World Academy of Science, Engineering and Technology
International Journal of Information and Communication Engineering
Vol:7, No:12, 2013

Interest Rate of Managers and Tourism Officials over e-Tourism (Electronic Tourism) Development (Case Study of Lenjan City)

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Open Science Index, Information and Communication Engineering Vol:7, No:12, 2013 publications.waset.org/9996754/pdf

***Abstract*—**E-tourism is among the issues that have recently been entered into the field of tourism. In order to achieve this type of tourism, Information and Communications Technology or ICT infrastructures as well as Co-governmental organizations and tourism resources are important. In this study, the opinions of managers and tourism officials about the e-tourism in Lenjan city were measured; it also surveyed the impact of level of digital literacy of managers and tourism officials on attracting tourists in Lenjan city. This study was conducted in Lenjan, one of the environs of the Esfahan province. This study is a documentary – survey and the sources include library resources and also questionnaires. The results obtained indicate that if managers use ICT, it may help E-tourism to be developed in the region, and increasing managers' beliefs on e-tourism and upgrading their level of digital literacy may affect e-tourism development.

***Keywords*—**ICT, e-tourism, opinion of managers and officials.

I. Introduction

TOURISM industry is one of the largest and the most divers industry in the world. In many countries, this dynamic industry is known as the main source of income, employment, privet sector development and developing infrastructure. Using the tourism new method such as electronic tourism or virtual tourism save the economy, reducing the cost of travel and also better planning for tourism. E-tourism is essentially an economic action that today; it is supplied by many active companies in this area. E-tourism means the application of e-business in travel and tourism and the digitalization of all processes and value chain in tourism (travel, hospitality and food sales). E-tourism scientifically includes electronic commerce and application of IT to maximize efficiency and effectiveness of tourism organizations [6]. E-tourism development requires the belief of managers and tourism officials to this issue. Accordingly, in this study, measuring the belief of managers and tourism officials in e-tourism development is surveyed.

II. Problem Statement

Lenjan city is one of the environs of Esfahan, and although this city is located near Zayanderood River and has a variety of tourism attractions, unfortunately tourism has been lagging behind in this city. Hence, the author of this study believes that using e-tourism shall be a useful solution for this problem.

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III. Background Research

Professor Dimitrios Buhalis is the pioneer of e-tourism. He discussed the theory of e-tourism at university of Surrey for the first time. Other individuals in electronic tourism could be - Aldebert, Benedicte, J-Dang, Rani, Longhi, Christian, 2010 [15] - Buhalis, Dimitrios, 1998 [11] - Buhalis, Dimitrios - Law, Rob, 2008 [12] - Buyukozkan, Gulcin- Ergun, Buse, 2011 [13] - El-Gohary, Hatem, 2011 [14]. The Iranian researchers who have done some researches in this issue could be Mohammad Reza Bamaniyan, 2009 [2]; Behroz Parvaneh and others, 2009 [4]; Ravadrad and others, 2010[5]; Mokhtari, 2010 [8] etc.

IV. Research Methodology and Data Collection Methods

This study surveys the opinion of managers and tourism officials over e-tourism development. The population of this study consists of the managers and officials of Lenjan city, which includes city mayors, governors, prefects, the official of cultural heritage of the city, etc. accordingly, a questionnaire With the sample size of 42 numbers was provided and distributed among the officials of Lenjan city with the title of surveying the belief of managers and tourism officials in e-tourism development and surveying the level of information literacy of managers and officials. The question reliability was reviewed via Cronbach's alpha and the question validity was reviewed by experts. A questionnaire was also provided with the title of controlling the satisfaction level of tourists with IT services in the city and was distributed among 300 tourists in the city. The results of questionnaires will be discussed later.

Lenjan city with an area of 1/1109square kilometers has about 1% of the total area of the province Esfahan. This city is located in the west of the Esfahan. This city With regard to its position near Zayanderod River has lots of tourism attractions which may attract lots of tourist to this city, but studies show the weakness of city in attracting tourists.

V. Theoretical Literature of Research

A. e-Tourism Infrastructures

One of the infrastructures related to e-tourism includes ICT which itself includes internet, portal, fiber optic, websites, bandwidth, search engines and e-mail. Other issues related to

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e-tourism may include Information society, information literacy, electronic city, electronic citizens, e-government, e-entertainment; [9], [11] which among all, the belief of managers and officials takes into consideration and also how much managers and officials consider to this important issue and how much they try to make cities electronic, because the implementation of e-tourism needs infrastructures of ICT and if there are such infrastructures, e-tourism can also be developed.

B. The Facilities of e-Tourism

The facilities which e-tourism offers us are stated as follows:

a. All information related to provided services which are effective in attracting tourists shall be available. For example:
   - The Profiles of hotels and lodgings and resorts
   - Cities and roads map
   - Data related to scenic sites and ways to get them
b. All communication takes place via online forms and you can use these services easily and it is possible without being at the place; for example:
   - Book airplane tickets, trains and scenic sites
   - Reservation and accommodation
   - Buy local products and crafts through internet
c. Tourist should be able to use specific services easily and in least amount of time which they are interested in but not be generalized [7].

C. The Advantages of e-Tourism

E-tourism is beyond the entering to a tourism website and watching different areas around the world through internet. The purpose of e-tourism is to provide appropriate fields for tourists such as welfare, comfort and security, travel, tourism development, and finally enjoy the tourism. The advantages of e-tourism are very important; these advantages are stated as follows:

1. Helping to economic development of less developed regions, helping to marketing and advertising in order to attract tourists, selling crafts and deploying resources in those areas [3].
2. No need to travel long distances and frustrated in long distances, as a result, it could be useful for elderly, patients and children who can`t endure long distances.
3. Many young people, teens and girls can safely travel without their parents with the help of e-tourism.
4. Ability to travel to various parts of the world, without worrying about the cultural, social, religious, and politics issues between two countries [5].
5. Reduce unnecessary construction for passengers residing
6. Scientific visits and attending different conferences with the help of electronic means such as video conferencing and no need to travel to those areas and thus no road hazard and no high costs of university.
7. Reduction in long queues to obtain tickets.
8. Providing internet shopping from crafts centers and thus it increases e-commerce and productions and installs large and small local shops for crafts.
9. Job creation.
10. More competition in the fields of hotel and resorts, and improving services and amenities, recreational facilities and tourism.
11. Suitable for less developed countries, due to lack of need to construction costs and developing tourism centers and travel services.
12. No need to trained leader for introducing tourism places and areas.
13. Useful for researchers due to case study a specific topic
14. Reducing unnecessary traffic.
15. Reducing and changing travel costs.
16. Save time.
17. Protection of cultural heritage due to the lack of direct connection with monuments [4].

D. Information Literacy

Information literacy is related to IT skills, but it has broader implications for individual, educational system and society. IT skills help people to use computers, applied software, databases and other technologies to access a wide variety of personal, educational and business purposes.

With the arrival of information age and intelligence communities, having necessary skills are essential for citizens for searching, extracting and using information. These skills can be obtained in terms of information literacy. The term information literacy was first introduced in 1974 by Zurkowski [10]. Besides information literacy, other terms were also introduced such as computer literacy, library literacy, media literacy, network literacy and digital literacy [2].

E. The Role of Managers and Officials in Developing e-Tourism

Managers can play an important role in developing this industry through tourism infrastructures. One of the most important duties of managers is macroeconomic management and designing general policy in this industry in public sector [1]. Through studying available potential, managers can design a comprehensive plan for tourism for the region, and through the allocation of necessary funds, they can provide necessary infrastructures for private sector investment and through developing of roads, airport equipment and reconstructing transportation systems, they can make security and safety of tourists. By legislating laws, infrastructures for mental and social security for tourists are built which are the most important factors in developing tourism industry [15]. Managers and officials can develop human sources and provide specialized training centers and pave the way for domestic and foreign investors by legislating protective laws of investment in the industry. They should provide necessary fields for tourists through advertisement and information. Among all, if managers and officials use ICT, it may help proceeding their goals in tourism. Hence, in this study, authors

survey the belief of managers and tourism officials in e-tourism development [8]. Accordingly, a questionnaire was provided and distributed among the officials of Lenjan city with the title of surveying the belief of managers and tourism officials in e-tourism development and surveying the level of information literacy of managers and officials.

VI. Research Findings

The author with regard to tourism attractions of city and IT infrastructures describes e-tourism as a way for introducing tourism attractions of city and also attracting more tourists to the city. Accordingly, the opinions and views of managers of Lenjan city should be regarded as programmers and deciders of city tourism; therefore the obtained results of questionnaires are stated as follows:

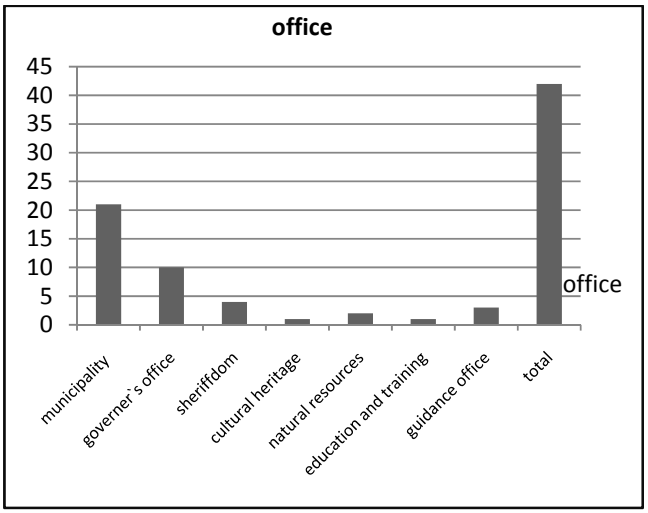


Fig. 1 Gender distribution of city managers

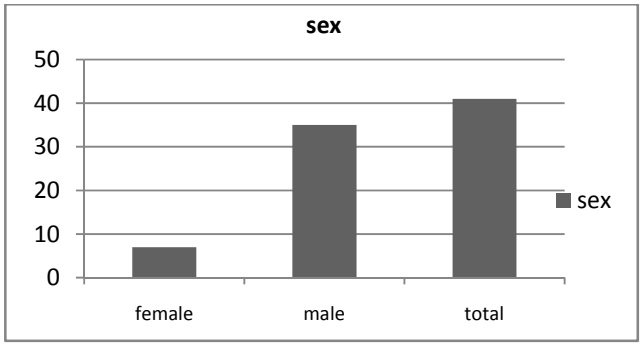


Fig. 2 Educational distribution of city managers

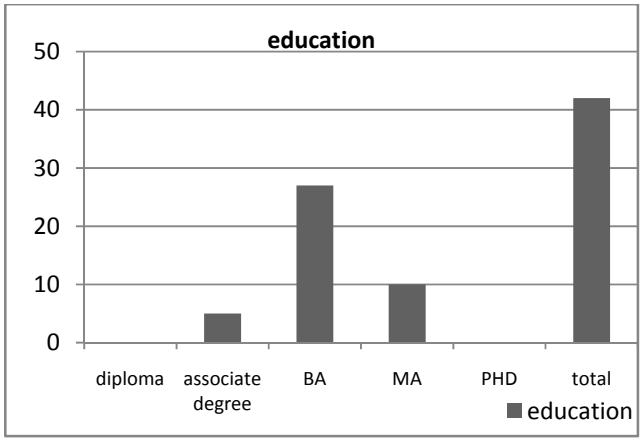


Fig. 3 Age distribution of city managers

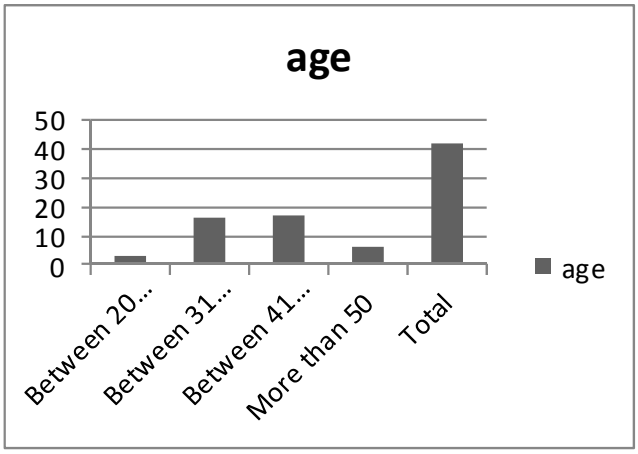


Fig. 4 Office distribution of city managers

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TABLE I
SURVEYING THE LEVEL OF INFORMATION LITERACY OF MANAGERS AND OFFICIALS IN LENJAN CITY

Number	Items	Very much	Much	Middle	little	Very little
1	Your daily telephone use	28.6	31.0	31.0	7.1	2.4
2	Your daily computer use	31.0	42.9	21.4	4.8	0
3	Your internet use	16.7	35.7	35.7	9.5	2.4
4	The amount you use chat, e-mail	4.8	9.5	33.3	35.7	16.7
5	Your daily cell phone use	31.0	38.1	28.6	2.4	0
6	Internet shopping	4.8	4.8	16.7	40.5	33.3
7	The amount you use electronic networks of banks and financial institutions	14.3	26.2	33.3	14.3	11.9
8	Spending your leisure time by using internet	9.5	19.0	23.8	28.6	19
9	To meet the needs of scientific and research and education through internet	28.6	26.2	28.6	9.5	7.1
10	Using electronic service offices and Municipal bodies	7.1	19.0	45.2	11.9	16.7
11	Using internet and portal of Esfahan in order to achieve information about Lenjan city	4.8	16.7	28.6	28.6	21.4
12	Attending in educational classes in order to developing digital information in five years ago (office, internet)	16.7	21.4	35.7	16.7	9.5
13	Using communication service offices, cafes…	4.8	7.1	33.3	28.6	26.2
14	Using Virtual Cultural Spaces (digital libraries, …)	2.4	16.7	21.4	35.7	23.8
15	Reading and reviewing news related to ICT through internet	11.9	23.8	40.5	14.3	9.5
16	Reading and reviewing news events as online	23.8	21.4	23.8	19.0	11.9
17	Your responsibility for developing sustainable e-tourism	11.9	16.7	35.7	19.0	16.7

Table I indicates the results of surveying the level of information literacy of managers. According to the results obtained from questionnaire, unfortunately, we can conclude that the city managers don`t have high level digital literacy.

TABLE II
SURVEYING THE BELIEF OF MANAGERS AND TOURISM OFFICIALS IN E-TOURISM DEVELOPMENT IN LENJAN CITY

Number	Items	Totally agree	Agree	No idea	Disagree	Totally disagree
1	Promotion in digital literacy of managers affects attracting tourist	64.3	35.7	0	0	0
2	Using IT saves time	92.9	7.1	0	0	0
3	Using IT saves location	66.7	33.3	0	0	0
4	Increasing access to mobile and telephone lines has an effect on attracting tourists	50.0	47.6	2.4	0	0
5	IT increases the ability of managers in creating tourism areas	69.0	31.0	0	0	0
6	Lenjan city has the ability to expand theVirtual Tour	47.6	42.9	9.5	0	0
7	Lenjan city has the ability to expand the Virtual Museums	31.0	33.3	35.7	0	0
8	Developing e-tourism develops traditional tourism	50.0	47.6	2.4	0	0
9	E-tourism increases attracting tourist in the area	57.1	40.5	2.4	0	0
10	Using IT tools is important for developing sustainable tourism	52.4	47.6	0	0	0
11	Using IT has an effect on management of sustainable tourism development in area	42.9	54.8	2.4	0	0
12	Technology increases tourists number	38.1	57.1	4.8	0	0
13	Notification through IT decreases damage to tourism attractions	40.5	42.9	14.3	2.4	0
14	Developing infrastructures of electronic city booms e-tourism	52.4	45.2	2.4	0	0
15	Developing IT increases the safety of tourist	47.6	38.1	14.3	0	0
16	It seems that virtual tour depends on the level of actual tourism	19.0	38.1	28.6	14.3	0
17	Using IT in tourism reduces environmental pollution	33.3	38.1	21.4	7.1	0
18	IT provides more business opportunities in e-tourism	40.5	50.0	9.5	0	0
19	Using IT is the best way to recognize tourism destination	38.1	52.4	4.8	4.8	0
20	Easy access to IT tools is useful in performing applied program in developing tourism	31.0	61.9	7.1	0	0
21	Increasing updated and active internet sites about tourism attractions of Lenjan city attracts tourists	47.6	47.6	4.8	0	0
22	Lenjan city has an acceptable level of internet sites for introducing tourism attractions	16.7	23.8	23.8	33.3	2.4
23	Using advertising SMS may be a useful way for introducing tourism attractions of the city	33.3	47.6	14.3	4.8	0
24	Using tourism professionals helps attracting tourists in the city	52.4	47.6	0	0	0

Table II shows the percentage of belief of managers of Lenjan city about e-tourism. The related information shows that city managers believe in e-tourism very much and all of them have a positive view about implementing e-tourism in Lenjan city.

TABLE III
THE RESULTS OF PEARSON CORRELATION TEST BETWEEN PROMOTING THE LEVEL OF DIGITAL LITERACY OF MANAGERS AND INCREASING TOURIST ATTRACTION

		promoting the level of digital literacy	Attracting tourist
Promoting the level of digital literacy	Pearson correlation	1	0.006
	Significant level**(1-tailed)**		0.486
	Number	42	42
Attracting tourists	Pearson correlation	0.006	1
	Significant level**(1-tailed)**	0.486	
	Number	42	300

Pearson correlation test is used for testing the relationship between variables as promoting the level of digital literacy of managers and increasing tourist attraction in Lenjan city (Table III). According to results of this test (sig.(1-tailed), r= 0.006), we can say that there is no significant relation between promoting the level of digital literacy of managers and increasing tourist attraction in Lenjan city. In other words, according to collected data, we can say that promoting the level of digital literacy of managers in Lenjan city has no effect on increasing tourist attraction. Although city managers believe in implementing e-tourism in Lenjan city, they don`t use IT tools at acceptable levels, and one of the reasons from author `s viewpoint is that city managers don`t have high level education and also use traditional methods for running the city. The age of some managers also prevents them from using IT at work. As a result it seems that there is no relationship between promoting the level of information literacy of managers and increasing more tourists.

VII. CONCLUSIONS AND RECOMMENDATIONS

According to the study, it may be concluded that using experienced managers in IT and also promoting the level of managers' digital literacy may help attracting tourist in Lengan city. Using young managers, who are proficient in using IT tools, besides experienced managers and their cooperation together may be a solution for tourism problems of this city.

REFERENCES

[1] H. Ahmadi, IT principles, 1387, SokhanGostar publication and Research Council of Islamic Azad University of Mashhad.
[2] M.R Bamaniyan-, Pourjafar-Mohamadreza, Mahmoudi Nejad-Hadi, 1388, presenting recommended model for implementing E-tourism in rural tourism development projects (a comparative study and presenting recommended model with regard to present situation in Iran), Journal of Urban Management, Number 23.
[3] F. Hasani, 1388, introduction to e-tourism, functions, development challenges and capabilities, journal of IT age, number 52.
[4] B. Parvaneh-, Ameri Siyahoyi-Hamidreza, Taghavi Godarzi-Saeed, 1388, new e-tourism approaches in developing Hormozgan`s centers (case study of Fin city), Geographical journal of Zagros Landscape, first year, number 2.
[5] A. Ravdarad. Haji Mohammadi- Ali, 1389, knowing the difference between actual tourism and virtual tourism based on narrative theory, cultural studies journal, Volume III, Number 2.
[6] M. Kazemi, Fiyazi-Marjan, Mirzade-Malihe, 1384, Barriers to the use of IT in tourism industry in Iran, Journal of new Economic and Trade, Number 2
[7] M. H .Moradi, Hashemi Farhood-Roghaye, 1384, It and e-government, Noor Elm publication, Hamedan.
[8] R. Mokhtari Malekabadi, 1389, ICT-driven modeling and Ecotourism and Sustainable Development, First National Conference on Electrical and Computer Specialist, University of Shahrekord.
[9] Hometown Consulting engineers, 1388, the strategic – structural-functional plan for developing Lenjan Tourism, Volume 26 of Cultural Heritage organization, Handicrafts and Tourism.
[10] D. Bawden, 2001, information and digital literacies: a review of concepts. Journal of Documentation, vol 57, no.2.
[11] Buhalis,Dimitrios,1998, Strategic use of information technologies in the tourism industry, London, Tourism Management, Vol 19,No 5, pp 409-421.
[12] D. Buhalis, -Law,Rob, (2008), Progress in information technology and tourism management: 20 years on and 10 years after the Internet—The state of eTourism research- Tourism Management 29 609–623Progress in Tourism Management, www.elsevier.com/locate/tourman
[13] Buyukozkan, Gulcin- Ergun, Buse, 2011, Intelligent system applications in electronic tourism, 2011, Expert Systems with Applications, journal homepage: www.elsevier.com/locate.
[14] El-Gohary, Hatem, 2011, Factors affecting E-Marketing adoption and implementation in tourism firms:An empirical investigation of Egyptian small tourism organisations, Tourism Management, journal homepage: www.elsevier.com/locate/tourman.
[15] Aldebert, Benedicte , J-Dang ,Rani, Longhi, Christian,2010, Innovation in the tourism industry The case of Tourism, France, Science direct, Tourism Management, Elsevier.

Open Science Index, Information and Communication Engineering Vol:7, No:12, 2013 publications.waset.org/9996754/pdf