OPEN ACCESS Freely available online

Journal of Tourism & Hospitality

ISSN: 2167-0269

Research Article

A Strategic Approach to Tourism Development Barriers in Iran

Nima Golghamat Raad*

Amirkabir University of Technology, Tehran, Iran

ABSTRACT

This research aims to have a strategic approach to the barriers that have hampered the development of the tourism industry in Iran. This study shows the application of MADM and strategic management tools in national tourism policy-making. In this research, PESTEL analysis is used to identify and classify the barriers that hamper tourism development in Iran. Then the Friedman test is carried out to rank the barriers. Then, the DEMATEL technique is used to determine cause and effect relationships between different types of barriers. After that, Importance-Performance analysis is done to identify the barriers that are the first priority of the country and need immediate attention. Finally, a set of strategies are proposed, evaluated, and ranked by CRITIC and VIKOR methods. This study identifies the most important issues and barriers to tourism development in Iran and proposes the most effective strategies to overcome those barriers. As the current tourism development strategies in Iran are proved to be ineffective and the situation of Iran in the international tourism industry is not comparable with the high potentials of this country, a strategic approach to tourism development barriers is absolutely necessary and valuable.

Keywords: Tourism Development; Tourism Strategies; Tourism in Iran; Multi-Attribute Decision Making; Strategic Management

INTRODUCTION

Tourism is one of the world's fastest growing industries as well as a major source of foreign income and job creation. The tourism industry of each country is rooted in people, places, heritage, and values of the country. The governments should make policies, plans to provide economic, social, and environmental benefits through tourism . The ability of the national economy to benefit from tourism depends on the volume of investment in tourism infrastructures and on ability to satisfy the needs of tourists.

Iran, a country with an area of 626336 miles^2, has a unique diversity of cultural, ethnic, linguistic, climatic, architectural and historical features. Iran has 30 UNESCO-Registered landmarks and 74 other sites and monuments in the pilot list of this international organization. Iran has burning deserts, humid forests, and cold mountainous regions. Also, the existence of a number of sacred Shiite shrines in this country, has provided a good position in the field of religious tourism for Iran. Affordable costs, as well as advanced medical and health services in Iran, have made this country one of the most potent countries to become a medical tourism hub in the region and even in the world. Iran is comparable with countries such as Egypt, Greece, India, Italy and Turkey in terms of its historical significance and cultural and natural glory. Iran ranked first in terms of price competitiveness tourism in the world. Despite the high potential of Iran at generating income and improving the economic situation through the tourism industry, the indicators do not show a satisfying situation in this field.. The indices of the travel and tourism industry are brought in Table 1. The rank and score of Iran in each index are specified and then are compared to the best performance in that index. Relative Functionality of Iran in each index is obtained by dividing the score of the country into the best performance [1-4].

Iran's ranking in all the indicators is worse than average in the Middle East. Several reasons have been mentioned in the literature for failure of the tourism industry in Iran, such as the mostly unfavorable view of Iran in the world, political tensions with the West for more than three decades, poor and unstable management, weak and ineffective advertising, and lack of tourism infrastructures such as hotels, restaurants, efficient transportation system, sanitation facilities, and the regulations of Hijab in this country [5-7].

LITERATURE REVIEW

The World Tourism Organization proposes a framework for designing the Tourism Master Plan. The first and most important step is to formulate a long-term development framework for tourism (10-20 years) with emphasis on policy and strategy, planning, institutional strengthening, legislation and regulation, product development and diversification, marketing and promotion, tourism infrastructure and superstructure, economic impact of

***Correspondence to:** Raad NG, Amirkabir University of Technology, Tehran, Iran, Tel: 989138050456; E-mail: nima_golghamat92@aut.ac.ir

Received: August 18, 2019; Accepted: September 06, 2019; Published: September 13, 2019

Citation: Raad NG (2019) A strategic approach to tourism development barriers in Iran. J Tourism Hospit 8: 410. doi: 10.35248/2167-0269.19.8.410

Copyright: © 2019 Raad NG, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Table 1: Tourism Indices, and rank and relative functionality of Iran in them.

Code	Index	Rank of Iran	Score of Iran	Best Country	Score of the best country	Relative Functionality
I1	Business Environment	79	4.34	Hong Kong	6.16	0.705
I2	Safety and Security	87	5.17	Finland	6.65	0.777
I3	Health and Hygiene	93	4.72	Germany	6.86	0.688
I4	Human Resources and Labor Market	105	4.13	Iceland	5.76	0.717
I5	ICT Readiness	94	3.79	Hong Kong	6.47	0.586
I6	Prioritization of Travel and Tourism	117	3.55	Malta	6.18	0.574
I7	International Openness	109	2.38	Singapore	5.21	0.457
I8	Price Competitiveness	1	6.66	Iran	6.66	1.000
I9	Environmental Sustainability	119	3.61	Switzerland	5.8	0.622
I10	Air Transport Infrastructure	89	2.2	Canada	6.76	0.325
I11	Ground and Port infrastructure	75	3.1	Hong Kong	6.4	0.484
I12	Tourist Service Infrastructure	116	2.53	Austria	6.67	0.379
I13	Natural Resources	100	2.45	Brazil	6.13	0.400
I14	Cultural Resources	38	2.78	China	6.94	0.401

tourism and tourism investment, human resource development, and socio-cultural and environmental impacts of tourism. Then, divide the plan into short- term (three-year) action plans to expand sustainable tourism and prepare several demonstration projects for pilot areas. The responsibility of designing such a plan is on the National Tourism Organization (NTO) which is an official organization in each country in which planning for development and promotion of the country's tourism section is carried out. Comprehensiveness and power of this organization depend on political, social, cultural, environmental, and economic conditions of the country and the importance of the tourism industry in it. In the following, the experience of some countries in the development of tourism strategies is mentioned [8-13].

Myanmar tourism master plan (2013-2020) has 6 Strategic Programs including Strengthening the Institutional Environment, Building Human Resource Capacity and Promote Service Quality, Strengthening Safeguards and Procedures for Destination Planning and Management, Developing Quality Products and Services, Improving Connectivity and Tourism–Related Infrastructure, and Building the Image, Position, and Brand of Tourism Myanmar. This master plan consists of 24 key objectives and 76 activities. Then, 38 Strategic Projects are proposed for Implementation from 2013 to 2020. The estimated cost and priority of each project and programs are determined by the planners [14-18].

Vietnam has also prepared a tourism master plan up to 2020. This master plan includes the following key contents: evaluating the previous plan, resources for tourism development, SWOT analysis, development perspective forecast, development vision and objectives, direction of key areas development, and implementation measurements.

The tourism master plan of Kuala Lumpur (2015-2025) details out 47 initiatives that covers 9 segments and all key enablers. With the vision to transform Kuala Lumpur into a world-class tourism destination, these initiatives aim to enhance the city's current tourism activities and enrich its offerings with new products and services. These segments are culture and heritage, shopping, entertainment, nature and adventure, luxury travel, sports, business and MICE, and medical and wellness. According to this document, steps towards designing a tourism master plan include:

- Identifying and building consensus on issues and challenges affecting the tourism industry, in particular the various tourism segments
- Developing a long list of potential ideas to enhance the tourism industry
- Prioritizing and defining clear initiatives for implementation, which include consolidation of ideas into themes and topics and assessment of each initiative based on ease of implementation and impact.

The Tourism Strategic Plan of Sri Lanka cites four main reasons for the failure of the tourism master plans, including coordination failures, institutional failures, market failures, and resource failures, and lists the causes of the failures [19-23].

Iran wants to develop its first tourism development document in the near future. According to the 20-year perspective, Iran's share of the world tourism industry should reach from 0.09 percent in 2004 to 1.5 percent in 2025 (around 20 million tourists). The active policies of Iran in the field of diplomacy and the nuclear deal have led to the growth of Iran's tourism industry and a clear future for it. The most important programs of the government in the field of tourism development are as follows:

- Modifying the current regulations and instructions
- Providing a credit of $ 25 billion and for around 1,300 projects
- Increasing the duration of the airport visa from 15 days to 30 days
- Issuance of electronic visa
- Human resource training for 16,000 people who work in the tourism industry
- Establishing tourism Information in 11 high-potential countries
- Developing international hotels and facilities and building residential centers
- Expanding the religious tourism
- Development of domestic tourism

• Supporting the private companies which have tourism-related activities in the web

• Expanding the transportation networks (land, air, rail, and marine)

Strategic Management tools and techniques are widely used by Iranian researchers to develop strategies for improving the tourism industry in this country. Some of these studies are focused on a specific tourism type, and the others study the entire industry. Scope of some of the studies is the whole country, but most of them focus on specific case studies. Medical Tourism has mentioned in several studies as one of the main strengths of the tourism industry in Iran. Ecotourism is one other important tourism type in Iran due to the climate diversity and unique nature of the country. Several studies have done in Iran that uses SWOT analysis for ecotourism strategic planning. Rural Tourism, Religious Tourism, Urban Tourism, and Sport Tourism are other types of tourism about which strategic studies and planning have carried out [24-28].

Although the methods and tools used in researches that study just one type of tourism are identical with those that study the entire tourism industry, the comprehensiveness of the strategies and development barriers reflected in the second category of research makes it more beneficial for policymakers and decision-makers in the tourism industry. Table 2 conveys some of the national-scale tourism studies which have conducted to identify barriers to tourism development in Iran [29,30].

METHODOLOGY

PESTEL analysis

PESTEL is a tool in strategic management that helps the decision-makers analyze the external environment of their organization and set their strategies based on the possible changes in the future. In this research, PESTEL analysis is used to identify the political, economic, social, technological, environmental, and legal barriers that hinder tourism development in Iran. The barriers are listed based on 21 tourism experts' opinions in academic and administrative levels and obtained with the Delphi technique. Table 3 shows the list of the barriers in 6 categories.

These barriers can be seen from another perspective. Each barrier is related to one of the tourism indicators mentioned at Table 1. The performance of Iran in each barrier can be defined as the relative performance of the indicator that is related to this barrier [31-33].

Friedman test

Friedman's test is a non-parametric statistical test that was invented by Milton Friedman. This test is used to compare three or more matched groups. Friedman test first ranks the values in each matched set (each row) from low to high. This test is used in this study to rank the tourism development barriers. This test has been carried out with SPSS16 software. The results of this test are shown in Table 4. The test statistics show that the degree of importance of the barriers is not the same [34].

DEMATEL analysis

DEMATRL stands for Decision Making Trial and Evaluation. This technique was developed by Fonetla and Gabus in 1971. DEMATEL is a comprehensive method for the development and analysis of a structural model that includes causal relationships between complex factors. DEMATEL operates based on directed graphs, and these graphs are able to display directed relationships between factors. The result of the DEMATEL method is the division of the factors into two groups of cause and effect. This technique is used in this research to identify the pivotal barriers that lead to the other barriers. The steps of this technique is brought in the following:

• **Direct relation matrix:** A four-level scale is required to measure the relationship between the factors with the help of experts. This scale is used to describe the relationship of factors are: 0 (ineffective), 1 (low impact), 2 (high impact), and 3 (very high impact). The next step is getting the expert's opinion by pairwise comparisons. The result of this stage is shown by matrix Z, and its components are shown by Zij that represents the effect of criterion i on criterion j.

• **Normalizing the direct relationship matrix:** The direct relations matrix Z can be converted into a normalized matrix of direct relations using eqns. (1) and (2).

$$s = \min\{1/\max_{1\le i\le n}\sum_{j=1}^{n} z_{ij},\ 1/\max_{1\le j\le n}\sum_{i=1}^{n} z_{ij},\quad i,j=1,2.....n \tag{1}$$

$$X=S.Z \tag{2}$$

Table 2: National-scale studies about tourism development in Iran.

Tools and Techniques	Result
Questionnaire and Statistical Approach	Lack of advertising for Iranian tourist attractions in tourist destinations; inefficient ground and air transportation systems; poor hotel and accommodation industry; international negative propaganda against Iran; adequate training of people working in the tourism industry, and lack of recreational facilities.
Mini-Delphi	Political instability, regional conflicts, mandatory Islamic hijab for tourists, and lack of investment are the most critical deterrents to tourism development.
Strategic Environmental Assessment	Lack of high-quality welfare services, inadequate and inefficient advertising, political problems, and low level of foreign investment are obstacles of tourism development in Iran.
Questionnaire and Statistical Approach	Categorizes the barriers into 7 groups including infrastructure inadequacy, and political, cultural, governmental, managerial, economic and human resource problems.
Delphi	Lack of a coherent strategy for sustainable tourism development, lack of appropriate infrastructure, lack of integrated development programs, and poor governance.
Regression Analysis, Variance Analysis, T-test	Lists a number of institutional, cultural, marketing, and infrastructural barriers
Fuzzy VIKOR Method	Inadequate service and visa problems are the most important barriers to medical tourism in Iran.
Fuzzy Interpretive Structural Modeling Approach	Managerial and financial problems are the main barriers to E-tourism development.

Table 3: Tourism development barriers obtained with PESTEL analysis.

Category	Description	Code	Related Tourism Indicator(s)
Political Barriers	Political disagreements with some other countries have led to problems for the tourism industry of Iran	P11	I1
	International sanctions against Iran and its damaging effects on the country's tourism industry, especially business tourism	P12	I2, I10, I11, I12
	The politicians prefer more sparkling solutions with immediate results instead of long-term planning for tourism	P13	I6
	The tourism section in Iran is mainly controlled by the government, which has little regard to the private section and its role in tourism development	P14	I1
	Some of the tourism sector managers in Iran do not have related education, their management period is short, and new managers do not approve the works of previous managers and leave their programs unfinished.	P15	I4
Economic Barriers	The sanctions deter the foreign investors from entering the Iranian market	P21	I2, I10, I11, I12
	Financial pressures on government and society have removed tourism from the list of investment priorities	P22	I2, I10, I11, I12
	Instability in macroeconomic indicators in Iran has increased the risk of investment in this country	P23	I1, I7
Socio-cultural Barriers	Participation of the community in decision-making process is very low	P31	I4
	Most people in small towns and in rural and border areas in Iran are very poor and have low capacity to accommodate tourists.	P32	I14
	Massive propaganda against Iran (Iran phobia) in foreign media	P33	I2
	Most Iranian people are not pleased with the presence of Arab tourists in Iran due to historical issues.	P34	I14, I7
	Most people, and even those who are working in the tourism industry, do not know how to deal with tourists.	P35	I14
	A small percentage of people are fluent in English or in other widely-spoken languages of the world.	P36	I14
Technological Barriers	Web sites, mobile apps, and virtual tours are not yet widely used to expand the tourism services and advertising of this industry.	P41	I5
	Lack of modernized civilian air fleet and airports and world-class airlines	P42	I10
	Number, quality, and distribution of hotels and hostels are not satisfactory.	P43	I12
	The infrastructure of roads, railways, and transportation services in Iran is not developed and is very poor compared to many countries in the region.	P44	I11
Environmental Barriers	Destructive effects of the presence of tourists in nature, because of not considering sustainable tourism principles	P51	I13
	Damage of the unprecedented drought to the environment of Iran	P52	I13
	Unauthorized hunting of rare species and extensive destructing of forests	P53	I13
	Air pollution in metropolitans of Iran	P54	I13
	Lack of facilities and camping equipment in the majority of natural and coastal areas	P55	I13
Legal Barriers	Due to the low regulatory quality and weakness in the rule of law, there is not enough investment in the tourism sector of the country.	P61	I1, I3, I5, I10, I11, I12
	Some legal restrictions in Iran may discourage tourists to travel to this country	P62	I7

Total relation matrix: After obtaining the normalized direct relations matrix (X), the total relations matrix (T) can be calculated using eqn. (3) in which (I) is the identity matrix.

$$T = X(I - X)^{-1} \quad (3)$$

• **Causal diagram:** Summation of rows and columns of matrix T are respectively called D and R vectors. The horizontal axis of the diagram is called the Importance Axis and is equal to (D + R). Similarly, the vertical axis is called Dependence Axis and is equal to (D-R). Basically, when (D-R) is positive, the criterion is a cause. Otherwise, the criterion is an effect.

The matrix Z of this research is shown in eqn. (4).

$$Z = \begin{bmatrix} 3 & 2.7 & 2.6 & 1.8 & 1.2 & 1.3 \\ 0.8 & 3 & 2 & 2.5 & 1.9 & 0.6 \\ 0.5 & 0.6 & 3 & 0.3 & 1 & 0 \\ 0.3 & 0.5 & 0.5 & 3 & 1.1 & 0.7 \\ 0.3 & 0.2 & 0.2 & 0.4 & 3 & 0.3 \\ 2.1 & 2.6 & 2.8 & 2.4 & 2.5 & 3 \end{bmatrix} \quad (4)$$

After doing the mentioned calculations, the cause and effect diagram of this research is plotted. The diagram is shown in Figure 1 [31-33].

Importance-performance analysis

Martila and James developed and used the Importance-Performance

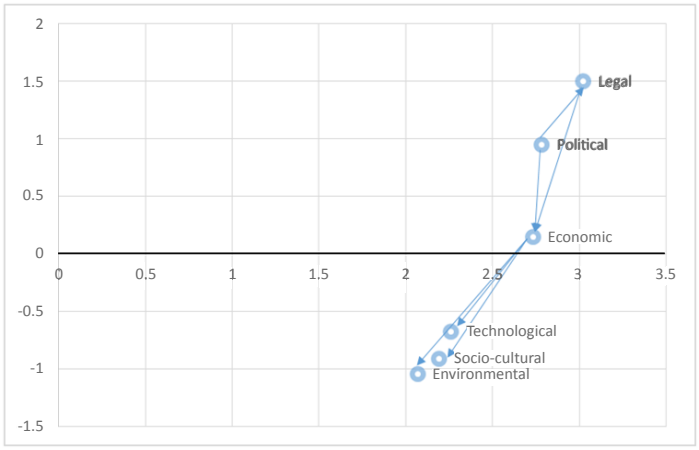

Figure 1: Results of the Dematel analysis.

analysis for the first time in` `. Today, however, the IP analysis has become a well-known management tool and is widely used to identify the weaknesses and strengths of businesses, products, services, and the prioritization of improvement opportunities.

The matrix of this model consists of two axes: the horizontal axis represents the Importance, and the vertical axis represents the performance. The concept of each of the four regions of this matrix is this:

Quarter 1: Continuation of the current situation: It conveys factors with high importance and satisfactory performance. The best strategy for these factors is to keep the current performance level up.

Quarter 2: Reducible Area: This quarter encompasses factors with low importance at which the organization (or country) has great performance. Decision-maker would be better to put less attention to these factors.

Quarter 3: Lower Priority: It conveys factors with low importance and weak performance. As these factors are not important very much, they are not the top priorities.

Quarter 4: The critical area: It encompasses factors with high importance in which the performance level is low. These indicators seem to be at a critical stage and need immediate attention. The solutions that are related to these factors should be the priority.

In this research, the barriers whose ranks are 15 or higher are in the high-importance category, and the others are in the low-importance category. Also, the barriers whose related tourism indicators have a relative performance of 0.5 or more, are in the high-performance category, and the others are in the low-performance category. Therefore, the IP matrix can be developed (Figure 2) [34-37].

Listing and evaluating strategies

At this stage, a list of strategies is created by reviewing the literature and gathering experts' opinions. These strategies help to overcome the barriers in quarter 4 of the IP matrix. The list is shown in Table 5.

The next step is to evaluate and rank the strategies. Political, economic, socio-cultural, technological, environmental, and legal impacts, are used to prioritize these strategies. The scores are obtained from experts' opinions. The experts are asked to express their opinion about the impact of each strategy on each criteria by a number between 0 (lowest impact) to 10 (highest impact). CRITIC technique is used to determine weights for the criteria, and VIKOR technique is employed to evaluate the importance of each strategy [38,39].

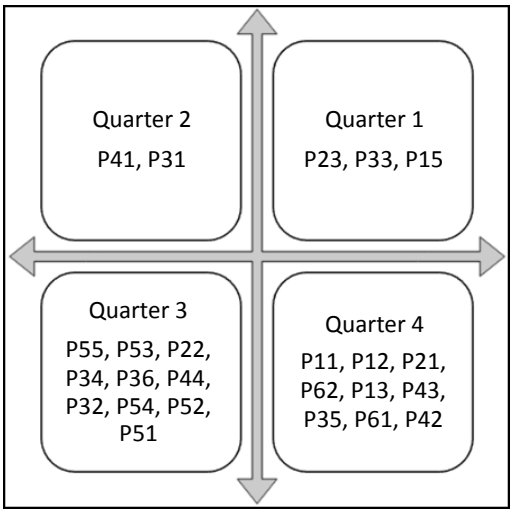

Figure 2: The IP matrix.

Table 4: Friedmzan test result.

Rank	Barrier Code	Mean Rank
1	P23	25.88
2	P11	25.81
3	P12	25.60
4	P33	23.69
5	P21	23.45
6	P62	20.07
7	P14	20.02
8	P13	16.74
9	P43	16.45
10	P15	15.74
11	P35	15.60
12	P61	15.12
13	P42	15.02
14	P55	12.52
15	P53	9.86
16	P22	9.10
17	P34	9.05
18	P36	6.60
19	P44	5.98
20	P41	5.93
21	P31	5.17
22	P32	5.17
23	P54	4.79
24	P51	2.40
25	P52	2.26
Test Statistics		
N		21
Chi-square		510.934
df		24
Asymp. Sig.		0.000

Criteria weights

The CRITIC approach is an objective method for determining the weight of the criteria. This is carried out by correlation coefficients and standard deviations. The first step in this method is to formulate a decision matrix in which the columns are made up of

Table 5: List of the proposed strategies.

Code	Strategy
S1	Registration of cultural heritages in UNESCO WHS list, strengthening and preserving ethnic and cultural variety and richness, art and handicraft and renovation of valuable landmarks
S2	Reviving the celebrations and rituals of ancient Persia and holding festivals all year round all over the country
S3	Developing reliable tourism infrastructure in main touristic cities like Tabriz, Isfahan, Shiraz, and Mashhad
S4	Investing in road transport systems, hotels and accommodation centers, medical and health services, and high-speed Internet.
S5	Strengthening local communities and reducing negative social and environmental effects of tourism
S6	Amending the plans and preparing detailed urban tourism development strategies
S7	Developing marketing strategies to increase the tourist arrival from the neighboring countries, Central Asia, and the South of the Persian Gulf
S8	Improving and diversifying health tourism products, services and marketing strategies
S9	Offering other tourism packages to health tourists
S10	Preserving the environment, tracking ecologically suitable principles, supporting different cultures, ethnics, races, dialects, and language
S11	Developing marketing strategies for the domestic ecotourism
S12	Diversifying competitive ecotourism products and services
S13	Constructing tourist accommodation centers and local and road-side restaurants, and public restrooms in ecotourism regions
S14	Sustainable development of coastal tourism through the construction of recreational facilities, sports, housing, transportation, and services
S15	Developing religious tourism and halal tourism
S16	Reducing tensions between Iran and Western countries, especially the United States, and increasing political stability
S17	Exporting cultural products such as Iranian films and music pieces, books, and articles to familiarizing other countries with Iran's cultural heritage
S18	Reduction of political disagreements with Muslim countries in the Middle East
S19	Development of websites and apps to promote Iran's tourism destinations in different languages
S20	Improving conditions for the presence of foreign investors in the tourism market of Iran
S21	Stability in tourism management in Iran
S22	Modifying the current tourism and visa laws and regulations
S23	Expanding the transportation networks (land, air, rail, and marine)
S24	Granting loans and other facilities to the private sector active in the tourism industry
S25	No mandatory hijab for Non-Muslim Tourists
S26	Hosting international sporting events in Iran
S27	Development of rural tourism and tourism in desert areas

criteria and rows of options. In this method, there is no difference between positive and negative criteria in determining the weights [40,41].

The second step is the decision matrix normalization. Eqn. (5) is employed to do this. After this step, all elements will be between 0 and 1.

$$r_{ij=}\frac{x_{ij-}x_j^{\min}}{x_j^{\max}-x_j^{\min}} \tag{5}$$

Then, the amount of available information in each criterion must be calculated. This value is represented by C_j (equation 6).

$$C_j=\sigma_j\sum_{i=1}^{m}(1-r_{ij}) \tag{6}$$

σ_j is the standard deviation of criterion j and r_{ij} shows the correlation of criteria i and j. According to the CRITIC, the higher the amount of obtainable information for a criterion, the more relative importance of that criterion. In step 3, the weight of each criterion is calculated using eqn. (7).

$$w_j=\frac{c_j}{\sum_{i=1}^{m}c_i} \tag{7}$$

Table 6 contains the result of CRITIC technique in this study.

Strategy prioritization

VIKOR is an MCDM tool that solves decision problems with conflicting criteria with different units, considering that compromise is allowable for conflict resolution, the decision maker aims to find a solution that is the closest to the ideal, and the alternatives are evaluated according to all criteria. VIKOR uses LP-Metric method (Equation 8) to find the best solution.

$$L_{pi}=\left\{\sum_{j=1}^{n}\left[\frac{w_j(f_j^*-f_{ij})}{(f_j^*-f_j^-)}\right]^{\frac{1}{p}}\right. \quad 1\le p\le\infty \quad i=1,2,.....,m \tag{8}$$

In this equation, w_j is the weight of criterion j obtained with CRITIC method, P represents LP parameter, f_{ij} is the value of solution i in criterion j, f_j and f_j are the best and the worst f_{ij} respectively.

L_{1i} is represented with T_j and can be obtained by eqn. (9).

$$S_j=\sum_{j=1}^{n}w_j\frac{f_j^*-f_{ij}}{f_j^*-f_j^-} \quad j=1,2,....,n;i=1,.....,m \tag{9}$$

$L_{\infty i}$ is represented with R_j and can be obtained by eqn. (10).

$$R_i=Max[w_i\frac{f_j^*-f_{ij}}{f_j^*-f_j^-} \quad j=1,.....n \quad i=1,.....,m \tag{10}$$

Also, f_j^* and f_j^- obtain by eqn. (11) and (12) respectively.

Table 6: Weights of the criteria obtained by the CRITIC method.

Factor	Political	Economic	Socio-cultural	Technological	Environmental	Legal
C_j	35.8909	24.7251	27.6282	37.2038	37.3531	28.4871
W_j	0.1876	0.1293	0.1444	0.1945	0.1953	0.1489

Table 7: Final Ranking of Strategies using VIKOR method.

Rank	Strategy	R_i	T_i	Q_i
1	S16	0.187628	0.612775	0.028244
2	S7	0.168218	0.622349	0.069011
3	S20	0.150965	0.665069	0.073335
4	S23	0.190071	0.454409	0.169728
5	S10	0.195271	0.418487	0.189922
6	S5	0.188213	0.364054	0.258775
7	S18	0.172531	0.390756	0.27402
8	S17	0.143658	0.454364	0.288611
9	S19	0.194491	0.295737	0.306435
10	S25	0.148922	0.411675	0.314956
11	S15	0.135868	0.400802	0.358525
12	S6	0.128187	0.41897	0.361244
13	S13	0.157629	0.299039	0.39774
14	S27	0.143513	0.331363	0.40373
15	S2	0.122767	0.355521	0.434313
16	S14	0.14116	0.277072	0.460402
17	S22	0.124722	0.292747	0.487868
18	S3	0.09657	0.362148	0.495209
19	S24	0.092825	0.325178	0.539288
20	S11	0.122339	0.241754	0.541543
21	S21	0.094892	0.302104	0.555521
22	S8	0.110506	0.252486	0.561829
23	S1	0.081243	0.238918	0.649416
24	S26	0.083199	0.226184	0.656287
25	S12	0.091754	0.173368	0.683654
26	S9	0.081713	0.166072	0.71617
27	S4	0.080228	0.129105	0.75446

For positive criteria:

$$\begin{cases} f_j^* = \max_i(f_{ij}) \\ f_j^- = \max_i(f_{ij}) \end{cases} \quad (11)$$

For negative criteria:

$$\begin{cases} f_j^* = \min_i(f_{ij}) \\ f_j^- = \max_i(f_{ij}) \end{cases} \quad (12)$$

And finally, Q_i obtains by eqn. (13). The less is this variable for a criterion, the higher is its rank according to the VIKOR method.

$$Q_i = \frac{[(T_i - T^*)/(T^- - T^*) + [(R_i - R^*)/(R^- - R^*)]}{2} \quad (13)$$

$$T^* = \min_i T_i, T^- = \max_i T_i, R^* = \min_i R_i, R^- = \max_i R_i \quad (14)$$

Table 7 contains the final ranking of the proposed strategies obtained by the VIKOR method [42-47].

CONCLUSION

This research employs a set of MCDM and strategic management tools to overcome the tourism development barriers in Iran. The results show that the main barrier to the tourism industry of Iran is the political tensions of this country some other countries. These tensions have severely damaged Iran's image and influenced the tourism arrival rate. Besides, tourism investors have no tendency to invest in the tourism infrastructure of Iran due to lack of political and economic stability. On the other hand, unprecedented sanctions on the economy of Iran have limited business transactions of this country with the world and decreased business trips to Iran very much. So in this study, the political barriers have been identified as the root cause of other barriers, especially economic ones. The economic hardships have hindered tourism-related construction projects, advertisement programs, festivals, events, loans, and other activities. Also, some legal barriers have made tourists disappointed from traveling to Iran. This research shows that the country has to focus on these issues to make Iran a more attractive tourism destination. The current tourism development strategies of Iran do not address these barriers, so this study has proposed a set of new strategies which are proportionate to Iran's problems and weaknesses. The strategies are ranked by MADM methods. The outcome shows that those strategies which are related to political issues (S16, S7), project finance issues (S20), and tourism infrastructure (S23, S10) are the absolutely necessary strategies for Iran's tourism industry.

REFERENCES

1. Akay GH, Cifter A, Teke O. Turkish tourism, exchange rates and income. Tour Econom. 2015;23:66-77.
2. Akbari P, Azizi R. Strategic planning and basic to development of sports tourism in Iran. IJSMD. 2014;6:32-39.
3. Amiri Aghdaie SF, Momeni R. Investigating effective factors on development of tourism industry in Iran. ASS. 2011;7:98-109.
4. Asadi R. Strategies for development of iran urban tourism. AJBAS. 2011;5:1933-1943.
5. Aung UH. Myanmar tourism master plan, Naypyidaw: Ministry of Hotels and Tourism. 2013.
6. Dadvar-Khani F. Participation of rural community and tourism development in Iran. Community Dev J. 2011;43:259-277.
7. Delshad A, Abohashem Abadi F, Ghasemian Sahebi I, Ajali M. Analyzing the barriers of e-tourism development in iran using the fuzzy interpretive structural modeling approach. JBAR. 2018;10:189-212.
8. Donyadideh A. The obstacles impeding the development of Iran's tourism industry with emphasis on marketing. J Hosp Manage Tourism. 2010;4:59-68.
9. Ebrahimzadeh I, Kazemizad S, Eskandari Sani M. Strategic Planning for tourism development, emphasizing on religious tourism (Case Study: Qom City). Human geography research quarterly. 2011;43:115-141.
10. Ghorbani A, Raufirad V, Rafiaani P, Azadi H. Ecotourism sustainable development strategies using SWOT and QSPM model: A case study of Kaji Namakzar Wetland, South Khorasan Province, Iran. Tour Manag Perspect. 2015;16:290-297.
11. Hajinejad A, Paidar A, Bagheri F, Abdi N. Projection of the strategic planning of Iran rural tourism development. J marco Strate Polic. 2015;2:111-135.

12. Hosseini SM. Development strategy of health tourism in iran. Int J Travel Med Glob Health. 2015;3:153-158.

13. Izadi M. Situation of health tourism in Iran opportunity or threat. J Military Med. 2012;14:69-75.

14. Jing G. Study on the Competitive Advantages of Tourism Industry in China. Shanghai, China, 2011.

15. Jozi SA, Rezaian S. Presentation of strategic management plan in ecotourism development through SWOT (Case study:Qeshm Island). s.l., IEEE. 2010.

16. Kalali NS, Akhavan Anvari MR, Pourezzat AA, Karimy Dastjerdi D. Why does strategic plans implementation fail? A study in the health service sector of Iran. Afr J Bus Manage. 2011;5:9831-9837.

17. Khodadadi M. A new dawn? The Iran nuclear deal and the future of the Iranian tourism industry. Tour Manage Perspect. 2016;18:6-9.

18. Khodadadi M. Challenges and opportunities for tourism development in Iran. Tour Manage Perspect. 2016;19:90-92.

19. Khodadadi M. Challenges and opportunities for tourism development in Iran: Perspectives of Iranian tourism suppliers. Tour Management Perspect. 2016;19:90-92.

20. Khorasani MA, Hatami L, Kiakojoori D. Strategic Planning of Rural Tourism Development Using SOAR Model: A Case Study of Kandovan Village. J Sustain Rural Dev. 2017;1:171-188.

21. Mahmoudi B, Haghsetan A, Maleki R. AprilInvestigation of obstacles and strategies of rural tourism development using SWOT matrix. J Sustain Rural Dev. 2011;4(2):136-141.

22. Mansor AbT. Kuala Lumpur tourism master plan (2015-2025), Kuala Lumpur: City Hall of Kuala Lumpur. 2015.

23. Mehrabi J, Khalili Shoureini S, Khalafi A. A study of the barriers to Iran's tourism industry development. JDEM. 2012;4:1-10.

24. Morakabati Y. Deterrents to tourism development in Iran. Int J Tour Res. 2013;13:103-123.

25. Najafi GN. 2016. Strategic planning of regional tourism with sustainable development approach; Case Study: Khaf Region. JCEU. 2016;6:7-15.

26. Najafi NasabM. 2018. Determinants of medical tourism expansion in iran: structural equation modeling approach. IJES. 2018;7:169-189.

27. Namdar R, Sadighi H. Investigation of major challenges of rural development in iran utilizing delphi technique. J Agr Sci Tech. 2013;15:445-455.

28. Nouri J, Arjmandi R, Moshiri SP. Strategic management for sustainable ecotourism in darabad region in Tehran, Iran. Asian J Chem. 2012;24:2265-2270.

29. Ommani AR. Strategies of rural development in shoushtar township of iran (Applying SWOT method). J Am Sci. 2011;7:696-672.

30. Pew research center. Global attitudes & trends-mostly unfavorable view of Iran, USA: Pew Research Center. 2015.

31. Raymond K, Choi T. An importance-performance analysis of hotel selection factors in the Hong Kong hotel industry: A comparison of business and leisure travelers. Tour Manag. 2000;21:363-377.

32. Reihanian A, BintiMahmood NZ, Kahrom E, Hin TW. Sustainable tourism development strategy by SWOT analysis: Boujagh National Park, Iran. Tour Manag Perspet. 2012;4:223-228.

33. Rokni L. Appraisal the potential of central iran, in the context of health tourism. Iranian J Public Health. 2013;42.

34. Sayyed MRG, Mansoori M, Jaybhaye RG. SWOT analysis of tandooreh national park (NE Iran) for sustainable ecotourism. Proceedings of the International academy of ecology and environmental sciences. 2013;3:296-305.

35. Scowsill D. Travel & tourism economic impact Iran, London: World Travel & Tourism Council. 2017.

36. Shone MC, Simmons DG, Dalziel P. Evolving roles for local government in tourism development: A political economy perspective. J Sustain Tour. 2016;24:1674-1690.

37. Sieu HV. Vietnam tourism master plan to 2020, Bhutan: 6th UNWTO Asia-Pacific executive training on tourism policy and strategy. 2012.

38. Soltanifar M. The Tourism Master plan is being developed in conjunction with the sixth development document. 2015.

39. Sri Lanka tourism strategic plan 2017-2020. Colombo: Ministry of tourism development and christian religious affairs. 2017.

40. Taghizadeh Yazdi MR, Barazandeh H. Identifying and ranking health tourism development barriers in iran using fuzzy vikor method. Asian Social Sci. 2016;2:54-63.

41. Taleghani GR, Ghafary A, Asgharpour SE, Bekiai M. An investigation of the barriers related to tourism industry development in Iran. Procedia Soc Behav Sci. 2014;120:772-778.

42. Taleghani GR, Ghafary A, Asgharpour SE Bekiai M. An Investigation of the barriers related to tourism industry development in Iran. Procedia Soc Behav Sci. 2014;120:772-778.

43. The travel & tourism competitiveness Report,. s.l.: World Economic Forum. 2017.

44. Tourani S, Tabibi S, Tofighi S, Shaarbafchi Zadeh N. Medical Tourism in Iran: Analysis of Opportunities and Challengies with MADM approach. Res J Biol Sci. 3:251-257.

45. UWTO. Tourism development master plans and strategic development plans, New York: World Tourism Organization technical cooperation and services. 2015.

46. Wikitravel, Iran. 2017.

47. Zamani Farahani H, Henderson JC. Islamic tourism and managing tourism development in Islamic societies: the cases of Iran and Saudi Arabia. Int J Tour Res, 2010;1:79-89.