Research on the Development of Rural E-commerce Based on Smart Tourism

Haibin Su¹*, Xiangzi Meng¹

¹Department of Economics and Management, Weifang Engineering Vocational College, Qingzhou, Shandong, 262500, China

*Corresponding author e-mail: suhaibin-001@wfec.cn

Abstract. With the popularity of the Internet, E-commerce has been applied to various industries in people's lives, which has been extended to rural tourism. Through E-commerce, rural tourism can develop a new model, which can enhance the effect of smart Tourism (hereinafter referred to as ST). Through ST, we can integrate tourism and E-commerce, which will help the countryside to better publicize. However, there are still many problems in the E-commerce of rural tourism, such as the single way of publicity, lack of branding, insufficient support, etc., which will seriously affect the economic development of rural tourism. Therefore, we must promote the application of ST in rural areas. Through the construction of rural characteristic tourism culture brand, we can attract many tourists, which will promote the multi-functional improvement of ST system, such as online display, reservation, payment, electronic authentication, etc. Firstly, this paper analyzes the importance of ST in the development of rural E-commerce (hereinafter referred to as REC). Then, this paper constructs a ST model. In view of the current problems, this paper puts forward some suggestions.

Keywords: Smart Tourism, Countryside, E-commerce

1. Introduction
The 21st century is the era of digital economy, which will change people's demand for tourism convenience. As people pay more attention to leisure tourism, rural tourism has become one of the main ways of urban tourism, which also leads to people's demand for rural ST [1]. Through ST, we can improve the visibility of the countryside, which will save more money. Through the ST website, we can get a lot of data, which will quantitatively analyze the development of REC. Through ST, we can bridge the digital gap of rural tourism, which can enhance the competitiveness of rural digital economy [2-4]. Through REC, we can also ease the employment pressure of farmers, which will increase farmers' income. Therefore, ST has become an auxiliary channel for the development of REC, which will help rural areas realize industrial sales and brand formation. Through ST, we can promote the integration of online and offline elements, which can promote the industrial integration of rural and E-commerce [5].

2. The importance of ST to REC
ST can increase the basic information equipment of REC, which will increase the popularity of products, as shown in Figure 1.

![Figure 1. The importance of ST to REC.](image)

2.1. Increase enterprise information channels
Most rural tourism enterprises belong to small and medium-sized enterprises, which are difficult to contact a large number of customers. Therefore, it is difficult for rural enterprises to collect enough information, which will be difficult to analyze the customer needs. Internet is a relatively efficient and low-cost information means, which can improve the information collection ability of rural tourism enterprises [6-8]. Through the network platform, enterprises can easily collect customer information, which can make rural enterprises quickly seize the market opportunities. Tourists can use the Internet platform to interact with rural tourism enterprises, which provides their own suggestions and opinions to enterprises, so that enterprises can constantly abandon their shortcomings. Therefore, the cooperation between E-commerce and rural tourism enterprises has brought a brighter road for the development of tourism [9].

2.2. Reduce enterprise cost
Most of the traditional enterprise cost is management cost, including document making, marketing cost and so on. ST can achieve high publicity efficiency at a very low cost. Therefore, E-commerce can save a lot of time, such as certificate production, delivery, handover and so on, which can improve the efficiency of work. Therefore, ST can reduce the cost of enterprise management. According to the survey, the publicity effect of enterprises on the Internet can be increased by 10 times [10]. Cost reduction can enable enterprises to put the remaining funds into customer related fields, which can improve customer satisfaction. In this way, we can achieve the good win cycle. ST is more important for rural tourism enterprises with more limited funds. Therefore, the network price will have the characteristics of low cost and high transmission efficiency, which will make up for the lack of rural tourism enterprises [11].

2.3. Enhance the comprehensive competitive strength of service enterprises
The organic combination of rural tourism and E-commerce can effectively reduce the cost. The network information dissemination speed is fast, the influence area is wide, this may reduce the investment cost
maximally. Through ST, we can effectively improve the sales of tourism projects. E-commerce can provide more sales channels for rural tourism enterprises, which will be more convenient for rural tourism to integrate into the marketing system [12]. According to the relevant statistical data, more than 80% of the consumers obtain tourism information from the business website platform. The application of E-commerce makes rural tourism management more active. Through ST, enterprises can provide convenient communication platform for service providers and consumers. Service providers can continuously obtain more market information, which will be more convenient to make information feedback to consumers. Through summary analysis, we can work out the business strategy in line with the market trend. Therefore, consumers can use E-commerce platform to understand the comprehensive information of tourism services, which can make a rational choice. Therefore, ST can enhance the comprehensive competitive strength of service enterprises [13].

3. The problems of ST E-commerce

At present, there are still many problems in China's ST, such as low degree of informatization, less application of global distribution system, etc., which will restrict the development of ST E-commerce, as shown in Table 1.

| Project                     | Domestic situation                                      | Situation of developed countries                      |
|-----------------------------|--------------------------------------------------------|-------------------------------------------------------|
| 1 Functions of E-commerce system | It needs to be improved                                 | The transaction and follow-up functions are perfect    |
| 2 Enterprise website        | The commercial function needs to be improved           | Business oriented                                     |
| 3 Online interaction        | Only a small number of enterprises                     | Most enterprises have this function                   |
| 4 Differentiated services   | A few systems in group enterprises have this function  | Most group enterprises have this function             |
| 5 GDS system                | Lack of large-scale all-round coverage GDS system       | Since the 1970s, the coverage rate is very high       |
| 6 Business support system   | Mainly local data exchange                             | Realize online service and data interconnection       |
| 7 Enterprise information system | The hotel is more perfect, the travel agency is more perfect, the scenic area is relatively less | Enterprises popularize information system             |

4. Construction of ST E-commerce

4.1. Integration of ST resources

By analyzing the business system data of each travel agency, a comprehensive basic resource database can be formed, as shown in Figure 2.
Figure 2. ST resources integration process.

4.2. REC based on ST
Based on ST, this paper constructs a REC, as shown in Figure 3.

Figure 3. REC based on ST.

5. Safeguard measures for the construction of smart rural tourism platform

5.1. Establish and improve the organization system of smart rural tourism construction
The construction of smart rural tourism platform is a systematic project covering many related tourism industries and technologies, which will involve a lot of complexity and diversity. Therefore, we must have a clear division of labor, which will coordinate and unify the organization and management system. Therefore, the government can strengthen the guidance and planning of rural tourism development and construction, which will set up a special rural tourism working group. By coordinating the links between various departments, we can coordinate the construction of smart rural tourism platform, which will promote the construction of smart rural tourism.
5.2. Improve the cooperation and operation mechanism of smart rural tourism
Tourism management departments should establish a mechanism for sharing rural tourism resources and technology exchange. By strengthening the communication between enterprises, we can strive for the attention of relevant departments to the construction of smart rural tourism, which needs the support and subsidy of project funds. In the process of building smart rural tourism platform, the government should take a leading role, which can attract social capital to participate. Through the enterprise operation mode, we can strengthen the cooperation between tourism enterprises and Internet companies, which will actively guide social funds to participate in the construction of smart rural tourism. At the same time, colleges and universities should introduce professional tourism enterprises, which can participate in the service and management operation. By continuously improving the level of tourism operation, we can effectively attract high-quality social resources, which will promote the economic development of rural areas.

6. Conclusion
Through a variety of ST modes, rural tourism can develop smart economy, which will in turn promote a number of measures to support the intelligent tourism system. Through ST, we can develop the mining, protection and inheritance of rural tourism resources, which can better adjust and optimize the rural industrial structure. By broadening the agricultural function, we can extend the agricultural industry chain, which will better develop the rural tourism service industry. Therefore, China should strengthen rural ST, which will promote the development of REC.

The implementation of Rural Revitalization Strategy is of great significance.

References
[1] Ai Qi. Let ST take wing -- 2012 China tourism E-commerce conference held in Shaoxing [J]. Yangtze River Delta, 2012, (7): 50-51.
[2] Fan Ying. Analysis on the development of ST in Zhenjiang "three mountains" scenic spot [J]. Jiangsu business theory, 2020, (1): 57-59.
[3] He Jun, Liu Xiaoyun, Wang Yi. Research on E-commerce ecosystem of Tourist Attractions Based on value chain [J]. Science and technology and industry, 2013, 13 (1): 38-42.
[4] He Xiaomin. Analysis on the optimization of mobile tourism E-commerce ecosystem [J]. Modern marketing, 2018, (7): 149.
[5] He Xudong, Zheng Jun, Zhao Wenfei. Research on Intelligent scenic spot service system based on tourism E-commerce [J]. Computer age, 2019, (5): 94-96.
[6] Li Chenghui, Bao Lei, Qian Lina. Analysis on the construction of ST E-commerce platform [J]. Times economic and trade, 2013, (20): 83-84.
[7] Li Xiaoxuan. Research on the innovation and development of ST under the Internet thinking [J]. Journal of Jiamusi vocational college, 2018, (9): 437-439.
[8] Liang Yan. Research on the construction of intelligent scenic spot tourism cloud E-commerce platform system [J]. Technology and enterprise, 2016, (8): 98-99.
[9] Liu Li. The Enlightenment of tourism E-commerce talent training -- Based on the development of ST [J]. Science and technology entrepreneurship monthly, 2016, 29 (14): 35-37.
[10] Luo Junming. Intelligent path and strategy of Li nationality cultural tourism [J]. Beauty and times City, 2020, (7): 83-84.
[11] Wan Jinjin. Research on the optimal development strategy of Jiangsu smart rural tourism E-commerce [J]. China business theory, 2019, (14): 87-88.
[12] Wang Shuling, Li Yun, Liu Ji. Research on the development mode of E-commerce in tourism destinations [J]. Fujian quality management, 2016, (1): 121.
[13] Zhao Yang. Research on the informatization construction of China's travel agencies under the background of ST [J]. Foreign trade and economic cooperation, 2016, (6): 68-69.