Research Article

Investigating the Impact of Word-Of-Mouth Advertising on Customer Experience Management in the Dental Equipment Industry Using Fuzzy Analytic Hierarchy Process

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Abstract

The present study aimed to investigate and prioritize the impact of word-of-mouthadvertising on customer experience in the dental equipment industry. The conceptual model of the research was developed through interviews with fourteen marketing experts. Then, the categories related to word of mouth advertising including five categories of credibility, transparency, brand personality, relationship quality and positive and negative advertising were identified. Also, the categories related to customer experience including four main types of satisfaction with sales staff, satisfaction with environment of sales center, customers' experience of the sales centers and diversity of services were identified through interviews and specialized questionnaires and the AHP technique in the form of a questionnaire distributed among the managers of a dental clinic in Tehran. the results of the hierarchical analysis showed that among the main categories, satisfaction with sales staff with a weight of 0.302 was ranked first, customers' experience of sales centers with a weight of 0.244 was ranked second, diversity of services with a weight of 0.229 was ranked third and satisfaction with the environment of sales centers with a weight of 0.225 was ranked fourth. The results of research on the subcategories showed that in the category of customer satisfaction with the sales unit staff, interaction with the weight of 0.219, in the category of satisfaction with environment of sales center, place of sales centers with a weight of 0.228, in the category of customers' experience of sales centers, customer emotional experience with a weight of 0.251, and in the category of service diversity, after-sales service with a weight of 0.237 had the highest priority from the respondents' point of view. The results showed that dental equipment sales centers should prioritize categories such as interaction, store place, customers' emotional experience, and after-sales service in their programs.

Keywords: Mouth advertising; Customer experience management; Industrial market; Fuzzy AHP

1. Introduction

The customer experience is the product of the interaction between the organization and a purchaser during the communication process between them. This interaction consists of three main parts, including the customer intention, the brand contact point with the customer, and the environment (including the physical or digital environment) that the customer experiences. In a good customer experience, the person's experience with the organization, at all points of contact, meets the individual's expectations. This concept is a tool to identify the purchaser's preferences well to provide a special experience for them. It is clear that finding information that can help the organization in this direction will not be an easy task and requires following the ways of communication and interaction with the organization (Klaus and Manthiou, 2020). Studies indicate that since the 1960s, many concepts have been developed about the customer experience. According to the Oxford Dictionary, the term "experience" means real observation or practical familiarity with truth or events (Hosnay 2012). This concept was first introduced by Holbrook and Hirschman

in 1982. First, the concept of customer experience examined the rational decision-making by customers, and then it examined the factors that pay attention to the behavioral aspect of the customer. The customer will always have a real experience of the organization's services in mind, as well as a symbolic attitude and feeling that is created by the marketer and the customer in pleasant, meaningful and memorable situations, and this experience can be created in a tangible and intangible way or both (Churchill, 2017).

Customer experience is an interesting action created jointly between the creator and the customer and where the customer understands the values and retains them in memory. Customer data is one of the most powerful tools your company can use. However, using it requires the right systems and tools to categorize it so that it can be both transparent and useful. It is not something you can effectively manage with a number of inappropriate solutions. If you want

to create a better customer experience continually , you need to evaluate the tools that can be used to combine customer conversations and your business concept. (Timothy 2020). Characteristics of the customer

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experience should include five dimensions or characteristics of novelty, learning, personal communication, surprising or astonishing, and entertaining and engaging customer (Frohle, 2014). Also, perceiving experience is a learning process that takes place over time and the customer reacts to other aspects of the service (Gupta et al., 2010).

Customer experience is the perception or feeling of a service that the customer is away from or facing with it (Carbon et al., 2014). Customer experience has a number of complex elements that are mentally and materially influential and the customer deals with and perceives it (Flanagan, 2015), which includes a debate between innate closeness and complex elements of experience (Chin, 2015). The customer experience is created from a series of interactions between the customer, product and company, which increases in the continuation of these interactions and reflects these personal experiences and customer engagements at different levels. Its evaluation depends on comparing customer expectations and stimuli provided by the company and matches different moments of interaction with tangible points. This definition covers the communication, physical, effectiveness, cognitive and sensory components (Gentile et al., 2017). Nowadays, customers have various needs that stem from their experiences (Shaw, 2015). Businesses have been creating and managing experiences for many years without r realizing the importance and characteristics of value creation for the customer. Nowadays, customer experience is widely perceived and used as an optimal strategy by market leaders to create value and gain a competitive advantage (Carbon, 2014).

The competitive advantage of companies depends on the extent to which they try to improve these factors in creating a customer experience. Factors related to the hierarchy of customer experience needs are listed (Shaw, 2015). Businesses have been creating and managing experience for many years without really realizing the importance and features of value creation for the customer. Today, the concept of customer experience is widely understood and used as an optimal strategy by market leaders to create value and gain a competitive advantage (Carbon, 2014).

2. Theoretical Foundations of Research

2.1 The concept of customer experience

Customer experience, defined as a customer's response to interactions with an organization before, during, or after purchase or consumption, across multiple channels, and across time, has emerged as a sustainable source of competitive differentiation.(Holmlund, 2021) customer experience management is defined as a higher-order resource of cultural mind-sets towards customer experience, strategic directions to design Customer experience, and organizational capabilities to continuously improve customer experience, with the goals of achieving shand sustaining long-term customer loyalty (Holmlund, 2021).

The concept of customer experience was first introduced by Holbrook & Hirschman in 1982. First, the concept of customer experience examined the rational decision-making by customers. Then, it examined the factors that emphasize the behavioral (sensory) aspect of the customer (Holbrook & Hirschman, 1982, quoted in Timothy et al., 2017). Customer experience includes all the points that the customer encounters with the organization, product or service (Moharramzadeh et al., 2016). In other words, experiences include product and service experiences, customer experiences during product search in the pre-purchase phase (decision-making process), the purchase phase, and the use and after-use phase. Schmidt also emphasizes that customer experiences provide sensory, emotional, cognitive, behavioral, and relational values that replace practical values (Schmidt, 2019). The customer will always have a real experience of the organization's services in mind and this experience can be tangible and intangible, or both.

A Customer Experience is defined as a consumer's internal and subjective response to any direct or indirect contact with a company. It comprises the search, purchase, consumption, and other after-sale phases, which are elements that the retailer may or may not be able to control. Customer Experiences occur when consumers search and shop for products, receive services, and consume both (Tyrväinen, Karjaluoto & Saarijärvi, 2020).

The customer experience is presented as the perception or feeling of service that the customer becomes away from or faces (Waverloo et al., 2016). In selecting, consuming, and evaluating the services, customers recall the process and organization of experience segments in a set of perceptions that are emotionally and sensibly provided by services (Berry and Seltman, 2017). If customers have a high level of awareness in this regard, their sensitivity to their experiences will increase, increasing the complexity and importance of the issue and the risk to the company (Berry et al., 2016). Experiences occur when consumers search for products, when they purchase and receive services, and when they consume them. The uniqueness of the customer experience can lead to differentiation and competitive advantage.

Most discussions of the customer experience refer to delivering a product or service that meets customers' needs, in an easy, frictionless manner. In contrast, the human experience depends on customers' ambitions for the product . Managing it effectively would mean customers perceive the process as easy and aligned with their values and beliefs (e.g., sustainability). The customer experience focuses on what the firm offers and how customers respond; the human experience centers on what customers desire and how the firm can respond to those wants. Each customer may prefer a different type of experience, itis up to firms to provide the experience that resonates with each of these customers, by bolstering their ambitions, beliefs, values, and/or feelings. Both types of experience (customer or human) require appropriate touchpoints, personalization, operations, and company culture. They also both rely on systematized and non-systematized knowledge to find pain points in a current experience and innovative options

(gain points) to create enhanced customer and human experiences. (Roggeveen, 2022)

Accordingly, the creation and transfer of customer experience is essential to improve customer relationships and build customer loyalty, thus providing economic value to companies. In relation to the main concept of customer experience management, this principle consists of seven characteristics that describe the areas of relevant actions in the company. They include senior management involvement, customer contact points, logical customer experience, customer emotional experience, customer perspective, staff hiring and training (including logical and emotional skills of staff). It should be noted that two of these dimensions are related to logical aspects, while the other two dimensions are related to emotional aspects. This differentiation is important since customer experiences can be logical (such as quality experiences, price, and practical product delivery time) and emotionally include customer's emotional system through the production of moods, feelings, and emotions. the customer's Emotional are especially important when it is difficult to assess the practical benefits of products and services. Consumer behavior researchers say that "economic decision-making is 70% emotional and 30% logical (Gruunalt et al., 2015).

Gentile et al. (2017) explained that "the customer experience arises from interactions between a customer and a product, company, or part of an organization." This experience is precisely personal and reflects customer involvement at various levels. Its evaluation depends on comparing the customer's expectations and the stimulus created from the interaction with the company and its proposal based on different contact points. The authors have a comprehensive view of the customer experience. First, this definition states that the customer experience is multidimensional, and shows that the customer experience combines cognitive, influential, emotional, physical, and communicative components. Second, it highlights the importance of the emotional and intellectual aspects of the customer experience, which is related to one of the characteristics of the experience.Third, the concept of contact points includes all points of the customer experience, ranging from pre-purchase, during-purchase and post-purchase experiences. This definition shapes the dimensions of the customer experience to harmonize the customer's previous expectations of the real experience at different contact points.

Meyer & Andre defined the "customer experience" as the internal and mental response customers make to any direct or indirect contact with the company. Direct contact usually occurs during the purchase, while using the service, and is usually initiated by the customer. Indirect contact often involves unplanned encounters with representatives of the company's product, service or brand. It takes the form of verbal suggestions or criticism, advertising, new reports, reviews, and so on. The customer experience is an engaging action created jointly between the creator and the customer, where the customer perceives the values and stores them in memory. Customer experience characteristics are based on five

dimensions, including novelty, learning, personal communication, surprising or astonishing and entertaining customers. Perception of experience is also thought of as a learning process that occurs over time and the customer reacts to aspects of the service. Customer experience can also be defined as the perception or feeling of a service that the customer becomes away from or faces it. Nowadays, the concept of customer experience is widely perceived and used as an optimal strategy by market leaders to create value and gain a competitive advantage (Ansari and Sanayei, 2016).

2.2. Dimensions of customer experience

Perceiving and improving the customer experience has become a management principle. The attractiveness of this goal is to improve the company's performance and improve customers following the creation of interest in marketing. The factors that form the customer experience and how these factors relate to customer evaluation of their experiences before, during and after encountering the brand require more detailed investigations. The desired dimensions are as follows.

1- Cognitive dimensions of customer experience
2-Emotional dimensions of customer experience
3- Physical dimensions of customer experience
4-Social dimensions of customer experience

2.3. Word of mouth

Word of mouth is a component of customer loyalty. Word of mouth as a consumer's likelihood to recommend and say positive things about a company to other consumers. Today, the Internet is a place for consumers to interact with one another and share their experiences on different platforms, such as social media. Compared to traditional face-to-face Word of mouth, social media Word of mouth differs in its non-simultaneous nature, and electronic channels also provide opportunities to have discussions anonymously. Word of mouth in the form of online product reviews can positively affect sales. For example, negative electronic Word of mouth can spread widely and have harmful effects on a firm's reputation and sales. (Tyrväinen, Karjaluoto & Saarijärvi, 2020).

2.4. Fuzzy

The theory of fuzzy sets was proposed in 1965 by Professor Lotfi Zadeh, an American automatic control expert, to express the uncertainty of things. Fuzzy comprehensive evaluation is an evaluation method based on fuzzy set theory. The fuzzy comprehensive evaluation method is employed to transform multiple and complex qualitative problems into quantitative data analysis problems. This is effected through the establishment of mathematical models which are used to analyze and provide a unified evaluation of the complex problems.

2.4.1 Fuzzy set

Set theory is the mathematical theory of well-determined collections, called *sets*, of objects called *members*, or *elements*, of the set. Pure set theory deals exclusively with

sets, In set theory, a set has elements that satisfy all of its specific properties. That is to say that elements that do not satisfy all the properties of a set cannot belong to this set. Thus, a subset A of a set X can be described from its characteristic function x : X→ {0, 1} as follows (Eq. (1)):

$$xA(x) = \begin{cases} 1 \ if \ x \varepsilon A \\ 0 \ else \end{cases} \tag{1}$$

However, many subsets expressed in common language cannot be defined by a specific/discriminant property:
For implementing fuzzy set theory in fuzzy requirements modeling and computing in product design, we proceed in the following three-phase

(1) defining a universe of discourse for a design problem, named U, made up of a set of domains representing linguistic variables (ex: {Access, Rotate, Solidarize, Open, Close, ...}).

(2) defining fuzzy subsets of these domains to represent fuzzy linguistic values (ex: {Weak, Average, Strong, ...}); and finally

(3) defining membership functions, named μ_i ... μ_j, allowing determination of the degree of membership of an instance of a lin- guistic variable stated by a designer, to one (or more) linguistic values (ex: let x be an instance of "open" and A the fuzzy subset corresponding to the linguistic value "Strong" then $\mu A(x) \in [0,1]$).

2.4.2. Multi-criteria decision-making (MCDM)

MCDM is a valuable tool that is applied to make or analyze complex problems and decisions based on some suitable alternative selections (Malczewski and Liu, 2014). It has all the features of an effective decision support tool. MCDM permits data storing, data analysis data modifying and data visualizing for decision-making (Jena et al., 2020a). MCDM helps to find the maximum significant factors. In this study, the MCDM method, specifically, AHP has been applied to explain the current situation. AHP is one of the most applicable decision-making processes in industries and academia. Therefore, this research has used AHP method to evaluate the social and structural vulnerabilities.(Shadmaan & Ibne Islam*, 2021*)

2.4.3. Fuzzy AHP method

The concept of AHP was initially developed The Analytic Hierarchy Process (AHP) was originally proposed by Myers and Alpert in 1968, and in 1977 it was developed as a model by Saaty to be used in the solution of multi-criteria decision-making (MCDM) problems. This involves making decisions concerning complex problems by arranging the factors in aij matrix format (Melkamu Fentahun, 2021). AHP is a widely accepted multiple criteria decision analysis tool (Saaty, 1977; Saaty, 1980). This method is based on psychological and mathematical foundation. AHP involves pairwise comparison of criteria and sub-criteria in a hierarchical order. The advantages of AHP are that it deals with both qualitative and quantitative attribute (Kuttila et al., 2000). Analytic hierarchy process (AHP) is a decision-making tool that helps in breaking the complex problem in simple criteria AHP is based upon three principles i.e. decomposition of the problem, comparative judgment and synthesis of relative importance or rankings In AHP, the problem is broken into hierarchical criteria. These criteria are compared to each other. This process of relative comparison is called pair-wise comparison. eigenvector method is used to calculate the rankings and after that consistency of the solution is also checked by using consistency ratio. (Panchal & Shrivastava, 2022).
However, AHP facilitates the decision-making procedure by pairwise comparisons, but pairwise comparisons are done with real (crisp) numbers. On the other hand, because the human evaluations may be vague and mental judgment –which is one of the typical features in decision-making problems- so it seems using AHP with real numbers for detailed evaluation of the relative importance of criteria and the performance of alternative towards criteria to be insufficient. Therefore, Fuzzy AHP was introduced to evaluate the problems in ambiguity and uncertainty situations. (*Eydi, 2016*).
The framework of the AHP can be decomposed into different levels of the hierarchical structure, as shown in Figure 1. The first level of the framework indicates the decision's goal, i.e., purchasing or evaluation decision. The second level of the framework includes factors that affect the decision behavior of the goal, and these factors are composed of exclusive criteria on the third level. The fourth level contains the alternatives of the candidate set. Note that we can add more levels to consider sub-criteria in the framework.
The framework of the AHP in this paper is represented as a three-level hierarchical structure composed of the goal, factors, and alternatives. The framework is based on factors that are usually used for evaluating alternatives rather than criteria The reason that factors are independent of each other is not postulated by the assumption but the statistical theory. The major difference from the original AHP framework is that alternatives are affected by factors rather than criteria, as shown in Figure 1 .
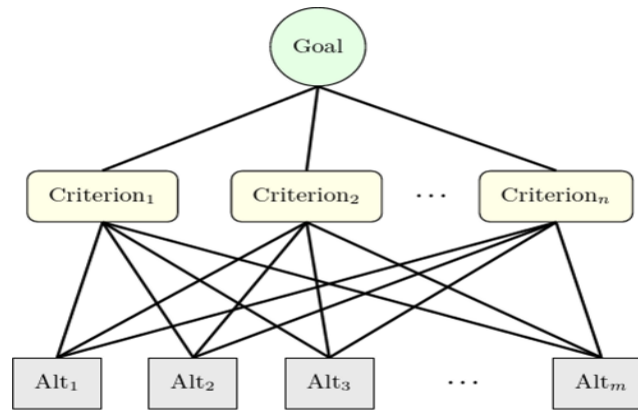
Fig .1. The framework of the AHP

In spatial decision-making, there have some steps involved in implementing the AHP method. The steps are:

- **Calculation of criteria score**
  to get the scores, execution of a pair-wise comparison is needed where each alternative is generally compared with a precise criterion (x_1; x_2; $\cdots$; x_n) of alternatives. The Eigenvector is calculated by normalizing the .

- **Estimation of criteria weights:**
  The criteria weights are calculated by pair-wise comparison and for this, the concept of principle eigenvalue or lambda max *(λmax)* is used (Saaty, 2008). To calculate weights, the comparison between criterion and alternatives need to be in pair-wise mode. There is a set of eigenvalues for each matrix and the largest eigenvalue is called *λmax*.

- **Consistency and priority estimation:** The consistency of judgment and priorities of criteria can be determined by developing the criteria comparison according to the goal. After normalizing the vector, the vector of priorities of the criteria is obtained. The consistency of the judgmental matrix is provided by the consistency ratio which can be defined as (Eq. (4.) .(Shadmaan & Ibne Islam, *2021)*

The AHP process starts from quantifying *by Eq.2.* and calculating the weights of the criteria equation 3:

$$a_{ij} = \prod_k (a_{ij}^k)^{\alpha_k} \tag{2}$$

$$Aw = \lambda_{\max} w \tag{3}$$

We can use the consistency index (*CI*) and the consistency ratio (*CR*) to check if the consistency condition is satisfied. The *CI* is calculated as:

$$CI = \frac{(\lambda_{\max} - n)}{(n-1)} \tag{4}$$

where *λmax* is the principal eigenvalue and *n* is the number of criteria. The judgmental inputs are undependable and not well accepted if a matrix comes up with a high *CR* value. However, *CR* value of less than or equal to 0.10 is acceptable. If *CR* exceeds 0.10, then the results are unreliable and needs to be elicited..The formula of *CR* is:

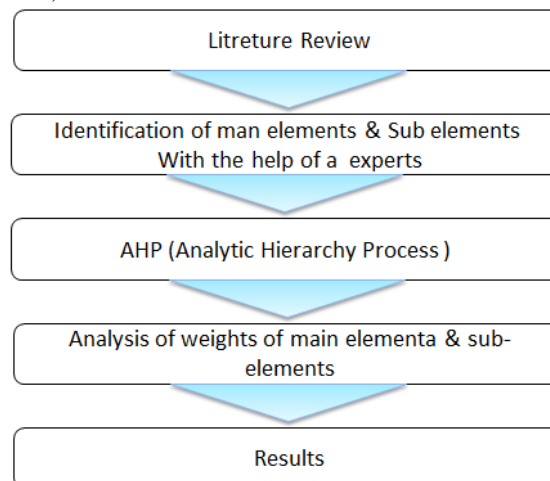$$CR = \frac{CI}{RI} \tag{5}$$

Fig .2. The Research Process

3. Implementation of AHP Model

Criteria related to customer experience and word of mouth advertising has been the result of the brainstorming of experts and previous studies in this area, which were stated in the research literature.

Then, by using AHP method. According to Satty's intensity scale (Table 1) and based on relative importance, Five criteria have been assessed in pair-wise comparison. When the Five criteria are of equal importance, at that time, the pair receives a value of 1. If a criterion has the highest importance compared to the other, the value will be 9. All criteria are generally arranged in a possible way of values in between 1 and 9. The adjustment of criteria is one of the major concerns in the AHP approach. The ranking of criteria is presented in Table2.

Step 1: Developing the hierarchical tree (Developing the problem structure)

In the present study, the first step in the process of hierarchical analysis is the formation of a hierarchical structure of the research problem. Thus, the pairwise comparison matrix of each expert in the area of importance of criteria was formed based on the general shape of the pairwise comparison matrix in AHP (Table 1).

AHP is a powerful MCDM tool especially in hierarchical decision-making where the decision problem is structured into components of different levels. Decision-makers elicit pairwise comparisons, based on their value judgments, of the elements at the same level concerning an element in higher immediate level. The strength of the AHP is in capturing subjective judgments of decision-makers and integrating them into the decision-making process. (Noven Castillo, 2017)

Problem structures are developed hierarchically in a top-down approach (Saaty, 1980). Often , there is an explicit definition and representation of the goal , criteria and alternatives. In various cases, criteria are described in more than one level so that further details are explicitly represented in the problem structure. The decision to include components and alternatives is usually carried out either through a critical review of literature or through an expert or group of experts who have sufficient knowledge and experience of the problem under consideration.

Decision components and elements are usually a combination of both objective and subjective ones with measurements in different multiple different . (Noven Castillo, 2017)

Step 2: Pairwise comparison of the criteria

Pairwise comparisons of elements in the same level concerning an element in the immediately higher level are carried out with expert decision-makers. The generic question in making pairwise comparisons goes like this: "Given a parent element and given a pair of elements, how much more does a given member of the pair dominate another member of the pair concerning a parent element?" (Promentilla *et al.*, 2006). To achieve a uni-dimensional scaling property of the pairwise comparisons, Saaty (1980) established the famous Saaty fundamental 9-point ratio scale as shown in Table 1. (Noven Castillo, 2017)

Based on the created hierarchical structure, the required questionnaire was designed to collect experts' opinions and provide a statistical sample of the research. To perform the first hierarchical analysis, the main criteria were compared in pairs (Table 4). Pairwise comparison is very simple and all criteria should be compared in pairs. In this step, the criteria in the research were compared with the purpose of the research. To compare the two experts, Saaty 9-quality scale was used, as described in the table below.

Step 3: Constructing the model

After collecting a pairwise comparison questionnaire from experts, we combined the opinions of experts using the geometric mean method so that the geometric mean of each cell of the questionnaire matrix is calculated and placed in the same cell. The formula for calculating the geometric mean is as follows:

$$\bar{a}_{ij} = \left(\pi_{K=1}^{N} a_{ij}^{k} \right)^{1/N} \tag{6}$$

After calculating the geometric mean obtained from the opinion of experts and specialists in the area, we determined the weight and significance of the research criteria in the Expert Choice software version 11. The results are presented as follows.

Table 1

Saaty fundamental scale

Rating Scale	Definition	Explanation
1	Equal importance	Two elements contribute equally to the objective
2	Weak	Between equal and moderate
3	Moderate importance	Experience and judgment slightly favor one element over another
4	Moderate plus	Between moderate and strong
5	Strong importance	Experience and judgment strongly favor one element over another
6	Strong plus	Between strong and very strong
7	Very strong or demonstrated importance	An element is favored very strongly over another; its dominance demonstrated in practice
8	Very, very strong	Between very strong and extreme
9	Extreme importance	The evidence favoring one element over another is one of the highest possible order or affirmation

Table 2
The main elements and sub-elements selected for the study.

Main Elements	Sub-Elements
Satisfaction with sales staff	Ethics
	Honesty
	Respect
	Interaction
	skill and expertise
Satisfaction with the environment of sales centers	visual design
	scope
	order and arrangement
	Place
	Ventilation
Customer experience of sales centers	access
	Hours of work
	Contact points
	Discount
	Customer emotional experience
Diversity of services	In-person and electronic services
	consulting services
	Customization
	after sales service

4. Results

4.1 AHP analysis of the main categories of customer experience

Table 4 present the results of a survey of experts on the main elements of customer experience. Based on the results, satisfaction with sales staff with a weight of 0.244 was ranked first, customer experience with a weight of 0.185 was ranked second, a diversity of services with a weight of 0.171 was ranked third, and satisfaction with an environment of sales centers with a weight of 0.167 was fourth from the point of view of experts. According to them, these categories can play a more effective role in advancing marketing goals. Graph 3 also shows that among the subcategories, sales staff and word of mouth advertising are more important in these two categories.

Table 3
The weight of the main elements

| Main Elements	Sub-Elements	Weight of Sub-Elements	Rank	Weight Elements	Rank
Satisfaction with sales staff	Ethics	0.166	4	0.302	1
	Honesty	0.245	2		
	Respect	0.136	5		
	Interaction	0.127	3		
	skill and expertise	0.326	1		
Satisfaction with the environment of sales centers	visual design	0.187	2	0.225	4
	scope	0.158	4		
	order and arrangement	0.252	1		
	Place	0.212	3		
	Ventilation	0.191	5		
Customer experience of sales centers	access	0.168	3	0.244	2
	Hours of work	0.219	1		
	Contact points	0.205	5		
	Discount	0.272	2		
	Customer emotional experience	0.136	4		
diversity of services	In-person and electronic services	0.199	2	0.229	3
	Consulting services	0.181	5		
	Customization	0.168	3		
	After sales service	0.279	1		
	Informing	0.173	4		
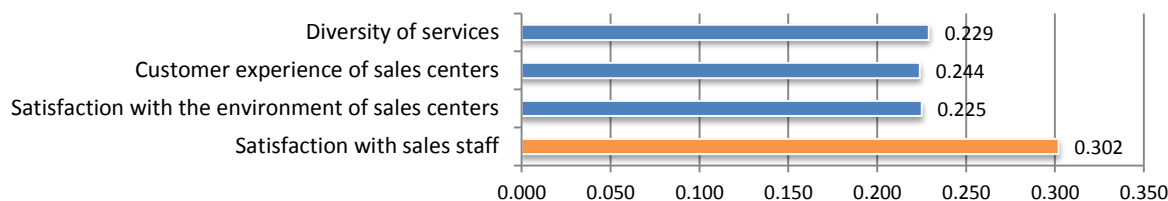
Fig. 3 The Weight of main elements combined Judgement.

4.2. AHP analysis of the relationship between word of mouth advertising and customer experience

Table 5 and Figure 3 presents the results obtained from the experts after collecting a questionnaire regarding the relationship between word of mouth advertising and customer experience. The results showed that the emotional experience of customers with a weight of 0.251

has the first weight according to experts . After-sales service with a weight of 0.237 has the second rank and business location with a weight of 0.228 has the third rank and order and arrangement, interaction and consulting services with weights of 0.225, 0.219 and 0.214 were ranked fourth to sixth, respectively, as shown in Figures 4 and 5.

Table 4
The Weight of sub-elements

| categories		Word of mouth advertising								
Main Elements	Sub-Elements	Credibility		Transparency		Brand personality		Relationship quality		Advertising (positive and negative)	
		Weight	Rank	Weight	Rank	Weight	Rank	Weight	Rank	Weight	Rank
Satisfaction with sales staff	Ethics	0.168	5	0.198	4	0.174	5	0.193	3	0.178	5
	Honesty	0.194	3	0.204	2	0.186	3	0.184	4	0.184	4
	Respect	0.190	4	0.191	5	0.245	1	0.178	5	0.187	3
	Interaction	0.212	2	0.207	1	0.211	2	0.235	1	0.232	2
	Skill and Expertise	0.236	1	0.200	3	0.184	4	0.210	2	0.219	1
Satisfaction with the environment of sales centers	Visual design	0.152	4	0.199	3	0.190	3	0.188	5	0.209	3
	Scope	0.132	5	0.204	2	0.184	4	0.194	3	0.194	4
	order and arrangement	0.280	1	0.191	5	0.232	2	0.221	1	0.211	2
	Place	0.256	2	0.208	1	0.242	1	0.208	2	0.226	1
	Ventilation	0.180	3	0.198	4	0.152	5	0.189	4	0.160	5
Customer experience of sales centers	access	0.150	5	0.188	3	0.170	3	0.210	2	0.150	5
	Hours of work	0.193	4	0.184	4	0.160	4	0.215	1	0.193	3
	Contact points	0.216	2	0.176	5	0.192	2	0.196	3	0.176	4
	Discount	0.237	1	0.197	2	0.140	5	0.186	4	0.217	2
	Customer emotional experience	0.204	3	0.255	1	0.338	1	0.193	5	0.264	1
Diversity of services	In-person and electronic services	0.185	4	0.191	4	0.176	4	0.220	2	0.135	5
	consulting services	0.196	3	0.244	1	0.185	3	0.243	1	0.201	3
	Customization	0.221	2	0.169	5	0.221	2	0.195	3	0.232	2
	after sales service	0.266	1	0.195	3	0.254	1	0.186	4	0.286	1
	informing	0.132	5	0.201	2	0.164	5	0.156	5	0.146	4
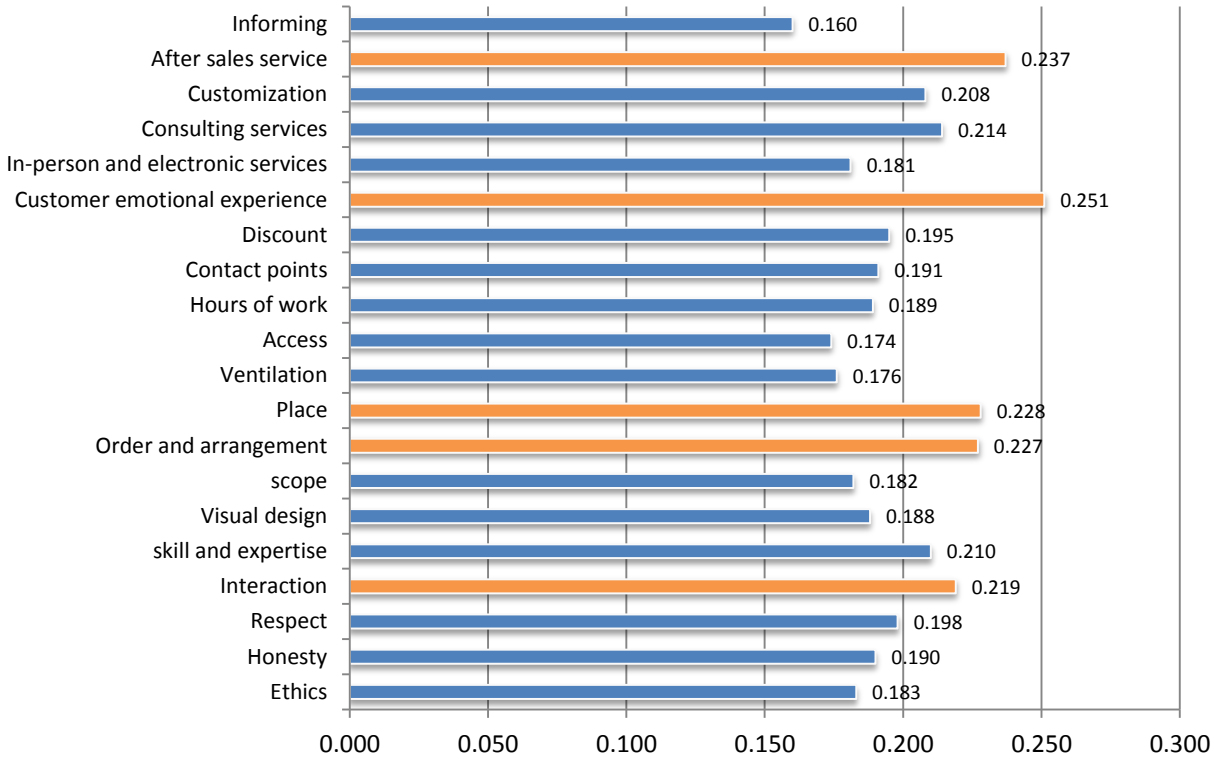
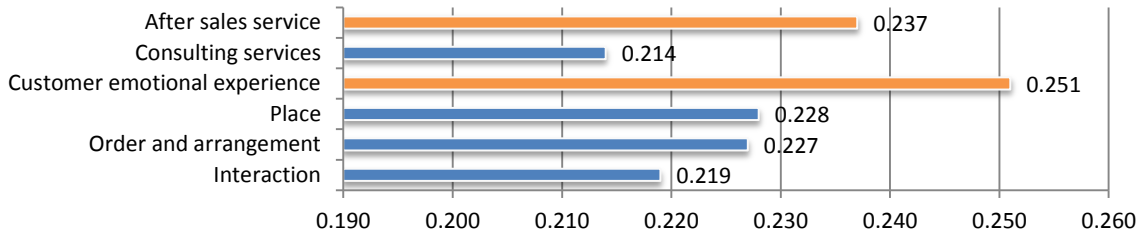Fig. 4. The Weight of sub-elements combined Judgement.

Fig. 5. The Weight of Top elements combined Judgement

4.3. Verbal advertising and customer satisfaction with the sales staff

Table 5 shows the results related to the weight of the main and sub-categories related to the impact of word of mouth advertising and customer experience. Ethics with a weight of 0.183 has the least impact. Figure 6 shows these results as well as other results of this survey.
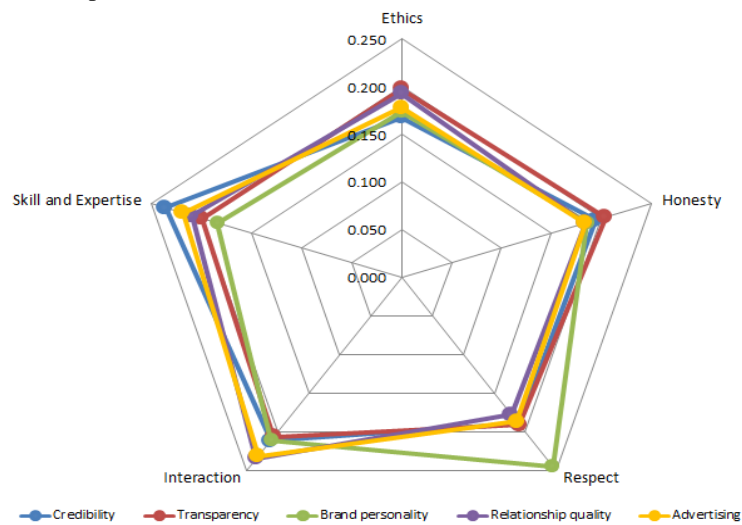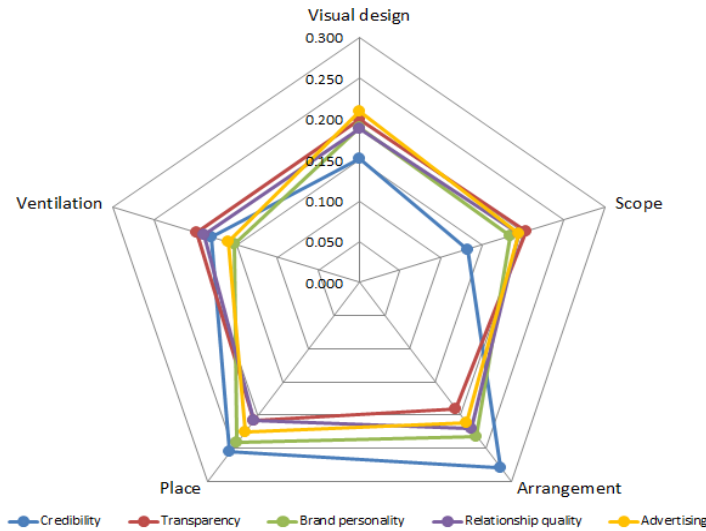

Fig. 6. The weight of the sub-categories related to the satisfaction with the sales

unit staff in word of mouth advertising

4.4. Verbal advertising and customer experience from the environment of sales center

In summarizing the results related to the impact of word of mouth advertising and the environment of sales centers, the results show that the place with a weight of 0.228 has the .

most impact and the order with a weight of 0.227 has the second rank and the size of sales centers with a weight of 0.182 has the least impact. Figure 7 shows these results as well as other results of this survey

Fig. 7. Weight of sub-categories related to satisfaction with sales center environment in word of mouth advertising

4.5. Word of mouth advertising and customer experience of sales centers

In the section related to customer experience from sales centers, the weight-related to the impact of word of mouth

advertising, the emotional experience of customers with a weight of 0.251 has the highest impact and a discount with a weight of 0.195 has the second impact and access with a weight of 0.174 has the lowest impact. Figure 8 shows these results as well as other results of this survey.
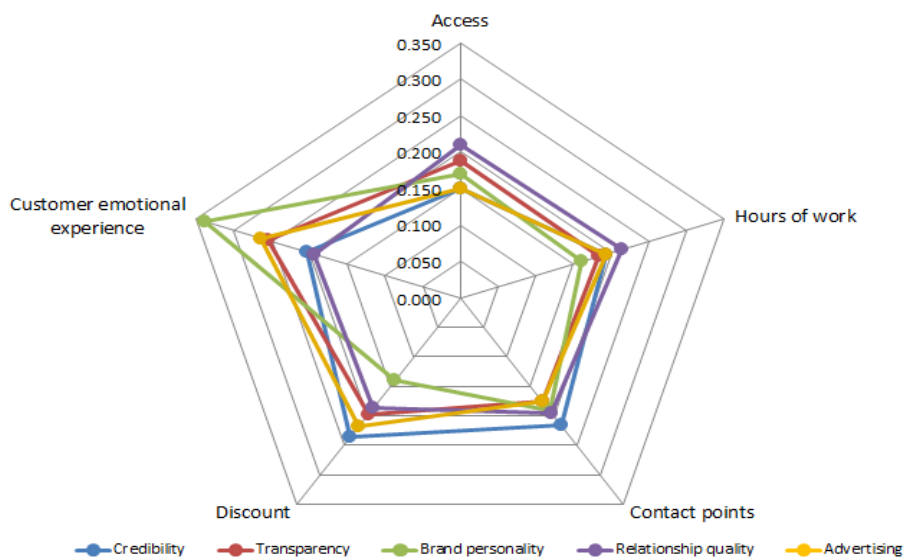

Fig. 8. Weight of sub-categories related to customer experience of sales centers on word of mouth advertising Word of mouth advertising and diversity of services

The results related to the impact of word of mouth advertising on the diversity of services showed that after-sales service with a weight of 0.237 has the most impact

and consulting services with a weight of 0.214 are ranked next and informing with a weight of 0.160 have the least impact on the impact of word of mouth advertising on the

diversity of services of sales centers. Figure 9 shows these results as well as other results of this survey.
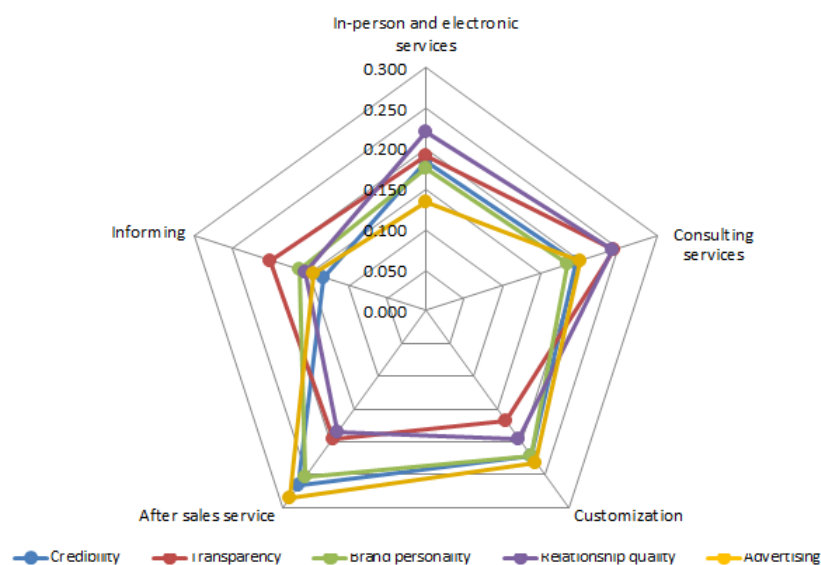

Fig. 9. Weight of sub-categories related to the diversity of services in word of mouth advertising

5. Conclusion

The present study aimed to investigate the impact of word of mouth advertising on customer experience. Categories related to the word of mouth advertising, including credibility, transparency, brand personality, relationship quality and positive and negative advertising were determined. Also, categories related to customer experience, including satisfaction with sales staff, satisfaction with sales center environment, and customer experience of sales centers and diversity of services were determined. The analysis of research results showed that satisfaction with sales unit staff is the most important among the main categories of customer experience. It means that paying attention to the sales unit should be one of the priorities of equipment sales centers. After-sales service was ranked second according to the opinion of the activists of this sector, so sales centers should prioritize the components related to the word of mouth advertising when planning.

The results of the research are also related to the following categories are as follows. In the results related to customer satisfaction with sales staff, interaction with a weight of 0.219 and skills and expertise with a weight of 0.210 have the most impact. Also, the results related to the environment of sales centers, location of sales centers with a weight of 0.228 has the most impact and order with a weight of 0.227 is ranked second. In the section related to customer experience of sales centers, the emotional experience of customers with a weight of 0.251 has the highest impact and discount with a weight 0.195 is ranked second. The results related to the diversity of services showed that after-sales service with a weight of 0.237 has

the most impact and consulting services with a weight of 0.214 is ranked second. The results show that dental equipment sales centers should prioritize categories such as interaction, store location, customers' emotional experience, and after-sales service in their future programs.

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