

Investigating the effective factors on Instagram advertising

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Abstract

Social networks, especially Instagram, have attracted many users to this network, so the purpose of this article is to examine the factors affecting advertising on Instagram. In this study, its statistical population includes 15 experts in the field of advertising on Instagram (relevant expert and higher and with a history of more than 10 years in the field of sales). In addition, two methods of library and field methods have been used to collect information. Data from the pairwise comparison questionnaire were used to prioritize the factors affecting advertising on Instagram using FUZZY-AHP. The results show that in scoring and prioritizing the factors of advertising dimensions (3275.0,) (psychological-biological) (2450.0,) brand-related (2365.0) and media-related (1910.0), the first to fourth priorities, respectively, gained importance.

Keywords: Advertising, Instagram, FUZZY-AHP

1. Introduction

Due to new technologies, the media industry is witnessing fundamental changes that have seriously changed the overall structure of this industry, increased its media scope and cut, and defined new frontiers for media functions. Because social networks are readily available to everyone and have penetrated families, today, these media are mentioned as one of the most important and powerful tools in internet marketing and branding that Through them, brands can easily and cost-effectively deliver their message, goals and programs to users and audiences compared to traditional methods and create a suitable and special place in the society for their brand. One of the important features of social networking marketing is the creation of a user-to-user message chain. In this way, by using content sharing and attracting the attention of users, you can convey your message, company, organization and brand to your target community as quickly as possible and make them more unaware of that content sharing. Because the message is conveyed through the chain, word of mouth, through users, there will be a sense of trust among related users that increases the value of the message more than ever and it indirectly has a positive effect on the audience and provides the conditions for exploiting potential and actual audiences. According to a recent report by the Nielsen Institute, more than 70% of the world's largest companies and brands use social media to influence their target audience and audience, as well as more brand visibility and by using creative methods, to cultivate and promote awareness of their brand among users. According to a new survey in the United States, 86% of marketers believe that social media is important to their business and the country's businesses will invest \$ 17 million in social media advertising by 2022. This is despite the fact that only 3.4% of corporate executives have reported the specific impact of the virtual environment on the performance of their business. This is what the Zenith Optimedia Institute in France predicts. The cost of advertising on social networks by 2022 will reach 20% of the cost of advertising on the Internet and about \$ 5 billion. It is

also predicted that social networks will be able to capture the market share of newspapers by 2022 [12].

In Iran, the Internet has found 30 years of life. It has been three decades since Sharif University of Technology was connected to the Internet by the Center for Theoretical Physics Research. In less than a decade, especially after the advent of virtual social networks and the widespread popularity of Iranian users, whispers of opposition to it were heard inside, and the first reaction to this phenomenon was made possible by filtering tools (Instagram social network has not been fully filtered yet) [5]. According to official statistics of Internet users in Iran, 61% of Instagram users are women and 39% of users are men. Due to the visual nature of Instagram, this network is also used as a media market. According to global statistics, since March 2016, 98% of fashion brands have had accounts on Instagram. The average number of published photos related to each brand that has an account on Instagram was about 27.9 per month (Online Economy Website, news release date 2018/12/25). Therefore, the main purpose of the research is to examine the factors affecting advertising on Instagram.

2. Theoretical literature

Older and more traditional models of ad evaluation, such as the Aida model, divide the audience selection process into different sections. The AIDAS model considers the stages of the customer's journey into five stages: attention, interest, desire, action, and satisfaction, and recommends that managers plan for each stage [3]. The application of this model in the purchasing process and the effect of advertising is such that when the consumer first sees the advertisement of the desired product, first he attracts his attention, then he becomes interested in it, and following this interest, he becomes inclined to buy goods, and then he buys the advertised goods. For example, in the model of the effectiveness of DAGMAR advertising, introduced by Peter Cutler in 1961 and known as the DAGMAR model, the main point is that the effects of communication are the basis for measuring the success or failure of advertising programs. The success or failure of advertising depends on the efficiency of the communication process in delivering the desired information to the main audience at the right time and at a low cost. From DAGMAR's point of view, an advertising

goal includes a communication task that is specific and measurable. DAGMAR stands for (defining advertising goals to measure advertising results). He believes that the consumer understands the commercial messages through a four-step process and then proceeds to purchase the advertised product. In designing advertisements, factors and indicators should be used that can best convey the desired message of the organization to the audience that is exposed to direct and indirect advertising attacks of various media at any time [11].

These two theories, along with other theories such as the Elijah and Steiner hierarchy model, the FCB model, the innovation acceptance model, the information processing model, the low sensitivity model, the heterogeneity model, and the ATR model are the most important models for this. Areas are raised and used by evaluators of the effectiveness of advertising. But as mentioned, changes in the media have also had a dramatic impact on the evolution of advertising [2]. In 2003, Ambler et al. Proposed five theoretical frameworks for designing marketing advertising impact models. These five frameworks are: 1) control theory 2) interface factor theory 3) brand value theory 4) market tendency theory 5) institutional theory.

A control theory view pays special attention to previous results and considers it an essential element in the cycle of analysis, planning, implementation and control. This theory tries to find the reasons why the results are different from the predictions. Therefore, the metrics should provide comparability both with previous results and with what is expected in the future, as well as with the performance of competitors. In this context, measuring attitude and behavior takes precedence over measuring actions, and it is believed that measuring attitude and behavior can be a good measure of the impact of advertising on increasing brand value. Market Tendency Theory focuses on market attitudes toward the product and looks at metrics to measure market sentiment [4].

It has transformed online users from passive consumers of information to active participants in creating and sharing information with each other. According to studies by Lenhart et al. (2010), nearly 13% of online users participate in some of the content they create (for example, videos, events, photos) and even post their comments on websites. In

addition to facilitating interpersonal communication, social media applications have enabled customers to play an active role in sharing their experiences while interacting with business organizations [14].

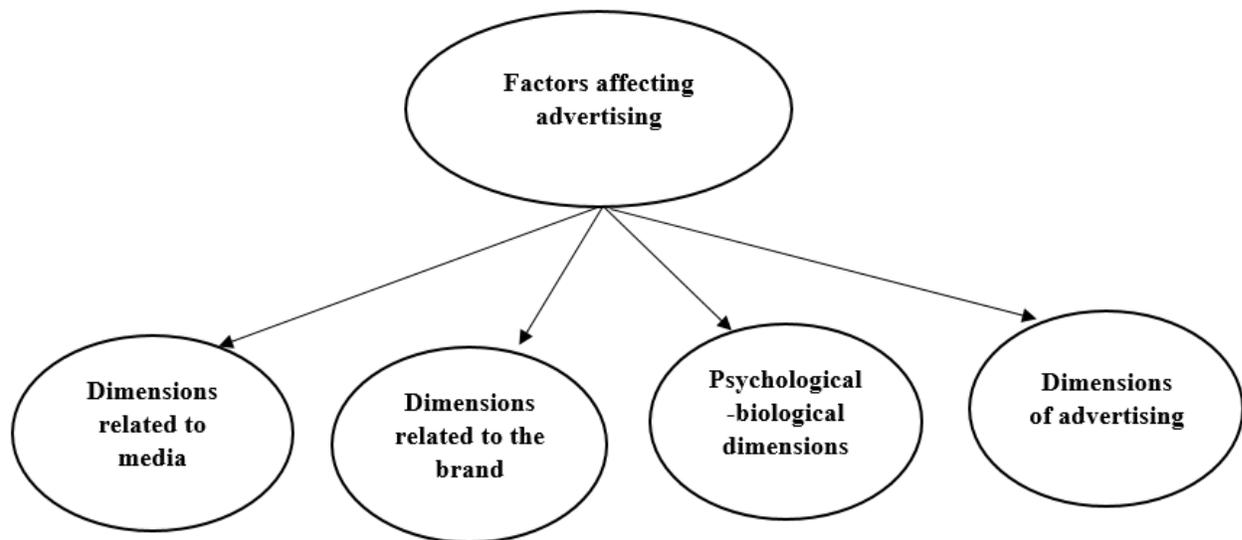
Namjoo and Duzali (2017) in their research entitled "The visual impact of Internet advertising and how to persuade in such advertising) Case study: the effect on the age groups of 15-25 and 35-35) concluded that visual, content, and communication stimuli affect the attitudes and reactions of Internet users. These stimuli are different in the age groups of 15-25 and 35-35 years, and a different method of advertising and persuasion should be implemented for each group in order to increase the efficiency of online advertising [13].

Shirkhodai et al. (2017) in their research entitled The Effect of Social Media on Trust and Brand Loyalty Formation in the Brand Community (Case Study: The Social Network of Instagram). They concluded that the positive and significant effect of individual and social identity on brand communities in the social network is confirmed. Brand communities in the social network have a positive and significant effect on brand community participation. The effect of brand community commonalities on social interaction and brand use The relationship between social commitment and social interaction has not been significant only, and social interaction and brand use affect trust. Finally, the positive and significant effect of brand trust on loyalty has been confirmed [16].

Thakur (2018) in their research entitled (Customer engagement and online reviews) concluded to use customer commitment on mobile devices and use the address of merchants and advertisers in these programs to have better management in new technology [17].

Bashir et al. (2018) in their research entitled (holistic understanding of the prospects of financial losses to increase buyer confidence to search, offer, positive accuracy and frequent visits to the online store (concluded that e-commerce managers while to realize the trust and willingness of these customers to buy, they must consider the financial risk of their consumer [1].

The proposed model for determining the factors influencing advertising on Instagram based on the research findings of the most indicators taken from Bashir et al. (2018), Thakur (2018), Shirkhodai (2017) and Kotler and Keller (2009) is as follows:



Research questions

Main question

What are the factors influencing advertising on Instagram and how are they prioritized?

Sub-questions

- 1- What are the dimensions of advertising and how are they prioritized?
- 2 - What are the psychological-biological dimensions and what is their prioritization?
- 3- What are the dimensions related to the brand and how are they prioritized?
- 4 - What are the dimensions related to the media and how are they prioritized?

Research method

The data collection method was used using the field method and a questionnaire. Then, in the next step, a pairwise comparison questionnaire (row and column) was prepared and the respondents were asked to determine the preference of each of the research variables after comparing the row with the column based on the following scale. Fuzzy-AHP technique is used to examine the research questions. Narration is done through expert judgment. To fully ensure the factors affecting brand advertising, dimensions related to the dimensions of advertising, psychological-biological dimensions, related dimensions of the content validity media of the questionnaire, the researcher conducted a number of questionnaires are distributed among a number of experts and knowledgeable about Internet and professional advertising issues in the field of Instagram

Research findings

In order to form a matrix of pairwise comparisons, in general, the factors are compared with each other once and once, the options are compared in terms of each factor. For this purpose, triangular fuzzy numbers have been used for even comparisons. The main research factors, which include advertising factors, psycho-biological factors, brand-related factors and media-related factors, are prioritized through the FUZZY-AHP technique. After collecting the information of the paired scale questionnaire of factors, converting the linguistic variables into fuzzy numbers and taking the geometric mean between the ideas of the comparison matrix, we form these factors. Table 4 shows the geometric mean of the main research factors:

Table 1- Geometric mean of the main research factors.

Row	Main factors	Dimensions of advertising	Psychological-biological	Related to the brand	Related to the media
1	Dimensions of advertising	(1, 1, 1)	(2, 2, 5, 3)	(1.5, 2, 2.5)	(0.5, 1, 1.5)
2	Psychological-biological	(0.33, 0.4, 0.5)	(1, 1, 1)	(0.5, 1, 1.5)	(0.5, 1, 1.5)

3	Related to the brand	(0.4, 0.5, 0.8)	(0.66, 1, 2)	(1, 1, 1)	(0.5, 1, 1.5)
4	Related to the media	(0.66, 1, 2)	(0.66, 1, 2)	(0.66, 1, 2)	(1, 1, 1)

In the next step, we obtain the SK values for each of the above matrices. In the EA method, for each row of the pairwise comparison matrix, the value of SK, which is itself a triangular fuzzy number, is calculated as follows.

Addition of all rows and columns * Addition of rows

$$S_k =$$

Where k represents the row numbers and i and j represent the indices, respectively.

Table 2- Calculations related to the calculation of SK for the principal factor matrix

							L	M	U
S1	5.000	6.500	8.000	0.034	0.057	0.078	0.171	0.374	0.622
S2	2.330	3.400	9.000	0.034	0.057	0.078	0.080	0.195	0.699
S3	2.560	3.500	5.300	0.034	0.057	0.078	0.087	0.201	0.412
S4	2.980	4.000	7.000	0.034	0.057	0.078	0.102	0.230	0.544

The SK column in the above table is obtained by multiplying ij M by kl M and using its coordinates, which are the same (U, M, I), to calculate the next step, the options of these factors. After calculating the SK, it is time to calculate the magnitude of each SK relative to each other in each factor relative to the other SKs in the same factor, and then calculate the smallest value from each set and bring it to Table 3 separately. All the above calculations are given below for each SK.

Table 3- Calculations related to the calculation of SK relative to each other

S1>=S2	1.0000	S2>=S1	0.7479	S3>=S1	0.5831	S4>=S1	0.7221
S1>=S3	1.0000	S2>=S3	0.9907	S3>=S2	1.0000	S4>=S2	1.0000
S1>=S4	1.0000	S2>=S4	0.9454	S3>=S4	0.9152	S4>=S3	1.0000
w' =	1.0000	0.7479	0.5831	0.7221			

Then W_i (non-normative weight (finally normative weight according to formula 1) is done, which you can see in Table 4.

Table 4- Scores and prioritization of indicators

Row	Factors	Score	prioritization
1	Dimensions of advertising	0.3275	1
2	Psychological-biological	0.2450	2
3	Related to the brand	0.1910	3
4	Related to the media	0.2365	4

In scoring and prioritizing the main factors of advertising, psycho-biological, media-related and brand-related, the first to fourth priorities, respectively, gained importance. According to the above method, the options of each of the factors are as follows

Table 5- Scores and option prioritization

Row	Factors	Options	Score	Prioritization	Row	Factors	Options	Score	Prioritization
1	advertising	Advertising structure	0.1987	1	1	Related to the brand	Brand loyalty	0.1394	2
2		Ability to persuade	0.1541	2	2		Previous attitude to the	0.1516	1

							brand		
3		Advertising quality	0.1427	3	3		Brand trust	0.1243	3
4	Psychological-biological	Stimulation	0.1236	4	4	Related to the media	Popularity assessment	0.1659	1
5		Sympathy	0.1282	2	5		Audience participation assessment	0.1414	3
6		Familiarity	0.1242	3	6		Impressive people assessment	0.1473	2
7		Gender	0.104	5			Audience feeling assessment	0.1300	4
8		Trust	0.1285	1	7		Perception	0.003	6
9		Perception	0.003	6					

According to the results of Table 5, in scoring and prioritizing options for ad dimensions, ad structure (1987.0) is the highest and ad quality (1427.0) is the least important, in scoring and prioritizing the options of psycho-biological factors, trust (1285.0) is the highest and perception (0030.0) is the least important, in scoring and prioritizing the options related to the brand, the previous attitude towards the brand is (1516.0) the highest and trust Brand (1243.0) is the least important, in scoring and prioritizing options, factors related to popularity evaluation (1659.0) were the highest and audience emotion evaluation (1314.0) were the least important.

Conclusion

Based on the results, 16 effective variables were identified from the identified dimensions by reviewing the subject literature and interviewing experts in the field of Instagram advertising, using the FUZZY-AHP method and distributing a questionnaire.

Their prioritization is: a) Advertising dimensions: In scoring and prioritizing the dimensions of advertising, the structure of advertising, the ability to persuade and the quality of advertising, respectively, the first to third priorities gained importance.

B (Psycho-biological dimensions: In scoring and prioritizing the psycho-biological dimensions, trust, empathy, familiarity, stimulation, gender and perception, respectively, the first to sixth priorities gained importance.

C) Dimensions related to the brand: In scoring and prioritizing the previous attitude towards Brand, brand loyalty and brand trust gained the first to third priorities, respectively.

D (Media-related dimensions: In scoring and prioritizing the popularity assessment, evaluating influential people, evaluating the audience's participation, and evaluating the audience's feelings, the first to third priorities gained importance, respectively.

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