An Analytical Study on Tourism Informatization in Hainan International Tourism Island

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Abstract Tourism informatization plays a very important role in the development of Hainan into an international tourism island. This chapter makes an analysis of the importance of Hainan's tourism informatization. It then elaborates on the current situation of and problems in the province's tourism informatization and puts forward relevant suggestions for improving its tourism informatization.

Keywords Tourism informatization • Hainan • Hainan International Tourism Island

The project of developing Hainan Province into an international tourism island was formally upgraded to a national strategy on January 4, 2010, after the State Council issued its opinions on promoting the construction and development of Hainan International Tourism Island. Hainan, which has since then seen a surge in tourists number, found there is a much urgent need for tourism informatization.

Tourism informatization refers to the process in which electronic technology, information technology, data base technology, and internet technology are used to transform the traditional mechanism on the production, distribution, and consumption activities in the tourism industry. In this process, technological approaches are adopted to improve the operation of tourism economy and to boost the development of tourism industry by upgrading the traditional tourism industry into a modern one. Tourism informatization mainly includes the three aspects: informatization of tourism enterprises, tourism e-business, and tourism e-governance [1].

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1 Current Situation of Hainan's Tourism Informatization

1.1 Informatization of Tourism Enterprises

Presently, Hainan Province has a total of 349 travel agencies, of which, 24 are engaged in outbound trip operations, and 103 branches. Most of these travel agencies are distributed in Haikou and Sanya cities. Only the large and medium-sized travel agencies have set up their own official Web sites, while many of them simply post their company introduction, address, and contact information on some tourism-related Web sites. For those which have developed their own Web sites, what they display online are mainly the services' general introduction, tourism routes, hotels, and very simple maps.

1.2 Tourism e-governance

Hainan Provincial Commission of Tourism Development plays an indispensable role in the province's tourism informatization, as it is the government authority responsible for coordinating the development of the provincial tourism industry, formulating provincial tourism development plans and protecting the provincial tourism resources. The Web site—tourism.hainan.gov.cn, known as the official Web site of the provincial tourism development commission, functions in the following aspects:

- 1. Releasing news and information related to Hainan's tourism industry;
- 2. Offering information on tourist attractions, itineraries, accommodation, catering, and travel agencies;
- 3. Delivering e-government services for the public;
- 4. Serving as an e-business platform on which tourists can book hotels and air tickets.

The tourism development commissions in the major cities and counties in Hainan also have their own official Web sites. For instance, www.haikoutour.gov.cn for Haikou City, www.sanyatour.com for Sanya City, www.qionghai.gov.cn for Qionghai City, and www.wenchangtour.com for Wenchang City. However, what these Web sites focus on are mainly the introduction to the tourism attractions, folk customs, classical itineraries, and accommodations. A few of them can deliver e-government services and offer links to shopping malls, but most of them are only Web pages containing static information.

The provincial tourism development commission's subordinate institutions and the other tourism-related organizations in Hainan have also developed their official Web sites. The following are some of the major official Web sites established by these organizations:

- www.hainanta.com for Hainan Provincial Tourism Association. The Web site
 mainly offers introduction and news on the association, as well as the policies,
 laws and regulations regarding the tourism industry. One of its features is that it
 has launched a series of questionnaires and surveys on the hot issues in the
 tourism industry;
- www.hi898.com for Hainan Tourism Development Research Association. The Web site mainly offers general introduction to the association, as well as tourism news, policies, laws and regulations regarding the tourism industry. There are also some online surveys.

1.3 Tourism e-business

According to the 31st Statistical Report on Internet Development in China released by the China Internet Network Information Center (CNNIC) in January 2013, China has had a total of 242 million online shoppers and the utilization ratio of online shopping rose to 42.9 % by the end of December 2012. Compared to 2011, online shoppers rose by 48.07 million with the growth rate of 24.8 %. However, despite the rapid growth of online shopping, e-business in tourism industry has maintained a relatively slow development trend. Most travel agencies have still been processing the clients' orders in the traditional and manual way. The provincial tourism development commission, which has an e-business platform, can only offer very limited tourism products and is lagged behind in promotion and marketing efforts. As the hotel industry is concerned, only a very limited number of hotels can offer online booking and payment services.

1.4 Other Tourism Informatization Projects

Different government authorities and organizations in Hainan have been making great efforts to develop the province into an international tourism island since 2010. For instance, the Hainan Administration of Surveying, Mapping and Geoinformation, with a view to supporting the construction of Hainan as an international tourism island, has applied to develop a digital geospatial framework, which has a public version that can offer the electronic maps, image maps, and 3D maps of the whole province and its 18 cities and counties. It can also provide the panorama of some major scenic spots. In addition, a special section on Hainan's tourism is set up under the framework to include the following modules: tourism routes, food and catering, shopping centers, hotels and accommodation, scenic spots, and 360 Panorama. Its major feature lies in that the specific positions of these modules are indicated by special pictures.

2 Problems and Countermeasures in Hainan's Tourism Informatization

2.1 Tourism Administrations Playing Leading Role in Tourism Informatization

The tourism administrations should play a leading role in tourism informatization as they are the authorities guiding the development of local tourism. Generally speaking, almost all tourism development commissions at various levels have opened their own official Web sites, but most of them are static, rather than dynamic. Though the provincial tourism development commission added the panoramic views of some scenic spots and hotels onto its official Web site, most of the local tourism administrations' Web sites only contain dull and out-of-date information. It is important to enrich and update timely the Web site information to better serve tourists. In the meanwhile, efforts should be made to encourage the administrations' staff to be engaged in online office and bring into full play their enthusiasm in using the e-government platform in processing daily work.

2.2 Avoiding Repetitive Construction and Monotony in Web site Content

The tourism companies and tourism administrations have attached more importance to tourism informatization with the rapid development of information and internet technologies. The first step they take is to set up their own official Web sites. However, it has been found that most of these Web sites lack their distinct features, as they usually only include information on tourist attractions, tourism routes, accommodation, and food and catering [2].

It is important to use various technical methods to help a Web site stand out from the pack. For instance, apart from news and photos, other technical forms, such as adequate use of flash and video, can make a Web site more friendly, eye-catching, and helpful. A lot of new technologies, such as Panorama, GIS, and GPS, can also be applied.

2.3 Developing Sharing Mechanism Between Government Administrations and Tourism Web sites

Even though tourism administrations and tourism enterprises have developed many tourism Web sites, they are lack of a resources sharing mechanism. This has, to a great extent, affected the efficiency of tourism-related operations and businesses.

Therefore, it is important for the tourism administrations to plan the informatization process and contents in a scientific and sound way, so that the whole province's tourism informatization may advance smoothly and avoid redundant work and waste of resources. Only in this way, can the relevant departments and enterprises have more time to think about what the distinctive features they have in tourism informatization are and how to increase their work efficiency and operation benefits.

2.4 Applying GIS Tech into Tourism Industry

The GIS and computer technologies can be applied into the tourism industry to help develop the traveling geographic information system (TGIS), which is able to offer tourists a full range of tourism information in a more direct way [3]. It is a trendy in modern tourism informatization to develop a user-friendly TGIS with versatile functions [4].

2.5 Cultivating Professionals in Tourism Informatization

The tourism informatization professionals should be inter-disciplinary talent personnel who are well-versed in management, tourism, and information technology. However, there have been a very limited number of such professionals so far, which somehow obstructs Hainan's tourism informatization.

To solve this problem, the higher education institutions can set up tourism informatization programs to cultivate the relevant talent personnel, and various training organizations can also open more relevant training programs. It is also important that relevant units provide their employees with training and study opportunities in this aspect to enhance their professional knowledge and capabilities. To cultivate high-quality talent for tourism informatization is one of the prerequisites for fueling tourism informatization.

3 Conclusion

In line with the national strategy, Hainan is scheduled to have been basically developed into a world-class recreation and vacation Mecca by 2020. It will become an open, green, and harmonious island by that time. To achieve this goal, it is important to boost tourism informatization, so as to overcome the obstacles encountered by the tourism industry in its upgrading process. To sum up, tourism informatization will help the traditional tourism industry to make significant adaptations and develop in a modern way.

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References

- 1. Chen, S., Feng, X.G.: Preliminary research on information construction of city tourism, a case study of Hangzhou city. East China Econ. Manage. 19(3), 8–11 (2005)
- 2. Guo, J.C., Li, Z., Zhu, J.F., Ma, Y.C.: To build Hainan International tourism island informatization must go ahead. J. Qiongzhou Univ. **16**(5), 1–4 (2009)
- 3. Li, X.Y., Jiang, W.B.: Research and analysis of the development of digital Hainan regional tourism geography information system. Mod. Comput. 11, 73–76 (2012)
- 4. Zhang, B.H., Yan, Y.F.: A review on the domestic and overseas tourism information research. Geogr. Geo-Information Sci. **28**(5), 95–99 (2012)