

ORIGINAL RESEARCH PAPER

## Identifying and ranking the factors affecting social media marketing in urban cyberspace

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### ABSTRACT

**BACKGROUND AND OBJECTIVES:** The main purpose of this study in qualitative section is to identify the factors affecting social media marketing in urban cyberspace and then in quantitative section, ranking these factors. Hence, the question has been raised as to what factors affect social media marketing in urban cyberspace?

**METHODS:** Due to the exploratory nature of this research, it is not possible to provide an initial response or hypothesis to the aforementioned question, and the final answer has been obtained using the theme analysis approach. In addition, based on the Analytic Network Process multi-criteria decision-making technique, the priority of the elements affecting social media marketing was discussed. In order to collect the data and get the opinions of experts, professors of the Iran Broadcasting University and senior media managers, in-depth and semi-structured interviews were conducted with 15 participants who were selected using the theoretical sampling method as well as the snowball method.

**FINDINGS:** Through a reciprocal process based on the theme analysis, key concepts associated with the social media marketing in urban cyberspace were extracted and finally, 1 pervasive theme and 32 subthemes were identified and categorized within the 4 main themes including factors related to marketing, competitive, and managerial factors, as well as, factors related to the social media. Also, the results from Analytic Network Process shows the preference value ( $\Phi$ ) of these factors respectively include the parameters of: Marketing-related factors ( $\Phi=0.169$ ); Managerial ( $\Phi=0.163$ ); Competitiveness ( $\Phi=0.139$ ); and Social media ( $\Phi=0.133$ ).

**CONCLUSION:** Presence of media in novel communication space with its general and special audiences is an opportunity which should not be ignored by the National Media. Compared to the commercial advertisements in various radio and Television channels, marketing in this atmosphere is likely to make less money (particularly at the early days), but such presence is highly significant. According to the results, the most important factors affecting social media marketing in urban cyberspace are Marketing-related factors, Managerial, Competitiveness and Social media factors.

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## INTRODUCTION

Social media (SM) is an important marketing tool to achieve the target market, the importance of which cannot to be ignored (Ahmad et al., 2016). Nowadays, SM has become a very powerful and influential tool for presenting ideas and viewpoints. Therefore, SM plays a critical role in making informed decisions by consumers through their peers (akhavan, 2017). It is fundamentally changing the way people communicate. It is a set of Internet-based applications built on the web allowing the users to create and share generated content. Therefore, the main objective of SM is to provide a platform for linking with others through the Internet (Bagozzi and Dholakia, 2002). Just as print media, cinema, radio, and particularly television brought about change in human communication in the 1950s and 1960s (De Bell et al., 2017). Social networks have been able to provide an appropriate potential power to make the entrepreneurial transformation in a worldwide network. As a basic tool, the Internet has created new communication possibilities and capabilities among the communities (Benitez et al., 2017). The Internet was first commercially used via the world-wide web platform twenty-five years ago (Bajpai et al., 2012). With the development of the web technology, newer generation of Internet users revised the rules of social interactions and the ways to do business. It is noteworthy that in today's world, life without SM is challenging. Media is a source of information and entertainment and is seen as one of the factors of social change, and certainly influence the society and culture (Boon-Long and Wongsurawat, 2015). SM is changing the way information is provided to people around the world. Rapid growth of SM such as blogs and other social networking websites and sharing technologies will change the way companies respond to the customers' needs and expectations, as well as the way they compete with their rivals (Capatina et al., 2020). Today, the messaging approaches and actions have moved beyond the conventional media (i.e. press, radio and television), and the active field of mass communication has entered a more extensive level. These new media lay the foundations of a new culture in which the communication pattern of community members, under the influence of new relationships resulting from the consumption and use of new media, takes on a new form (Castellacci and Viñas-Bardolet, 2019). The advent of the Internet-based mass media

has made it easier for an individual to communicate with hundreds or even thousands of people about their products and companies (Chatterjee and Kar, 2020). One of the important categories targeted in new areas of marketing studies is the investigation of marketing methods in cyberspace and new SM. In the current era of e-commerce, companies exploit the SM in new areas of technology and business. Therefore, they are inevitably forced to prepare for new competitive pressures by adopting new business strategies. As a result, national and international companies are moving toward the development and implementation of marketing strategies, which put them on a par with global competitors. Many companies, either small or large, should consider developing a logical solution for Internet marketing. In their study, Ghayekhloo Alivaki and Fattahi (2015) stated that since the marketing industry has used the Internet effectively since 1994, one can conclude that organizations which do not consider using the Internet in their marketing activities are making a big mistake. Globalization, complexity, and dynamics of the business environment pose real challenges for strategic marketing in the 21<sup>st</sup> century. Researchers believe that cyberspace has rapidly and profoundly changed the nature of businesses, markets as well as the economy. While some organizations have been successful in online business environments, others have failed or been unable to take advantage of cyberspace and SM (Chung et al., 2017). As the comprehensive and the most important media body of the government, the Iranian national media has faced a strong competitor, i.e. social networks, which play a basic role in all areas of society. Should the national media continue to follow the traditional broadcasting methods, it will definitely lose the competition. Over time, it will lose its viewers and will be overcome by the SM (Constantinides, 2014). Emergence of novel fields in today's communication areas is an outcome of fast changes in the era of information and communication where there are special requirements and conditions. Cyberspace communities are able to recognize the new conditions and strengthen their foothold (Chatterjee and Kar, 2020). The effective and active presence of the Islamic Republic of Iran Broadcasting (IRIB) entails intelligent planning and management that facilitates the overcoming of obstacles, optimal use of opportunities and achieving organizational goals. Undoubtedly,

the IRIB, as a super media and the rostrum of the Islamic Republic, should play a highly important and influential role in the new communication structures in the cyberspace. In other words, with the emergence of SM and new communication structures in cyberspace and competition with the national media in attracting audiences and increased influence on cultural, political, social, economic aspects and other areas of human societies, the national media cannot but recognize these new media and exploit them to achieve its goals. Considering their own special appeals and the wide presence in the lives of their audiences and in commensurate with the content and messages they broadcast, the radio and television can have an effective and guiding presence in cyberspace in various fields. Similarly, advances of the national media towards a bold and effective presence in this competitive space requires that the content of cyberspace and the status and interaction of the IRIB in this space be investigated through conducting surveys and studies. However, not many studies have been done in this field and the gap of experimental studies in this field is evident. On the other hand, this study will serve effectively to open a new and innovative model for discussing the cyberspace marketing and understanding as well as applying this idea in cyberspace in terms of the context, activity and role of its various fields. As such, the objective of this study is to identify and rank the main factors affect social media marketing (SMM) in cyberspace. The research results can play a role in presenting national media marketing strategies in urban cyberspace in order to increase competitiveness and revenue. Hence, the question arises that what are the factors influencing the SMM in cyberspace?

#### *Literature review*

##### *Significance of social media*

Media is seen as a communication means by which the sender conveys the desired meaning (message) to the recipient (Ghaykhloalivaki *et al.*, 2015). SM refers to a group of Internet-based applications that affect the ideological and technological functions of the web (Iankova *et al.*, 2018). In other words, SM is a description of online tools people use to share the content, profiles, opinions, views, experiences and thoughts (Felix *et al.*, 2017). Therefore, the SM facilitates the online conversations and interactions between groups of people. Chang *et al.* (2017) argued that SM is a

group of online applications whose goal is to facilitate interactions and content sharing. People are increasingly considering the SM programs as an important part of their daily lives and are more likely to move their interactions to virtual programs (Khaleghi *et al.*, 2019). One important reason for companies to use the SM is that these channels allow them to engage in dialogue with stakeholders (Khalouzadeh Mobarakeh *et al.*, 2019). Because of its increasing impact, use of SM by companies indicates that the more companies depend on the network, the more successful they will be in the long term (Cambria *et al.*, 2012). SM can affect positively on entrepreneurial intentions through identity, presence, sharing, fame, groups, relations and conversation mechanism (Salamzadeh *et al.*, 2020). This is why companies learn better when they are connected to the network. In sum, the SM helps a company to increase its brand awareness and improve its sales and market share. If the program is planned and executed properly, the SM will become a cost-effective form of advertising (Morgan *et al.*, 2017; Wibowo *et al.*, 2022).

##### *SMM and its benefits*

SMM is defined as a tool for connecting and interacting with existing and prospective customers, as well as, to build customer relationships (Morris and James, 2017). On the other hand, some studies have defined it as a process of increasing the value of stakeholders through marketing activities by combining the system of SM agents in marketing communications. SMM is a new way to build profitable relationships with customers (Alves *et al.*, 2016). With the growing trend of people's presence in the social media, organizations and companies are moving towards having a greater presence in the social media, so that they could attract more customers (Nazeer, 2017). SMM refers to the use of SM to achieve the organization's goals aiming at value creation for the stakeholders. Marketing activities across the SM are a subset of online marketing activities, which complement promotion-based programs (Alalwan *et al.*, 2017). By launching online brand forums, marketers can expand their businesses (Kaur, 2016). Online brand forums are groups in different sizes that incorporate the personal opinions of their members through online interaction and sharing of their personal opinions, and admiring the brand that the community has created (Oggenhaffen and Claeys, 2017).

Based on [Stilzner \(2016\)](#) the advantages of SMM include: more access, more traffic, more loyal fans, more customer help and support, better search rankings, better sales and lower marketing costs ([Phua et al., 2017](#)).

#### *Marketing in cyberspace*

Cyberspace is used to describe all sources of information provided through the Internet. SM is known as the main media on the Internet and operates in this space. SM is intelligent technologies which can encourage a scattered audience to gather and actively interact with each other ([Pusey and Sadera, 2012](#)). By sharing text, image, audio and video files for exchanging information, cyberspace allows its users to hear the voice of the public in cyberspace and see their power over other communication activities. Although cyberspace is known for its technical dimensions, from a social perspective, it focuses on the effects it has on the society. This phenomenon has greatly affected the production and consumption of news content by audiences and one cannot ignore its role in the evolution of the media ([Ramadan et al., 2018](#)). The features of cyberspace create this capacity, which effects can be seen in the consumption and publication of content every day. One of the cyberspace's requirements for creating news content is to pay attention to the components of religious communication with the concern of going beyond delivering information and paying attention to the construction and reproduction of meaning. Measures for effective market segmentation in cyberspace marketing cannot be outlined just as a list of desirable aspects such as measurability, accessibility, relevance, operability, sustainability and differentiation. In cyberspace marketing, these measures are dynamically related. Furthermore, the overall effectiveness of cyberspace marketing segmentation strategies seeks to meet additional scalability and compatibility metrics, and it may even be argued that stability is not a basic or necessarily desirable condition for effective cyberspace market segmentation. The nature of the virtual demographic-based segmentation strategy relies on four criteria of measurability, accessibility, scalability, and compatibility. These four criteria are absolutely essential for identifying, monitoring and tracking the complex behavioral dynamics of the cyber sector in the global cyberspace ([Razak and Latip, 2016](#)).

#### *Empirical background of the study*

Research shows that in many countries, including the United States, Africa, Japan, India, Australia, the Netherlands, Malaysia, and North America, studies on SMM have been conducted to identify the differences between SMM and its role in brand equity. Finally, the present study builds on the research conducted in line with the subject at hand to prevent repetitive work while creating innovation in the research. Most studies have been conducted on the factors affecting SMM and its impact on the brand equity and purchase intention, and less attention has been given to the appropriate models and solutions. Therefore, this study seeks to fill the gap in these studies. In his study entitled "Designing a model to enhance the experience and customer's response using SMM", [Khalouzadeh and Mobarakeh \(2019\)](#) concluded that the categories of time management, cost management, leisure management, the right product selection, the desire for well-being and social comfort and influence are the causal factors leading to customer participation and use of SMM. Investigating SMM in the causal relationship between brand love and viral marketing, [Sadrania et al. \(2019\)](#) found that sport brands can strengthen the fields of viral behavior by increasing the level of their customers' participation. Investigating the impact of cyberspace on the improvement and development of businesses in a qualitative study, [Akhavan \(2017\)](#) found that the most important advantage of Internet networks and cyberspace is the sharing of hardware and software resources and quick and easy access to information. Among other advantages of access to the cyberspace are global access and transfer of information on a large scale, being fast, lower cost, convenience and action speed, services for citizens and social and cultural interactions ([Sharifi et al., 2016](#)). [Ramadan et al. \(2018\)](#) discussed the impact of brand and SM communications on the perceived value of Facebook advertising. Their results show that the overall experience of users on Facebook is based on three key areas of communication with friends, social networks and advertising brands. Hence, it contributes to the perceived value of advertising on Facebook ([Stelzner, 2011](#)). In a study entitled "Customer-Based Brand Equity in the 21st Century: the role of SMM", [Yazdanparast et al. \(2016\)](#) showed that brand-based SMM is essential in influencing the customer's attitude toward a brand.

In his study entitled “The effect of SMM on brand loyalty based on structural equation modeling”, Ahmad (2016) showed that SMM has an important effect on brand loyalty, brand awareness and the relationship between SMM and brand loyalty.

## MATERIALS AND METHODS

The present study aims at identifying the factors affecting SMM in cyberspace. Therefore, the present study is applied in terms of its objective. The research revolves around marketing, SM and particularly SMM as its main topics. The research approach is mixed (i.e. qualitative-quantitative) and the statistical population includes the experts and university professors specialized in media and marketing, as well as the senior SM managers with at least a master’s degree and ten years of work experience. In the qualitative section, sampling was done by the snowball method. The data collection tool is a semi-structured interview. This study reached the saturation point with 15 interviews. Furthermore, the theme analysis technique was used to analyze the data obtained from the interviews. Theme analysis is a way to determine, analyze and express patterns in the obtained data. This method at least organizes the data and describes it in detail. This analysis includes a continuous flow between the dataset and the encoded summaries, and the analysis of the generated data. Writing the analysis starts from the first step. In general, there is no single way to start studying a theme analysis. The six steps of theme analysis are as follows:

- *Step 1) Familiarity with the data:*

In order to become familiar with the depth and scope of the data content, it is necessary for the researcher to immerse himself/herself in them to some extent. In the present study, the researcher examined all the data obtained from the interviews before starting to encode the data. At this stage, the researcher also began note-taking and marking the themes for the next stages.

- *Step 2) Creating the initial codes:*

The second stage begins when the researcher examines the data and becomes familiar with it. This step involves creating the initial data codes. Codes provide a data feature that the analyst finds interesting. The encoded data are different from the analysis units, i.e. the themes.

- *Step 3) Searching the themes:*

This stage involves categorizing various codes into

the potential themes, and sorting all the encoded data summaries into specified themes. In fact, the researcher begins to analyze his/her codes and considers how the different codes can be combined to create an overall theme. At this point, some primary codes form the main themes, while others form sub-themes, and the rest are omitted. There is likely a set of codes at this point that do not appear to belong anywhere.

- *Step 4) Reviewing the themes:*

The fourth stage begins when the researcher creates a set of themes and reviews them. This stage includes two steps of reviewing and refining the themes. The first step involves a review at the level of coded summaries. In the second step, the credibility of the themes in relation to the dataset is taken into account. If the theme map works well, then it is possible to go to the next stage. However, if the map is not consistent with the dataset, the researcher should go back and continue the coding until a satisfactory theme map is created. At the end of this stage, the researcher should have sufficient knowledge of what the different themes are, how they fit together, and the whole story they tell about the data.

- *Step 5) Defining and naming themes:*

The fifth stage begins when there is a satisfactory map of the themes. At this stage, the researcher defines and reviews the themes he/she presents for analysis, and then analyzes the data within them. By defining and reviewing, the nature of what a theme is discussing is determined and it is specified which aspect of the data each theme has.

- *Step 6) Developing reports:*

The sixth stage begins when the researcher has a set of well-established themes. This stage includes the final analysis and report writing.

To ensure the validity and reliability of the data in a qualitative research, the necessary investigations including acceptability and verifiability were made. To increase the degree of acceptability, the researchers obtained the necessary approvals by retrieving the speech and ideas during the interviews and summarizing the statements of the interviewees at the end of the interviews for confirmation or correction by the interviewees, and their suggestions were taken into consideration. In order to verify the obtained pattern, suggestions were returned to the seven initial participants for review and approval, and the suggested points were applied and the final approval was

obtained.

In the quantitative section, conducting a survey, the data were obtained from 21 questionnaires completed by the professors of Iran Broadcasting University and senior managers of this media based on Judgmental sampling and all of questionnaire were analyzed. In this part, the priority of the components affecting SMM was determined based on the ANP multi-criteria decision-making technique.

**RESULTS AND DISCUSSION**

*Qualitative section*

To analyze the data, the axial and open coding techniques were utilized. As a result of the coding process and deleting the repetitive data and final summarization of data, one pervasive theme and 32 subthemes were identified and categorized within the 4 main themes. A summary of the dimensions, main themes and subthemes are given in Table 1. In

this table (Table 1), the initial codes are collected in a set based on their authenticity where they have received a conceptual label thus creating a subtheme. Then, considering the unique messages they convey, the concepts were assigned to different categories composing the main themes. The main themes, in turn, compose the pervasive themes or dimensions. In view of the fact that what common meanings are induced by the different main themes, the researchers assigned them to the special dimensions. Indeed, an inductive process moving from raw data to the concepts (subthemes), categories (main themes) and abstract dimensions is seen in this categorization. It is noteworthy that to label the conceptual concepts, the researchers frequently referred to the literature in all various stages of the data analysis to verify the extracted concepts and to ensure their comparability, in order to put the findings across a broader study context in the literature. In fact, the literature review

Table 1: List of pervasive themes, main themes and subthemes obtained from the theme analysis process

Pervasive theme	Main theme	Subtheme	
Identifying the factors affecting SMM	Marketing related factors	Marketing mix (Product, Price, Place, Promotion)	
		Easy access to the cyberspace	
		Determining the market share in various social media	
		Content marketing in social media	
		Accurate design of messages based on the audience's needs and desires	
		Accurate recognition of market and its governing components	
		Recognition of real needs	
		Enjoyment of viral marketing	
		Objectives of the target market and the segmentation market	
		Analysis of competitors' strengths	
		Identification of competitive advantages	
		Considering cyberspace as an opportunity	
	Competitive factors	Conveying the generated content easily and rapidly to the audience	
		Continuous evaluation and correction of errors	
		Differentiating the novel media space from the traditional space	
		Recognition of the competitive areas in social media	
		Managers' risk-taking	
		Managers' misunderstanding of the cyberspace	
		Managerial stability	
		Marketing knowledge and expertise of managers	
	Managerial factors	The administration and management's structure and model	
		Managers' support of the audiences in social media	
		Insufficient public budgets	
		Emerging SMM	
		Difficult supervision and full control of contents	
		Identification of various new social media	
		Sufficient recognition of cyberspace, its audiences and existing competitors	
		SM related factors	Social media; opportunities and threats together
			Attractiveness of the social media
			Gaining of the audiences' trust through content
	Preventing news misuses		
	Development and implementation of training programs in social media		

served as a guiding beacon for the researcher.

From the interviewees' point of view, the main factors affecting SMM in cyberspace are as below: marketing factors (marketing mix including product, price, place and promotion; easy access to cyberspace; determining market share in various social media; content marketing in social media; durability of messages and advertisements; advertising methods; ways of introduction; accurate design of messages based on the audience's needs and desires; addressing the audience's needs and desires in a new business space; accurate recognition of marketing and the components governing it; powerful public relations; identification of audience's needs and expectations; recognition of real needs; familiarity with marketing methods; training the staff for marketing; considering an effective and durable presence in the market; understanding the difference between the real and cyber spaces in marketing; choosing the proper slogan and abiding by it; active presence of National Media in the marketing field; introduction of consumable goods, news, etc. in a clear and correct way; utilizing viral marketing; using all the capacities of SM in marketing; market segmentation and choosing the target market and the operational planning commensurate with the target market); competitive factors (analysis of competitors' strengths, identification of competitive advantages, considering cyberspace as an opportunity, conveying the generated content easily and rapidly to the audience, continuous evaluation and correction of errors, differentiating the novel media space from the traditional space, recognition of competitive areas in social media, monitoring the audiences' needs, a wise look at the competitive environment, accurate recognition of audience, attracting more audiences and competing the marketing by other networks in cyberspace); managerial factors (risk-taking, scientific and non-arbitrary performance of managers, marketing expertise and knowledge, stability, political use of brands, supporting audiences across the social media, familiarity with social media, insufficiency of public budgets, governance structures and managerial models, and lack of familiarity with the cyberspace); social and cultural factors (increased penetration rate of the social media, collective learning, society's culture governing on how to establish communication, increased media literacy across the country, necessity of understanding the appropriate culture in various kinds of social media, culturalization replacing the

content supervision, promoting the intellectual and cultural level, raising the users' awareness, empowering the cultural activities and promoting the ethical values among the users); and SM related factor (emerging SMM, difficult supervision and full control of content, identification of various new social media, sufficient knowledge of cyberspace, its audiences and existing competitors, SM - opportunities and threats together, attractiveness of social media, being up-to-date, not taking the SM and its information seriously, attracting the audiences' trust through creating content, preventing the news misuses, development and implementation of training programs in social media, creativity and innovation in offering services, designing the internal SM and efficient use of SM and increased speed of activities.

In sum, results of interviews' analysis led to the identification of factors affecting the SMM in cyberspace and extraction of a model, as shown in [Fig. 1](#).

#### *Quantitative section*

The quantitative section was conducted in survey method. The required data were obtained from 21 Likert scale questionnaires completed by the professors of Iran Broadcasting University and senior managers of this media. In this part, the priority of the components affecting SMM was determined based on the ANP multi-criteria decision-making technique. To perform the confirmatory factor analysis test of the research model, first the correlation relations of all the dimensions and components of the research model were tested. For this purpose, the Pearson correlation test was performed. The test results show that there is a correlation at a significance level of 0.01 between all the components of the model. Then, to measure the adequacy of the sample size and the appropriateness of conducting a factor analysis to confirm the model, the Kaiser-Meyer-Olkin (KMO) test (sampling adequacy index) was performed. Demonstrates the appropriateness of factor analysis to identify factor structure and model. As the KMO value is greater than 0.7, the sample size is adequate for carrying out the test and the significance test indicated the appropriateness of performing a factor analysis to identify the structure and model of the factor.

In this analysis, four factors were obtained using the Varimax rotation that had eigenvalues greater than 1 and their factor load values were greater than 0.49. [Table 3](#) shows the eigenvalue, the percentage of

the variance explained, and the cumulative variance percentage of each factor.

As shown in Table 3 these four factors account for 47.72% of the total variance for SMM.

The results of the factor analysis indicate suitable validity of all the model factors to be used as scales (Table 4).

*Confirmatory factor analysis*

In order to confirm the homogeneity of the items related to this scale in terms of content and underlying dimensions, a confirmatory factor analysis was performed on this scale. There are several indices for evaluating the fitness of factor analysis models. In this study, the Average Variance Extracted (AVE), compos-



Fig. 1: Research framework

Table 2: The KMO and Bartlett's test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.739
Bartlett's Test of Sphericity	Approx. Chi-Square	248.589
	df	27
	Sig.	.000

Table 3: Exploratory factor analysis of factors affecting SMM in cyberspace

Factor	Eigenvalue	Variance explained %	Cumulative variance
Marketing-related factors	2.22	14.58	14.58
Management factors	2.11	14.08	28.66
Competitive factors	2.03	10.07	38.83
SM factors	1.89	8.99	47.72

Table 4: Results of the exploratory factor analysis with a varimax rotation of SMM

Items		Factor loading
Marketing mix	Item 1	0.91
	Item 2	0.88
	Item 3	0.94
	Item 4	0.90
Availability	Item 1	0.78
	Item 2	0.87
Determining the market share	Item 1	0.80
	Item 2	0.84
Accurate market knowledge	Item 1	0.91
	Item 2	0.88
Identification of actual needs	Item 1	0.77
	Item 2	0.78
Viral marketing	Item 1	0.84
	Item 2	0.96
Target market	Item 1	0.82
	Item 2	0.84
Managers' risk-taking	Item 1	0.88
	Item 2	0.90
Lack of understanding of managers	Item 1	0.95
	Item 2	0.74
Marketing expertise and knowledge	Item 1	0.77
	Item 2	0.84
Governance structures	Item 1	0.89
	Item 2	0.89
Managers' support of the audience	Item 1	0.73
	Item 2	0.67
Analysis of the power of competitors	Item 1	0.75
	Item 2	0.81
Identification of competitive advantages	Item 1	0.90
	Item 2	0.88
Considering the cyberspace	Item 1	0.75
	Item 2	0.74
Delivering the generated content	Item 1	0.68
	Item 2	0.87
Continuous evaluation and correction of mistakes	Item 1	0.71
	Item 2	0.70
Understanding the competitive environment	Item 1	0.73
	Item 2	0.83
Novelty	Item 1	0.80
	Item 2	0.74
Difficulty of monitoring and fully controlling the contents	Item 1	0.88
	Item 2	0.73
Gaining adequate knowledge and trust	Item 1	0.62
	Item 2	0.64
	Item 3	0.76
SM opportunities and threats	Item 1	0.87
	Item 2	0.85
Attractiveness of the social media	Item 1	0.72
	Item 2	0.70
Preventing misuse of the news	Item 1	0.88
	Item 2	0.68

ite reliability and the Cronbach's alpha have been used.

The AVE, composite reliability and the Cronbach's alpha are used as indices to evaluate the validity of the model. As mentioned, the results show that all of

the above values are higher than the desirable values (Table 5).

Fig. 2 shows the path coefficients that indicate the strength of the linkage between the variables. The

numbers on the paths represent the path coefficients and those inside the circles indicate the endogenous variables the value of the coefficient of determination (indicating the effect that independent variables have on a dependent variable).

*Ranking factors affecting SMM with ANP*

Once it was established that marketing-related, competitive, managerial and social media-related factors were among the factors influencing SMM, we applied the multi-criteria decision-making Analytic Network Process (ANP) to rank and prioritize the factors based on their impact. ANP is one of the decision-making techniques that are very similar to the AHP method, and in fact, it is an extended version of it. In cases where the lower levels affect the higher levels or the elements that are on the same level are not independent of each other, the AHP method can no longer be used.

Table 7 shows that the marketing-related factor has the highest ranking, the managerial factor is in the second place, competitiveness is in the third place and SM is in the fourth place. According to the results, marketing-related factors are the most important in social media marketing in urban cyberspace; hence,

detailed marketing plans should be developed to promote activities in cyberspace. Morris and James (2017) found that although there are limitations in using the social media, this media creates advantages for companies which can utilize the opportunities to deliver their products directly to the audiences. Using the Grounded Theory, Khalouzadeh Mobarakeh et al. (2019) designed a model for experience promotion and customer response by making use of SMM in which the categories of time management, cost management, leisure management and the social influence are the causal factors leading to customer’s participation and use of SMM; these categories lead to the customer’s experience and response through the current study strategies, i.e. capabilities of social media, customer dynamics and perceived value. Boon-long and Wongsurawat (2015) stated that the effectiveness of SMM is so hard to measure and this measurement is not conducted systematically.

**CONCLUSION**

This study aims at identifying the factors affecting the SMM in cyberspace which was conducted based on the theme analysis approach. On the basis

Table 5: Reliability and validity indicators

Factor	Average Variance Extracted (AVE) (Minimum desirable value higher than 0.5)	Composite reliability (Minimum desirable value higher than 0.7)	Cronbach’s alpha (Minimum desirable value higher than 0.7)
Marketing mix	0.78	0.88	0.83
Availability	0.64	0.91	0.91
Determining the market share	0.59	0.90	0.86
Accurate knowledge of the market	0.55	0.75	0.87
Identification of actual needs	0.74	0.78	0.72
Viral marketing	0.80	0.80	0.90
Target market	0.69	0.88	0.83
Managers' risk-taking	0.70	0.81	0.79
Lack of understanding of managers	0.52	0.79	0.76
Marketing expertise and knowledge	0.77	0.75	0.84
Governance structures	0.71	0.84	0.76
Managers’ support of the audience	0.66	0.80	0.70
Analysis of the power of competitors	0.63	0.71	0.72
Identification of competitive advantages	0.69	0.74	0.77
Considering the cyberspace	0.71	0.92	0.83
Delivering the generated content	0.75	0.89	0.80
Continuous evaluation and correction of mistakes	0.74	0.90	0.90
Understanding the competitive environment	0.70	0.94	0.75
Novelty	0.69	0.86	0.72
Difficulty of monitoring and fully controlling the contents	0.84	0.79	0.87
Gaining adequate knowledge and trust	0.73	0.76	0.85
SM opportunities and threats	0.63	0.77	0.73
Attractiveness of the social media	0.55	0.86	0.76
Preventing misuse of the news	0.57	0.73	0.80

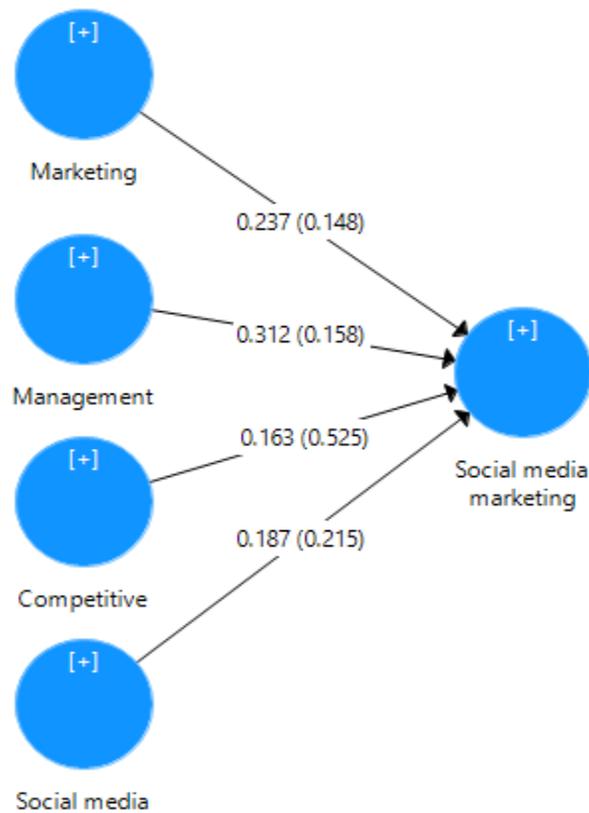


Fig. 2: Standardized path coefficients of the four-factor structure of SMM

Table 6: Ranking the factors affecting SMM by analyzing path coefficients in PLS

Path	Path coefficient	Ranking
Marketing-related factors	0.237	1
Competitiveness	0.163	4
Managerial	0.312	2
Social media	0.187	3

Table 7: Ranking factors affecting SMM with ANP

Factor	Weight	Ranking
Marketing-related factors	0.16902	1
Competitiveness	0.13856	3
Managerial	0.16349	2
Social media	0.13345	4

of themes extracted from the interview in connection to the SMM, 248 key concepts were categorized within 32 initial codes, 1 subtheme and 4 main themes. Based on the results of qualitative analysis for the studied part to apply the factors affecting the SMM, the following suggestions are offered. As it is evident, the urban cyberspace has durability, accessibility and

timely feature in its own capacities which can help significantly to advance the media objectives. To promote quality and quantity of its audiences and find more audience, from one hand, and to enhance the audiences' trust, their dependency, their needs as well as its image in their minds, on the other hand, Islamic Republic of Iran Broadcasting (IRIB) should

initially take a serious step in audience analysis stage to design a media product and enjoy the cyberspace. Furthermore, to recognize better and more accurate and personalize the audience, IRIB can use the data generated in social media; in other words, based on the classification of audiences within various groups and categories relying on the pre-defined characteristics, IRIB can generate content for them based on the more real recognition of the audiences. The proliferation of social media creates an amazing opportunity for companies and brands to look for new interactive ways to reach their customers. This rapidly expanding SMM channel should not be used as a stand-alone marketing strategy; rather, it should be used as the final step in the strategic marketing process; improve other digital marketing communications such as corporate websites. In addition, the rapid development of information and communication technology, communication through the Internet and the existence of high-speed Internet have increased the penetration of the Internet. This increase represents the percentage of the population of a country or region that uses the Internet. This provides a good opportunity for social media marketers to connect with this vast market easily. On the other hand, the research results indicate that the ease of access and persistence of messages and advertisements in this field has caused many customers and customers of commercial advertisements to use the capabilities of cyberspace. Therefore, paying attention to the category of marketing in cyberspace and its large and widespread presence in this space is very important and vital for traditional media. It is worth noting that cyberspace has a constant availability and availability in its capacities, which can help in advancing the goals of the media. Finally, due to the emergence of social media and new communication structures in cyberspace and competition with national media in attracting audiences and increasing influence and influence on cultural, political, social, economic and other areas of human societies. The national media has no choice but to recognize these new media and use them to achieve their goals.

### **SUGGESTIONS**

Nowadays, since the main advertisements of companies are performed via the websites and social media, the best media in commensurate with the product should be selected by recognizing the inter-

ests and values of target audiences to establish communication with them. The legal organization in IRIB is a structure which, if formed properly, can protect both the products and contracts with celebrities. The organization should seek more to establish an independent and real group to make money and focus its mechanisms on legal channel rather than to use its business group. In fact, a legal structure should be determined for these products which form the cyberspace so that the products are arranged properly. It is here that a powerful legal complex helps significantly an organization to be arranged in urban cyberspace and structured well. Presence of media in novel communication space with its general and special audiences is an opportunity which should not be ignored by the National Media. Compared to the commercial advertisements in various radio and TV channels, Marketing in this atmosphere is likely to make less money (particularly at the early days), but such presence is highly significant. Consequently, if the owners of goods and services choose the platforms of National Media for advertising their goods and services, the message beyond this selection results in trust in IRIB which is considered a capital for each media. An important factor in background factors of National Media marketing framework is the competition; if there is no competitor, we do not know what to do. Currently, competition in cyberspace has risen significantly over other media. As a result, it is suggested that a website like Divar should be available through which the advertisements are attracted and the media managers have identify the issues of value, money-making, content, strengths, opportunities and threats and design a (invasive) strategy for it.

### **LIMITATIONS**

Entirety, the considerable point in domestic studies is that the questionnaires already designed by the foreign researchers are used to investigate the relationship among the different variables of SMM and brand equity and only a few have examined the factors affecting the SMM and this research contributed to developing the research area. One limitation of this study is that expressing all experiences and personal opinions of interviewed managers is not possible due to the personal consideration and self-censorship and fear of information disclosure. At last, accessing the interviewees and allocating time with regards to the COVID-19 pandemic across the country were limited

and since we needed to interview the professors of Iran Broadcasting University, the interviewees, especially the experts, the time allocation for interview faced limitations. It is suggested that in-depth qualitative studies be conducted on each of the factors identified in this study separately. Also, conducting this research in a different context such as specific sectors of the industry and comparing the factors affecting social media marketing in the private and public sectors can be helpful in advancing the literature in this field.

#### AUTHOR CONTRIBUTIONS

Y. Vakil Alroaia performed the literature review, experimental design, analyzed and interpreted the data, prepared the manuscript text, and manuscript edition. M. Montezarhojat performed the experiments and literature review, compiled the data and manuscript preparation. A. Rashidi helped in the literature review and manuscript preparation. Vakil Alroaia performed data correction, writing original draft preparation, writing reviewing and editing references.

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#### CONFLICT OF INTEREST

The authors declare no potential conflict of interest regarding the publication of this work. In addition, the ethical issues including plagiarism, informed consent, misconduct, data fabrication and, or falsification, double publication and, or submission, and redundancy have been completely witnessed by the authors.

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#### ABBREVIATIONS

<i>ANP</i>	Analytic Network Process
<i>AVE</i>	Average Variance Extracted
<i>IRIB</i>	Islamic Republic of Iran Broadcasting
<i>KMO</i>	Kaiser-Meyer-Olkin
<i>SM</i>	Social media
<i>SMM</i>	Social Media Marketing
<i>SM</i>	Social Media

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