ASSESSMENT OF INTERNET AND VIRTUAL SPACE CAPABILITIES IN THE DEVELOPMENT OF TOURISM AND TOURISM ATTRACTION IN THE CITY OF RASHT IN GUILAN PROVINCE, IRAN

Nader ZALI[*]

Mozhgan Khademi KAMAL

Seyed reza AZADEH

Abstract

The role and impact of ICT and tourism industry isn't secret to any one. By taking advantage of the Internet and the advent of electrical tourism, ICT is one of the essential elements of tourism industry and it has increased the efficiency of it. Estimates indicate that global industry of tourism has increased approximately 6.5 billion dollar in this current year (2013). With the growing trend of world tourism in 2013, World Travel and Tourism Council Report on projected earnings about 6 billion and $500 million from tourism industry. According to the World Tourism in this current year tourism industry, provides 260 million new jobs around the world. This trend also continued in 2012 with the Asian countries which are top countries with the highest growth in the tourism industry. The global tourism industry in 2012 was host to one billion and 35 million visitors this year the figure is expected to grow dramatically[1]. In this regard, the present study explores the role of information technology in all aspects of the tourism city of Rasht. For the study of field studies and questionnaire techniques are used. Hence according to the statistical community which are tourists of Rasht and according to the sample size, Which 200 were randomly selected to produce and distribute 200 questionnaires to both tourists and the tourism department personnel that among those who filled out 123 questionnaires, 101 were tourists and 22 were tourism department manager and staff. The results of this study show that due to poor infrastructure in terms of offering this technology, the contribution of tourism activities in the field of information technology, the contribution of tourism activities in the field of information technology of Rasht, is not justified. For example, the results of this questionnaire suggest that the amount of tourist' use of this technology in learning information and booking residential units are minimal. So that 8.9% of the research subjects had very little skill, 33.7% had lack of skill, 38.6% were average and 17.8% were skillful in using computer. Among were the managers of tourism, 45.5% of the research subjects had very little skill, 27.3% were average, 18.2% were skillful and 9.1% were very skillful in using computer.

Key words: IT, tourism development, marketing, tourism potentials of Iran

1. Introduction

Fast scientific revolution in the second half of 20th century has changed world face in an unrecorded way. Computer advent in human life and its convergence with communicative waves has created global information network referred as information revolution. In scholars' ideas, informatics revolution has changed the world more than industrial revolution, penetrating in all human life aspects. Such revolutions in economy have created modern IT-based economic methods and opened new arenas in income earning. In this case, IT includes gathering, organizing, storing, publishing and using the information in the form of sound , picture graphic, text, number, ... by using the computer and telecommunication

[*] Nader Zali, Assistant Professor, Urban Planning Department, University of Guilan, Rasht ,IRAN, N.zali54@guilan.ac.ir, Mozhgan Khademi kamal, M.A student of urban planning, Azad University of Rasht, email: khademi_kamal@yahoo.com, Seyed reza azadeh, M.A Student of regional planning, University of Guilan , Email: seyedrezaazadeh@yahoo.com
[1] http://Khabaronline.ir/detail/281196/

tolls... (Hamidi et al, 2011: 370). Tourism is a powerful force of change in the economy in both the developed and in the least developed Countries. (Alipour eshliki and Kaboudi, 2012: 333). Thus introducing their natural and historical attractions, these countries have gained fluent income through building strong communicative foundations, using information network and global communication. Nowadays, IT has revolved tourism marketing, directing tourism attraction ways by paper and TV toward advertisement via Internet. According to Sheldon, information for tourism is like blood for human life. IT capabilities have led to new demands in global networks and provided the conditions for distributing the products for the manufacturers across the world; this gives the consumers the chance of more alternatives in selecting their favorable goods (Buhalis, 2001: 165).

Iran has been blessed by varieties of tourism attractions. Iran's vast land mass of 1,648,000 Km² (636,000 Sq. mi) makes it the sixteenth in size among the countries of the world. This quality along with its natural environments potentially made Iran a prime tourist destination. With more than 2800 Km of coastline, as well as, high mountain ranges and 3 deserts, the country has a spectacular physiography. The supply of recreational and tourism opportunities is endless. Such geographical/topographical characteristics render Iran a four-season country (Aminian, 2012: 515). In a word, with over 1,200,000 historical and natural attractions, Iran is one of ten top touristy countries in the world. In 2000, global income of the world from tourism was 500 billion $ which exceeds oil income of OPEC members.700 million tourists with over 500 billion $ visited touristy places among which Iran's share is 800 million $ in 56th rank. Iran also has 69th rank from the view of tourism number. Italy which is similar to Iran from historical and natural status has gained 31 billion $ (tourism industry in Iran and in the world, 2003, 25). Based on the latest statistics, there are 3167 touristy attractions in Iran which can be classified in 3 groups:

   1. 2140 tangible and intangible attractions with the including architectural and artistic monuments before and after Islam advent, rituals of different areas, art crafts, traditional foods, country music, and local ceremonies.

   2. 819 natural places like climatic areas, mountains, deserts, valleys, preserved areas, shelters, and national parks.

   3. 208 human-made places including facilities for gatherings, fairs, cultural events, recreational centers, and museums (Iran Tourism Organization, 2001, 4).

2. The Review of Related Literature

Information technology, new knowledge in the comprehensive growth and development of modern societies, will play an important role. IT means collect, organize, store and publish information such as sound, image, text that accomplish with using computer and telecommunication tools (Mostafapour et al, 2012: 99). IT in tourism has developed selection circle around the consumers and facilitated service provision. In fact, motivations, favors, mental and social backgrounds of the tourists are different in a way that each person demands a special product with certain quality in a specific time based on his willingness. IT enables touristy corporations to offer services for different classes with different interests.

Technological progress and tourism have been going hand in hand for. Since the 1980s, Information Communication Technologies (ICTs) have been transforming tourism globally. Developments in ICTs have undoubtedly changed both business practices and strategies as well as industry structures. The establishment of the Computer Reservation Systems (CRSs) in the 1970s and Global Distribution Systems (GDSs) in the late 1980s, followed by the development of the Internet in the late 1990s, have transformed the best operational and strategic practices in the industry dramatically. If the past 20 years have seen an emphasis on technology per se, then since the year 2000 we have been witnessing the truly transformational effect of the communications technologies. This has given scope for the

development of a wide range of new tools and services that facilitate global interaction between players around the world. (Buhalis, 2008: 609)

In this case, having a unique nature, tourism is distinct from other economic activities because of 10 following features (Williams, 1993:29-36):

1. *Instantaneity*. An important tourism feature is its instantaneity, implying that some situations for visiting can occur in only one moment, like observing eclipse in a spot.

2. *Memo ability*. Trips usually can't be forgotten and are happy moments of the people.

3. *Tourism legacy*. Perspectives and sceneries, rich cultural legacies, and historical attractions provide necessary conditions for successful supply of tourism products. Countries with more features like these can attract more tourists.

4. *Coordination*. Successful tourism products' supply depends on the coordination of service quality and quantity regarding market needs.

5. *Temporariness*. Tourism products are temporary since they can't be stored. So the time should be used optimally to make money from the situation because it can't be saved.

6. *Acceptance capa*city. It implies that with tourism growth in the world, existing attractions and facilities are not enough and pressures on tourism officials for raising them will increase.

7. *Changeability*. Tourism destination develops or changes by the time lapse. It may also widen several times for tourist density.

8. *Competition for more space*. Tourism section competes with others to gain more space for hotels, and recreational centers. It develops easier than others for its pro-environmental features.

9. *Fixed operational costs*. Tourism products costs are mostly fixed. For example, airport or hotel costs, equipped for welcoming tourists without considering their number, are the same for each tourist.

10. *Seasonal demands.* For weather change, holiday times, school closing, and etc tourism is seasonal and it may increase in a season and decrease in another time.

The Internet and tourism

Internet network, which is widely used throughout the world, is among technologies that have the greatest effect on the distribution of tourism products and services and now it is considered as an alternative and complement to traditional distribution channels for these products and services. When the network is considered as complementary systems, travel agents and passengers can obtain the appropriate information about products and services and prices (Rajabi et al, 2011: 6).

In this case, benefits from IT, particularly the Internet for tourism, are substantial. These benefits are no longer dependent on proprietary information systems as has been the past experience, since the Internet is a commonly available technology. Dogac, *et al,* (2004) considers the Internet provides many advantages to players in the tourism industry. Some of these benefits are: (Pease and Rowe, 2005: 4)

- Enhanced level of collaboration between tourism operators, for example, between travel agencies and service providers;
- Pre-arrangements with respective suppliers no longer necessary;
- Web service discovery will identify alternatives, enabling holiday packages to be constructed;
- Greater negotiation of service to be purchased and customization of services/activities;
- Generally greater levels of interoperability with internal and external applications.

Gunn Model

Gunn (1988) calls interested in and capable of traveling people as tourism and he consider this as demand and supply which is including of various types of transport, attractions, facilities and services for tourists and tourist information. In planning for tourism

development, tourism concept as a complete system based on supply and demand factors, is the basis for effective planning and management of tourism. Mill and Morris identified the four parts of the tourism system as follow: Market (tourists), travel (transportation), destination (attractions, facilities and services), commercial (advertising information). (Movahed, 2002: 25)

Fig 1: Gunn model of the tourism system
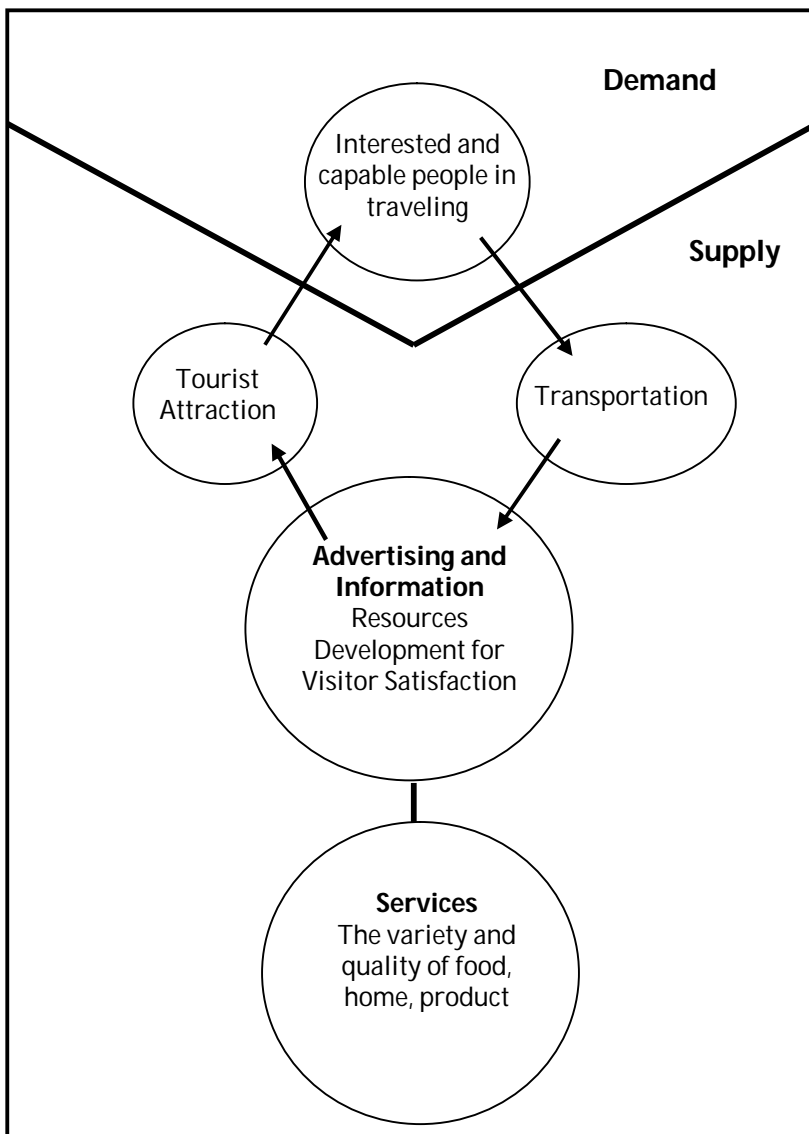
Reference: Movahed, 2002: 26

3. Methodology

In this study, the city of Rasht has been selected as a case study and the main objective of this study was to investigate the role of information technology in various aspects of tourism in this city. In this regard, questionnaire has been used for collecting data from field studies. Hence, according to the Statistical population which are tourists of said city and as well as

tourism department personnel, and according to randomly selected samples, we attempted to produce and distribute 123 questionnaires to both tourists and the tourism department personnel. We are going to analyzed and explain result of the questionnairein the following the study.

4. Case Study

Rasht city is one of cities of Guilan Province. Te city is bounded by the Caspian Sea on the north, on the West by Roudbar and on the South it is bounded by Some'esara and it is bordered by Lahijan on the East. The city covers an area of 12,516 square kilometers, the province accounted for 9% of the province area (Comprehensive Plan Rasht, volume 3, 2007: 3) .

Fig2: Guilan & Rasht position in Iran
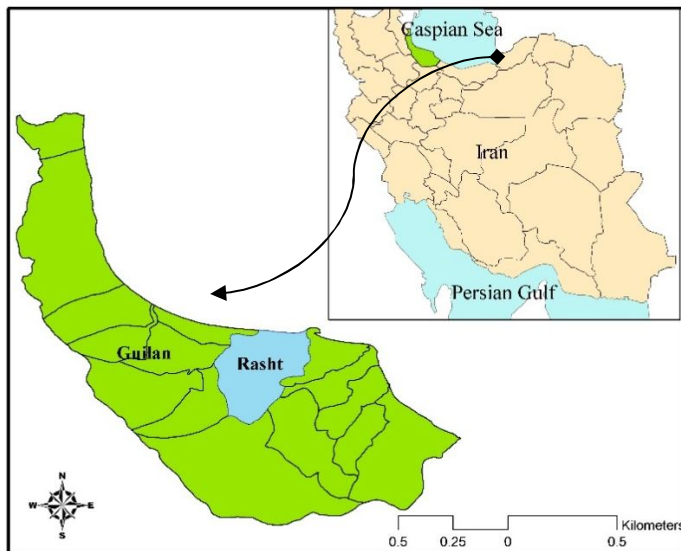
Tourism attractions are abundant in Guilan and almost there is no place for a passenger to be devoid of grace and attractiveness. Also there are varieties of attractions in Rasht including natural attraction, historical attractions and a memorial pilgrimage, cultural, traditional and economical attraction. There are pavilion (Emarate kolah Farangi), City Hall, Clock Tower, Museum of Rasht, Guilan Rural Heritage Museum, Mohtasham Garden, Mirza kouchak Khan tomb, the National Library and Typical Tourism building in Rasht city. Total of 20 tourist attractions are detected in the Rasht city, including 7 natural attractions, 9 historical and cultural attractions, 4 man-made attractions.[1] According to data released by the Central Islamic Council of Rasht, this metropolitan is known as Fifty-seventh electronic city in the country.[2] Along with making electronic services, Municipality of Rasht, is providing citizen access to city information, realization of electronic city, information and communication technology development and delivery of information and services to citizens in the web environment and ... . And the sub portal has been prepared for each of the municipalities, in order to create uniformity and coordination between the three regions of the Rasht city. This site (www.Rasht.it) is available for all internet users. In fact the Metropolitan website is Encyclopedia of Rasht which provides information including all the necessary information for tourists and citizens. This website includes many professions and useful information is

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[1] www.Gchto.ir

[2] http://www.gilannews.ir/6400.html

provided for job seeker and employer to take advantage of the opportunity to work in various jobs. Downloading Newsletters, Brochures and Publications of Public Affairs of Rasht city hall, online registering to visit the development projects in the city of Rasht, on-line electronic services 24 hours a day in order to reduce the time and cost of visiting and also to avoid of traveling within the city and participation of citizen in urban management is the interesting part of this portal.

Also the www.rashtcity.ir which is managed by a private company is part of related activities of electronic city that Citizens can use of various facilities. This site is known as Rasht e-city and it is comprised of five main sections which include: e-city, e-Citizen, e-government, e-tourism and our city. Each of the said section including includes flowing services:

- **Section of e-City:** registration in Electronic City, online shops, e-auctions, city jobs, internet placement, news, news archive;

- **Section of e-Citizen:** Iran Press and News Agencies, Children, library, sports, culture, art, religion, online stores, schools, recreation centers, the disable people and veterans, parents, women ... totally there are 41 services in this sector;

- **Section of e-Government:** Baking, insurance, stock, legal and judicial, transportation, post and telecommunication, broadcasting, military and police, industry, institutions of higher education ... totally there are 36 services in this sector;

- **Section of e-Tourism:** Including Tourism and Traveling in Iran, online hotel reservation, online ticket reservation, Iran traveling and Tourism organizations traveling agencies, typical tourist areas, the Museums of Iran... totally there are 35 services in this sector;

- **Section of our city:** this part includes links of internet portal of various agencies and institutions in Rasht, Guilan Province and the questions will be answered. According to the Cultural Heritage and Tourism Organization, the numbers of tourist areas of Rasht were mare than 75 units in 2005. This number increased to 58 in 2006 & 2007, 62 in 2008, 72 in 2009, 85 in 2010, 99 in 2011 and finally it increased to 109 areas.[1]

5. Discussion

After introducing the city of Rasht, we will review, analyze and explain the results of questionnaires and field studies. Information such as combination of gender, employment status, education status, English Proficiency, Proficient in using of computer, using technology for learning tourism information, using technology to book residential units for two groups of tourists (101 people), Personnel of tourism department (22 people) were collected and in the following we will analyze and explain those results.

1.5. Sample group of tourists

Surveys based on the gender composition of respondents indicate that totally there are 73.3% Male and 26.7% Female. A review of the status of literacy and education suggests that most of them had bachelor's degree (36.6 percent). Also a minimum sample size was accounted to people under diploma (3%). Since most of the tourist in the area at the time of collecting information, are domestic tourist, researchers expected that the majority of them speak Persian language and other Iranian dialects. However, the growing use of new technologies (computers and internet) have led younger people to show greater enthusiasm for learning foreign language. But the percentage of people learning and their mastery of foreign are very limited. As is shown in table 1, most respondents (47.5%) had limited command on English language; also about 10% were skillful in speaking English language.

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[1] www.Gchto.ir

Table 1: Tourists proficiency in English

Proficiency in English	Abundance	Percent Abundance
Very low	9	8.9
Low	48	47.5
Average	34	33.7
High	10	9.9
Sum	101	100

The next variable in this study is associates with the level of skill using computers. Now we can say that by acceleration of technological development and computer related sciences and their effects on the everyday life of many people, this technology which is called "the famous virtual world" can not be accounted as luxury goods. The results of the collected data in this field, suggests that skill levels of 57 respondents were excellent and average (Fig 3). Hence it can be said that individual's skill in using computer science is forming and growing but the point is that they are not part of any activity that would help.

Fig 3: The amount of tourists skills in using computers
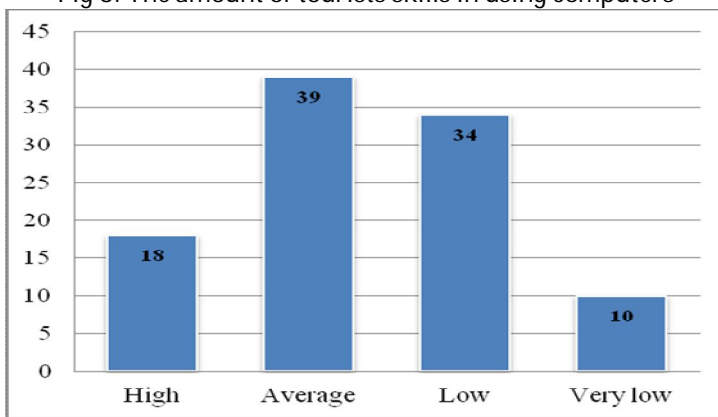
The next variable is the use of information technology in tourism. In this context it should be noted that the tourism infrastructure based on virtual worlds and computer science is still in its very early stages and tourist attractions in different regions aren't properly prepared in sites and blogs. Results of research in this area suggests that more than 70 percent of respondents are at the level of low and very low in using of technology for finding tourism information. Only 29.6% of respondents use information technology to tourism information (Table 2). These statistics indicate that in Rasht city due infrastructure and platform has not been created for tourists.

Table 2: The use of information technology, tourism, tourists

Use of Technology	Abundance	Percent Abundance
Very low	21	20.8
Low	52	51.5
Average	16	15.8
High	12	11.9
Sum	101	100

As mentioned already, all of the Internet services in the tourism market, such as providing information about attractions, residential places and their distribution, are running traditionally. The results of this study indicate that about 76 percent of residential places don't use internet technology for reservation (Fig 4).

Fig 4: Use of tourists booking technology for residential units
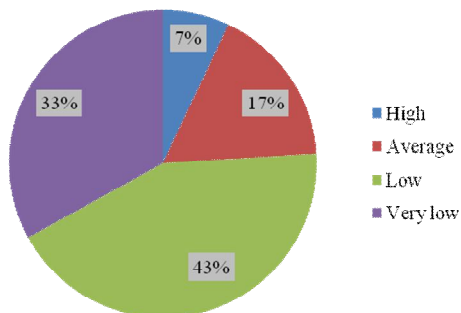
2.5. Sample group of tourism units' managers

The study was conducted about tourism in Rasht city, it also collected some information about tourism units' managers by questionnaire, in this study the number is 22. In the following we well continue to analyze the data. The first variable which is examining is the level of English proficiency. There are jobs in which ability and proficiency of foreign languages can play an important role in their job promotion. According to the results of Table, only about 27.3 percent of sample group are skillful and professional in using English language and the rest of them (73%) are not so skillful. In according with what was said, virtual space of the internet has not flourished. (Table 3)

Table 3: Accommodation and catering managers' proficiency in English

| Proficiency in English	Abundance	Percent Abundance
Very low	6	27.3
Low	10	45.5
Average	2	9.1
High	2	9.1
Very much	2	9.1
Sum	22	100

Also the results of study about having internet address for introducing of residential units by managers is summarized in Table 4, show this point clearly. According to the results of table, we can say that only 31.8 people had internet address for introducing of residential units. Results indicate that significant part of managers do not rely on computers for doing tourism and employment affairs.

Table 4: Places of accommodation and catering managers have a URI

URL	Abundance	Percent Abundance
Yes	7	31.8
No	15	68.2
Sum	22	100

Leaders with proficiency in use of computers are the results that a substantial proportion of managers of residential buildings (46%) use computers to do their job and tourism, rely on. (Fig 5)

Fig 5: Managers' skills in using computers
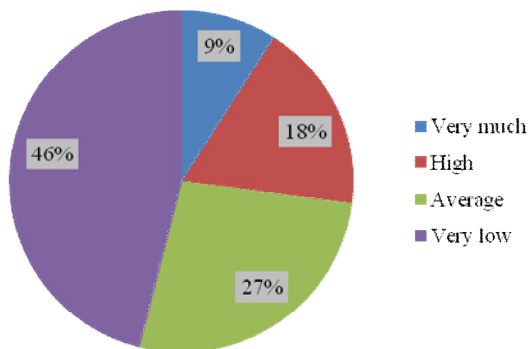
The use of information technology in finding tourism information is last variable that we examine in this section. The results of Table 5 shoe that about 45.5% of the managers use new technologies for gaining tourist information. This can be considered as a good start for them.

Table 5: Tourist Places manager residential usage of information technology

Use of Technology	Abundance	Percent Abundance
Very low	10	45.5
Low	2	9.1
Average	6	27.3
High	4	18.2
Sum	22	100

6. Conclusion

In this study, 123 subjects of tourist and tourism managers were examined. Of this number, 101 of them were tourists, and 22 of them were managers. The results indicate that 8.9 percent of sample tourist has very little mastery of English, 47% low, 33.7% average, and 9.9% have high proficiency in English. 27.3% of tourism managers have very little command on English language, 45.5% have little command, 9.9% are average, and 9.9% are very skillful in English language. 8.9% of tourisms have very little command in using computer, 33.7% have little command, 38.6% are average and 17% are very skillful in using computer. Besides those mentioned, the finding highlights the fact that despite the rapid growth in providing such technologies, links between tourism activities and information technology is minimal and activities taking place in the field of electronic tourism and introducing tourist attractions of the area, was undertaken on the basis of personal taste. On the other hand, since many businesses always have traditional method of learning information and Mass Media doesn't advertise about the new method of learning information, the majority of families don't use net for reservation and if this technology is used, its users are teenagers and young people just for having fun.

Recommended action

According to the finding in the present study, the following suggestions are offered:

- It is suggested that regulatory agencies be wiser about tourism units and force using and access to the Internet and information technology.

- Tourism and tourism managers and employees should be learned how to useInternet and information technology.
- Advertisement should be used for developing the culture of using IT.
- Setup and increase the usage of digital information base, such as web kiosk and ATM, especially in the tourism areas entrances of City.
- Review, revise and management of site information associated with city growth.
- Promoting tourism sites in all available public and private sites.
- Create a central site where all the tourist centers and institutions related to tourism become related through the internet.
- Creating codified calendar for special traditions of that city and putting it in the city's central tourist site.

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