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### **Identifying the effective drivers on internet advertising using structural equation modeling: an empirical investigation**

*Today internet advertising is the hugest method for enterprises to increase their sales and strengthen market positions. The total advertising volume is increasing every day and the relevant question is connected with the investigating the basic approaches and methods of improving the effectiveness of this activity. One solution is the identification of the online advertisement drivers and evaluation of their effectiveness on the customer's behaviour. This investigation is based on the finding these online advertising drivers. In order to collect the information, a questionnaire was composed and its reliability and validity were evaluated and it was filled by 400 customers in large food stores in Shiraz. Factor analysis confirmation showed that the study parameters were chosen correctly. In this research was testing three hypotheses, which were based on using the content and communication stimuli and investigating the extent of these stimuli on the consumer's behavioural response. Testing of hypotheses confirmed that content and communication stimuli had a significantly positive influence on food stores customers and the effect of the content stimuli was stronger than the communication stimuli. On the other hand, informativeness which is one of the subsets of the communication stimuli had the most significant positive effect on the behavioural response of the consumers. In its turn, the factor of entertainment had the most significant negative effect on the behavioural reaction of the food stores customers. With the purpose of the better utilizing of the findings the innovation research model of influencing electronic advertising on consumer behaviour was created. It will give companies the opportunity to identify the most important stimuli which affect the behavioural response of food retail.*

Keywords: Internet advertising, communication driver, behavioural reaction, structural equation modelling.

**Introduction.** Internet-based advertising in one of the most important methods for companies to communicate with their customers and it has become an important marketing channel which companies use to promote their brand, distribute information and increase their commercial transactions. Digital advertising world has undergone revolutionary changes during the past two decades. With the development of new methods and technologies for online advertising in the recent years, the portion of this type of advertising in the whole advertising market has been increasing. One decade ago a few of advertisers were aware of the internet advertising potential and opportunities but today in some countries including the USA, the turnover of this type of advertising have surpassed the newspaper advertisements [1]; the reason for this can be the ability of the internet in decreasing the costs and increasing the ease of access to the services. Also, the advertisers can easily be in touch with thousands of users and communicate with them in a cost-effective manner [2]. For the same reasons, food stores also use internet advertising to introduce and advertise their products. Studies show that in order to increase its effectiveness and more efficient use of this media, factors that influence the consumer's behaviour should be recognized so that the benefits of electronic advertising can be utilized, in order to take advantage of

the consumer's need. In another word, companies in order to reach their goal of selling and making a profit, need to advertise and internet advertising can be of benefit to them. But careful planning and recognition of the effects of this type of advertisement on consumers are needed to achieve effectiveness. Also in food stores, studying these advertisements can result in increased effectiveness and efficiency and it should be determined that which aspects of electronic advertising in such stores have more effect on the consumer.

**The aim of the article.** The main goal of the research was to design an electronic advertising model to influence consumer behaviour. In order to achieve this goal, extensive studies were conducted on the various aspects of electronic advertising, and while expressing the theoretical foundations of this topic and its wide variations with traditional advertising, we examined different models of advertising impact from both the traditional dimension and the electronic dimension. The purpose of this study was to identify the most effective factors in electronic advertising on customers of food stores in the city of Shiraz. According to the analysis of different models and reviewing their strengths and weaknesses, in this study, the following model is recommended as a research model for studying the effectiveness of electronic advertising.

1. Given that a systematic approach is used in this model, therefore, model inputs, as effective incentives, are in form of communicational and conceptual drivers.

2. The above drivers result in intellectual, cognitive and Sentimental-emotional reactions. In this process, beliefs, opinions and feelings (emotions) and finally, the consumer's attitudes are formed.

3. Finally, based on the communicational and conceptual drivers of electronic advertising and the process of the effectiveness of the model, we arrived at the consumer's behavioural response which shows the assessment of the effectiveness of the model or in other words, its validation.

**Literature review.** Burns et al [3] suggested the following pattern for advertising in his study: drawing attention: the first step in this pattern is drawing the attention of the audience to the intended commodity; creating a connection: the second step is using different methods to create a connection between the audience and the commodity; this means telling the audience that what is the commodity used for; to convince: the Third step in this pattern is to convince the audience to buy the commodity. Patsioura et al. [4] studied a new model of advertising effectiveness for companies' advertisements websites. The purpose of this study was to provide a conceptual framework for the effect the companies' advertisements websites to evaluate multiple advertising and promotional activities and relationship marketing. The required data was gathered using 160 questionnaires filled by students and graduates. Results showed that significant behavioural aspects of the participants in this study were based on their actions, activities, preferences and intentions. It was also revealed that qualitative factors of communication-based marketing had an important effect on effectiveness indicators of the advertising. Electronic advertisement factors investigated in this study were: 1 - The content of the advertisement; 2 - connections; 3 - feedback; 4 - service presented to the customer or the consumer; 5 - interaction; 6 - effects of artistic and aesthetic factors. Kim et al. [5] investigate 9 aspects of electronic services including efficiency, system availability, private space, sensitivity, contact, implementation, customization, adequacy of information and graphical styles. This study showed that there is a difference between websites providing internet services for men and women, especially in clothing websites where the level of service quality and satisfaction were higher for women than men. In a comparative study conducted by Wang et al. [6] the role of beliefs and the way of thinking about online advertising in the USA and Romania was investigated. The purpose of this study was an inspection of inline advertisement in different cultures including American and Romanian. In this study, the relation between beliefs and way of thinking about online advertising and the consumer reaction was tested and the relationship between variables was investigated by studying 557 internet users in both countries who were tested using a structural relation equations model. Results showed that belief factors (for example searching for information, entertainment, economic savings and credibility) are significant

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statistical predictors for online advertising and online advertising is an important predictor of consumers' reactions. In comparison with Americans, Romanians had more tendency towards online advertising and were more likely to click on them; while Americans were more likely to shop online than Romanians. Zhang and Wang [7] in an important field research, firstly define the concept, values and attitude of the consumer or the customers; then they have tested them against different purposes of advertising. They have concluded that four factors are effective on the value and the attitude perceived by the customer towards advertising: entertaining; persuasiveness; informativeness; credibility. Moreover, they believe that interaction ability and classification of consumers are other factors which will influence the perception and behavior of the consumers. Po [8] claims that in the recent years, much attention has been paid to the internet and its use and its interaction and dynamism had become common and popular; but for some reasons, its effectiveness has been decreasing. With the increase in the internet surfing experience of the users, this effectiveness has decreased; because they think online advertisements are annoying so they block them. The study investigated the factors influencing customer or consumer attitude, towards internet advertising which will increase its effectiveness. He believes that the factors which are being used to evaluate advertisement effectiveness in traditional media are not applicable for internet advertising; so in this study, the effects of content factors, excited emotions and brand on internet advertising effectiveness were investigated. The main effects and interactive effects of these factors on the attitude towards internet advertising an intention and desire to purchase were also studied. Results showed that only the content and the brand were effective on the attitude towards advertisings. The content of the advertisement is mostly related to the content of the host website which the advertisement is displayed in and this cause a positive attitude towards the advertisement. A famous bran can also result in a more desirable attitude toward an advertisement in comparison with an advertisement without a brand. The results also be concluded that a positive attitude towards the advertisement can lead to a positive attitude towards intention to purchase. Mirahmadi and Dadgaran [31] in a study entitled "The Impact of Television Advertising on Consumer Consumption-Driven Behavior in the Convincing Stage" examines the impact of Iran Khodro's TV advertising on the Peugeot 405 product, based on the Lavigne and Stiner Hierarchy Model among 108 Members of the statistical community. In this study, only the 5th step of the model, namely, persuasion or conviction has been investigated. The research results show that Peugeot 405's car advertisement has not been effective on purchasing the product through television. The results also indicate that TV advertisements did not affect buyers' convincing, but more than 57% of buyers, despite being unconvinced, bought the product. Perhaps other effective factors such as market conditions, advice from friends and relatives, brand name and product intention and previous intention to buy have been more effective than buying. Wells [32] has addressed "Designing a Consumer Purchasing Behavior Model". This model is essentially used as a plan for organizing the knowledge structure of consumers. The model consists of several editing channels aimed at optimizing the editions, as well as clarifying the relationships between the main components and the sub-elements. In this model, before the message is exploited, the consumer should be aware of it. 2. Give the received message the capacity to process the information. 3. Interpret the stimulus and the motive. 4. Encourage this motive. 5- Maintain messages by converting and transferring input and data into long-term memory.

**Electronic advertising.** Internet advertising started with the early years of formation of the web with text and graphic advertisement in some of the popular websites; besides this, another method of advertising was to send advertisement emails to groups of recipients. But with the beginning of the new millennium and the Google corporation entrance to the online advertisement world, internet advertising turned to a serious business. Characteristics like permanent display in a specific time range, going beyond the geographical regions, flexibility in design and implementation, ability to interact with the user, ability to direct the user to the target website, ability to direct the user to purchase the good or the service, ability to generate reports on the advertisement visitors and few other options are causes to increase the

enthusiasm to advertise online. Development of the internet tools and increased number of users have provided more potential for online advertising [9] therefore the emergence of internet as a new media in the field of communication and advertisement have encouraged many researchers to do more studies in this area. Many researches have been conducted about the factors affecting the consumer's behavior in internet advertising. For example, Patsioura et al. [4] studied a new model for effectiveness of the advertising in the companies' advertisement websites; the purpose of this study was to present a conceptual framework to evaluate the effectiveness of the overall function of the companies' advertisement websites in order to do multiple advertising, promotional actions and relationship marketing. Required data was gathered using questionnaires filled by 160 students and graduates. Results show that certain significant aspects of participants' behavior are based on their actions, activities, preferences and intention. It was also shown that qualitative factors of marketing based on communications had a considerable and important influence on advertising effectiveness indicators. Electronic advertising factors studied in this research were as follows: content of the advertisement; communications; feedback; consumer/customer service; interaction; effects of artistic and aesthetic factors. Kim et al. [5] studied 9 aspects and features of electronic services including efficiency, system availability, private space, sensitivity, contact, implication, customization, adequacy of information and graphical styles. Results showed that there are some differences between men and women websites in providing internet services which are more obvious in women clothing websites which provide higher level of electronic services quality and higher satisfaction. In a research Wang et al. [6] compared the role of beliefs and the way of thinking in the United States and Romania. The main purpose of this study was trying to test the relationship of beliefs about online advertising, attitude towards online advertising and the consumer's reaction to these advertisements. The study was conducted on 577 internet users in the abovementioned countries using a model of equations of structural relationships between the variables. Results of this study showed that belief factors (for example searching for information, entertainment, economical saving and credibility) are significant statistical predictors for online advertising and such advertisements are important predictors for consumer's reaction. In comparison with Americans, Romanians had more positive tendency towards online advertising and were more likely to click on them; while Americans were more likely to shop online than Romanians. Table 1 show a summary of these studies based on Barry and Howard [10].

Effectiveness is the key point in evaluating advertisement. Advertising companies are always interested in measuring their advertisement effectiveness. There are many indicators for evaluating advertisement effectiveness. Such indicators can be categorized in 3 groups: choosing the brand, purchase intensity and corporate accounting variables. Choosing the brand and purchase intensity are relatively independent variables (indistinguishable in terms of advertising effect). Accounting variables are relatively non-analyzable and general [20]. Choosing the brand is the selection of a certain trademark between different available brands by the customer. Choosing the brand is only possible in the markets with multiple brands available and is meaningless in monopolistic markets [21]. In comparison with the independent choosing the brand and purchase intensity variables, general criteria of selling and income can present a brief report on advertising effectiveness. Unlike independent variables, such criteria lack the insight on the nature, depth, extent or the response time to the advertisement. So independent variables are superior to non-analyzable variables. However dependent variables are not without advantages. Firstly, acquiring them is fairly easy. Usually internal documents provide some information about selling and income. Secondly, they can be even more accurate, especially when they represent the population, not only one a sample [22]. Market outputs measure a company's performance in comparison with other companies in the market. The most usual indicator in this group is the market quota of the brand. Market quota of a brand is the amount of a brand sale divided by the amount of the competitors' sale in the market.

**Table 1 – Different indicators for evaluating the factors affecting the consumer's behavior in similar studies**

Variable	Researchers	Concepts Used
Content stimuli	Zhang & Wang [7]	Entertainment, informativeness, persuasiveness, credibility, demographic classification
	Ducoffe [11]	Entertainment, informativeness, persuasiveness
	Groenne and Barker [12]	Entertainment, informativeness
	Thorson & Rodgers [13]	Searching, having fun
	Korgaonkar&Wolin [14]	Informativeness, having fun, leisure activities
	Papacharissi& Rubin [15]	Having fun and spending time, informativeness, entertainment
	Schlosser et al. [16]	Pleasure, informativeness
	Brackett et al. [17]	Credibility, demographics
	Po [8]	Content factors, excited emotions, dynamism
	Zhang & Wang [7]	Entertainment, informativeness, Mass motivation, persuasion methods
	Patsioura et al. [4]	Content factors, artistic factors, aesthetics
	Wang et al. [18]	Exploring, entertainment, credibility
Communication stimuli	Zhang & Wang. [7]	Interactiveness
	Groenne and Barker [12]	Ease of purchase
	Thorson & Rodgers [13]	Ease of purchase, establishing connection
	Papacharissi& Rubin [15]	Interpersonal desirability, comfortability
	Groenne and Barker [12]	Consumer interaction: human-human, message-human, human-computer
	Cetina [19]	Web interactionism: machine interaction, content interaction, personal interaction, exchange and improvements for correspondence
	Po [8]	Interaction and dynamism
	Patsioura et al. [4]	Service, communications, customer feedback, interaction
Wang et al. [18]	Economical saving	

Following the market quota will become very important when there are quite similar brands and there is no growth in the market. In this situation, any increase in the sales of a one brand will result in decrease of the market quota of the other brands [23]. Among output variables, sales and market quota which are two indicators included in the accounting variable are the most used indicators. Reason of their popularity include simplicity of measurement and analyzability. An indicator which is gaining popularity in the era of electronic data is choosing the brand [24]. Due to the fundamental theories and literature review, independent variables of this study were divided in two categories; content stimuli and behavior stimuli. Content stimuli are related to content of the advertising website which cause a desirable attitude towards the advertisement and it has 7 aspects as follows: informativeness; entertainment; persuasiveness; credibility; demographics; explorability; updatability [8]. Communication stimuli is related to the communication infrastructure of the advertising website which also cause a desirable attitude towards the advertisement and it also has 7 aspects as follows: interactiveness; availability; universalness; ease of purchase; customizability; cost-effectiveness; evaluation and feedback [25]. Entertainment factor is the ability to create entertainment and engagement for the user. In another words, entertainment factor is the ability to fulfill the audience emotional needs [11]. Informativeness factor is the ability to provide consumer desired information about the product and services; for example, the price, quality, packaging, etc [7]. Persuasiveness factor means the ability to motivate, stimulate and getting attention of the consumer towards the advertised product or service. Although stimulating the consumer can be positive or negative stimulation which means that it can be encouraging and motivating or it can be annoying and irritating [26].

Credibility factor means that in what extent the advertisement in the internet have credibility and how much it is trustworthy and how using such advertisement as a media to get in touch with the consumer is believable and builds the trust of the consumer [7]. Interactiveness factor is the relation between advertiser and the audience which is a two-way relation. It is one of the advantages of the electronic advertising and due to the nature of the advertisement and media which is different from traditional one-way advertising [11]. Demographics factor (classification and separation of the consumers) means that using the features available in the internet it is possible to send messages and advertise based on the consumers classified by age, sex, etc.; so specialized advertisements can be produced and published [18]. Explorability factor is the possibility to explore and search for the audience beyond the displayed advertisement. This means that consumers and customers can find information about different aspect of product or service; through this they can search for more information as they receive the advertisement [26]. Ease of purchase is providing the possibility to electronically buy the products and services and this is a feature of internet advertising which makes it possible to purchase right after the advertisement is received and the customer is interested; because the advertising website provides enough information about the delivery and any other related costs and financial transactions [27]. Customizability is the ability to display specific advertisements for consumers utilizing the website's specifications and one by one communication with consumers based on two-way interaction; so it is possible to attend to the requests of an individual consumer and provide personalized information. In another words some kind of direct marketing is done based on the capabilities of this type of advertising [28]. Availability factor means that the consumer can see the advertisement at any time while using the internet. This feature is available due to the nature of the media and unlike traditional advertisements which were broadcasted at specific times, this type of advertising can be received by consumer and customer at any time because of ease of its access and availability [27]. Evaluation and feedback factor is feature that unlike traditional advertising, the advertiser can monitor the number of people who have viewed the advertisement and even the duration of time which each user spent to watch an advertisement; so this type of advertisement has the ability to evaluate the audience and give provide a quick feedback from customers and users when they encounter an advertisement [30]. Updateability is an option due to the features of the internet so that an advertisement can be updated in a short time and at a low cost. So according to the conditions and feedbacks, it is possible to modify and advertisement, quickly [29]. Universality factor means that unlike traditional advertising, using the webpages, internet advertisement has a worldwide reach and can be received by audience all over the world [29]. Cost-effectiveness factor means that internet advertising is a beneficial and cost-effective way of advertising not only for the advertiser and seller, but also for audience and consumers; because by obtaining adequate information and doing comparisons can find minimum prices in minimum time [30].

**Study variables.** As mentioned above, the purpose of this study was to identify the factors effective on food store customers' behavioral response in internet advertising. To do so, similar to the researches mentioned in the literature review section, the independent and dependent variables were selected.

Dependent variable was food store customers' behavioral response which was surveyed using a questionnaire containing 5 questions.

Independent variables similar to the customers' behavior stimuli studies were categorized to content stimuli and behavior stimuli and each of them has 7 factors.

Content stimuli: informativeness; entertainment; persuasiveness; credibility; demographics; explorability; updatability [8].

Communication stimuli: interactiveness; availability; universality; ease of purchase; customizability; cost-effectiveness; evaluation and feedback [26].

**Research Hypotheses.**

- Hypothesis 1: content stimuli has a significant effect on the consumer's behavioral response.

– Hypothesis 2: communication stimuli has a significant effect on the consumer's behavioral response.

– Hypothesis 3: the extent of effectiveness of these stimuli and their factors on the consumer's behavioral response is different from each other.

**Population and sample of the research.** Due to the fact that it was intended to design a model for electronic advertising to affect the consumers, after surveying different stores and advertisement websites it was decided that large food stores in Shiraz, due to their advertisements in advertising websites to introduce vastly different goods and products, were good statistical societies to conduct this study. According to the statistical society and cluster random sampling method based on visible traits in the population with the highest estimated number of customers with a cautionary view of the customers of the large food stores in Shiraz, the sample size was calculated to be 400; because in statistical factor analysis, at least 5 participants is necessary for each item of questionnaire.

**Research methodology.** This study investigated the most effective factors on large food stores customers' behavioral response using concepts and variables defined in the model and different indicators which have been used in similar studies. In this way the questions of the final questionnaire were designed; then for validating its content, the questionnaire - with a brief description of the study - was assessed by a group of management professors and final modifications were done based on their comments. Cronbach's alpha was applied to evaluate the reliability of the questionnaire Cronbach's alpha for the whole questionnaire was 0.92 and for sub-scales was varied between 0.86 to 0.98 which shows the high reliability of the questionnaire. In order to collect the data, using the described sampling method, 30 questionnaires were filled by the customers of following food stores who had used the store's website: Ofogh-Koorosh ([www.ofogh-koorosh.com](http://www.ofogh-koorosh.com)), Iranian Hyper Star ([www.hyperstariran.com.ir](http://www.hyperstariran.com.ir)), Final ([www.final.ir](http://www.final.ir)), Shahrvand ([www.shahrvand.ir](http://www.shahrvand.ir)), Chareh ([www.chareh.ir](http://www.chareh.ir)), Pardis ([www.pardis711.ir](http://www.pardis711.ir)), Yaas ([www.yaasonline.com](http://www.yaasonline.com)), Asoona ([www.a3ana.ir](http://www.a3ana.ir)), Shaahsavand ([shop.shahsavand.com](http://shop.shahsavand.com)), Takhfif Shiraz ([www.shiraztakhfif.ir](http://www.shiraztakhfif.ir)), Refaah ([www.rafaahchainstores.ir](http://www.rafaahchainstores.ir)), Miaad ([www.miaadshop.com](http://www.miaadshop.com)) and Tahvilaan ([tahvilan.blogfa.com](http://tahvilan.blogfa.com)).

**Results.** In order to find the most effective factors in internet advertising on large food store customers' behavioral response, due to the sample size, 400 questionnaires were filled by the customers and a summary of resulted descriptive statistics is shown in Table 2.

Table 2 – Summary of resulted descriptive statistics

Sex	Male	Female			
	241	159			
Marital Status	Single	Married			
	289	111			
Education Level	Primary / Lower Secondary	Upper secondary	Bachelor	Master	Doctoral
	29	193	98	63	24
Age	20-30	31-40	41-50	51-60	61 and higher
	144	190	51	15	0

Normality of the data was evaluated using Kolmogorov–Smirnov test. Results are shown in Table 3.

Table 3 – Kolmogorov–Smirnov test

	Age	Sex	Education	Marital Status	Content Stimuli	Communication Stimuli	Behavioral Response
N	400	400	400	400	400	400	400
Std. deviation	0.48999	1.0876	1.4013	0.44833	0.83137	0.68335	0.79651
Asymp.sig (2-tailed)	0.105	0.194	0.163	0.094	0.225	0.515	0.402

Because all the numbers in the last row (Asymp.sig) are higher than 0.005, so the distribution of all variables in the study is normal. To confirm correctness of the advertising stimuli classification and the behavioral response of the customers, confirmatory factor analysis was used. Confirmatory factor analysis is used to assess whether measures of a construct are consistent with a researcher's understanding of the nature of that construct or factor. The researcher determines the relation between each factor with a specific subdivision of variables, based on the existing theories and tries to confirm them. Exploratory and confirmatory factor analysis was used to determine latent variables and confirm measurement models. In the questionnaires, 31 items to evaluate the content stimuli, 29 items to evaluate the communication stimuli, 14 and 5 items to evaluate the behavioral response were designed and their correctness and fitting of their model was investigated using confirmatory factor analysis. The KMO coefficient to determine the adequacy of the sample size was 90.0 and Bartlett's test coefficient was 52990 with the degree of freedom 3081 in 0.0001 significance level which showed the adequacy of sampling and items correlation matrix for factor analysis. Figure 1 shows standard estimate of the results of confirmatory factor analysis of content stimuli variable. Factor loadings in the standard estimate show the effectiveness of each item in explaining the variable or main factor variance. This means that factor loading shows the correlation of each observed variable (questionnaire question) with the latent variable (factors). As it can be seen in Figure 1, all factor loadings are higher than 0.3 which is desirable. For example, first item (x1) has factor loading of 0.77; it means that this item expresses 60 percent of content stimuli factor variance and the value 0.4 shows the amount of error in this item which is the variance that cannot be expressed by the first item. As the amount of error decreases, determination coefficients are increased and there is more correlation between the item and the factor. Determination coefficient is a number between 0 and 1 and as it gets closer to 1, the amount of variance expression increases. Figure 2 displayed standard estimate of the results of confirmatory factor analysis for the communication stimuli factor. As shown in Figure 2 factor loadings are higher than 0.3 which is desirable. For example, the first item (x10) has factor loading of 0.34; it means that this item only expresses 11 percent of content stimuli factor variance and the value 0.89 shows the amount of error in this item which is the variance that cannot be expressed by the first item. Standard estimate of the results of confirmatory factor analysis of intermediate variables which include cognitive reaction, emotional reaction, attitude and the dependent variable of behavioral response. All factor loadings are higher than 0.3 which is desirable. After confirmation of the model and items, the relation between dependent and independent variable will be investigated.

**Investigating the research hypotheses. First hypothesis:** content stimuli have a significant effect on behavioral response of the consumers. As presented in Table 4, there was no reason to reject this hypothesis. It can be concluded that content stimuli have a significantly positive effect on the food store customers' behavioral response.

*Table 4 – First hypothesis Results*

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	2.662	0.144	-	18,461	0.000
Content	0.161	0.047	0.168	3,402	0.001

**Second hypothesis:** communication stimuli have a significant effect on behavioral response of the consumers. Investigating this hypothesis also shows that communication stimuli have a significantly positive effect on the food store customers' behavioral response. Results are shown in Table 5.



Table 5 – Second hypothesis Results

Model	Unstandardized Coefficients		Standardized Coefficients	t		Sig.
	B	Std. Error	Beta	B	Std. Error	
1 (Constant)	1.705	.166		10.287		.000
communication	.459	.052	.405	8.834		.000

**Third hypothesis:** the extent of effectiveness of these stimuli and their factors on the consumer's behavioral response is different from each other. The extent of effectiveness of investigated stimuli were different. In internet advertisements of food stores, communication stimuli were more effective than content stimuli. Most significantly positive effect was from informativeness stimuli. So, it should be noted that in the design of internet advertisements for food store customers, the informativeness is much more important any other factor. On the other hand, the most negative effect was from entertainment stimuli; so due to its negative effect on the advertisement effectiveness, it should be avoided in the design of the internet advertising.

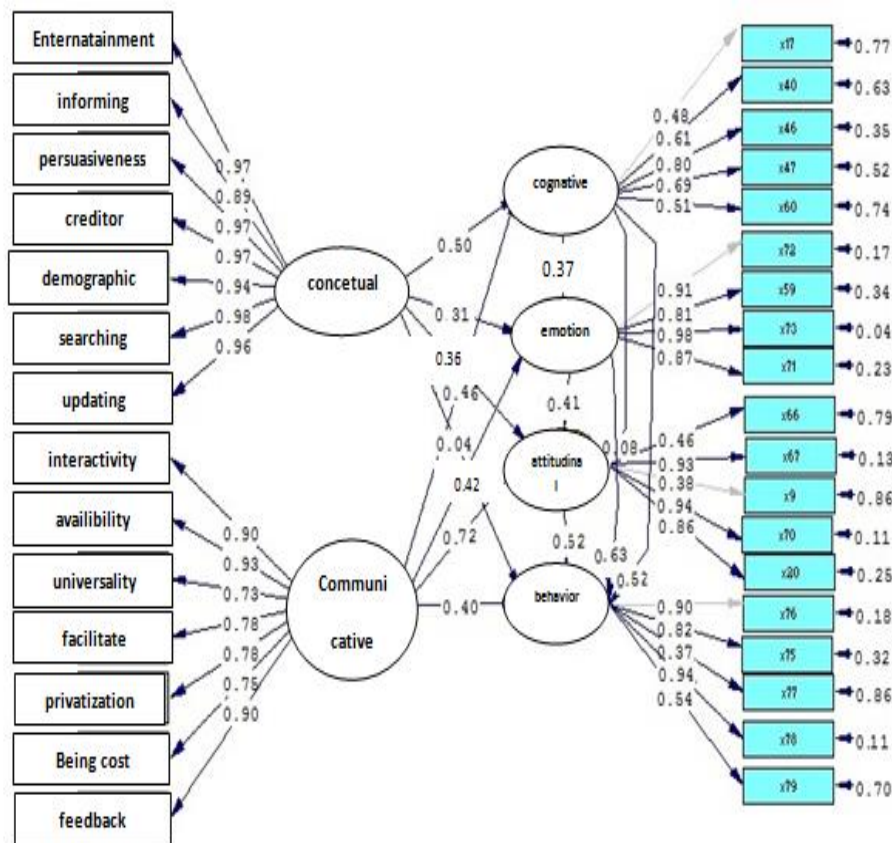


Figure 1 – Structural equation modeling in standard estimation mode

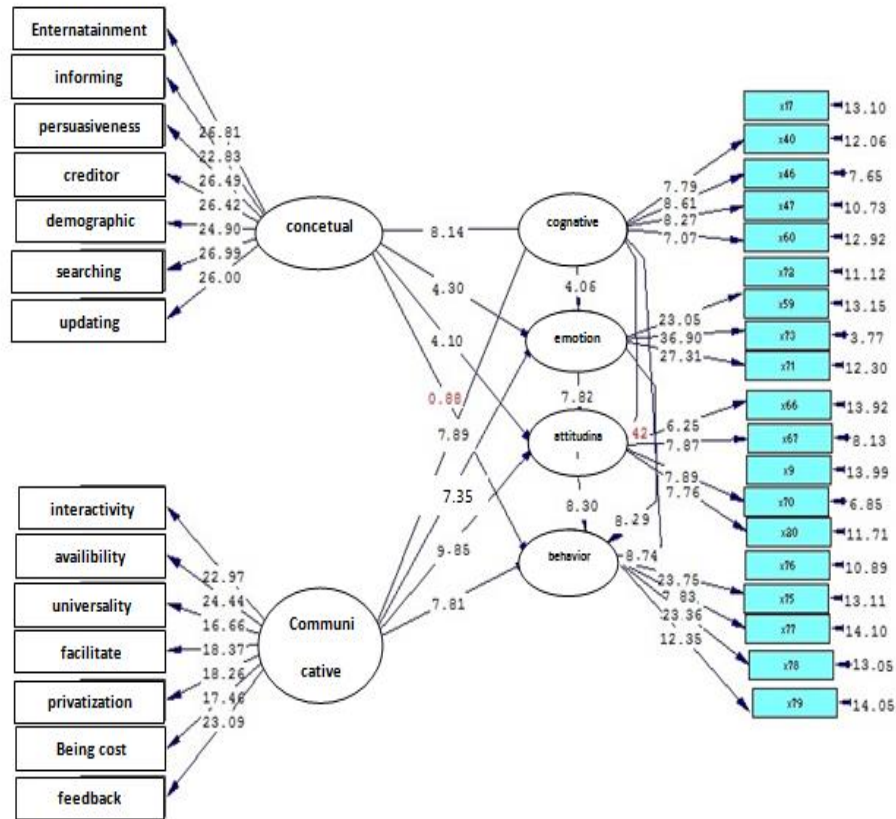


Figure 2 – Structural equation modeling in significant coefficients mode

**Discussion and conclusion.** Internet advertising is one of the important tools for companies to get in touch with their consumers and customers. So electronic advertising has become an important marketing channel that companies use to establish their brand position, distribute information and increase their commercial transactions. However, evaluating the effectiveness of these advertisements and identification of appropriate solutions and strategies are more important than the advertising. So this research was conducted to identify the important stimuli which affect the behavioral response of food store customers. At first, a study of previous researches in this area showed that different factors affecting effectiveness of internet advertising can be categorized in to communication stimuli and content stimuli. Then a researcher-made questionnaire was designed and its reliability and validity were examined and approved and then it was filled by 400 customers of large food stores in Shiraz and the required data was collected. In the next stage, the research model was confirmed using confirmatory factor analysis and in the end the research hypotheses were investigated which showed that content stimuli and communication stimuli have significantly positive effect on behavioral response on the food store customers and the effect of each sub-factor of those stimuli on behavioral response were different from each other; this meant that some of the sub-factors had positive effect and some had negative effect on customers' behavioral response. For example, informativeness factor had the most positive effect and entertainment factor has the most negative effect. It should be noted that in the designing of internet advertisements for food stores

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customers, they care more about its informativeness than entertainment of the advertising space; so large food stores in order to have effective electronic advertising should use different stimuli carefully; otherwise, given the growing trend of internet and increasing its influence they cannot fulfill the society's expectations in this area. This is also true in case of manufacturing, commercial and service companies.

The results obtained from the hypothesis test and the study of the quality of the variables studied in the statistical society has revealed the realities that need to be analyzed. Because one of the stages of each research, following the various stages of collecting theories, subject records, data collection, data analysis and statistical testing, and finally testing the hypotheses and testing the model, is that the results and findings are analyzed So that the findings can be better utilized in different ways(Figure 3).

1. The results of the analysis of the status of the research variables indicate that it is essential for the store site to make a difference based on the responses of customers using the store site so that from the point of view of its customers, it has a better and more acceptable status in all fields.

2. The findings of the research and the proposed model indicate the identification and introduction of two categories of stimuli affecting the Internet. Accordingly, if used thoroughly and properly, it can be very effective in the process of influencing e-commerce. Therefore, as time goes by, in addition to the 14 stimulants mentioned above, other innovative stimuli can be enhanced in terms of content and communication, which can add to the strength and quality of work.

3. Intermediate variables which mean cognitive response, emotional response, and attitude and dependent variable, behavioral reaction also indicate that the use of this process during the effectiveness of electronic advertising can well identify the process and path of consumer impact that eventually, a behavioral response can be achieved along the specified path. Because in most cases, immediate and short-term expectations of advertising on the customer or consumer are futile. It needs to be done over time and through the correct process. Therefore, the use of this process in the model and its meaningfulness as intermediary variables can be used correctly for different goods and services based on the level of conflict.

4. According to a confirmatory factor analysis, independent variables (content drivers and communication stimuli) indicate that each of the seven stimuli in each of the content and communication categories has a significant positive effect in explaining the variance of the relevant variable. Regarding the fitting of the model, which indicates that the model is suitable, it should be acknowledged that if all the stimuli are used well, it will have a beneficial effect on the effectiveness of electronic advertising.

5. In analyzing the results and considering the lack of direct effect of content drivers on behavioral responses, it can be stated that after obtaining information and awareness and other content downloads from Internet advertising, the consumer will not be arrive to treated stage. Rather, it has to go through the process of influence (cognition, emotion, and attitude) so that it can reach behavioral reaction. In other words, online advertising is not immediately effective in many products that require more engagement and thought. Therefore, the effective steps should be carried out according to the proposed model.

6. In analyzing the results, it can be stated that the content and communication stimuli reach the stage of behavioral response during the process of influence (cognition, feeling and attitude). The proper use of this model can help companies to promote e-commerce and promote web sites, especially in terms of content and communication incentives.

7. This model can be used in the decision hierarchy of high mental involvement. In this case, consumers increase problem-solving activities and are increasingly seeking information about products. As a result, many beliefs about products are formed. Every emotional affinity is tied together and the sum of these beliefs creates attitudes. After the formation of beliefs and attitudes, behavior treats.

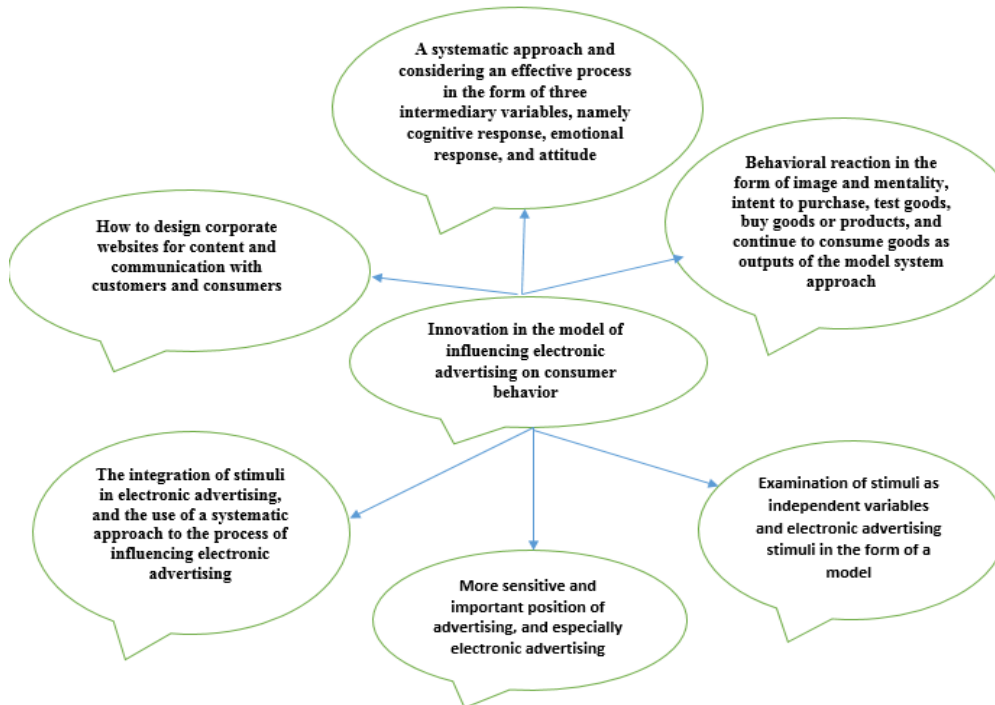


Figure 3 – Innovation Research Model

**Limitation of this study.** Limitation of this study can be categorized to research limitations and executive limitations which are discussed below: research limitations: using the questionnaire as the only source of data and inability to use other methods like interviewing which could have provide more accurate data; participants were varied in the level of using internet and consequently varied in their encounterance with internet advertisements so some of them had difficulties to answer some of the questions; difficulty of choosing desired statistical society which had a website or portal with acceptable and standard level of electronic advertising.

Executive limitations: lack of cooperation of some participants in answering the questions: not returning or delays in retuning some of the questionnaires; electronic advertising and electronic shopping was still new for many people and companies and many of them are still using traditional ways although they should move towards the new way; some of the stores did not provide thorough statistical information about their customers and their website users.

**Suggestions for future studies:** research about effective advertisements from the consume/customer point of view; comparison of effectiveness of electronic and traditional adverteng; finding other factors and stimuli that affect effectiveness of electronic advertising; considering the amount of time that participants spend using the internet in future studies.

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**Використання моделі структурних рівнянь для визначення ефективних драйверів інтернет-реклами: емпіричне дослідження**

*В сучасних умовах розвитку цифрової економіки інтернет-реклама є одним із найдієвіших інструментів просування товарів компанією та зміцнення її позицій на ринку. Авторами визначено, що загальний обсяг рекламних послуг стрімко зростає. У зв'язку з цим актуальності набуває аналіз основних підходів та методів підвищення ефективності інтернет-реклами. В роботі ідентифіковано та систематизовано основні драйвери онлайн-реклами, оцінено вплив інтернет-реклами на поведінку клієнтів. При цьому було виокремлено залежні та незалежні змінні, що впливають на ефективність інтернет-реклами. Дослідження залежних змінних проводилось за допомогою анкетування 400 респондентів-клієнтів*

великих торговельних центрів (відділіє продуктіє харчування) міста Шираз (Іран). У якості незалежних змінних розглядалися два параметри (контент та комунікація), кожен з яких був розподілений на 7 стимуляторів. Було висунуто три гіпотези щодо ступеню впливу основних параметрів інтернет-реклами на поведінку та реакцію споживачів. Результати перевірки гіпотез свідчать, що контент-маркетинг, як один з методів інтернет-реклами має статистично значимий та позитивний вплив на поведінку споживачів. При цьому інформативність контенту є найбільш ефективним інструментом впливу на поведінкову реакцію споживачів. У свою чергу, намагання виробників реклами розважити, справити враження на потенційних споживачів, мало найбільший негативний вплив на реакцію поведінки споживачів торговельних центрів. Для того, щоб великі продовольчі магазини могли отримати бажаний ефект від електронної реклами, необхідно обережно комбінувати різні ефекти, враховуючи зростаючий вплив інтернет-маркетингу на прийняття споживчих рішень. З метою кращого використання отриманих результатів авторами було запропоновано інноваційно-дослідницьку модель впливу інтернет-реклами на поведінку споживачів. Це дасть компаніям змогу визначити найбільш дієві стимули, які впливають на поведінкову реакцію споживачів продуктів харчування.

Ключові слова: Інтернет-реклама, драйвер зв'язку, поведінкова реакція, моделювання структурного рівняння.