

## **Identification and Prioritization of Effective Criteria in the Selection of Outdoor Advertising Using the AHP Technique**

**Mohammad Reza Karimi Alavijeh, Atefeh Foroozan, Amir Aslani Afrashteh**

*Assistant Professor, Faculty of Management and Accounting, Allameh Tabataba'i University  
(Email: mr.karimi@atu.ac.ir)*

*MA in Marketing, Faculty of Management and Accounting, Allameh Tabataba'i University  
(Email: atefeh\_faroozan@yahoo.com)*

*PhD Candidate of Marketing, Faculty of Management and Accounting, Allameh Tabataba'i University  
(Email: amir.aslani@atu.ac.ir)*

*Corresponding author: Mohammadreza Karimi Alavijeh*

---

**ABSTRACT:** Nowadays, audiences are exposed to a wealth of information in their environments and therefore, according to the limitation of the audiences' focus, companies intend to attract the attention of audiences who are frustrated by the frequency of advertising in public media through spending optimum expense to their advertising messages. One of the advertising medium that is seen by many audiences in the environment and has become increasingly important in recent decades is the outdoor advertising. Therefore, the purpose of this research is to identify the criteria and factors effective in the effectiveness of outdoor advertising and the ranking of various outdoor advertising in Tehran. The statistical population is the experts of the advertising agencies of Tehran that in the first stage, after identifying 11 effective factors in the effectiveness of outdoor advertising in the literature review, seven important criteria were identified using SPSS software. In the second stage, according to these seven criteria, all types of outdoor advertising were completed by the experts through the paired comparison questionnaires (AHP) and ranked with Expert Choice software. The seven main criteria are: attracting attention with color and size, times of exposure to the audience, being seen in the audience ideal position, the duration of viewing the advertising message by the audiences, the last reminder before purchase, the cost of advertising, the low level of oldness and tediousness of the message. Also, billboard was ranked as the most effective medium for outdoor advertising, street furniture, alternative media and transit were placed in the next order, respectively.

**KEY WORDS:** Media, Outdoor Advertising, Analytical Hierarchy Process

---

DATE OF SUBMISSION: 17-03-2018

DATE OF ACCEPTANCE: 01-04-2018

---

### **I. INTRODUCTION**

In different texts, different definitions of the title and concept of advertising have been proposed, in which there are many commons in all of these definitions. Advertising is the impersonal communication and introduction of the product through various carriers, against the receipt of funds for profit or nonprofit institutions, or for the people who are somehow identified in the message "(Khodadad Hosseini & Roustae, 2010). Cities have provided good spaces for advertising historically. As Bernstein (1997) has pointed out, "advertising has started from the environment" (Iveson, 2011). Outdoor advertising is a blend of effective media mechanisms that can reach people in their cars, subway, airport, shopping centers, and wherever permitted by law (Mohammadian & Pour Hosseini, 2012). According to the American Marketing Committee, the growth rate of outdoor advertising in the last decade of the twentieth century has increased by 7.2%. In the outdoor advertising, attracting and targeting the audiences is very important. The agents of these ads are trying to create interest in the audience with an attractive and lovely ad (Sedaghat, 2011).

Despite the growing importance of advertising, the environment has been overlooked as a medium unknowingly, and the nature and use of this medium in relation to marketing promotional forms is unclear (Bingham et al., 2005). Many of the performed advertisements due to misleading method, cause the advertiser company not to benefit from its advertisement, but, on the contrary, competing companies benefit from the advertisement of that company (Mohammadian, 2009). Also, despite the use of some companies and advertising agencies of people who have specialty in advertising and its related fields, primarily sufficient research in the society and the advertisement audience is not conducted. Another issue facing companies in performing outdoor advertising is the lack of scientific and precise evaluation of effective criteria for the selection of outdoor advertising because the various types of outdoor advertising based on the Outdoor Advertising Association of America (OAAA) are billboards, alternative media, street furniture and transit. (Sedaghat, 2011). And

companies therefore need to be able to choose the most effective type of advertising according to their purpose and budget, and based on a series of important criteria because today is no longer the same as the past, and the audience is faced with a bunch of information which comes toward him on behalf of the competitors and other environmental factors and it is difficult for companies to easily attract the attention of the audience to themselves through advertising messages, unless they can choose the most effective medium based on a series of scientific criteria. The current research is innovative in that, with extensive study in the literature review, the most important criteria in the selection of outdoor advertising have been identified and a model for assessing the priority and ranking a variety of outdoor advertising have been provided.

Therefore, the purpose of this research is to identify the criteria of the effectiveness of outdoor advertising and the selection of the most important ones, as well as the ranking of various outdoor advertising based on the selected criteria to help managers and decision makers choose better media for advertising.

## **II. LITERATURE REVIEW**

### **2-1. Concepts and Theories**

Advertising is as one of the most accessible and most well-known marketing tools ever used by companies and many studies have examined its impact on the effectiveness of sales amount (Frison et al., 2014). According to a survey conducted in 2012, it accounts for nearly \$ 500 billion, or about 7% of the world's gross domestic product (Barnard, 2012). In today's world, one of the most effective ways of transmitting messages of the commercial companies to their audience is advertising (Kim and Jun, 2: 2016). It is stated in its definition that advertising consists of any impersonal presentation and promotion of ideas, goods, and services by an advertiser, which performing it involves payment of costs. (Cutler, 1999). An advertisement is effective which attracts the attention of the audience, has a memorable effect, and stimulates the buyer's buying activity and awakens the sensory perception of the audience (Pourkarimi, 2002). Advertising is one of the most important marketing tools that companies spend a huge amount of time for it in recent years. Therefore, it is imperative to consider the advertising methods and tools when implementing it, which undoubtedly each specific feature and ability requires its special consideration; types of advertising are: advertising on television, radio, newspapers, magazines, Internet and outdoor advertising (Boone & Kurtz, 2002). Literature and research conducted in the field of advertising can be categorized generally in a few main areas that have been focused. These categories are: advertising attractions, customer's response to advertising attractions and marketing outcomes of advertising (Srivastava et al., 2017).

One of the media that attracted the attention of many business owners and advertising agencies in advertising campaigns is outdoor advertising. Outdoor advertising is necessarily a kind of advertising that has the ability to reach customers while away from home. This feature is against the press and broadcast media and Internet. Outdoor advertising focuses on marketing of the consumers who are at the public places, at public transit, in waiting areas, or in specific business locations. All types of outdoor advertising can be classified into four categories: billboards, street furniture, transit and alternative (OAAA, 2013). Outdoor advertising boosts television messages when viewers are away from their homes during a period of daily activities. Cable TV offers a relatively small but targeted audience in relation to the TV broadcasts. Outdoor advertising improves the provision of cable television by improving the overall accessibility of a campaign. Of course, a combination of outdoor advertising and cable television offers advertisers the benefits of a combination of television broadcasting and outdoor advertising. The outdoor advertising boosts the native media from cable television advertising. A combination of radio and outdoor advertising reaches a moving audience by providing a visual and audio balance. Radio messages are exposed to surfing the channels. Outdoor advertising can preserve the market presence of a prominent brand on the radio after listeners have changed stations. Radio is considered as a periodic media, and outdoor advertising can increase access to a radio program by providing a widespread market demand for radio listeners (Outdoor Advertising Association of America (OAAA), 2013). Outdoor advertising, based on the benchmark of impact on audiences, in comparison to other types of advertising, has important role in influencing on the brand image and brand preferences in the minds of customers (Poulos, & Pasch, 136: 2015). Blech&Blech (2001), Kaplan (2004) have argued that the three main features of outdoor advertising are: unusual locations, different implementation techniques and new issues. Outdoor advertising is an advertisement that is used in abnormal and unexpected places, and often is applied through unusual and new ways, as well as new performances – performances which appear to the audience for the first time. These ads are subject to the terms and in some cases, they may be changed in accordance with the advertising norms of each period. These characteristics that often cause outdoor advertising is considered as a transformative medium (BakhshinZadeh et al., 2016). The growing importance and success of outdoor advertising is due to the ability of the media of this kind of advertising to reach and access a wide range of audiences who are not likely to be exposed to other media at work or at home (Wilson & Till, 2011). Outdoor advertising, with all the mentioned benefits and advantages, also is exposed to the external challenges that the efforts and planning of designers for outdoor advertising are heavily influenced by domestic laws and political

decisions and in that sense challenge the planners (Lowery, 2016). Our-of-home (OOH) media or outdoor advertising, is often used to identify products and packages, and is known as an effective medium that covers a wide range of audiences and is frequently exposed to individuals. (Chang& Cheng, 2012).Also, outdoor advertising media are made to access people who spend most of their time traveling (Francese, 2003).Francese (2003) states that outdoor advertising includes both traditional advertising and interactive advertising. For people who spend a lot of time for traveling, outdoor advertising is a good way to provide information to them (Kedfors and Madzinova, 2015). Tools used in interactive advertising have played an important role in promoting outdoor advertising.For example, touch screens help customers in public places to engage more with messages (Burciaga, 2014).

Outdoor advertising in the contemporary era, passes through static and fixed screens along the roads to massive advertising on walls, buildings, or places and includes a wide range of animated advertisements (such as advertisements installed on moving vehicles, trains, buses and taxis). It has also recently been located on equipment and structures of public places, such as chairs, columns in the streets, elevators, etc. (Meurs and Aristoff, 2009, Osborne and Coleman, 2008, Shimp, 2010, Veloutsou and O'Donnell, 2005).The outdoor advertising is designed to attract audiences' attention for marketing purposes by expressing a message to express fixed content outside the home where audiences are coming and going that in this way, advertising programs in the open area can help with these outdoor advertising. One of the most important features of outdoor advertising is that it can attract the attention of many target groups outside the home and office, where people are traveling. (Akören, 2015).Yavuz&Sezer state that undoubtedly, outdoor advertising is faced with increasingly value in the 21st century, as it is one of the essential requirements of urban life. People are always faced with bulk of messages and perspectives and it is no longer possible to protect themselves from such bombardment and are exposed to it unwittingly (Akören, 2015).Outdoor advertising is a presentation of a marketing message to a multitude of buyers that is done by one of the communicative media (Akören, 2015).

It should be noted that the mental state and the intentions of the target audiences in particular environments can affect the response of the audiences towards the outdoor advertisements there. Outdoor situations and open area, each one reflects special mental states and specificities. Also, the audience may be tired, irritable, busy doing, and especially vigilant and sensitive to relevant messages at certain times of the day. For example, those who are surfing in the big stores, it's likely to respond to outdoor advertising messages that relate to fashion brands. The changing nature of outdoor advertising requires advertisers and advertising agencies to use a procedure for systematic media planning. Their goal should not be merely to expose the advertisement to the maximum audiences, or to spread the message massively to all audiences who pass through instead, it should look for the quality of the message transmission through being exposed to the special audiences of the target market (Roux, & Van der Walddt, 2014). The key feature of outdoor advertising that gives the media the flexibility to exploit advertising is that it is able to convey messages to the selected target markets continuously and without changing. This subject as a distinct factor, can pass the brand from the threshold of consciousness and lead it to preference and priority (Hutt &Speh, 2012). Outdoor advertising is viewed by the Outdoor Advertising Association of America (OAAA) as follows:

**Table 1. Various types of outdoor advertising in the view of the Outdoor Advertising Association of America (OAAA, 2013)**

Billboard	Street Furniture	Alternative Media	Transit
Bulletin	Bus stop	Cinema	Bus
Digital billboards	Seats inside the city	Digital media	Airplane
Posters	Kiosk	Sports stadiums	Mobile vehicles/subway
Advertise on the wall		Business centers	Taxi
spectacular			Truck

As defined by the Outdoor Advertising Association of America (OAAA), the term “street furniture” is used for types of advertising that are compatible with the social environment of cities. This kind of advertising is located near the visitors’ and passerby’s sight and in front of them or on the sidewalks to influence people on vehicles. (Mohammadian& Pour Hosseini , 2012). Billboard, is the dominant form of outdoor advertising, and can be divided into types of bulletins, small and large posters, advertisements on walls and other forms. (OAAA, 2013). Transit advertising is also referred to as advertising on a variety of vehicles of transport or terminals and their stations (Mohammadian& Pour Hosseini, 2012). Ultimately, alternative media includes a variety of examples, including air advertising, cinema, digital media, balloons and other forms. Regularly, new products and media come from whatever you can imagine (OAAA, 2013).Instead of standardization, outdoor advertising requires intelligence, proper understanding of the capacity of media and location of installation, and this is something that is less visible in Iran. In fact, it is not the standard problem, the problem is the stereotypical thinking of advertisers, which understands the capacity of each medium. In fact, outdoor advertising should be based on the following four indicators, none of which are standardizable, but are indicators for analyzing work.

These indicators include adapting design and content to the media, design attractiveness and the implementation tactic, the main idea quality and the ability of advertisement in the concept transfer. (Mohammadian, 2006).

## **2-2. Research Background**

While in the developed world, research in marketing and advertising have had remarkable growth and annually much budget is spent on the effectiveness of advertising; but research on outdoor advertising is less than other media in the world as well as in Iran in relation to the other media, however, we continue to study a number of research around this issue in the world and in Iran in the past years.

Fortenberry&McGoldrick (2010) in a study titled "American Blacks' Receiving Outdoor Advertising" have measured the adoption of billboard advertisements by American black consumers in terms of awareness, their viewpoints on information transfer, their impact on supportive decisions, and their general ideas. The results of the research indicated that, contrary to expectations, black American consumers accepted billboard advertisements in all of the above.

Rick Wilson (2007) conducted a research titled "Measuring the Motivation, Opportunity, and Ability Impact on Reminding the Outdoor Advertisements by Case Study of Advertisements in Cinema" at St. Louis University of America. The purpose of this study was to evaluate the factors affecting brand reminding in outdoor advertising. In this research, the researcher first observed naturally how consumers interact with outdoor advertisements, using natural ethnographical techniques, then collected the information of the advertised brand using survey methods with or without researcher assistance. Ultimately, the researcher concludes that: increasing motivation and opportunity increases reminding rates. While increasing ability does not have any effect on it. The use of insignificant films leads to an increase in the reminding rate. While increasing the frequency of shown advertisements, increases the time spent in the cinema and increases the time exposed to the message. Reducing the amount of distraction (opportunity) also improves the brand and reminding the commercials. The use of attraction and advertisements relevant to theater (ability) does not have effect on reminding.

Lichtenthal et al. (2006) in a study titled "Outdoor Advertising for Industrial Markets" states that although outdoor advertising is important as a mediator, but it is not widely used in the B2B industrial market. The researcher concludes that in order to use the outdoor advertising in industrial markets, the geographic focus of the buyers, the need for customers targeting, integrated communications, the likelihood of demand, and the target market of the commercial fairs should be focused.

Rasoulzadeh (2012) has conducted a research on "Studying and Prioritizing Effective Advertising Methods for Attracting Tourists in Khorasan Razavi Province". In this research, the researcher has tried to identify and prioritize effective advertising techniques for attracting tourists. This study was conducted on a case study of Torqabeh, one of the tourism sites of Khorasan province, using AHP model and completing questionnaire among 133 tourists as a sample and 10 experts of Khorasan Razavi Tourism Organization during the new-year holiday of 2010. The results showed that from the viewpoint of tourists and officials, advertising methods in television channels and satellites, and presenting the program of tourism attractions of the provinces, introducing the landmarks of the province through teaser and advertising billboards at the level of cities and introducing tourism attractions at the entrance of the city and the holy shrine, have the highest degree of importance in attracting tourists, respectively.

Karoubi (2010), has identified "The effectiveness of advertising media in a scientific way and the selection of effective advertising media in the field of tourism offices" from the viewpoint of the experts according to the AIDA model. The results of this study showed that considering the dimensions of attracting attention, and considering the indicators of accessibility and outward attractiveness, the newspaper had the highest degree of effectiveness and considering the stimulate to buy, the Internet, and according to the indicator of guiding to buy, the face to face relationship is more effective compared to other advertising media.

Ebrahimi et al. (2010) studied "the effect of advertisements on the attraction of tourists in the city of Isfahan". They also explained the impact of the advertising media used in the tourism industry in Isfahan. In addition to it, suitable media for using in the tourism industry were identified in this research. The results of their research showed that the advertising tools used in Isfahan was not effective in attracting international tourists and five ways of handbooks, online advertising, television, brochures, and newspapers, can be used which vary in terms of the impact for different areas, gender, age and education.

Fatoorehchi (2009) has conducted a research titled "Assessing the Effectiveness of Outdoor Advertising of Irancell Communication Services Company from the Perspective of Subway Passengers in Tehran" that the purpose of this research is to evaluate the effectiveness of the outdoor advertising of Irancell Communications Services Company from the perspective of subway passengers which is descriptive and survey type. Cluster or area random sampling was used and the sample size was 394. The used conceptual framework has been the Lavidge and Steiner model. The result of the research indicates that:



- Creating awareness, knowledge and information, tendency, preferring goods, and convincing potential and actual customers are effective on the effectiveness of outdoor advertising of Irancell Company in terms of subway passengers.
  - The purchase of potential and actual customers does not effect on the effectiveness of outdoor advertising of Irancell Company from the perspective of the subway passengers.
- The researcher based on the extensive search of domestic and foreign libraries, articles (scientific-promotional and scientific-research), theses, reports, and ... found 11 effective measures on the effectiveness of outdoor advertising, summarized in Table 2.

**Table 2. Criteria for effectiveness of outdoor advertising**

Item	Criteria	Reference
1	Extensive access and high frequency means the number of times of audiences' exposure and achieving all parts of a market or population	Mohammadian, Pour Hosseini, 2012
2	Being exposed means the length of time the ad is viewed	Belch and Belch, 2004
3	Geographic flexibility means the completion and support of other advertising media in selected geographic areas that need support and covering national, regional and even local markets	Mohammadian, Pour Hosseini, 2012
4	High creativity means the ability to attract the audiences' attention through large print, colors and other elements	Mohammadian, Pour Hosseini, 2012
5	Low environmental concerns and criticisms mean that from the viewpoint of outdoor advertising shall not be distracting and ugly, which of course, depends on the individual's taste.	Russell & Lynn, 1999, Mohammadian, Pour Hosseini, 2012
6	The high reminding power means high before buying , its reminding amount is high	Mohammadian, Pour Hosseini, 2012
7	Short and limited messaging means that speed of people passing off outdoor advertising and messagingshould be short because long writings and attractions are not likely to be effective	Mohammadian, Pour Hosseini, 2012
8	Oldnessand tedious that comes about due to exposure to multitude of advertisements	Belch and Belch, 2004
9	Low cost of outdoor advertising (cost per thousand people)	Mohammadian, Pour Hosseini, 2012
10	Being timely means being exposed in a timely manner to the advertising message. Many shoppers who go to the store to buy a product or service may be exposed in a timely manner to the advertising message.	Mohammadian, Pour Hosseini, 2012
11	The audience's ideal mode, such as crowds, heat, hurry, may ignore the installed ads. Sitting or standing on a very crowded subway may cause people not to pay attention to the advertisements in the subway or not to read it. The controversial and engaging advertising messages at this time do not convey a positive and good feeling. Additionally, being in rush in airports and other similar places does not make people pay attention to advertisements and thus reduce the effectiveness.	Mohammadian, Pour Hosseini, 2012

In the meantime, according to the experts' opinion including university professors, advertising industry experts and marketing managers of the several top brands of Tehran, 7 criteria were selected out of the above 11 criteria and finally, given that the researcher intends to use the AHP method to rank a variety of outdoor advertising methods, the hierarchical analysis tree of decision was formed as shown in Fig. 1.

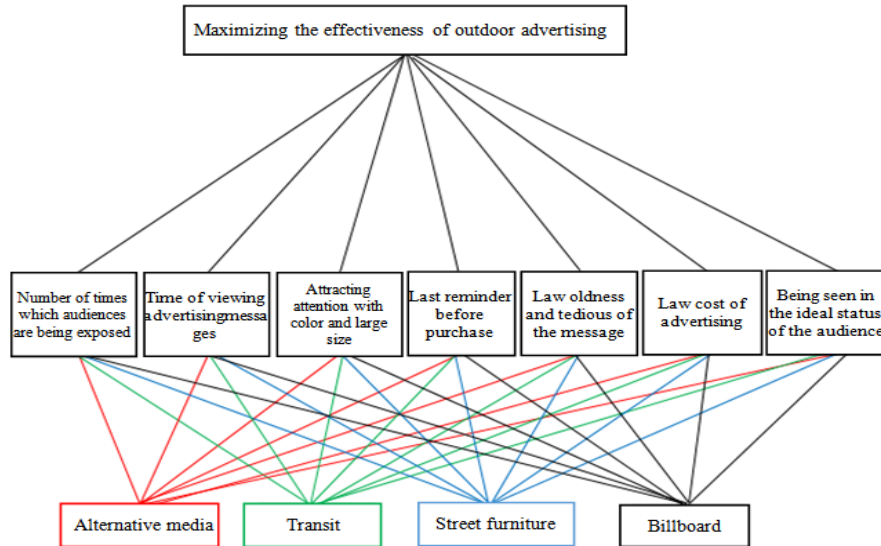


Figure 1. Hierarchical analysis tree of decision for modeling variety of outdoor advertising methods

### III. RESEARCH METHODOLOGY

The method of conducting this research from the point of view of the target, is an applied research because it ranked various types of outdoor advertising, and, from the point of view of data analysis, this research is a descriptive survey. In this research, two sets of information have been used. The first set of information was used to regulate the theoretical basis of the research, which was collected by the library method. The second group of information which used for statistical analysis was information gathered from the field method using a questionnaire tool.

To achieve the research objectives, four steps have been taken. The first stage is the collection of effectiveness criteria of outdoor advertising. That in this part of the research, using library studies, the subject literature and the internal and external dissertations and articles available to the researcher were studied that in this regard, 11 criteria out of important criteria have been collected on the effectiveness of outdoor advertising. In the second stage, these criteria were distributed through a questionnaire among 30 people of university professors, experts in the field of advertising and marketing managers of some companies with top brands in the city of Tehran. This questionnaire had 11 questions and the importance of each criterion was scored using the Likert scale. To collect, diagnose and analyze these questionnaires, Friedman test was performed with the help of SPSS software and the validity of the Likert scale questionnaire is confirmed by the experts and its reliability is confirmed by the high Cronbach alpha coefficient (0.887). In the third stage, among the 11 important criteria for the effectiveness of outdoor advertising according to the existed limitations in the AHP method and in order to avoid a detailed questionnaire with high number of questions, 7 criteria were chosen by the experts and a paired comparison questionnaire was designed for various types of outdoor advertising according to each criterion. In the final stage, paired comparison questionnaire distributed among 30 experts in the advertising industry and sales and marketing managers of several top brands. After collecting, its data was analyzed using Expert choice software. The validity of the AHP technique is dependent, which also the inconsistency rate in the paired comparison determines it, since it is less than 10% , it has a credible validity (Azar and Faraji, 2008). As mentioned, the statistical community of this study, were university professors, executives and experts of advertising industry, marketing managers of several top brands in the year 2015, who were selected and questioned by the researcher.

### IV. RESULTS

Data collected is determined for analyzing and concluding in the form of Friedman test for identifying the most effective outdoor advertising criteria and answering research questions and then using the Hierarchical Analytic Process (AHP) process, the types of outdoor advertising are measured two by two and finally, variables are prioritized using Expert choice software.

#### 4-1. Ranking the importance amount of criteria using Friedman test

This test examines the average ranks of each presented variable and statistics  $\chi^2$ . According to the SPSS output, the value of the significance number (sig) is less than 0.01 and close to zero and is less than the standard level ( $\alpha = 5\%$ ). Therefore, the  $H_0$  is rejected at 95% confidence level. Therefore, it can be said that there is a significant difference between the rank of the challenges at the 95% confidence level and do not have the same ranks. According to the average of the obtained ranks, the most important was the criterion

4 (it had the highest rank average) and the least important was criterion 3 (the lowest rank average).The seven main criteria are indicated in this table.

**Table 2. Average of Criteria Rankings**

Criteria	Rank Average	Priority
The number of times the message is exposed to the audience,	7.40	2
Time of seeing the advertising message,	6.23	4
Geographical flexibility of installing advertising message,	4.13	11
Attracting attention of the message through color and large size,	8.40	1
Lower environmental criticism than installing a message,	4.82	9
As the last reminder before purchase,	6.03	6
Shorter and concise message content,	4.78	10
low level of oldness and tediousness of the message (not being repetitive),	5.93	7
Low advertising cost,	6.17	5
Being exposed to the audience timely (precisely before buying),	5.17	8
Viewing the message in the audience's ideal state (when not tired),	6.93	3

The results of Friedman test show that the level of significance is less than 5% and it can be concluded that these 11 criteria have the ability to be prioritized and this prioritization is significant. According to the above table, 7 criteria of (The number of times the message is exposed to the audience, Time of seeing the advertising message, Geographical flexibility of installing advertising message, Attracting attention of the message through color and large size, Lower environmental criticism than installing a message, As the last reminder before purchase, Shorter and concise message content, low level of oldness and tediousness of the message (not being repetitive), Low advertising cost, Being exposed to the audience timely (precisely before buying), Viewing the message in the audience's ideal state (when not tired)) were selected as variables of the proposed model. This selection was place in the made table according to the experts' view, the decision tree limitation, the number of questions of the AHP questionnaire and their priority.

**4-2. ranking criteria and factors**

Regarding decision tree of figure 1, a paired comparison questionnaire was designed for ranking. The questionnaire contains 42 paired comparisons, which called for elites to use grades 1 to 9 in paired comparisons. A total of 30 questionnaires were distributed among the elites, and finally, based on the data obtained from these 30 questionnaires, ranking was done.

**4-3. ranking via AHP Technique**

After completing the questionnaires, the data was analyzed using Expert choice software. In a way that the matrices of the paired comparison questionnaires were entered into the software individually, and then the rate of incompatibility of the matrix of the views of each person was calculated. Finally, by the software, a composite matrix was created, and the final rank with the weight of each of them was presented separately, which the results are shown in the following tables. As shown in Table and Figure 1, the Indicator "Attracting attention of the message through color and large size " has the highest score among the seven indicators. The ranking of the rest of the indicators is also visible.

**Table 3. Summary of the priority coefficients calculations of the four parts of the criteria and methods of advertising**

Indicators Methods	Number of times the message is exposed	Time of seeing the advertising message	Attracting attention of the message through color and large size	As the last reminder before purchase	low level of oldness and tediousness of the message	Advertising cost	Viewing the message in the audience's ideal state
Weights	0.193	0.132	0.311	0.126	0.025	0.037	0.175
Billboard	0.524	0.31	0.539	0.37	0.338	0.164	0.333
Street furniture	0.152	0.285	0.197	0.169	0.194	0.272	0.208
Transit	0.132	0.176	0.15	0.264	0.23	0.389	0.194
Alternative media	0.192	0.23	0.114	0.197	0.237	0.176	0.265

**Table 4. Weight and final ranks of the methods**

Ad methods	Weighted Mean	final rank
Billboard	$(0.193)(0.524) + (0.132)(0.31) + (0.311)(0.539) + (0.126)(0.37) + (0.025)(0.338) + (0.037)(0.164) + (0.175)(0.333) = 0.429$	1
Street furniture	$(0.193)(0.152) + (0.132)(0.285) + (0.311)(0.197) + (0.126)(0.169) + (0.025)(0.194) + (0.037)(0.272) + (0.175)(0.208) = 0.201$	2
Transit	$(0.193)(0.132) + (0.132)(0.176) + (0.311)(0.15) + (0.126)(0.264) + (0.025)(0.23) + (0.037)(0.389) + (0.175)(0.194) = 0.183$	4
Alternative media	$(0.193)(0.192) + (0.132)(0.23) + (0.311)(0.114) + (0.126)(0.197) + (0.025)(0.237) + (0.037)(0.176) + (0.175)(0.265) = 0.187$	3

### V. CONCLUSION AND SUGGESTIONS

Types of outdoor advertising were ranked according to the weights achieved and billboard (0.426) was selected as the most effective type of outdoor advertising, street furniture (0.198) was placed in the second rank, alternative media (0.192) was placed in the third rank and transit (0.179) was placed in the fourth rank. Due to the importance of each type of outdoor advertising, the applied suggestions are presented as follows.

– According to the results of this research, advertising directors have paid special attention to the billboard in selecting a variety of outdoor advertising. Exposing the message to the audience quickly, delivering uninterrupted messages in a unique, customized setting, suburban desirable coverage, and filling the gaps that other media have neglected, have caused the billboards as cornerstone of outdoor advertising. Billboards have high costs compared to other outdoor advertising methods that is why it is suggested that billboards be used at the stage of product growth, which advertisements should be promoted. Also, despite the selection of this kind of outdoor advertising as the most effective one in comparison to other types, for specialized products, billboards should be used only in the dissemination of specialized conferences and exhibitions.

– Advertising on street furniture can be very creative and flexible. This ad can effectively target different demographic sections or be used to reach a mass market. From time perspective, seeing the advertising message and the cost have been of the high rankings. To advertise products or services that are in their maturity, street furniture advertising is suggested. Because advertising costs should be reduced during the product's maturity, and advertising should focus on persuading rival customers to buy our products, this requires long-term acquaintance to stay in mind. With creative ideas, it's possible to describe advantages of the products against rival products via using street furniture.

– Since the alternative media has low rank among the low level of oldness and tediousness of the message and being seen in the audience's ideal state, and the number of times the message is exposed to the audience, it will attract a lot of attention and attraction. According to the research literature, alternative media include advertising in cinemas, sports stadiums and advertising in shopping malls, etc. Existence of deep psycho-emotional currents during major sporting events, especially football, can affect the effectiveness of sport advertising. Audiences consider advertising messages related to these events more important and more attractive, and as a result they pay more attention to them. Alternative media and its types can be used at times when the product is in decline and has been forgotten, because these kinds of advertisings have tediousness and the audience usually faces to it in the ideal state as a result, by diversifying the ads, this method can be used to remind the forgotten products.

– Transit advertising is a desirable media because of its low cost. Since it is exposed fleetingly to the eyes of the audience, the message should be clearly and concisely stated. So that the audience receives the necessary information in a few seconds from the message. These ads have a reminder mode before purchase, so you can use it in conjunction with specialized products at the sales sites of these types of products and because of their low cost, they are also affordable.

– Using creativity is essential in outdoor advertising to attract the audience. This is possible by inserting recognizable uppercase letters, inserting a large amount of space between the writings, the inclusion of specific attractions (humor, fear, etc.), providing short messages, using words and images that cause the audience think and the larger framework for attracting attention. It is also important to pay attention to the type of product (consumable or industrial) to use a variety of outdoor advertisings. Using alternative media for specialized products at conferences and exhibitions, and using billboards to inform of these exhibitions and conferences, using street furniture and transit advertising seems to be more systematic for consumable products.

### REFERENCES



- [1]. Akören, A. N. (2015). Interaction of outdoor advertising Improved by Innovative Methods with digital art. *Procedia-Social and Behavioral Sciences*, 195, 799-805.
- [2]. Azar, A., Faraji, H. (2008). *Fuzzy Management Science*, Tehran, Mehraban Pub Co.
- [3]. BakhshinZadeh, A.R., Kordnaeij, A., Khodadadhosseini, S.H., Ahmadi, P. (2016). Studying the effect of the visual aspect of environmental advertisement in commercial passages on brand awareness, brand preference and customer loyalty, *Journal of Modern Marketing Research*, 6(4), 1-24.
- [4]. Barnard, J. (2012). ZenithOptimedia Forecasts 4.1% Growth in Global Adspend in 2013. Posted December 3, 2012. Available at: <http://www.zenithoptimedia.com/>
- [5]. Belch, G. E., & Belch, M. A. (2004). *Advertising and Promotion: An Integrated Marketing Communications Perspective*, (6 Th. New York: NY: McGraw-Hill.
- [6]. Bingham, F. G., Gomes, R., & Knowles, P. A. (2005). *Business marketing. Recording for the Blind & Dyslexic*.
- [7]. Boone, Louise & Kurtz, David, (2002), "Contemporary Marketing", South Western Thompson Learning, 4<sup>th</sup>ed.
- [8]. Burciaga, G. (n.d.). OOH! 3 Digital Out-Of-Home Trends For (2014). Retrieved May 15, 2015
- [9]. Chan, K., & Cheng, B. (2012). Awareness of outdoor advertising in Hong Kong. *International Journal of Consumer Research*, 1(1), 81.
- [10]. Ebrahimi, A.H., Ghasemi, E., GhayderRahmati, S., Akbari, R. (2010). The effect of advertisements on the attraction of tourists in the city of Isfahan, *Journal of Geography and Development*, 8 (17), 139-156.
- [11]. Fatoorehchi, Y. (2009). Evaluation of effectiveness of outdoor advertisement of Irancell Co. from Tehran Metro passengers' Viewpoint, MA Thesis, AllamehTabatabaei University. Fortenberry, J. L., &McGoldrick, P. J. (2011). Receptiveness of Black Americans to outdoor advertising. *Journal of Business Research*, 64(6), 586-593. Francese, P. (2003), "More home less", *American Demographics*, vol. 25, no. 8, pp.
- [12]. Frison, S., Dekimpe, M. G., Croux, C., & De Maeyer, P. (2014). Billboard and cinema advertising: Missed opportunity or spoiled arms?. *International Journal of Research in Marketing*, 31(4), 425-433. Hutt, M. D., &Speh, T. W. (2012). *Business marketing management: B2B*. Cengage learning.
- [13]. Iveson, K. (2012). Branded cities: outdoor advertising, urban governance, and the outdoor media landscape. *Antipode*, 44(1), 151-174.
- [14]. Karoubi, M. (2010). The effectiveness of advertising media in a scientific way and the selection of effective advertising media in the field of tourism offices, *Journal of Social Welfare*, 10(37), 383-408.
- [15]. Kedfors, F., &Madzinova, V. (2015). Creating brand awareness in outdoor advertising: Designing for interactivity and presence.
- [16]. Khodadadhosseini, S.H., Rousat A. (2010). *Advertisement (from theory to application)*, Tehran, Horoufie Pub Co.
- [17]. Kim, S., & Jun, J. (2016). The impact of event advertising on attitudes and visit intentions. *Journal of Hospitality and Tourism Management*, 29, 1-8.
- [18]. Kotler, Ph. (2010). *Marketing Management: Analysis, Programming, Application and Control*, Translated by Forouzandeh, B., Esfahan, Amookhteh Pub Co.
- [19]. Lichtenthal, J. D., Yadav, V., &Donthu, N. (2006). Outdoor advertising for business markets. *Industrial Marketing Management*, 35(2), 236-247.
- [20]. Lowery, B. C. (2016). Planning for Private Consumption and Collective Beauty: Regulating Outdoor Advertising in Los Angeles, 1881–2014. *Journal of Planning History*, 15(3), 191-209. Mohammadian, M. (2009). *Advertisement Management from Marketing Viewpoint*, Tehran, Horoufie Pub Co.
- [21]. Mohammadian, M. (2016). Outdoor Advertisement Needs Intellectuality, *Journal of Advertisement Knowledge*, 43, 5-7.
- [22]. Mohammadian, M., PourHosseini, J. (2012). *Outdoor Advertisement*, Tehran, KetabMehraban Pub Co.
- [23]. Osborne, A. C., & Coleman, R. (2008). Outdoor advertising recall: A comparison of newer technology and traditional billboards. *Journal of Current Issues & Research in Advertising*, 30(1), 13-30. Outdoor Advertising Association of America, (2013).
- [24]. Poulos, N. S., & Pasch, K. E. (2015). The Outdoor MEDIA DOT: The development and inter-rater reliability of a tool designed to measure food and beverage outlets and outdoor advertising. *Health & place*, 34, 135-142.
- [25]. Pourkarimi, J. (2002). Media advertisement and audiences' attitude: a psychological approach to advertisement, *Journal of research and evaluation*, 9(29), 311-325.
- [26]. RasoulZadeh, M., Hasan Nejad, M. (2012). Identification and prioritization of advertisement methods for tourist attractiveness in Khorasan, *Journal of Tourism Studies*, 1(1), 19-33.
- [27]. Roux, A. T., & Van der Waldd, D. L. R. (2014). Out-of-home advertising media: theoretical and industry perspectives. *Communitas*, 19, 95-115.
- [28]. Sedaghat, N. (2011). New outdoor media advertisement in outdoor graphic, *Journal of Educational Development*, 8(3), 33-37.
- [29]. Shimp, T. A., & Andrews, J. C. (2012). Advertising promotion and other aspects of integrated marketing communications. Cengage Learning. Srivastava, E., Srivastava, E., Maheswarappa, S. S., Maheswarappa, S. S., Sivakumaran, B., & Sivakumaran, B. (2017). Nostalgic advertising in India: a content analysis of Indian TV advertisements. *Asia Pacific Journal of Marketing and Logistics*, 29(1), 47-69.
- [30]. Van Meurs, L., & Aristoff, M. (2009). Split-second recognition: What makes outdoor advertising work?. *Journal of Advertising Research*, 49(1), 82-92. Veloutsou, C., & O'Donnell, C. (2005). Exploring the effectiveness of taxis as an advertising medium. *International Journal of Advertising*, 24(2), 217-239.
- [31]. Wilson, R. T. (2007). Measuring the impact of motivation, opportunity, and ability on the recall of out-of-home advertising: The case of cinema advertising. ProQuest. Wilson, R. T., & Till, B. D. (2011). Effects of outdoor advertising: Does location matter?. *Psychology & Marketing*, 28(9), 909-933. [www.oaaa.org](http://www.oaaa.org)
- [32]. [zenith/zenithoptimedia-forecasts-4-1-growth-in-global-adspend-in-2013/https://www.oaaa.org/NewsEvents/News/PressReleases/tabid/327/id/3915/Default.aspx](http://zenith/zenithoptimedia-forecasts-4-1-growth-in-global-adspend-in-2013/https://www.oaaa.org/NewsEvents/News/PressReleases/tabid/327/id/3915/Default.aspx)
- [33]. <https://www.oaaa.org/OutofHomeAdvertising/OOHMediaFormats/OOHMediaFormats.aspx>