

Association for Information Systems AIS Electronic Library (AISeL)

Eleventh Wuhan International Conference on e-Business

Wuhan International Conference on e-Business

5-26-2012

A Research on Tourism E-Business of Shanxi

Jiahong Xu

Faculty of Earth Sciences, China University of Geosciences, Wuhan, 430000, China, xjh880821@sohu.com

Zhiwu Yan

School of Economics and Management, China University of Geosciences, Wuhan, 430000, China

Guoshuang Wang

Secretariat, Yuanping Municipal Government, Yuanping, 034100, China

Follow this and additional works at: <http://aisel.aisnet.org/whiceb2011>

Recommended Citation

Xu, Jiahong; Yan, Zhiwu; and Wang, Guoshuang, "A Research on Tourism E-Business of Shanxi" (2012). *Eleventh Wuhan International Conference on e-Business*. 72.

<http://aisel.aisnet.org/whiceb2011/72>

This material is brought to you by the Wuhan International Conference on e-Business at AIS Electronic Library (AISeL). It has been accepted for inclusion in Eleventh Wuhan International Conference on e-Business by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.

A Research on Tourism E-Business of Shanxi

Jiahong Xu¹, Zhiwu Yan², Guoshuang Wang^{3*}

¹Faculty of Earth Sciences, China University of Geosciences, Wuhan, 430000, China

²School of Economics and Management, China University of Geosciences, Wuhan, 430000, China

³Secretariat, Yuanping Municipal Government, Yuanping, 034100, China

Abstract: E-business has become a new growth point of current economic development in the world. The natural adaptability between tourism and E-business gives birth to tourism E-business. The tourism resources in Shanxi are unique, yet its tourism development level and the abundant resources are not harmonious. To transform its resource advantage into economic advantage, developing tourism E-business is very urgent and necessary. In this article, through quantitative analysis and qualitative analysis methods, we find out the problems existing in the development of tourism E-business in Shanxi, and put forward corresponding development measures, especially the mobile E-tourism based on 3G technology, which is a new pattern and will become the development direction of Shanxi's tourism E-business in the future. The research aims at providing practical references for the tourism management departments and enterprises in Shanxi to enhance its competitiveness and promote its sustainable development.

Keywords: tourism E-business, E-business, tourism, Shanxi

1. INTRODUCTION

E-business is all kinds of business activities that are based on information technology, network technology and communication technology, centering on commodity exchange with high efficiency and low cost ^[1]. E-business has become the main economic trade way and a new economic growth point in the world today. Tourism and E-business have a natural adaptability ^[2], which gives birth to tourism E-business. The widely accepted definition of tourism E-business is made by the World Tourism Organization in "E-Business for Tourism", that is, improve the internal and external connectivity of travel agencies through advanced information technology ^[3].

The rich cultural connotation is a trump card of Shanxi's tourism. The "borderless" and "zero distance" of network can promote Shanxi's abundant natural resources and cultural landscape to the world with multiform and multilanguage. Tourism E-business can not only reduce the management cost of travel enterprises, but also deeply reflect the cultural connotation of Shanxi's tourist resources by virtual tourist activities and other forms. It can provide personalized service to satisfy consumers' individualized demand. In this sense, it appears to be more urgent and necessary to develop tourism E-business in Shanxi.

2. PRESENT DEVELOPMENT SITUATION OF SHANXI'S TOURISM E-BUSINESS

The long civilization history gives Shanxi the rich and precious heritages. According to statistics, Shanxi has 271 national key cultural relics protection units, accounting for 11.5%, ranking first in China; Shanxi's ancient architecture also ranks first in China, including 50 national key protection unites and 400 provincial key protection unites, which has a reputation for "Chinese ancient architectural art museum" ^[4].

Shanxi's tourism resources are unique, with rich cultural resources and particular natural resources. Its tourist informatization construction is developing rapidly, with large numbers of netizens, rapid construction of professional tourism websites and improved supporting facilities of travel agencies and hotels. However, the

* Corresponding author. Email: xjh880821@sohu.com(Jiahong Xu), xjh880821@sohu.com(Jiahong Xu)

development situation of its tourism is inharmonious with its abundant resources. Its development level lagged behind the neighbor provinces. Through the investigation into the macro environment of Shanxi's E-business from 2009 to 2011, this article reveals the development situation of its tourism E-business.

2.1 The survey of the number of Shanxi's netizens

In 2010, China's provinces with more than 10 million netizens increased to 19. The Internet development levels were obviously different in areas. Shanxi was the only central province in the first echelon whose Internet development level was good and the penetration rate was higher than the national average level. Table 1 shows the penetration rate of Shanxi reached 36.5%, among the top 10 of China [5]. So it has the good foundation to develop tourism E-business.

Table 1. Shanxi's netizens

Netizens (million people)	Internet penetration	Ranking	Growth rate	Ranking
12.50	36.5 %	10	17.5 %	25

2.2 The survey of Shanxi's netizens' travel ways

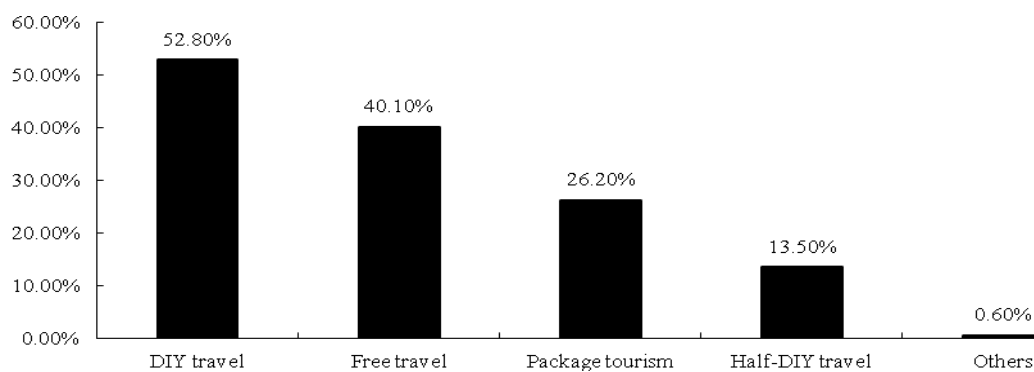


Figure 1. Netizens' travel ways in the first half year of 2011

In recent years, tourism demand tends to be personalized, including sightseeing, leisure vacation, study and special tourism, with abundant structure levels and obvious personalized requirements. Family travel and DIY travel have been the main travel ways in holidays. As shown in Figure 1, 52.8% of netizens choose DIY travel, 40.1% free travel, and 26.2% package tourism [6].

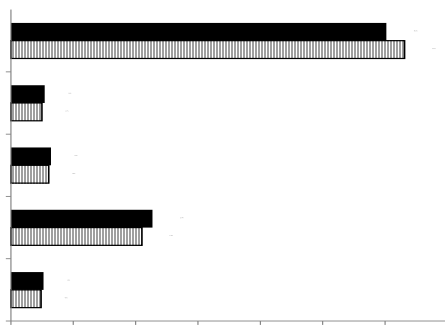
2.3 The survey of Shanxi's tourism websites

China's tourism websites can be divided into four categories: (1) national or local tourism websites constructed by the governmental tourist management institutions, such as China travel net, Shanxi tourism information net; (2) tourism E-business websites constructed by the professional E-business companies, such as China tourism information net, Ctrip; (3) websites constructed by the tourism enterprises, such as the Chinese tourism net, CYTS online; (4) travel channels of comprehensive portal sites, such as Sina, Netease and eLong [7]. The classification of Shanxi's tourist websites can be seen from Table 2.

Table 2. Classification of Shanxi's tourist websites

Website types		Representative websites
Shanxi province/city/county tourism administration websites		Shanxi tourism information net
Enterprise websites	Travel agencies	CITS, CTS, CYTS, Kang Hui, Chun Qiu
	Tourist attractions	Wutai mountain, Pingyao ancient city
	Tourist hotels	Shanxi World Trade Hotel
	Communications	Shanxi transportation hall
	Shopping & Amusements	China life net
Third parties	Finance	Financial talent net
	Insurance	Shanxi insurance elite network
Travel network platforms		Shanxi tourism hotline net

Through observation of the websites, we find that the repetition rate of Shanxi's present tourism websites is high, lacking respective characteristics; the service project provided by the sites is single; the information update of the website is too slow. As shown in Figure 2, the update cycle of Shanxi's websites is slightly higher than the national average level, but more than 60% of the websites update in half a year. Websites updating in less than one month only account for 27.93% [8].

**Figure 2. The update cycle of Shanxi's websites**

2.4 The survey of Shanxi's travel booking

Table 3. Application of E-business transaction from 2010.12 to 2011.6

Time	2011.6		2010.12		Growth rate
	Users (million)	Utilization ratio	Users (million)	Utilization ratio	
Application					
Online shopping	172.66	35.6%	160.51	35.1%	7.6%
Online payment	153.26	31.6%	137.19	30.0%	11.7%
Online banking	150.35	31.0%	139.48	30.5%	7.8%
Group purchase	42.20	8.7%	18.75	4.1%	125.0%
Travel booking	36.86	7.6%	36.13	7.9%	2.0%

As shown in Table 3, by June 2011, the number of China's netizens using online travel booking was 36.86

million, accounting for 7.6% of the netizens and 22% of the travel netizens in the first half year of 2011^[9]. Compared to online shopping, online payment and other business applications, the users of online travel booking increase relatively slowly.

2.5 The survey of application of E-business in Shanxi's hotels

Hotels not only play an important role in tourism industry, but also a sign to measure the regional economic development. By 2010, there were 13 five-star hotels and 56 four-star hotels in Shanxi^[10].

Taking Taiyuan as an example, this paper conducts an online sampling survey of the application of E-business in the star hotels. There are 5 five-star hotels and 11 four-star hotels in Taiyuan^[11].

Table 4. Application of E-business in star hotels of Taiyuan city

Star level	Name	Website	Online searching	Online booking	Online payment
5	Shanxi World Trade Hotel	Yes	Yes	Yes	No
5	Grand Metropark Wanshi Hotel	No	Yes	Yes	No
4	Sanjin International Hotel	Yes	Yes	Yes	No
4	Shanxi Grand Hotel	Yes	Yes	Yes	No
4	Yellow River Jingdu Hotel	Yes	Yes	Yes	No
3	Bingzhou Hotel	No	Yes	Yes	No
3	Shanxi Hotel	Yes	Yes	Yes	No
3	Xishan Hotel	Yes	Yes	Yes	No
2	Taiyuan Defence Hotel	Yes	Yes	Yes	No
1	Taiyuan Vico Inn	Yes	Yes	Yes	No

According to the survey of the tourism hotels in Taiyuan (Table 4), we can see that the informatization infrastructures and application levels are low. Considering the maintenance cost and other problems, hotels just use telephone and online booking to keep the room. Clearing fee has to be finished at the front desk.

3. PROBLEMS OF SHANXI'S TOURISM E-BUSINESS DEVELOPMENT

In recent years, many sites related to tourism in Shanxi have provided online travel booking service, and tourism E-business has made some development, but there are still many problems that cannot be ignored.

3.1 The overall environment is imperfect

Due to the geographical location, the economic development level and other reasons, the overall environment of developing tourism E-business in Shanxi is not perfect. For example, the informatization infrastructure is weak; the information technology level is low; the information management mode still stays in the stage of imitation; the informatization level of tourism enterprise is relatively backward; the growth rate of netizens is high, but the penetration rate is still low; tourism hotels and travel agents do not pay enough attention to tourism E-business.

3.2 The construction of tourism websites is unscientific, lacking personalized services

Many tourism websites of Shanxi lack characteristics. Copying the ready-made mode of websites at home and abroad leads to identical content and repeated construction, which greatly reduce visitors' click rate; It has not formed the scale operation; The success rate of online sales promotion and reservation is low; The service projects are single, with constant contents about introduction of tourist routes and scenic spots, online booking

of tickets, hotels and car rental, but with few projects of DIY travel arrangement and online virtual travel; The update of websites is slow, unable to attract tourists; The locating surface of websites is too narrow to face the guests all over the world, or to eliminate the lingual and cultural differences. The lack of personalized services cannot meet the tourists' needs.

3.3 The consumption concept is laggard

The wide use of credit card in foreign countries provides convenience for the rapid development and popularization of tourism E-business. However, in China, people are still used to the traditional tangible payment and difficult to accept the intangible electronic payment. The consumption concept is laggard, still using the payment mode of "online transaction, off-line payment" ^[12]. Because of the perfect offline travel booking service and weak awareness of online travel booking, people' impetus of using travel bookings is not strong.

3.4 The security for tourism online payment is out of guarantee

Tourism E-business trades are basically online trading, and what plagues people's online trading activities is the security issues of online payment. One is the invasion of external hackers in the process of trading to steal the personal information and confidential materials of both sides; the other is the unilateral fraudulent conducts of one side ^[13]. Because of the restriction of the two factors, tourists hold a wait-and-see attitude towards tourism E-business, leading to low online purchase rate of tourism products. Security is still the key to tourism e-business activities, which directly related to the interests of all trade parties.

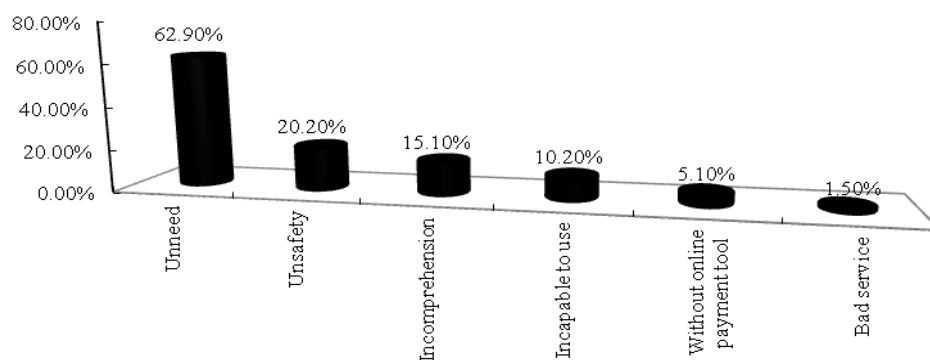


Figure 3. The reasons of netizens not using online travel booking

Figure 3 shows that among the netizens not using online travel booking, 62.9% of them feel unneeded, whose demand of travel booking service has not been aroused. 20.2% of users are for the reason of unsafety, 15.1% incomprehension, 10.2% incapable to use, and 5.1% without online payment tool ^[14]. For those netizens who have searched travel information and had traveling experiences during the last six months, the security concern about online travel booking is more obvious.

3.5 The professional talents of tourism E-business are lacking

E-business has been developing rapidly in recent years and has formed certain industry scale. However, only a few applications of E-business have been used in professional tourism and the talents proficient in both E-business and tourism industry are rare. Nowadays, people engaged in the construction, management and

maintenance of tourism websites are those computer professionals. To develop Shanxi's tourism E-business, employees should not only have the knowledge of computer network and E-business, but also the knowledge of tourism, management, marketing, culture aesthetics and so on. Therefore, what Shanxi lacks is neither the website construction staff, nor the tourism employees, but the versatile talents of both organic combination.

4. SUGGESTIONS OF DEVELOPING SHANXI'S TOURISM E-BUSINESS

Contraposing the above problems existing in the development of Shanxi's tourism E-business, this paper puts forward corresponding measures.

4.1 The government plays a leading role to support the development of tourism network system

Shanxi's government should play a leading role and cooperate with relevant departments, such as tourism enterprises, banking, information industry and law to solve the problems existing in the development of tourism E-business; Strengthen the macro-control function and make the long-term master plan of tourism informationization development to grasp the general orientation of tourism E-business construction; Formulate, improve and revise the policies and laws related to tourism E-business to provide policy and legal protection for tourism information network construction; Gradually improve the control of network security, strengthen the precaution and make relevant regulations to hit hackers.

4.2 Develop and improve Shanxi tourism information platform, providing personalized services

Shanxi should speed up the construction of tourism information platform, which sets in the integration of "tourism destination marketing system, travel consultation service system, tourism E-business system and tourism electronic government affairs system" ^[15]; Set up regional tourism consulting service center, tourism complaint center and travel network information centre, providing one-stop services; The star-level hotels, traffic hinges, hotel chains and important business districts with large tourist flow should set up overall tourist touch screen system to ensure the tour information released in time; Improve the optical fiber network of artery traffic and scenic spots, and construct satellite communications network covering all scenic spots, especially the remote areas to improve the tourism crisis management level and the information service ability. Establish online tourist information database, including users' basic information, tourism demand, etc. When visitors' preference information reveals a lot, companies can make better target marketing, and customer can get more satisfying plan.

4.3 Guide people's concept of online consumption actively

The wide application and popularization of tourism E-business needs the support and participation of consumers. Therefore, the government and tourism enterprises should create a good trading environment for the development of tourism E-business. For example, the government makes legal system to safeguard trading security; ally banking to promote credit card to gradually change people's traditional consumption habits as well as establish credit system. The enterprises should resolutely put an end to false propaganda, and develop personalized service products of high quality, giving maximum profit to consumers; pay attention to the after-sales service of tourism products; keep electronic files of consumers. All these measures are to eliminate consumers' mistrust in network trade and set up their confidence in online consumption.

4.4 Many parties involve in to solve the security problem of online transaction

Internet safety and integrity are restricted by technology, society and legal system. Therefore, it needs the involvement of governments, enterprises, trade associations and users. Only by the governments perfecting the

security mechanism, the enterprises strengthening the network safety protection system and the netizens improving the ability of distinguishing network safety and integrity, can we establish the comprehensive prevention mechanism, achieve the safe and reliable Internet environment, and preserve a green and healthy network consumption environment together.

4.5 Develop mobile E-tourism

In recent years, the development of 3G technology has opened up a new era of network economy. The extensive use of mobile phone wireless network has promoted the development of mobile E-business^[16]. Using this mobile technology into tourism service gives rise to mobile E-tourism, namely: combine mobile terminals, such as mobile phone, personal digital assistant and smaller laptop with wireless communication technology to provide mobile information service and convenient reservation and trading for the whole tourism process (before travel, in travel and after travel)^[17]. Mobile E-business includes electronic traffic, electronic destination, electronic hotel, electronic travel agency and electronic travel agent, etc.



Figure 4. Application of mobile E-business transaction in the first half year of 2011

As shown in Figure 4, by June 2011, the mobile travel booking has reached 3.7%. Though the proportion is small, the development trend is considerable. At present, the scale of mobile phone users in China continues to expand, up to 318 million. Shanxi's mobile phone users account for 3.0%, among the 12th^[18]. It is thus clear that Shanxi has the vast market to develop mobile E-tourism, which will be the development direction of its tourism E-business in the future.

4.6 Pay attention to fostering the professional talents of tourism E-business

Colleges and universities are the cradle of talent training, and are responsible for fostering talents suitable for various industries. However, the courses offered by some colleges divorce from the market demand, attaching more emphasis on theory than practice. Therefore, the tourism management major should adjust the current course structure according to current market demand to foster versatile talents adapting to the international operation of tourism in the future; Tourism enterprises should cultivate the younger generation to be the interdisciplinary talents skillful in both E-business technology and travel business; Strengthen the training of E-business knowledge for the staff in tourism competent departments and tourism enterprises, especially the leaders; The tourism employees should learn the knowledge of E-business and grasp the operation methods to strengthen the ability of business process and enterprise management by using E-business.

5. CONCLUSIONS

Tourism E-business plays an important role in promoting Shanxi to be a "powerful tourism industry province". This paper takes domestic netizens and tourism websites as the pointcut, using quantitative analysis and qualitative analysis methods to conduct a series of investigation and research, and gets some achievements. Firstly, by analyzing the development situation, the paper finds out the problems existing in Shanxi's tourism E-business development, and then puts forward corresponding suggestions.

However, due to the limited personal knowledge and ability, as well as the complexity of tourism E-business study itself, it needs more research and practical work in the future to provide some suggestions for the development of Shanxi's tourism E-business and make a contribution to provide practical references for the management departments and tourism enterprises in Shanxi.

ACKNOWLEDGEMENT

The author thanks professor Zhiwu, Yan for the guidance to the paper.

REFERENCES

- [1] Zhonghai Li. (2010). Research on the Development Status of Tourism E-Commerce、 Problems and Solutions in Anhui Province. Ms D Thesis. Anhui: Anhui University
- [2] Miaoxing Fan. (2010). The Research on Strategic Alliance of Tourism Enterprise Based on the Value Chain under E-Commerce Environment. Ms D Thesis. Shanxi: North University of China
- [3] Fenglong Li. (2007). Travel E-commerce Investigation of Shanxi. Ms D Thesis. Beijing: Beijing Jiaotong University
- [4] Shanxi Culture Relics Bureau, China. (2011). <http://www.sxcr.gov.cn/index.php?m=content&c=index&a=lists&catid=23>
- [5] CNNIC. (2011.1). 27 China Internet network development status statistic report
- [6] CNNIC. (2011.6). 28 China Internet network development status statistic report
- [7] Gaoli Wu, Shuji Deng. The integration of tourism and E-business—Tourism E-business. (2008). Business China, (7):136
- [8] CNNIC. (2011.6). 28 China Internet network development status statistic report
- [9] CNNIC. (2011.6). 28 China Internet network development status statistic report
- [10] Shanxi statistics yearbook in 2011
- [11] www.sxly.org. 2011
- [12] Huifang Shu. (2004). A study on the development situation and countermeasures of tourism electronic commerce in Shenzhen. Special Zone Economy, (10): 87
- [13] Vineent C.5.Heung. (2003). Barriers to implementing E-commerce in the travel industry: a practical perspective. International Journal of Hospitality Management, 22 (1): 111-118
- [14] China Internet Network Information Center (CNNIC). (2011). <http://www.cnnic.net.cn>
- [15] Shaoqing Wei. (2009). Research on the Construction of Information Platform in Shanxi Travel. Ms D Thesis. Shanxi: Shanxi University of Finance & Economics
- [16] Dimitrios Buhalis, Ourania Deimezi. (2004). E-tourism developments in Greece: information communication technologies adoption for the strategy management of Greek tourism industry. Tourism and Hospitality Research, 5(2):103-130
- [17] Zhonghai Li. (2010). Research on the Development Status of Tourism E-Commerce、 Problems and Solutions in Anhui Province. Ms D Thesis. Anhui: Anhui University
- [18] China Internet Network Information Center (CNNIC) (2011). <http://www.cnnic.net.cn>