

# Recognition and Prioritization of Internal and External Factors Affecting Development Strategies of Iran Tourism

**Ramin Asadi**

*Azerbaijan National Academy of Sciences Institute of Geography*

E-mail: Ra\_asadi@yahoo.com

Tel: +989123997845

## Abstract

Recognition and prioritization of environmental factors affecting the tourism industry is one of the most important steps in developing long-term plans and regional and national strategies. In this research, first referring to literature review and Delphi model and also experts of tourism, internal and external factors affecting Iran tourism industry are recognized, and after forming a model in Expert Choice Software and entering a pair-wise comparison matrix, weights of the dimensions, criteria and sub-criteria are calculated. By prioritization of internal and external factors of Iran tourism industry, it becomes evident that external factors are of more importance.

All technical managers of tourism companies, which are active throughout the country, are subject of the study. To determine sample volume, Morgan Formula is used. Regarding the real number of active subject (1000 companies), the number of sample is 278. In this study random classified sampling method is applied and one technical manager is selected from each country.

**Keywords:** Tourism Industry, Iran, National Strategy, Internal Factors, External Factors.

## 1. Introduction

Environmental scanning is the study and interpretation of the political, economic, social and technological events and trends which influence a business, an industry or even a total market [1].

This approach of tourism prediction has been widely used in a steady flow of studies on tourism [2, 3, 4, 5 & 6]. The fact that environmental scanning can be a key factor to sustained competitive advantage emphasizes on the integration of business strategy and environment. Environmental scanning is widely viewed as the first step in the process linking strategy and environment. The main debate in strategy and environment is concerned with the primary importance of environmental scanning in strategy formulation and implementation [7].

Environmental scanning is the monitoring, evaluating and disseminating of information from the external and internal environments to keep people within the corporation. It is a tool that a corporation uses to avoid strategic surprise [8].

Scanning of the environment is done in order to avoid surprises, identify threats and opportunities, gain competitive advantage, and improve long-term and short-term planning [9].

Strategic planning and management in tourism takes place within highly dynamic environment. Environmental analysis or awareness of the environment has an immediate objective in tourism development [10].

Weichard (1992) wrote that no business operates in isolation as there are many external, uncontrollable conditions such as political, economic, legal, competitive and socio-cultural environments which affect all businesses [11].

Environmental scanning can take into account economic, political, social, technological, competitive and geographical factors. Economic factors can look into the world recession, the increasing costs of living, standards of living, disposable income, war economy and investment. Political factors may include political stability, the country's image, politically motivated incidents such as air piracy, kidnapping and killing of tourists, civil war and unrest, ethnic conflicts, disintegration of the country, political organizations, ethnically based government administrative structure, lay-offs, transfers and re-entrenchments, exodus of skilled manpower. Social factors may focus on the aging population in the industrialized tourist-generating countries, high disposable income, changing lifestyle, family value, work and business attitudes, extended leisure time, mobility and education. Technological factors are technological changes, advancement in transport systems, and advancement in transport systems, the quality of services, variety of products, and ease of communication. Competitive factors may include the size of competition, competitor's strategies, number of competitors, location, market segments, promotional strategy, case of entry into/or exits from market and the type of marketing strategy. Geographical factors may include proximity to major markets, location of tourist attractions, and accessibility by sea, international air carries and infrastructures.

Liu in surveying the environment of tourism development provided a checklist of the main macro-environmental variables affecting tourism development including economic (economic system, GNP per capital & trends, wage & tax level), political & legislative (political ideology, national, regional and local governments, international relations), socio-cultural (social classes and structures, leisure time, lifestyle and fashion), demographic, physical and technological. He adds that major goal of environmental scanning is to encounter environmental threats, while achieving an optimal fit between tourism capacities and opportunities in its changing environment.

## **2. Materials and Methods**

The present study is of descriptive research type. It is considered as applied type in terms of objective. The present study is of survey research type in terms of collection of information and data has been made through studying books and documents. For obtaining necessary information at this study, required data have been collected through library-based studies, questionnaire and obtaining data from resources and documents (for provision of study theoretical fundamentals).

### **2.1. Subject, Sample Volume and Sampling Method**

All technical managers of tourism companies are subject of the preset study. In this study sample volume is calculated by application of Morgan table and equals 1000 persons according to reports presented in Euromonitor 2009 [12] report about real number of active traveling agencies. Sample volume of this study amounts to 278 persons. Random classified sampling method was used and one technical manager is selected from each company.

### **2.2. Validity & Reliability, Measuring Tools**

At the present study, library based study was applied for preparation of theoretical basis and recording of previous studies and questionnaire is used for determining the affective factors and degree of reaction of tourism industry to these factors.

Provided initial questionnaire was given to university professors and experts in charge, with the aim of presenting their views on validity of questionnaire and whether questions posed at the questionnaire are appropriate or not.

Then, viewpoints of lecturers and officials in charge were considered at questionnaire and consequently, necessary changes were made at questions.

Cronbach's Alpha Test [13] was used for testing reliability of questionnaire of study. For this reason, 76 study questionnaires were distributed among subject (individuals set for this study). Then each answer was studied individually and response rate of each question was calculated. First, the rate of acquired responses was over 90% of the sample. Second, there was no question to which most of the 16 person group didn't answer or gave an unexpected response. In the same direction, Cronbach's Alpha Reliability Test was made through the application of SPSS software package. Generally, test reliability rate was obtained 792% at large.

## 2.3. Method of Analysis

### 2.3.1. Delphi

Delphi method starts with identification of the problem and selected experts (Delphi panel) based on their experiment related to the defined problem. A questionnaire is designed and administered to the Delphi panel. Then data is collected and analyzed to reach consensus in responses. If the respondents have reached consensus a report is developed based on responses, if not a new questionnaire is developed based on the results of the previous round and again distributed to the panel. This process is repeated until consensus is reached and based on which a final report is developed [14].

### 2.3.2. AHP

The AHP (Analytic Hierarchy Process), proposed by Saaty [15] is one of decision making models which consists of three parts, namely, making hierarchy structure of the problem, evaluating local weights by pairwise comparison and calculating the global weights by additional sum. An AHP has been widely used because it can deal with unquantifiable objects and its implementation is very easy. In this paper, we concentrate pairwise comparison, the second stage of the AHP. It has been considered that an AHP is the method evaluating alternatives in a ratio scale [16] hence, the pairwise comparison value  $a_{ij}$  means the ratio of the weights  $w_i$  and  $w_j$  of alternatives  $i$  and  $j$ . When the exact weights of all alternatives are already known, each comparison value  $a_{ij}$  equals to  $w_i/w_j$  exactly. In this case, a pairwise comparison matrix  $A$  can be written as

$$A = \begin{pmatrix} 1 & a_{12} & \cdots & a_{1n} \\ a_{21} & 1 & & a_{2n} \\ \vdots & & \ddots & \vdots \\ a_{n1} & a_{n2} & \cdots & 1 \end{pmatrix} = \begin{pmatrix} 1 & w_1/w_2 & \cdots & w_1/w_n \\ w_2/w_1 & 1 & & w_2/w_n \\ \vdots & & \ddots & \vdots \\ w_n/w_1 & w_n/w_2 & \cdots & 1 \end{pmatrix}$$

We call this situation *completely consistent*, which corresponds to the case that the rank of  $A$  is one. But in practical settings, such a case seldom occurs. Moreover, if the most popular linear scale, such as 1/9, 1/7, 1/5, 1/3, 1, 3, 5, 7, 9, is used for a comparison value, it is hardly expected that the resulting comparison matrix has rank one.

Therefore, Saaty (1980) has introduced so-called *consistency index value* (CI value) to measure the consistency of pairwise comparison. The CI value is defined as

$$CI = \frac{\lambda_{\max} - n}{n - 1}$$

where  $n$  is the size of a comparison matrix  $A$  and  $\lambda_{\max}$  is the principal eigenvalue of  $A$ . It is well known that  $\lambda_{\max} \geq n$  holds for a pairwise comparison matrix and that  $\lambda_{\max} = n$  if and only if the corresponding comparison matrix is completely consistent. Hence, in general the more CI value is, the less consistent a pairwise comparison matrix is, and Saaty indicates that a comparison matrix can be thought to be consistent if its CI value is less than 0.1 (or in some case, 0.15).

When an AHP is applied to practical problems, pairwise comparisons are often reviewed and performed iteratively. Also, because of some mistake and inaccurate data, there may be unusual and false observations [17] which deteriorate consistency of pairwise comparison.

In such cases, it is practically useful to estimate consistency intervals, in which a pairwise comparison value can move without exceeding a given CI threshold, or to indicate a pairwise comparison which causes inconsistency the most.

#### 2.4. Reorganization of External and Internal Factors Affecting Iran Tourism Industry

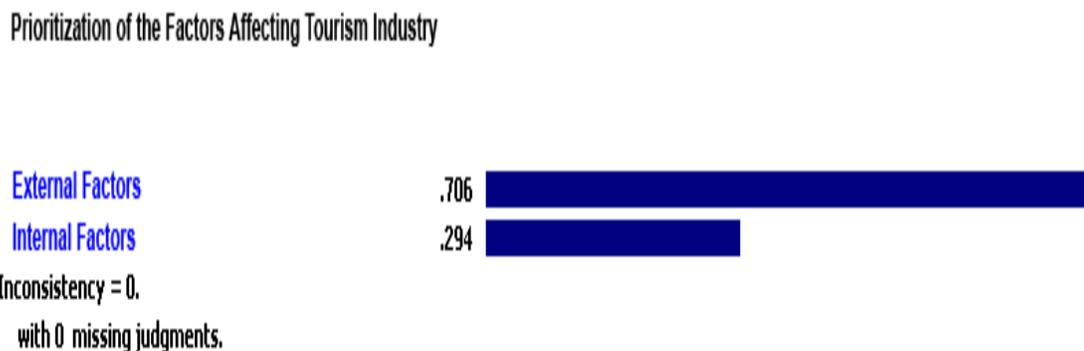
In the first phase, on the basis of Delphi Method, two internal and external dimensions are recognized for prioritization of internal and external factors affecting the tourism industry in developing strategies and national plans. Matrix of pairwise comparison of decision makers is shown in Table 1.

**Table 1:** Matrix of Pairwise Comparison of Basic Dimensions of Research

dimensions	external	internal
external	1	2.4
internal		1

After forming the model in Expert Choice Software and entering the matrix of pairwise comparison, weight of dimensions, criteria and sub-criteria was calculated as shown below. Figure 1 shows prioritization of internal and external factors affecting the tourism industry in developing strategies and national plans with Expert Choice Software. As shown in Table 2, external factors with relative weight equal to 0.706 are of the most importance and so they have the most effect among all internal and external factors affecting the tourism industry in developing strategies and national plans and internal dimension is in the next priority with relative weight equal to 0.294. Inconsistency rate of the pairwise comparison is 0.00 which is acceptable; because it is lower than 0.10.

**Figure 1:** Prioritization of Internal and External Factors Affecting the Tourism Industry in Developing Strategies and National Plans Using Expert Choice Software



**Table 2:** Prioritization of Internal and External Factors Affecting the Tourism Industry in Developing Strategies and National Plans

row	dimension	weight	priority
1	external	0.706	1
2	internal	0.294	2

**2.5. Calculation of Relative Weight of Criteria Regarding Each of the Main Dimensions**

In this research, referring to the literature review and expert views, 6 main internal and 6 main external criteria are recognized for prioritization of internal and external factors affecting the tourism industry in developing strategies and national plans and Pairwise Comparison matrixes of decision makers are shown in Tables 3 & Figure 2.

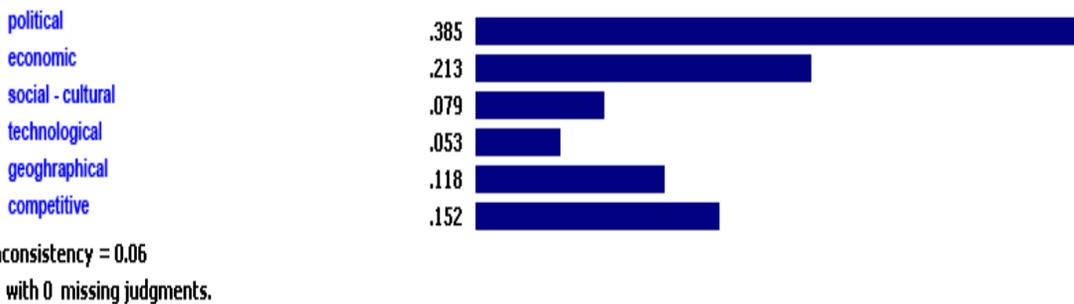
a. Relative Weight of External Dimension Criteria

**Table 3:** Matrix of Pairwise Comparison of External Dimension's Main Criteria

political	economic	social	technological	geographical	competitive
	2.7	3.2	4.4	2.3	4.9
		3.4	4.2	2.7	1.3
			2.6	2.0	3.0
				3.0	2.0
					2.0
Incon: 0.06					

**Figure 2:** Prioritization of External Dimension Criteria Using Expert Choice software

Prioritization of the Factors Affecting Tourism Industry



According to the results of the software, political criterion is of the most importance, weighted 0.385 and so it is in the top priority. Economic and competitive criteria are in the second and third priority weighted 0.213 and 0.152. Inconsistency rate of pairwise comparison is equal to 0.06 which is acceptable; because it is lower than 0.10.

**Table 4:** Prioritization of External Dimension Criteria

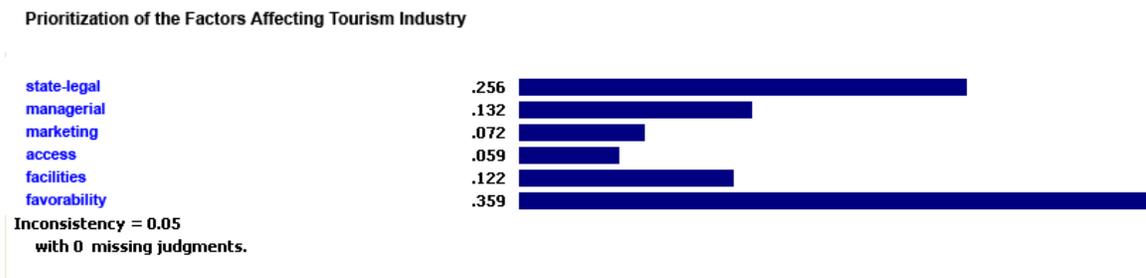
row	criterion	weight	priority
1	political	0.385	1
2	economic	0.213	2
3	Social and cultural	0.079	5
4	new global technologies	0.053	6
5	geographic	0.118	4
6	competitive	0.152	3

b. Relative Weight of Internal Dimension Criteria

**Table 5:** Pairwise Comparison Matrix of Internal Dimension Main Criteria

state-legal	managerial	marketing	access to technology	facilities	favorability of attractions
	4.8	3.3	2.3	1.5	2.0
		2.2	3.6	1.3	3.0
			1.6	2.0	4.0
				2.0	6.0
					3.0
Incon: 0.05					

**Figure 3:** Prioritization of Internal Dimension Main Criteria Using Expert Choice Software



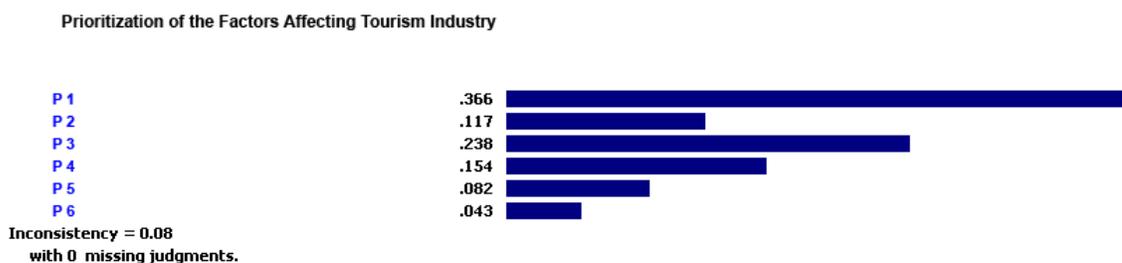
As shown in Figure 3 and Table 6, favorability of attractions criteria is of the most importance, weighted 0.359 and so it is in the top priority. State and legal criteria are in the second priority (weighted 0.256) and management and human resources are in the third priority (weighted 0.132). Table 6 shows prioritization of internal dimension criteria. Inconsistency rate of pairwise comparison is 0.05 and since it is lower than 0.10 these comparisons are acceptable.

**Table 6:** Prioritization of Internal Dimension Criteria

row	criterion	weight	priority
1	Legal and state	0.256	2
2	Management and human resource	0.132	3
3	Marketing	0.072	5
4	Accessibility of new technologies	0.059	6
5	Infrastructures and facilities	0.122	4
6	Desirability of products (attractions)	0.359	1

a. Relative Weight of Sub-criteria Related to Political Factor

**Figure 4:** Prioritization of Political Criteria Indexes Using Expert Choice Software

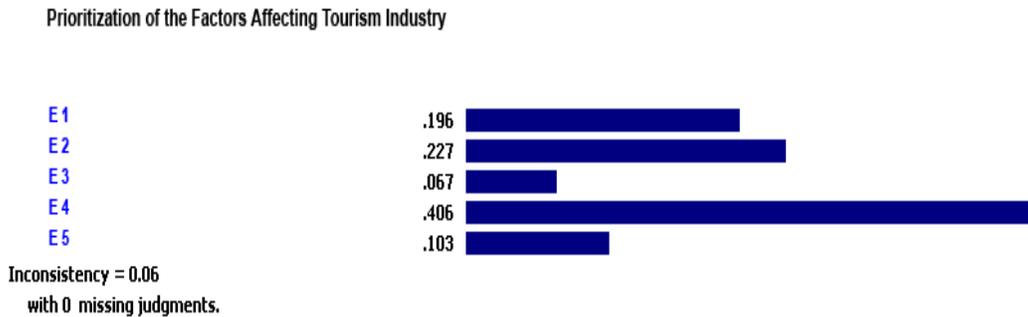


**Table 7:** Prioritization of Political Factor Indexes Using Expert Choice Software

row	Sub-criterion	weight	priority
1	Internal political disputes	0.366	1
2	Foreign policy and political relations with other countries	0.117	4
3	Image of the country in international Medias	0.238	2
4	Political stability in Middle East	0.154	3
5	Security of border areas	0.082	5
6	International sanctions against Iran	0.043	6

b. Relative Weight of Sub-criteria Related to Economic Factor

**Figure 5:** Prioritization of Sub-criteria Related to Economic Factor Using Expert Choice Software

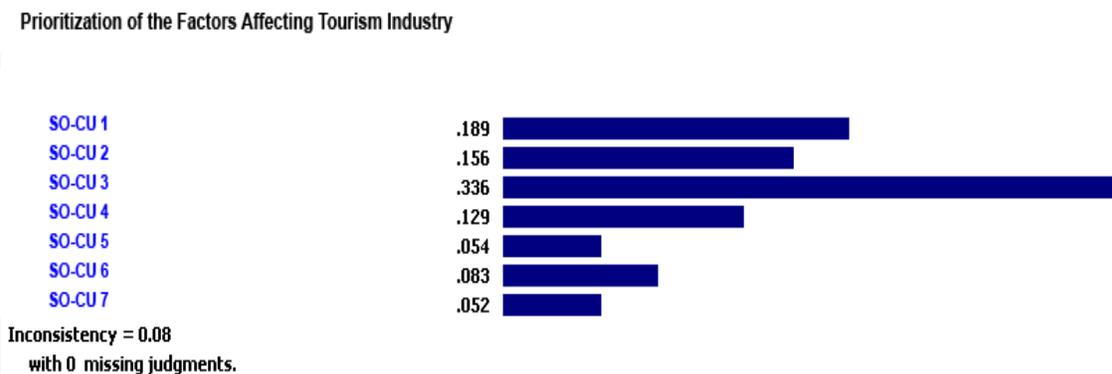


**Table 8:** Pairwise Comparison Matrix of Sub-criteria Related to Economic Factor

row	Sub-criterion	weight	priority
1	Global economic situation	0.196	3
2	Level of tourism development in the world and level of demand for tourism attractions	0.227	2
3	Domestic economic conditions (inflation and economic development or recession)	0.067	5
4	Increase or decrease of free time	0.406	1
5	The amount of disposable income of domestic and foreign tourists	0.103	4

c. Relative Weight of Sub-criteria Related to Socio-Cultural Factors

**Figure 6:** Prioritization of Sub-criteria Related to socio-cultural Factor Using Expert Choice Software



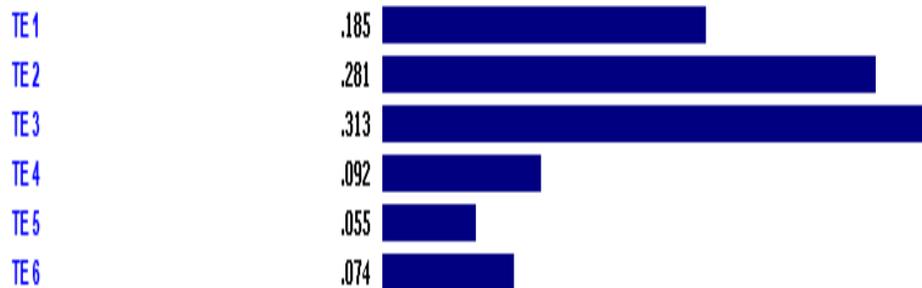
**Table 9:** Matrix of Pairwise Comparison of Sub-criteria Related to Socio-Cultural Factors

row	Sub-criterion	weight	priority
1	Social security.	.189	2
2	Negative attitude of local authorities to tourists.	.156	3
3	Customer orientation and considering common and rational expectations of tourists.	.336	1
4	Level of public awareness from social and economic benefits of tourism industry.	.129	4
5	Social and religious limiting factors and communicative barriers imposed by language.	.054	6
6	Being afraid of penetration of cultural norms of other countries in national and local cultures.	.083	5
7	Epidemic diseases and public health conditions.	.052	7

d. Relative Weight of Sub-criteria Related to New Global Technologies

**Figure 7:** Prioritization of Sub-criteria Related to New Global Technologies Factor Using Expert Choice Software

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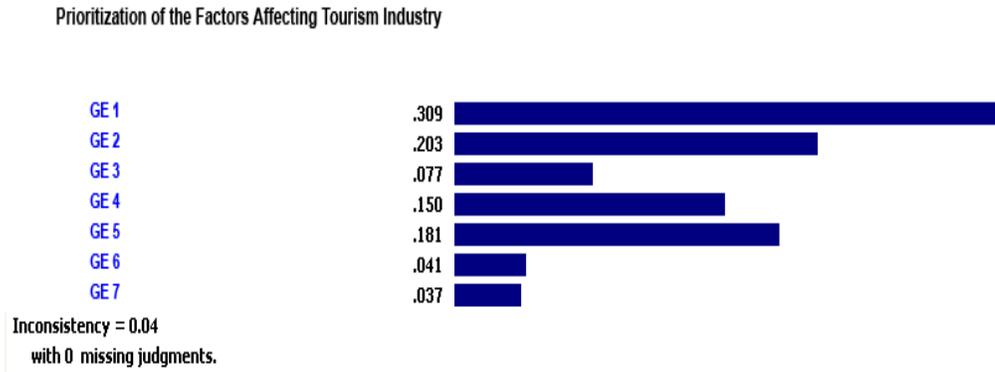
Inconsistency = 0.08  
with 0 missing judgments.

**Table 10:** Matrix of Pairwise Comparison of Sub-criteria Related to New Global Technologies Factor

row	Sub-criterion	Weight	Priority
1	Fast information systems in internet, providing electric banking systems, issuing electronic visa, easy access to information of hotels and reservation.	.185	3
2	International satellite channels and local TV channels to introduce tourism products.	.281	2
3	Advanced communicative system and fast post service.	.313	1
4	Global positioning system (GPS)	.092	4
5	Software and intelligent guidance systems.	.055	6
6	Other technologies and techniques of performing the works.	.074	5

e. Relative Weight of Sub-criteria Related to Geographical Criterion

**Figure 8:** Prioritization of Sub-criteria Related to Geographical Factor Using Expert Choice Software

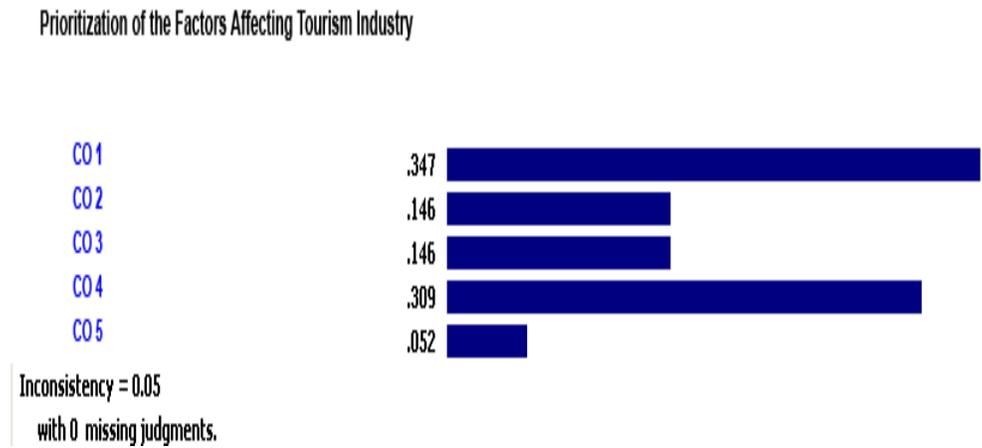


**Table 11:** Matrix of Pairwise Comparison of Sub-criteria Related to Geographical Criterion

row	Sub-criterion	Weight	Priority
1	distance from tourism generality countries	.309	1
2	geographic position of the country	.203	2
3	accessibility by sea, train and vehicles	.077	5
4	environmental and climate variety	.150	4
5	natural disasters like earthquake and flood	.181	3
6	expansion of the country	.041	6
7	climate change	.037	7

f. Relative Weight of Sub-criteria Related to Competitive Criteria

**Figure 9:** Prioritization of Sub-criteria Related to Competitive Factor Using Expert Choice Software



**Table 12:** Matrix of Pairwise Comparison of Sub-criteria Related to Competitive Criterion

row	Sub-criterion	Weight	Priority
1	number of rivals	.347	1
2	competitive advantage	.146	3
3	rival's capabilities	.146	3
4	potential rivals	.309	2
5	domestic and foreign actual tourists	.052	4

## 2.6. Calculating Relative Weight of Indexes Regarding Each of the Internal Dimensions Criteria

### a. Relative Weight of Sub-criteria Related to Legal and State Criterion

**Figure 10:** Prioritization of Sub-criteria Related to Legal and State Factor Using Expert Choice Software

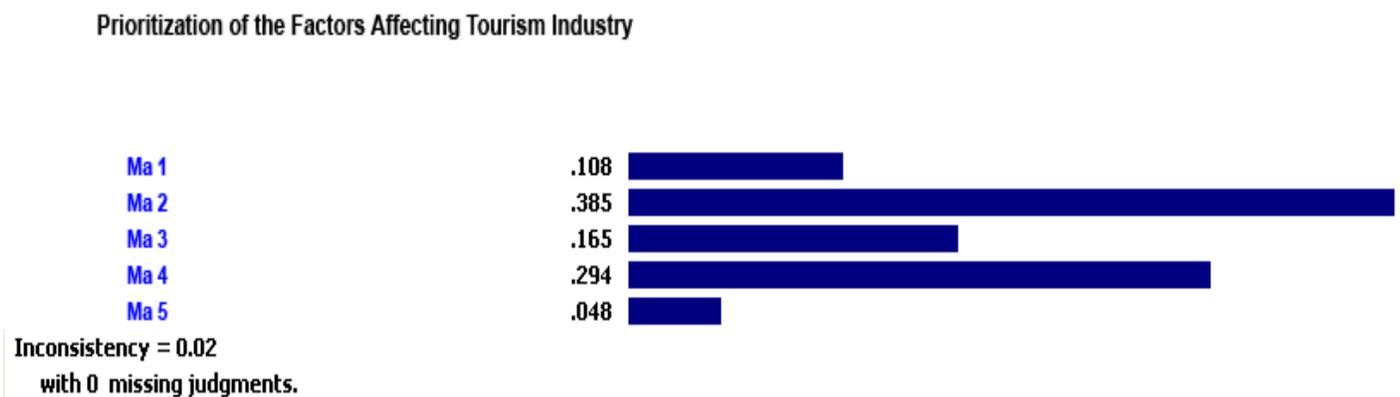


**Table 13:** Matrix of Pairwise Comparison of Sub-criteria Related to Legal and State Criterion

row	Sub-criterion	Weight	Priority
1	Laws which support limiting sector or laws and regulations	.278	1
2	Devoting funds.	.070	5
3	Macro policy making (strategies and national comprehensive plans)	.187	3
4	Number of decision-making authorities and level of coordination among them.	.074	6
5	Defining qualitative standards for service providers.	.193	2
6	Codifying laws which support domestic and foreign tourists.	.094	4
7	Level of bureaucracy and official corruption.	.068	7
8	Extra-legal structures and levels of cooperation of the government as a rival of private sector.	.035	8

### b. Relative Weight of Sub-criteria Related to Management and Human Resources Criterion

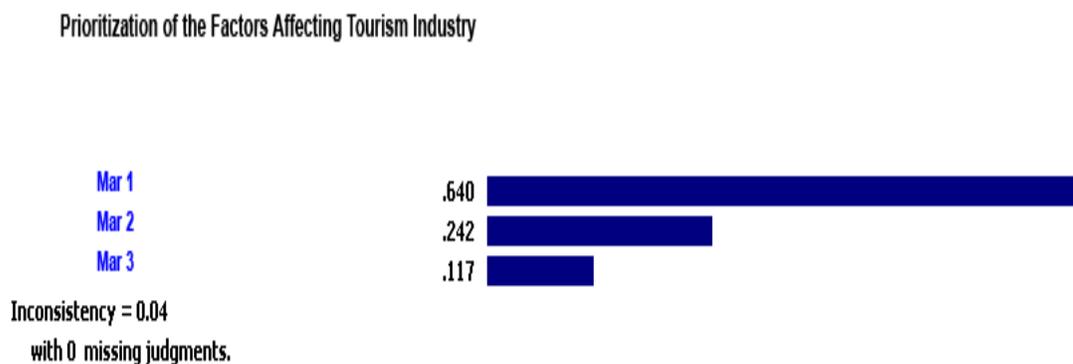
**Figure 11:** Prioritization of Sub-criteria Related to Management and Human Resource Factor Using Expert Choice Software



**Table 14:** Matrix of Pairwise Comparison of Sub-criteria Related to Management and Human Resources criterion

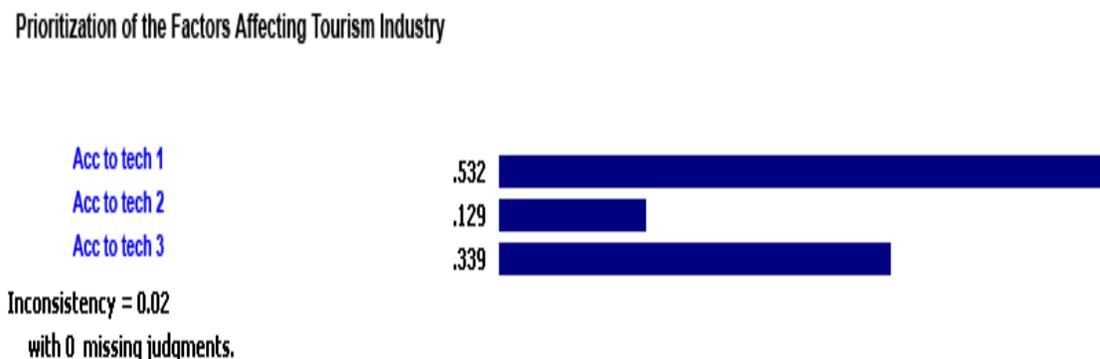
row	Sub-criterion	Weight	Priority
1	Number of professional managers, personnel and human resource advice in the sector.	.108	4
2	Quality and quantity of functional teaching of employees in the sector.	.385	1
3	Professional and nongovernmental associations like assemblies and etc. also ability and the power of local authorities like councils.	.165	3
4	Level of cooperation among related organizations.	.294	2
5	Level of control of service sectors like hotels, restaurants and welfare and recreation centers.	.048	5

b Relative Weight of Sub-criteria Related to Marketing Criterion

**Figure 12:** Prioritization of Sub-criteria Related to Marketing Factor Using Expert Choice Software**Table 15:** Matrix of Pairwise Comparison of Sub-criteria Related to Marketing Criterion

row	Sub-criterion	Weight	Priority
1	Level of success in providing a suitable image from Iran as a tourism destination.	.640	1
2	Level of attention paid to affective advertisement and scientific marketing.	.242	2
3	Promoting tourism culture.	.117	3

c Relative Weight of Sub-criteria Related to Access to New Technologies

**Figure 13:** Prioritization of Sub-criteria Related to Access to New Technologies Factor Using Expert Choice Software

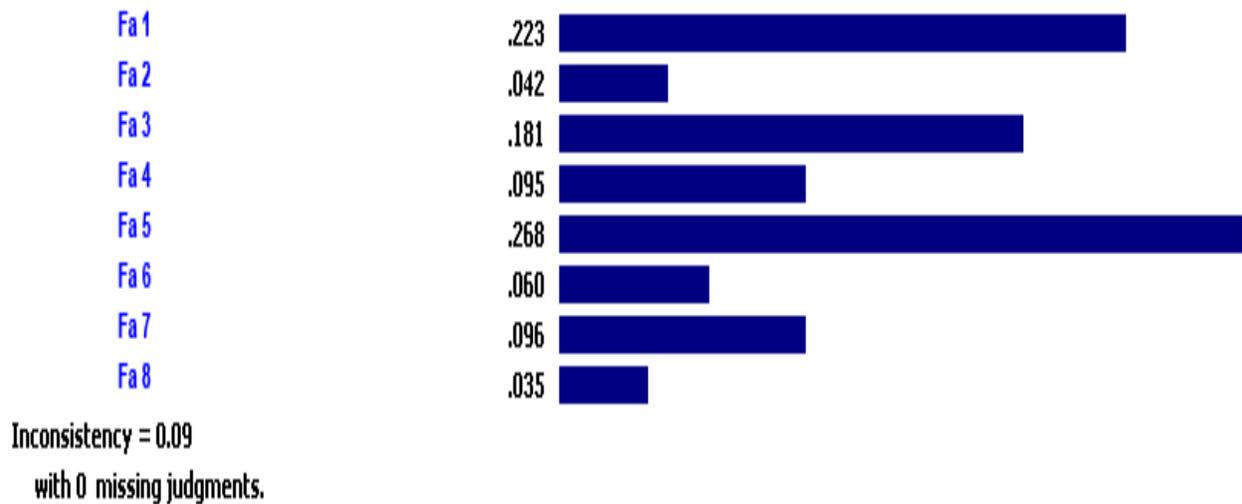
**Table 16:** Matrix of Pairwise Comparison of Sub-criteria Related to Access to New Technologies Criterion

row	Sub-criterion	Weigh	Priority
1	Level of access and usage of new technologies to introduce tourism attractions.	.532	1
2	Quality and number of satellite and local TV channels.	.129	3
3	Quality and accessibility of software and intelligent systems to guide tourists.	.339	2

d Relative Weight of Sub-criteria Related to Infrastructures and Facilities

**Figure 14:** Prioritization of Sub-criteria Related to Infrastructures and Facilities Factor Using Expert Choice Software

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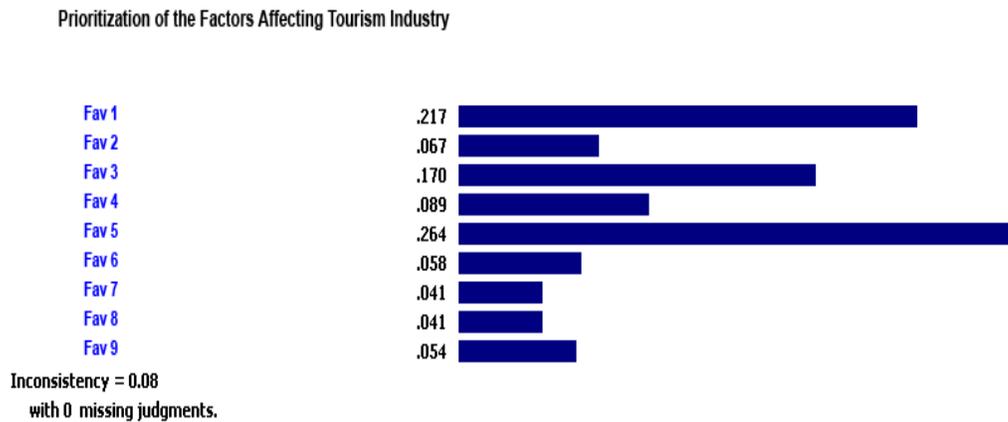


**Table 17:** Matrix of Pairwise Comparison of Sub-criteria Related to Infrastructures and Facilities Criterion

row	Sub-criterion	Weigh	Priority
1	Rail, air, road and sea transportation system	.223	2
2	Accommodation centers	.042	7
3	Public health network and system	.181	3
4	Access to information systems, internet, satellite, local TV channels, newspapers, magazines and etc.	.095	5
5	Telecommunications and postal service	.268	1
6	Banks and system of money transfer and new methods of paying the money in shopping.	.060	6
7	Access to fresh water, electricity and other sources of energy like gas and etc.	.096	4
8	Other facilities and equipment.	.035	8

e. Relative Weight of Sub-criteria Related to Favorability of Products

**Figure 15:** Prioritization of Sub-criteria Related to Favorability of Products Factor Using Expert Choice Software



**Table 18:** Matrix of Pairwise Comparison of Sub-criteria Related to Favorability of Products Criterion

row	Sub-criterion	Weigh	Priority
1	Frequency or scarcity.	.217	2
2	Exceptionality of attractions.	.067	5
3	Importance and oldness of attractions.	.170	3
4	Distance and ease of access.	.089	4
5	Complementary attractions.	.264	1
6	Seasonality or lack of seasonality.	.058	6
7	Cheap and accessible primary resources.	.041	8
8	Infrastructures and amenities provided in attractions.	.041	8
9	Quality of services and informing.	.054	7

### 3. Conclusion

Results of the survey show that among the external factors affecting Iran tourism industry, political factor is the most important factor and it is considered as the biggest potential opportunity and threat for this industry. Existence of internal political dispute, image of the country in international media and political sustainability in Middle East have a high effect on this industry.

Economic factor is the second most important factor for Iran tourism, because increased free time and growth of tourism through the world and world economic situation can have a high effect on this industry as external factors.

Competitive factors besides geographical factors are in the next priorities regarding their effect, because Iran has a large number of rivals in different fields of cultural tourism, ecotourism, business tourism, medical tourism and so on. Also newly independent republics in central Asia threat tourism industry of Iran as potential rivals. Distance from tourism generating countries like Arab and European countries and geographical position of Iran which makes travel possible in all seasons, are important opportunities for Iran tourism and natural disasters like flood and earthquake have always threatened tourism industry of the country. In internal dimension of Iran tourism environment, favorability of the products is of the most importance. It seems that complementary attractions have an important role in attracting tourists. In addition scarcity of the attraction and their oldness has a high effect on favorability of Iran tourism products.

Legal and state factor is the next priority in internal environment of Iran tourism, because the existence of some laws and limiting legislatures is a big challenge. Tourists have an unfavorable image of Iran in their minds and so don't travel to this country. Here paying attention to scientific marketing to alleviate negative affect of international media, advertisement and promotion of tourism culture will

be very effective. Prioritization of sub-criteria related to access to new technologies show that this factor has not so much importance in affecting Iran tourism industry.

At last by performing a general comparison between internal and external factors affecting Iran tourism industry it was evident that external factor has more importance. It is necessary to pay careful attention to utilize external opportunities and alleviate negative effects of possible threats.

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