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An empirical investigation on effective factors for the success of tourism industry in Iran

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A B S T R A C T

Article history: Received April 20, 2012 Accepted 21 July 2012 Available online July 22 2012 Keywords: Tourism SWOT services Exploratory factor analysis Confirmatory factor analysis Structural equation model Tourism industry is one of the most important low carbon industries and it can provide good opportunities for developing countries to take advantage of their natural attractions such as historical monuments, culture, etc. to create value added. However, there are always some barriers in front of developing this industry and a good strategy could help it develop faster. There are different methods for strategic planning and SWOT matrix is one of the most popular one. In this paper, we present an empirical survey to find the most important and strategic items for developing tourism industry in Iran. The proposed study designed a questionnaire and distributed it among 384 tourists who were visiting Iran in a three months period of year 2011. The information gathered were analyzed using factor analysis and structural equation modeling. There are seven important factors involved in developing tourism industry. The first factor, price and having sufficient infrastructures, is the most important factor according to our survey representing 14.623 percents of the changes. The second factor is associated with political and international affairs, which represents 13.926 percents of the changes. The third factor is associated with culture and civilization attractiveness representing 9.342 percent of changes on tourism. The fourth factor is natural attractiveness representing 6.691 percent of the changes. The fifth factor is related to economical factor representing 5.632, the sixth factor, human resources, represents 5.353 percent of the changes and finally the last factor is related to diversity of creatures, which represents 4.749. These factors include 60.3 percent of the success of tourism.

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1. Introduction

Strategic planning using strength, weakness, opportunities and threats (SWOT) has been one of the most popular methods among many practitioners (Burkart & Medlik, 1989; Show & Williams, 1994; Valentin, 2001; Dyson, 2004; Ahmed et al., 2006; Wehring, 2006). Despite that fact that SWOT maintains a simple infrastructure, it helps discovering many issues associated with business units. Yu ^{*} Corresponding author. Tel: +989121232535 E-mail addresses: esfarjani.b@gmail.com (B.Esfarjani)

© 2012 Growing Science Ltd. All rights reserved. doi: 10.5267/j.msl.2012.07.016 and Huimin (2005), for instance, investigated Hotel reform in China by performing a SWOT analysis. Tsang and Qu (2000) investigated service quality in China's hotel industry in a perspective from tourists and hotel managers. Bernrioder (2002) performed an empirical work on factors in SWOT analysis applied to micro, small-to-medium, and large software enterprises for an Austrian case study. Sariisik et al. (2011) investigated how to manage yacht tourism in Turkey using SWOT analysis and related strategies. Incaz and Guler (2000) considered important conditions and problems of Turkish Yacht tourism. Ibrahim (2009) investigated tourism development and the environment on the Egyptian red sea coast.

A good quality tourism industry is a combination of partnerships and processes from different organizations where customer security and safety are considered as the primary concern (Tribe & Snaith, 1998; Burns, 1999). Quality means planning, control and achievement to acceptable standards to serve customers (Narayan et al., 2008). Saleh and Ryan (1991) analyzed service quality in the hospitality industry using the SERVQUAL (Parasuraman et al., 1985) model. Weiermair Fuchs (1999), for example, measured tourist judgment on service quality in an empirical study.

Tourism industry in Iran has recently been considered as one of the most important strategic planning for the government of Iran and people are encouraged to invest in this sector by providing low interest loans in an attempt to create attractive industry. According to Tosun (2001) tourism can be considered as a sustainable development of today's economy. Customer satisfaction plays an important role on attracting tourists (Chadwick, 1994; Chadee & Mattson, 1996; Chaudhary, 2000; Kozak & Rimmington, 2000; Lockwood & Medlik, 2001; Kozak, 2001; Burns et al., 2003). Poon and Low (2005) presented a comprehensive survey to find out whether tourists were satisfied by visiting Malaysia or not. Sureshchandar et al. (2002) believed there is a strong relationship between quality and customer satisfaction in tourism industry.

There are many attractive potentials in Iran, which could absorb special types of tourism in the country especially those who are interested in visiting religious, historical or cultural places. However, there are many barriers involved in this industry, which make it difficult to develop this industry such as lack of connection to international credit card providers, laws and regulations, embargos, etc. Bielski (2006) discussed the SWOT for retail information technology (IT) on tourism industry and the study revealed the interconnections of technology. There are many studies associated with detecting barriers in tourism industry but most of them have focused on transportation issues. For instance, Millan and Esteban (2004) investigated development of a multiple-item scale for measuring customer satisfaction in travel agencies services. Domeisen and de Sousa (2006) investigated the role of non-governmental organizations on developing tourism industry. Heung and Cheng (2000) assessed tourists' satisfaction with shopping in the Hong Kong special administrative region of China. Yuksel and Yuksel (2001) performed a comparative performance analysis on tourists' perceptions of Turkey relative to other tourist destinations.

The proposed study of this paper attempts to find important factors influencing tourism industry in Iran. We first present details of our investigation in section 2, the results are given in section 4 and the paper ends with concluding remarks.

2. The proposed study

The proposed model of this paper uses SWOT analysis to investigate tourism industry in Iran and to find out how we can develop this industry. We consider different factors including the impacts of price and infrastructures, foreign policy, culture and civilization attractions, natural attractions, economical infrastructures, human resources and diversity of creatures on tourism industry. Table 1 shows details of our seven hypotheses.

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Table	1
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Different hypotheses of the proposed study

Η		Title
	H ₀	Price and infrastructures do not have any impact on development of tourism industry.
1	H_1	Price and infrastructures statistically have meaningful impact on development of tourism
		industry.
	H_0	Politics and foreign policies do not have any impact on development of tourism industry.
2	H_1	Politics and foreign policies statistically have meaningful impact on development of
		tourism industry.
	H_0	Culture and civilization attractions do not have any impact on development of tourism
3		industry.
	H_1	Culture and civilization attractions statistically have meaningful impact on development of
		tourism industry.
4	H_0	Natural attractions do not have any impact on development of tourism industry.
4	H_1	Natural attractions statistically have meaningful impact on development of tourism
		industry.
5	H_0	Economical infrastructures do not have any impact on development of tourism industry.
5	H_1	Economical infrastructures statistically have meaningful impact on development of tourism
		industry.
(H_0	Human resources do not have any impact on development of tourism industry.
0	H_1	Human resources statistically have meaningful impact on development of tourism industry.
7	H_0	Diversity of creatures does not have any impact on development of tourism industry.
/	H_1	Diversity of creatures statistically has meaningful impact on development of tourism
		industry.

The proposed study of this paper designed a standard questionnaire and distributed among tourists in city of Tehran, Iran. We selected tourists who were residing in different international hotels and International and local airports in city of Tehran, Iran. The study was performed in a three months period started from June, 2011 to August, 2011. The sample data is calculated as follows,

$$n = \frac{z^2 p(1-p)}{m^2},$$
 (1)

where *n* is the sample size, *z* is confidence level, *p* is the estimated prevalence of malnutrition in the project area and *m* is the margin of error. In our study z = 1.96, p = 0.5 and m = 0.05, which yields 385. The questionnaire consists of 31 questions in five-scale in Likert scale. We use LISREL software to implement structural equation modeling analyze the data based on nonparametric techniques.

3. The results

In order to reduce the number of unnecessary variables and determine the impact of each variable we use factor analysis. Our computations for Kaiser-Meyer-Olkin Measure of Sampling Adequacy yields KMO=0.89, which is well above 0.7 and indicates that the sample size is sufficient and the input data are consistent. Bartlet test is also meaningful (5222.67) when the level of significance is one percent and this means we can use factor analysis. Based on Kaiser Criteria, there are seven factors in the model. Table 2 summarizes the results of our survey.

Table 2
Factor analysis

Factor	Title	Weight
	Cheap hotel price	0.639
	Suitable products and services	0.507
	Certificate from UNESCO	0.429
	Winter sport attractiveness	0.643
1	Existence of rich civilization	0.719
	Participation in International exhibition	0.734
	Current state of currency exchange rate	0.754
	Sufficient support for private sector	0.644
	Suitable information technology	0.552
	Rapid changes in tourism industry	0.616
	Diversity of food	0.655
	Political security in Iran	0.483
	Political security in Middle east	0.605
2	Acceptable bureaucracy within organization	0.533
	Good governmental support	0.779
	The impact of global recession on tourism	0.778
	The impact of tourism from foreign investment	0.574
	Iranian hospitality	0.845
3	Good marketing	0.841
	Handicraft attractiveness	0.793
	Historical attractiveness	0.807
4	Transportation infrastructure	0.584
	Information centers in airports	0.624
5	Investment opportunities in Iran	0.644
5	Weak effects of global turmoil	0.673
6	Existence of trained and young tourism	0.865
0	Support tourism to prevent brain drain	0.805
	Weather conditions	0.499
7	Diversity of museums	0.692
	Wealth distribution	0.666

According to Table 2, the first factor, price and having sufficient infrastructures, is the most important factor according to our survey representing 14.623 percents of the changes. The second factor is associated with political and international affairs, which represents 13.926 percents of the changes. The third factor is associated with culture and civilization attractiveness representing 9.342 percent of changes on tourism. The fourth factor is natural attractiveness representing 6.691 percent of the changes with significant eigenvalue. The fifth factor is related to economical factor representing 5.632, the sixth factor, human resources, represents 5.353 percent of the changes and finally the last factor is related to diversity of creatures, which represents 4.749. These factors include 60.3 percent of the success of tourism.

The implementation of SEM in its initial form is shown in Fig. 1 and it is observed that all t-student values are statistically meaningful when the level of significance is five percent. The value of RMSEA is about 0.08, which means we may need to apply some changes to make the model more suitable. Table 3 shows details of the changes and the summary of the results are shown in Fig. 2.



Fig. 1. The structure of SEM in initial mode

Fig. 2. The corrected model

Table 3						
The summary of changes progress						
Revised model	χ^2	$\Delta \chi^2$	df	RMSEA	Sig.	
Model 1	1805.55	-	384	0.098	-	
Model 2	1703.67	>2.75	381	0.095	1%	
Model 3	1623.97	>2.75	378	0.092	1%	
Model 4	1502.75	>2.75	375	0.087	1%	
Model 5	1441.84	>2.75	373	0.085	1%	
Model 6	1368.62	>2.75	370	0.083	1%	
Model 7	1366.08	<2.75	368	0.082	meaningless	

Table 4 shows the weights of all factors along with t-student values.

Factor	Title		Weight	t-student
-	Cheap hotel price	Q10	0.54	17.55
	Suitable products and services	Q11	0.98	16.63
	Certificate from UNESCO	Q12	0.62	13.52
Price and having	Winter sport attractiveness	Q13	0.95	17.78
sufficient	Existence of rich civilization	Q14	0.98	19.38
infrastructures	Participation in International exhibition	Q18	0.78	14.51
	Current state of currency exchange rate	Q27	0.99	18.87
	Sufficient support for private sector	Q15	0.54	18.42
	Suitable information technology	Q16	0.63	13.12
	Rapid changes in tourism industry	Q19	0.57	12.28
	Diversity of food	Q20	0.95	15.89
	Political security in Iran	Q21	0.89	9.01
Political and	Political security in Middle east	Q22	0.72	14.08
international affairs	Acceptable bureaucracy within organization	Q23	0.59	15.32
	Good governmental support	Q24	0.71	15.81
	The impact of global recession on tourism	Q5	0.59	14.39
	The impact of tourism from foreign investment	Q6	0.97	15.96
Culture and	Iranian hospitality	Q7	0.98	24.50
civilization	Good marketing	Q1	0.63	21.57
attractiveness	Handicraft attractiveness	Q25	0.88	20.41
	Historical attractiveness	Q26	0.92	7.52
Natural attractiveness	Transportation infrastructure	Q28	0.42	11.00
	Information centers in airports	Q31	0.56	9.88
	Investment opportunities in Iran	Q4	0.95	4.91
Economical factor	Weak effects of global turmoil	Q29	0.61	6.44
	Existence of trained and young tourism	Q2	0.17	16.42
Human resources	Support tourism to prevent brain drain	Q17	0.93	9.61
	Weather conditions	Q30	0.47	1.60
Diversity of creatures	Diversity of museums	Q10	0.54	8.64
	Wealth distribution	Q11	0.98	6.20

Table 4The modified factors (Level of significance = 0.01)

Note that to validate the model, we have used different factors. Mean of residuals (RMR) is reported as 0.13, which is close to ideal value, zero, standardized RMR (SRMR) is 0.06 is also close to normal. Goodness of fit (GFI), normalized fitness ratio (NFI), NNFI, incremental fitness (IFI), certified fitness index (CFI) and root square of variance of error (RMSEA) are 0.92, 0.95, 0.95, 0.95, 0.95 and 0.083, which are all almost within the acceptable limits.

4. Conclusion

In this paper, we have presented an empirical investigation to find the impact of different factors on tourism industry. The research was performed among 384 randomly selected tourists who visited Iran during a three months period of 2011. The proposed study of this paper used structural equation modeling (SEM) along with factor analysis to detect most important factors. The first factor, price and having sufficient infrastructures, is the most important factor according to our survey representing 14.623 percents of the changes. The second factor is associated with political and international affairs, which represents 13.926 percents of the changes. The third factor is associated with culture and civilization attractiveness representing 9.342 percent of changes on tourism. The fourth factor is natural attractiveness representing 6.691 percent of the changes. The fifth factor is devoted to economical factor representing 5.632, the sixth factor, human resources, represents 5.353 percent of the changes and finally the last factor is related to diversity of creatures, which represents 4.749. These factors include 60.3 percent of the success of tourism.

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