertisements (IAB, 2008). The condition that a host website must be in order to be selected as the most appropriate website for publishing an ad is an issue that researchers have thus far neglected. Thus, it is necessary to develop an efficient theoretical framework and methodology in order to determine appropriate means for the identification and selection of an appropriate host site for publishing an ad. The present study attempted to identify the criterion factors and features of a website in order to publish an effective ad and present this criterion within a theoretical framework. The aim of this study was to design a model that introduces the most appropriate website for each advertising scenario. This study also intended to introduce a general framework that presents the influential factors and features, on the one hand, and the right website for publishing an ad, on the other. Since the website chosen for publishing an ad is primarily selected by the advertiser and specialized teams, this research determined that selection indices with high accuracy must be proposed.

*Corresponding author. E-mail: Behboudi1983@gmail.com. Tel: +989122811398.

LITERATURE REVIEW

To date, researchers have proposed few models concerning internet advertising. However, one model is the interactive advertising model (IAM) proposed in 2000. In their study, these researchers offered a theoretical model with two components; user and advertiser. This model was applied to investigate how information is processed by the user (Rodgers and Thorson, 2000). Another model by Ko et al. (2005) is the structural equation model of interactivity advertising, which investigates the structure of interaction based on antecedents (motivations for using the internet) and consequents (attitude toward website, trade mark, and purchasing intention). Other studies conducted in the area of internet advertising primarily focus on the effectiveness and perceptions of internet advertising (Bruner and Kumear, 2000; Briggs and Hollis, 1997; Cacioppo and Petty, 1984; Burns and Lutz, 2006; Ducoffe, 1996; Previte, 1998; Scholsser et al., 1999). The only model proposed concerning selection of a website for publishing ads was a study by Nagi (2003), which, using analytical hierarchy process (AHP), proposed the right website for publishing an ad in Hong Kong. Specifically, Nagi identified five criteria for evaluating available choices in website, which are introduced in the following:

- i. Impression rate; how much the web page is seen by the user.
- ii. Cost; monthly rent or every one thousand times of ad display on a website.
- iii. Audience fit; accordance of the age and education level of the user.
- iv. Content quality; content which is published.
- v. Look and feel; elements designed and created in the website (Nagi, 2003).

The main difference between this study and that of Nagi relates to two major issues. The first issue is that of a qualitative and customer viewpoint, which is almost completely absent from Nagi's study, possibly because the main goal of Nagi's study was to apply and operationalise a model (AHP) in a specific area. Thus, internet advertising and possible websites publishing the ad were selected as a case study. Additionally, Nagi's study was quantitative in nature and focused little attention on factors influencing customer behaviors, such as intention of entering the website (Flanagin and Metzger, 2001; Maddox, 1998; Ko et al., 2005), perception from the website (Ko et al., 2005; Rogers and Thorson, 2000), product involvement and information processing (Cushing and Douglas-Tate, 1985; Gardner, 1985; Dahlen et al., 2004; Dahlen, 2002), interactivity (Hoffman and Novak, 1995; Hwang, 2002; Ko et al., 2005), and time spent at the website (Alwitt and Prabhaker, 1992). This research took a more comprehensive approach in considering these issues in the current study. In other words, the

present study took a qualitative approach in order to address behavioral and reactive issues more accurately. The second point is that features presented for evaluation and selection of the right website for publication of an ad were considered independent of each other in Nagi's (2003) study; whereas these features are completely interrelated (Jiang et al., 2010), and decision-making models of interrelated features must be used in order to rank alternatives rather than use an independent decision-making model such as the analytical hierarchy process.

Main features

E-business model

The definitions of business models are not offered through an integrated approach that covers the four basic elements of product innovation, infrastructure management, customer relationship, and financial aspects (Hanafizadeh and Behboudi, 2008). The definitions proposed by researchers concerning business models are typically from an elementary or strategic viewpoint (Osterowalder and Pigneur, 2002). In this respect, a comprehensive category of business model cannot be provided (Lambert, 2003) since business models are scenarios or real stories that describe the performance of a business institution (Magretta, 2002). Peter Drucker, a renowned author in management introduced the business model as "the basic logic of business" (Hanafizadeh and Behboudi, 2008).

There are many e-businesses models in the vast world of the web, which, depending on the kind of website, serve to manage their own revenue methods. Specifically, advertising is one of the most important elements of many of these e-business models. Most electronic financial agencies, depending on their business model, deal with advertising revenues in one way or another. Understanding the type of business model is an important factor in website selection as a website that rejects an ad, because of their business model must be separated from other business when selecting websites for publishing an advertisement. Thus, it is necessary from an advertising standpoint, to become acquainted with different types of business models.

According to Rappa (2005), there are nine general types of electronic business models, which include advertising, intermediary, community, infomediary, merchant, direct model, affiliate, subscription, and utility. In order for the advertiser to publish an appropriate Internet ad, he or she must be able to identify the business type of the website asking him or her to publish the ad. Some business models appropriate for publishing ads were identified in a statistical sample of Iranian website include advertising, intermediary, affiliate, and community models (Appendix 1). In this regard, the following hypothesis was proposed

for the current study:

H₁: Type of business model of the website influences selection of the right website for publishing advertisement.

Electronic satisfaction

Although the subject of satisfaction and e-satisfaction has been discussed in many previous studies (Anderson et al., 1994; Bitner et al., 2000; Caruana et al., 2000; Cronin and Taylor, 1992; Oliver, 1981; Parasuraman et al., 1988; Zeithaml et al., 1996), attempts to identify dimensions and determinants of e-satisfaction remain an important and dynamic issue because the success and failure of websites depend on the satisfaction of their customers (Chen et al., 2008; Evanschitzky et al., 2004). This is particularly the case in virtual environments because this environment presents different experiences compared to physical world, such as customer support, security, and ease of use (Wang and Tang, 2004; Wang et al., 2001; Wolfenbarger and Gilly, 2003).

Many definitions exist with regard to electronic satisfaction. Oliver (1997) defined customer satisfaction as the overall subsequent psychological state following the appraisal of the consumer experience against the prior expectations. Anderson and Srinivasan (2003) defined e-satisfaction as the contentment of the customer with respect to his or her prior purchasing experience from a given electronic commerce firm. High customer satisfactions lead him or her to return to the website (Chen et al., 2008). Electronic satisfaction involves the two issues addressed thus.

Electronic services quality (e-servqual): Electronic services quality (e-servqual) indicates the degree to which a website can efficiently and effectively provide possibilities for buying, selling, and delivering goods and services. Website quality (WebQual) is an equally important index formed on the basis of user perceptions regarding usability, information quality, and service interaction quality, as well as a process of iterative refinement (Barnes and Vidgen, 2003). As such, the higher the quality of services offered, the higher the level of satisfaction.

The next element is website usability. User satisfaction of e-commerce software and hardware is considerably related to the main features of design and usability of a website, such as download delay, navigation, content, interactivity, and responsiveness (Palmer, 2002). Electronic services quality consists of reliability, responsiveness, empathy, assurance, and tangibility. Reliability, responsiveness, and empathy are all applicable to electronic business services quality. Specifically, reliability refers to an ability to perform the promised service, dependably and accurately; responsiveness refers to the willingness to help online customers and provide prompt

service; and empathy refers to the caring and attention the online retailer provides its customers. In addition, online shopping invokes methods of information gathering, which are different from those of the traditional shopping experience. In this respect, questions concerning user satisfaction with information quality (IQ) and software quality (SQ) of e-commerce applications are raised that result in discrepancies between prior expectations and present performance. These include issues such as convenience, delightfulness, reliability, and technological advancements, which are identified as factors that affect the level of user satisfaction and loyalty (Zviran et al., 2006). Based on this review, the following was hypothesized for this current investigation:

H_{2a}: The quality of electronic services is an influential factor in selecting the right website for publishing an advertisement.

User-based (user-centered) design: User-based (user-centered) design has been identified as the second factor affecting customer e-satisfaction (Zviran et al., 2006). Many researchers have investigated customer-oriented design and presented varying results. According to Zviran et al. (2006), customer satisfaction involves (a) usability of the website; (b) user-based design; (c) personalization, structure, navigation, layout, performance, and searchability of various websites (Zviran et al., 2006). Additionally, Abels et al. (1998) classified user-based designs into six main groups of criteria including, (a) use, ease of using the web; (b) content, useful information; (c) structure, an appropriate, understandable, and organized structure; (d) linkage, integrated information links on the website that relate to other websites; (e) search, the possibility of searching for information on the website; and (f) appearance, the website must be attractive regarding design and graphics.

In this regard, Szymanski and Hise (2000) investigated the aspects of website design and presented three main categories, including preparing an uncluttered screen, designing easy search paths, and high-speed display. Additionally, Ranganathan and Ganapathy (2002) investigated user-based designs of websites and categorized these design types into three main groups, including ease of navigation, time taken for navigation, and display elements (Hwang et al., 2003). Design has been addressed in other studies that have referred to this function as format (Doll and Torkzadeh, 1988), appearance (Aladwani and Palvia, 2002), and arrangement (Muylle et al., 2004). Additionally, design is often considered an influential factor in customer satisfaction. The appropriate design of a website is more of a qualitative influential factor, that is, it shapes customer's first impression of a website. The more congruent the design of a website is, in terms of customer needs, interests, and expectations, the more satisfied with customer will be. Higher satisfaction results, in the presence of more users

to the website, offer a good opportunity for advertisers to utilize the high-traffic as a place to be heard. In this respect, the following was hypothesized:

H_{2b}: Having a user-based design as an element raising e-satisfaction is influential in selecting the right website for publishing an ad.

Interactivity

The internet, in comparison to other media, requires a higher level of interactivity with its users (Ruggiero, 2000). Mutual activities or interaction is also a distinct feature of this new media. Specifically, mutual activities allow users to efficiently participate in the process of persuasion through the control and supervision of advertisements, required information, and personal preferences (Hoffman and Novak, 1995). A website is also an important place for interactive advertisement. Although, in marketing literature, some experimental and conceptual studies have concentrated on establishing interactive media for users (Balabanis and Vassileiou, 1999; Bezjian-Avery et al., 1998; Bruner and Kumar, 2000; Chen and Wels, 1999; Cho, 1999; Cook and Coupey, 1998; Coyle and Thorson, 2001; Gallagher et al., 2001; Stevenson et al., 2000), there is still no comprehensive understanding of users' responses to websites or persuasion of communicative activities (Bourliataux-Lajoinie, 2000; Hwang et al., 2003; Macias, 2003; Peterson and Merino, 2003). Interaction on a website is divided into six groups, including (a) complexity of choice, (b) level of effort, (c) media responsiveness, (d) media monitoring capability, (e) ability to add information, and (f) capability of interpersonal communication (Heeter, 1989). Additionally, an interactive system can help consumers process information, as they are able to easily reduce or eliminate unwanted or superfluous information and can organize information in such a way that facilitates the process (Widing and Talarzyk, 1993). Therefore, if a website interacts with its users and the users have the opportunity to interact with other users of the offered products and services, organization will have a better positive output due to increased amounts of time users spend on the website (Ko et al., 2005). Essentially, the attitudes toward a website form customers' attitudes concerning the trademark of the organization. In other words, as customers' attitudes of the website increase, buying intention also increased (Hanafizadeh and Behboudi, 2008). In this regard, this research predicted that the more interaction and interactive systems provides on the website, the higher its advertising-operating efficiency. On this basis of this argument, the following was hypothesized:

H₃: Website possession of interaction facilities with the customers is influential in selecting the right website for publishing an ad.

Website involvement

Many researchers have defined the term involvement using various words; for instance, customer participation (Martin and Horne, 1995), co-development (Anderson and Crocca, 1993; Muller et al., 1993; Neale and Corkindale, 1998), user involvement (Kaulio, 1998), participation (Campbell and Cooper, 1999), and customer involvement (Alam, 2006). According to Zaichkowsky (1985), involvement is related to the amount of perceived communication of an individual with a phenomenon, which considers the innate needs, values, and interests of the individual. In addition, Alam (2002) classified the advantages of customer involvement into five groups, (a) superior and differentiated service, (b) reduce cycle time, (c) user education, (d) rapid diffusion, and (e) long-term relations. Involvement level influences people's wants (Bransford et al., 1999; Caine and Caine, 2003; Cho, 1999; Fogg, 2003; Petty and Cacioppo, 1979; Wathan and Burkell, 2002) and is an appropriate factor in the evaluation of individuals' trust (Ferebee, 2007). Considering the fact that the amount of involvement affects evaluation of website elements, designers must implement specific strategies when designing a website in order to raise the involvement level of the website (Ferebee, 2007).

It is expected that an individual with high motives is more likely to visit websites in order to meeting his or her internal needs (Alwitt and Prabhaker, 1992) and as such, spend more time on the website. Thus, motivations of using the Internet have a great effect on the continuation of a user's presence on the website (Hanafizadeh and Behboudi, 2008). Specifically, the time a customer spends on a website is affected by four primary motives including information, comfort, entertainment, and social interaction (Hanafizadeh and Behboudi, 2008). Chen and Wells (1999) practically investigated attitude toward website in order to evaluate the effect of websites on different people. Besides the general inclination of individuals toward websites, other factors, such as entertainment of websites, informative nature, and organization of websites resulted in a positive attitude among the audience. Hence, it seems that attitude toward website is an important factor in the effectiveness of a website and advertisement. In some investigations, interaction with the website induced rational and emotional effects on customers (Eroglu et al., 2003; Koufaris, 2002). Additionally, involvement of the customer with the website is divided into two types rational involvement and emotional involvement (Vaghen, 1986). Rational involvement relates to rational behaviors and is presented by profit-making and rational motives (Park and Young, 1986). On the other hand, emotional involvement is based on emotions and enjoyment (Park and Young, 1986; Putrevu and Lord, 1994). Thus, the following hypothesis was formed:

H₄: Congruence of the type of website involvement with the user's primary motive for entering the website affects

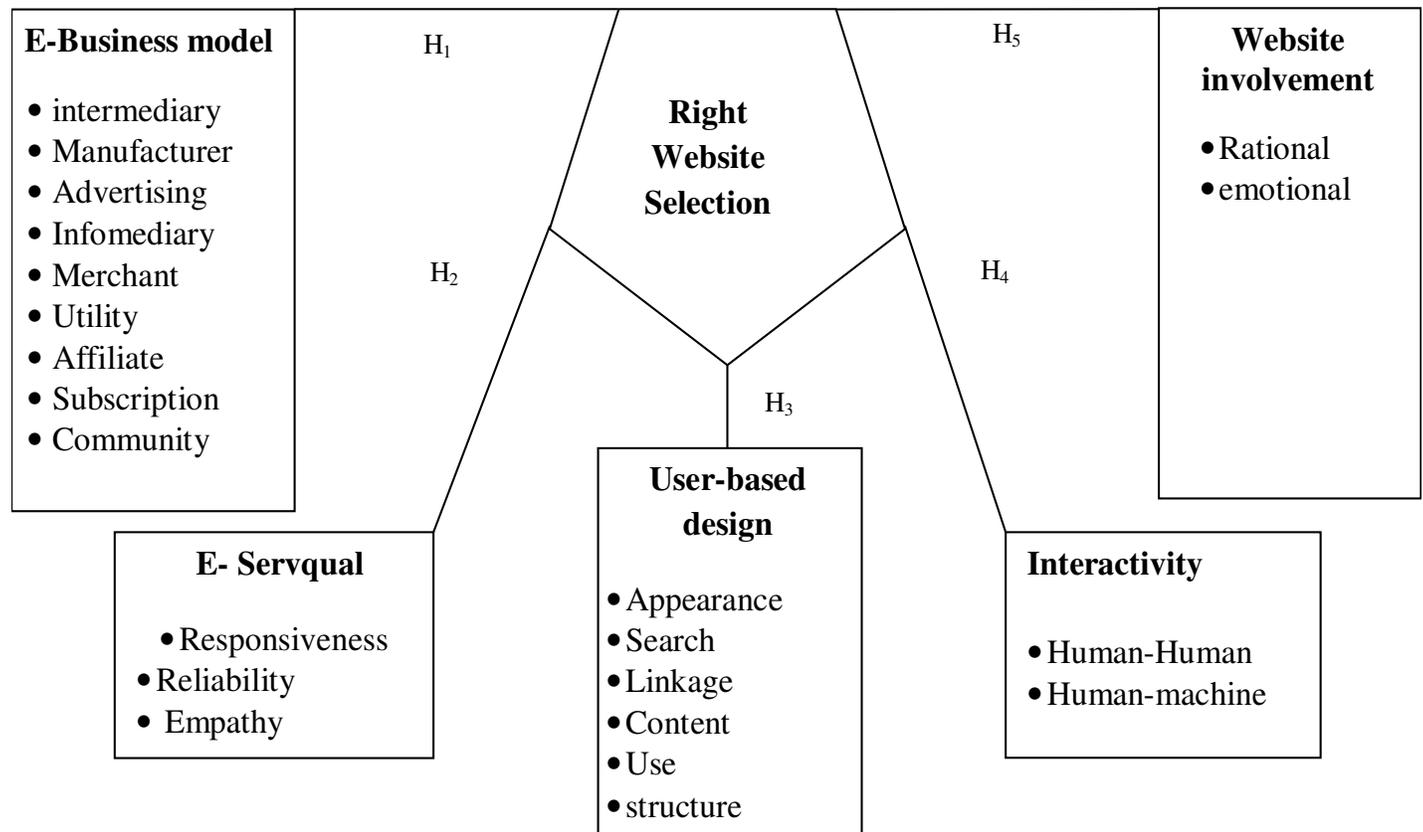


Figure 1. Conceptual model of right website selection for publishing internet advertisement.

selection of the right website for publishing advertisements.

Designing conceptual model

Considering the literature and the five aforementioned hypotheses, this research developed a conceptual model for the selection of the right website for publishing internet advertisements. This model is a general framework that serves to determine the factors on which the most appropriate website for advertisements must be selected (Figure 1).

RESEARCH METHODOLOGY

The methodology of the present study consists of two main parts: the first part relates to data collection, statistical sampling, developing the questionnaire, and measuring reliability and validity. The second part is related to the specific methodology of this study that, via an innovative approach, develops a ranking model for identifying the right website for publishing an ad on the internet. In the following, this research will first address the research methods and then the main methodology of this study, called the website selection process.

First, this research conducted a content analysis of more than 60 previous studies on internet advertising, online marketing, and

electronic business in order to identify influential factors in selecting the right website. Content analysis is a method confirmed by many studies and is considered one of the tools of developing a theoretical framework (Kassarjian, 1977; Kolbe and Burnett, 1991; Okazaki and Rivas, 2002). Using content analysis, this research identified 22 indices, confirmed by most researchers, and categorized these indices into five main groups including interaction, electronic services quality, type of website involvement, business model of website, and user-based (user-centered) design. Additionally, this research employed a combinational comparative-inductive method to identify influential factors, confirmed by international researchers, on the one hand, and evaluate the applicability of these indices from the viewpoint of domestic researchers, on the other.

In order to specify the statistical sample, expert was operationally defined as (a) instructor, assistant professor, associate professor, or professor in one of the disciplines related to IT, business management, e-commerce, or computers; (b) has at least one paper published in the area of internet marketing, e-business, or internet advertising; (c) is a successful e-businesspersons in Iran; and (d) is active in internet advertising among consultative companies or agencies.

Developing questionnaires

This research developed a questionnaire using a Likert scale containing five alternatives from most important to least important. Each index was presented as one question in the questionnaire and administered to experts or e-businesspersons in order to

Table 1. Type of business model student's t test statistical computing.

Variable	\bar{x}	f	fx	$(x-)^2$	$f(x-)^2$	Statistic
Electronic business model	1	0	0	3.114	0	M= 2.765
	2	4	8	0.585	5.47	Critical value = -1.65
	3	16	48	0.055	0.785	T= -0.8504
	4	34	136	1.526	2691.78	Sx= 12.326
	5	18	90	4.997	8088.8	
		72	282		10786.8	

Table 2. Hypothesis testing through student's t test.

$\mu \geq 4$	Examination statistics: $t_{student}$					
	Hypotheses	Number	Mean	standard deviation	Critical value	Examination statistic
E-business model	72	2.76	12.326	-1.65	-0.8504	Accept
E-Servqual	72	3	18.65	-1.65	-0.455	Accept
User-based design	72	2.892	15.44	-1.65	-0.61	Accept
Interactivity	72	2.667	11.674	-1.65	-0.97	Accept
Website involvement	72	2.882	12.73	-1.65	-0.603	Accept

investigate their view point in the area of Iranian businesses. The questionnaire was administered in print to 112 experts, of which 72 were completed for a return response rate of 64%. Data collection commenced in February, 2010 and ended in March 2010. A student *t*-test was used for the data analysis. In order to accurately measure the indices in the area of Iranian e-business, this research ran a strict test ($\mu \geq 4$), with the results reported in Tables 1 and 2. The critical value of this test, with $\alpha=1$ degree of freedom, was -1.65. As such, it could be concluded that the examination statistics were acceptable (that is, they were greater than this critical value, in other words, they were close to zero). As shown in Table 2, the first hypothesis, that is, the type of website business model, with -0.85 examination statistics, was an influential factor in selecting the right website for publishing an internet ad. In addition, other hypotheses, with examination statistics of -0.45, -0.61, -0.97, -0.63, respectively, were also identified as influential factors in selecting the right website.

Reliability and validity

In order to determine reliability and validity, this research examined previous content and used a pre-test method. Since the foundation of this study was extracted from previous studies, the present research intended to determine if the findings could be confirmed. In fact, reliance upon the literature and using experts' views for validating the questionnaire justified its validity. Using pre-test method, this research first administered the five point Likert questionnaire to 30 experts. Respondents faced some difficulties in answering some questions due to the novelty of these concepts (for example, e-satisfaction). However, once this research offered operational definitions, the ambiguities were resolved. Additionally, in order to determine reliability, a Cronbach's alpha test revealed an alpha coefficient of 86%, which proved high reliability of the questionnaire. Thus, it was found out that the questions exhibited internal consistency; that is, all questions measured a common construct. Finally, in order to develop variables related to the ideal framework, this research conducted specialized interviews with e-businesspersons.

Process of right website selection

The process of selecting the right website for placing internet advertisements follows TOPSIS philosophy of fairness from and closeness to the ideal (Hanafizadeh et al., 2009). First, in considering the features confirmed, that is, features related to the given website, this research designed a main ideal framework. This framework was use as a tool for assessing the alternatives (websites) and scenarios (products and services). For the purposes of the current study, scenario means any goods or service selected for advertisement. This framework, first defines an ideal state for each website; that is, considering the confirmed features, the main ideal framework (assessment tool) defines a scoring scale for each alternative. On the other hand, each scenario (the given goods or service) is placed within this framework and its ideal state is extracted. Then, the ideal state of the given scenario is compared with each ideal state of the present alternatives. The right website is the alternative whose ideal state is most congruent to the ideal state of the given scenario (Table 3).

Main ideal framework

Components of the main ideal framework

Ideals for selecting the right website are divided into four major features of e-satisfaction, e-business model, interactivity, and website involvement. E-satisfaction is further divided into two features of user-based design and electronic services quality. In a more accurate classification, user-based design is divided into use, content, structure, linkage, search, and appearance. In addition, quality of electronic services is divided into empathy, reliability, and responsiveness. The classification of business models is based on the content analysis conducted for identifying the electronic business models in Iran of which four models, including intermediary, affiliate, community, and advertising were selected from among nine business models proposed by Rappa (2005) (Appendix 1). According to Ko et al. (2005), interaction is divided into human-human and human-message interactions. Involvement is also

Table 3. The main ideal framework of right website selection.

Product / alternatives	Type of feature																
	Electronic satisfaction									E-Business models				Interactivity		website involvement	
	User-based design						E-servqual			Affiliate	Community	Advertising	Intermediary	Human-human	Human-machine	Emotional	Rational
	Use	Content	structure	Linkage	Search	Appearance	Empathy	Reliability	Responsiveness								
Ideal																	

further divided into emotional and rational involvement (Vaghen, 1986).

Classification of websites (alternatives)

Various researchers have proposed different approaches to investigating and classifying the content of websites (Adam and Deans, 2000; Deans and McKinney, 1997; Ho, 1997; Hoffman and Novak, 1995; Hoffman et al., 1997). Ware and Lin (2000) also argued that the main element of assessing commercial websites is their classification. Based on the literature, it could be claimed that the simplest classification offered for websites is the study of Hoffman and Novak (2005) who divided commercial websites into five distinct groups including online storefront, internet presence, content, mall, incentive sites, and search agents. However, since this classification has not been applied to Iranian businesses, this research conducted a content analysis of Iranian websites in which websites were divided into six groups including, online stores, online newspapers/magazines, portals, informative, communities, and computer device selling (Appendix 1).

Online stores (recruitment sites)

Online stores offer the correct way to sell products through electronic channels and attempt to provide such conditions for their customers that eliminate customer distrust in electronic payments and lack of physical presence in the stores (Hoffman and Novak, 1995). Online stores enable customers to see and buy the products such as books, clothes, and even cars. More recently, the traffic in these websites has significantly increased, as most users are people with positive attitudes toward electronic purchases and e-commerce (Zviran et al., 2006). For example, according to a study conducted on Iranian websites, www.7gardoona.com was selected as the most-visited site with highest level of variety from among nine online stores.

Online newspapers (online magazines)

Most visitors to online newspapers and magazines are highly educated people. Newspaper and magazine websites offer the following services, scientific information, news, purchasing guides, entertainment, and sport news. In fact, these sites attempt to earn advertising income by increasing traffic and visitor rates (Nagi, 2003). From among 12 newspaper websites, www.funpatogh.com was selected as the website with the most variety.

Portals

Portals seek to offer information that attracts customers during the first visit (Greenstein and Feinman, 1999). Portals earn income through monthly subscriptions or the selling of advertising space. Additionally, portals often offer information and services, which cover all the needs of customers, including chatrooms, entertainment, travel, shopping, and software downloads (Nagi, 2003). One example of a widely visited portal among Iranian websites is www.Kashkul.com.

Informative websites

Informative websites are responsible for accurately and logically collecting information on various subjects in order to attract many users by offering superfluous information and using reach pictures and communicative messages (IBM, 1999). The aim of informative websites is to display their advertisements through these services and earn income. For instance, www.persianv.com is the most-visited informative website among Iranian websites.

Online communities

Online communities are virtual spaces that play a significant role in shaping the thoughts and beliefs of society. Dellarcas (2006) recently demonstrated that internet forums are good alternatives for mass media and information resources. These communities attempt to gather users by providing different parts and presenting topics of interest for discussion and exchange of ideas. In fact, one of the advantages of these communities is easy access for the users in obtaining their required information. By providing users with facilities, such as personal profiles and the like, communities intend to create an attractive space for users to be comfortable. From among 12 community Iranian websites, www.gtalk.ir is suggested to be the most-visited.

Computer device selling websites

Computer device selling websites offer the latest information about computers and related devices and guide the customers in accessing the most appropriate alternatives by offering comprehensive and accurate information about computers and related devices. These sites also create a comfortable space for users by offering the possibility of free software downloads, which also attracts more users. Often, these websites display ads in order to earn income. Another way of earning income is selling their own

electronic products, such as educational software and CDs or notebooks. Among 12 computer device selling websites in Iran, www.P30world.com is the most-visited.

Defining variables

In order to operationalize the model and more accurately assess the alternatives, this research specified a unique variable for each of the confirmed features so that the score obtained by each feature can be put within the main ideal framework. By entering these scores into the main ideal table, the tool is completed and is ready to evaluate the alternatives.

Variables of user-based design

- i. Use: According to Abels et al. (1998), ease of use is very important and an overall plan of site development as well as an appropriate structure of website navigation that must be available so the users are not confused when on the site. On the basis of the above definition, in the ranking made, H shows the difficulty of using the website and E shows the ease of using the website.
- ii. Content: Considering the congruence of website content with the mental status of the visitor, the ranking made in Zviran et al. (2006), study was H and L, meaning high and low congruence is used here.
- iii. Structure: According to Zviran et al. (2006), website structure is the organization of information within the website. In this regard, two variables introduced are FL and IFL, which signify a formal and informal nature of the website, respectively.
- iv. Linkage: According to Jusoh et al. (2002), linkage refers to the fact that the pages of the website search and link information related to each other in various websites. According to this definition, the ranking of this feature is divided to H and L, which respectively mean high and low.
- v. Search is defined as the possibility of searching information on the website, availability of useful products and websites, and existence of pages with the lowest processing time (Abels et al., 1998). In this regard, this issue is ranked as γ and +, in that + indicates the presence of the given alternative in the feature, and γ signifies that the given alternative is not present in the feature or it is neutral.
- vi. Appearance: According to Jusoh et al. (2002), appearance is defined as the attractive appearance of the given website at the time of display. Of note, the design need not necessarily be graphical in order to be rated high for appearance. Thus, this issue is ranked as attractive (ATE), semi-attractive (SATE), or unattractive (UATE).

Component of e-servqual

- i. Empathy: According to Lee and Kozar (2006), empathy involves the accuracy and attention of the internet publisher toward his or her customers; whether he or she has been able to provide the facilities ordered by the user or the virtual assistant so that he or she feels comfortable. According to this definition, empathy is divided into comfortable, semi-comfortable, and uncomfortable as indicated by Com, Scom, and Ucom, respectively.
- ii. Reliability: According to Lee and Kozar (2006), reliability refers to the ability to acceptably and reliably provide the services promised in the time specified; therefore, ensuring the customer's welfare. Based on this definition, the variables of reliability are ranked by +, -, and γ , which respectively mean that the given alternative is positive and appropriate for the given feature, the given alternative has the lowest validity for the given feature, or the given alternative is neutral for the given feature.
- iii. Responsiveness: According to Iwaarden et al. (2003),

responsiveness involves the help offered to customers in solving their problems and offering timely online services. The variables quick (Qck), slow (Slw), and normal (Nor) are assigned to this feature.

Business models

Considering the content analysis conducted on Iranian websites, this research identified the business models intermediary, community, advertising, and affiliate:

- i. Interaction involved on the internet, particularly internet advertising, are present in the two general forms of human-human and human-message interactions with the variables H-M and H-H, respectively, to signify these variables (Ko et al., 2005).
- ii. Website involvement: According to Vaughn (1986), customer involvement with the website is classified into two groups of emotional and rational involvement which are indicated by E and R, respectively.

The main ideal framework of the right website selection

The main ideal framework of this study involved six alternatives of online stores, online newspapers/magazines, portals, informative websites, online communities, and computer device selling websites and 12 factors including use, content, linkage, search, appearance, empathy, reliability, responsiveness, electronic business models, interactivity, and website involvement. Table 4 shows the main ideal framework.

Case study

In order to evaluate the operational efficiency of the model, advertising educational CDs were selected for the case study. Since the customer needs information in order to buy educational CDs and will therefore search the content of the website to increase their knowledge of these products, this case was selected for study. On the basis of the interviews conducted and the literature review, this research developed the ideal framework for educational software (Tables 5 and 6). This framework was then compared with the main ideals of alternatives (websites) and as was observed, the alternative for computer device selling websites was selected as the most appropriate alternative with the least incongruity.

According to model of the right website selection, computer device selling websites are the right alternative for publishing advertisements of educational software on the internet. In order to evaluate the truth of this claim, this research conducted a strict analysis on 40 most-visited Iranian websites (which belonged to computer device selling) to determine if the model output was justified on the Internet.

RESULTS AND DISCUSSION

The results are presented in Appendix 2. According to the analyses, all websites contained advertisements especially advertisements of educational software.

This paper presented novel concepts such as e-satisfaction, electronic services quality, user-based design, and factors such as use, empathy, responsiveness, and appearance. The five proposed hypotheses were significantly confirmed relating to e-servqual, user-based design, e-business model, interactivity, and web-site

Table 4. The main ideal framework of six alternatives assessed on the basis of 12 variables.

Alternative	Type of feature															
	Electronic satisfaction						E-business models						Interactivity		website involvement	
	User-based design			E-servqual			Affiliate	Community	Advertising	intermediary	Human-human	Human-machine	Emotional	Rational		
	Use	Content	structure	Linkage	Search	Appearance									Empathy	Reliability
Online stores	E	H	FL	H	+	ATE	COM	-	Qck		*	H-H			R	
Online newspapers/ magazines	H	H	FL	L	+	SATE	SCOM	Y	Nor		*	H-M			R	
Portals	E	H	IFL	H	Y	ATE	COM	+	Nor		*	H-M		E		
Informative websites	E	H	FL	H	+	SATE	SCOM	Y	Nor		*	H-M		E		
Online communities	H	L	IFL	L	Y	SATE	COM	+	Qck		*	H-H		E		
Computer device selling websites	E	H	FL	H	+	SATE	COM	+	Qck		*	H-H			R	

Table 5. The main ideal framework of educational software.

Selling educational CDs	Type of feature															
	Electronic satisfaction						E-business models						Interactivity		website involvement	
	User-based design			E-servqual			Affiliate	Community	Advertising	intermediary	Human-human	Human-machine	Emotional	Rational		
	Use	Content	structure	Linkage	Search	Appearance									Empathy	Reliability
Use	E	H	FL	H	+	SATE	COM	+	Qck	*		H-H			R	
Content	H	H	FL	H	+	SATE	COM	+	Qck	*		H-H			R	
structure	H	H	FL	H	+	SATE	COM	+	Qck	*		H-H			R	
Linkage	H	H	FL	H	+	SATE	COM	+	Qck	*		H-H			R	
Search	H	H	FL	H	+	SATE	COM	+	Qck	*		H-H			R	
Appearance	H	H	FL	H	+	SATE	COM	+	Qck	*		H-H			R	
Empathy	H	H	FL	H	+	SATE	COM	+	Qck	*		H-H			R	
Reliability	H	H	FL	H	+	SATE	COM	+	Qck	*		H-H			R	
Responsiveness	H	H	FL	H	+	SATE	COM	+	Qck	*		H-H			R	

involvement, which are representative of the bases of website selection for publishing dynamic ads on the Internet. Additionally, this research proposed a specific methodology in order to launch the conceptual model of the right website

selection. This method offers an assessment tool, called the main ideal framework, and evaluates scenarios associated with the alternatives and introduces the most appropriate alternative for that scenario.

Additionally, this research conducted a content analysis on Iranian websites and successful websites in the area of internal businesses. Popular businesses in Iranian contexts that are most visited included online stores, online newspapers,

Table 6. The main ideal framework of the alternatives.

Computer device selling websites	Type of features																
	Electronic satisfaction									E-Business models				Interactivity		website involvement	
	User-based design						E-Servqual			Affiliate	Community	Advertising	intermediary	Human-human	Human-machine	Emotional	Rational
	Use	Content	structure	Linkage	Search	Appearance	Empathy	Reliability	Responsiveness								
Ideal	E	H	FL	H	+	SATE	COM	+	Qck			*		H-H		R	

informative websites, community websites, and computer device selling websites. The audiences of the present study were researchers, advertising and consultative agencies, and businesspersons who were interested in advertising through the internet. Results also revealed that being aware of the criteria for the right website selection can play an important role in a manager's decision-making regarding the right website selection.

Identifying and introducing the main basis of the right website selection presents a new research horizon for future researchers. Future studies should focus on each of the identified features and develop enhanced knowledge about these features. In addition, these researchers introduced domestic successful businesses, which can be probed in more detail because these businesses have managed to attract a significant portion of the traffic of Iranian users.

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APPENDIX

Appendix 1. Iranian websites' business models.

Classification of web	ID	Number of visit	Frequency	e-Business model
1) Online stores	http://www.7gardoona.com	94823	9	Intermediary
	http://www.npshop.net	63526		
	http://www.agahinameh.com	60399		
	http://www.iran.bz	36371		
	http://www.city01.ir	34192		
	http://www.100cd.net	26756		
	http://www.dpayshop.com	18981		
	http://www.fal4u.com	15581		
	http://www.select114.mihanblog.com	15407		
2) Online newspapers / magazines	http://www.jadidtarin.com	50624	12	Advertising
	http://www.funpatogh.com	50510		
	http://www.aviny.com	47253		
	http://www.iranian.fi	35690		
	http://www.iranhall.com	35689		
	http://www.parsianfun.com	22334		
	http://www.takkhal.net	21268		
	http://www.Shz.iR	20447		
	http://naghola.com	20174		
	http://www.irebooks.com	17288		
http://www.tafrihi.com	16534			
http://www.iranselect.net	15782			
3) Portals	http://www.7pic.ir/	64360	11	Affiliate/advertising
	http://kashkul.com	41466		
	http://www.pichak.net	31780		
	http://www.kiabox.sub.ir	36229		
	http://www.yaronline.com/	24782		
	http://www.miadgah.ir	22966		
	http://www.100fal.com	22840		
	http://www.ariamob.com	17682		
	http://www.iranpixfa.ir	15959		
	http://www.mihanrobot.com	15911		
http://www.kocholo.org	15841			
http://www.fun95.blogfa.com	14736			
4) Informative websites	http://www.persianv.com	111290	9	Advertising
	http://www.niloox.com	70493		
	http://www.Bitaraf.com	62195		
	http://www.ketabeavval.ir	41743		
	http://www.footballiran.ir	29261		
	http://www.engfa.com	23861		
	http://www.pezeshk.us	23496		
http://www.irpdf.com	20259			
http://pnunews.blogfa.com	18726			
5) Online communities	http://www.webgozar.com	15303	12	Community
	http://www.gtalk.ir	62195		
	http://www.irkut.ir	29323		

Appendix 1. Cont'd

	http://www.mersee.com	26749	
	http://www.boxeshia-sonni.mihanblog.com/	24021	
	http://www.p30city.net	20744	
	http://www.tvshow.ir	20741	
	http://www.iran-forum.ir	19325	
	http://www.ir3at.org	16155	
	http://www.daneshju.ir/forum	15607	
	http://www.parsiking.com	15160	
	http://www.topgoal.ir	15113	
	http://www.p30world.com	146388	
	http://www.mihandownload.com	113192	
	http://www.patoghu.com	69402	
	http://www.downloadha.com	62068	
	http://www.asandownload.com	49456	
6) Computer device selling websites	http://www.softgozar.com	34716	12 Advertising
	http://www.rapidautodl.blogfa.com	29077	
	http://www.freedownload.ir	26229	
	http://www.p30world.com	18538	
	http://www.Hotfaz.ir	18031	
	http://www.Takmob.Net	17957	
	http://www.Clickkon.com	17135	

Appendix 2

Content analysis on 40 most-visited Iranian websites.

Classification of web	ID	Type of advertising
	1 http://www.nod321.ir	Educational software
	2 http://www.Kamyabonline.com	Educational software
	3 http://www.bindownload.com	Educational software
	4 http://downloadkade.com	Educational software
	5 http://4downloads.ir	Educational software
	6 http://www.iranmeet.com	Educational software
	7 http://www.narmafzar11.persianblog.ir	Educational software
	8 http://www.downloadpersian.com	Educational software
	9 http://www.casedl.com	Educational software
Computer device selling websites	10 http://www.vatan20.com	Educational software
	11 http://www.haraji.org/	Educational software
	12 http://persiadl.com	Educational software
	13 http://www.p30island.com	Educational software
	14 http://updatedl.com	Educational software
	15 http://www.downlodiha.com	Educational software
	16 http://peakdl.com	Educational software
	17 http://www.jahandl.com	Educational software
	18 http://www.mob4u.ir	Educational software
	19 http://www.amindownload.ir	Educational software
	20 http://www.empratoor.com/	Educational software
	21 http://www.musicfarda.com/	Educational software

Appendix 2. Contd.

22	http://elecdl.com /	Educational software
23	http://xtar.ir/	Educational software
24	http://tehrandownload.ir /	Educational software
25	http://www.bestdanlod.ir	Educational software
26	http://deltafoxy.com	Educational software
27	http://www.negar-mobile.ir	Educational software
28	http://www.hamirayane.com /	Educational software
29	http://danlod.mahblog.com	Educational software
30	http://www.melidownload.com	Educational software
31	http://2nload.com	Educational software
32	http://www.p30day.com	Educational software
33	http://www.yekdownload.com /	Educational software
34	http://www.mirsoft.net /	Educational software
35	http://www.downloadina.com /	Educational software
36	http://ariamob.40sotoon.net /	Educational software
37	http://sys.blogsky.com /	Educational software
38	http://www.parsianfun.com/	Educational software
39	http://www.p30persia.com/	Educational software
40	http://www.royadownload.com /	Educational software
