Research on the Intelligent Development Mode of Tourist Attractions in Shaanxi Province from the Perspective of Big Data

Xin Jian
Xi’an International Studies University, Xi’an, Shaanxi, China

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Abstract: Compared with traditional tourism, the intelligent development of tourist industry based on big data technology provides more convenient and efficient tourism experience for tourists. In the context of rapid improvement of people’s living standard, many tourist attractions have begun to build intelligent facilities. Shaanxi Province is one of the birthplaces of Chinese nation and Chinese civilization, and there are many high-quality tourist resources. However, as seen in the relevant investigations, there are still some shortcomings in its intelligent construction, which has caused some serious constraints on the development of the tourist attractions in Shaanxi Province. On the basis of this situation, this paper makes an analysis on the suggestions for perfecting the intelligent development mode of tourist attractions in Shaanxi Province from the perspective of big data technology.

1. Introduction
Intelligent tourist attraction is not only an important embodiment of the modernization of tourism industry, but also the base and core of intelligent tourism. The developmental demand of modern service industry makes the extensive service of traditional tourism change to intensive service. Big data technology takes computer network as a medium, stores and analyzes the relevant data which is formed by cloud computing. By means of the application of big data technology, the intelligent development of tourist attractions could be more targeted and more accurate, and it is of great significance to realize the double improvements----the tourist’s satisfaction and the service of the tourist attractions, and it is also significant to the intelligent development of the tourist attractions. Shaanxi Province is a very province which has lots of high-quality tourist resources in China. At present, the intelligent construction of tourist attractions in Shaanxi Province has formed a new mode, but there are still some shortcomings in the application of big data technology, these shortcomings have restricted the long-term intelligent development of the tourist attractions to a certain extent. Therefore, it is necessary to urgently think about the intelligent development mode of tourist attractions in Shaanxi Province from the perspective of big data technology.

2. Big data and intelligent development of the tourist attractions
2.1 Conception of big data
Big data is a kind of technology that can obtain the information assets which have the features of high value, high growth rate, and diversity by means of collecting, sorting and calculating the mass data, and by means of the functions of decision making, data analysis and data optimization in the process of the operation. Compared with the traditional data collection, big data has larger data volume, it can analyze and calculate more complex data structure, and it has the following four features----the data volume is large, the data types are more, the processing speed is fast and the value density is low. In short, big data technology can quickly obtain valuable information from all kinds of data types. At present, big data technology has been widely used in various industries.

2.2 Conception of intelligent tourist attraction
As the name implies, the intelligent tourist attraction means the intelligent development of the
tourist attractions, and it gradually evolves as the development of intelligent technology. The factors of its formation include the application of intelligent equipment, the higher requirement of the public for tourist experience, the developmental driving force of modern tourism industry, and so on. In a word, the intelligent development of tourist attraction is not only the requirement of tourists’ experience, but also an important situation for the tourism industry to maintain its competitiveness in the future. From its development point of view, the intelligent tourist attraction is the advanced developmental stage of the tourist attraction which is in the stage of digit or information. It refers to the construction of the tourist attractions’ service project which is formed by the combination of information technology, digital technology and intelligent technology, and the whole services that play an important role in the operation of the tourist attraction. The total range of intelligent tourist attraction includes food, accommodation, shopping, entertainment and all aspects of tourist industries, such as promotion, marketing, location, ticket buying, tourist projects, travel behavior, etc. Its main content involves many aspects such as infrastructure construction and test, marketing, network platform, amusement facilities and so on.

2.3 Relationship between big data and intelligent tourist attractions

Tourist industry is a typical service industry, so it takes the consumers as the center. Big data technology has the close relationship with the intelligent development of tourist attractions, because big data technology is an information processing technology that can collect and compute tremendous amount of data accurately. In fact, big data technology has been applied to the intelligent development of tourist attractions; we take network and cloud computing as the media, so that we can carry out effective data collection and data analysis, and do more scientific and rational management works of the tourist attractions. For example, using big data technology can further fit into the infrastructure construction and tour information framework of the tourist attractions, so that the tourist attractions can flexibly adjust its management mode and future development ideas according to this kind of accurate information; at the same time, it can also realize the tourist prediction and feedback service by intelligent platform, realize the customization of individualized services, promote the satisfaction of tourists, and promote the development of the tourist attractions.

3. The shortcomings of the intelligent development mode of the tourism attractions in Shaanxi Province from the perspective of big data

3.1 Insufficient intelligent management mode and too traditional management center

The biggest difference between the traditional tourist attractions and the intelligent one is the realization of “intelligence”, which is not only the intellectualization of infrastructure construction and equipment application, but also the intellectualization of management mode.

In fact, the management mode of the tourist attractions in Shaanxi Province is too traditional. In the actual investigation of the author, it is found that most of the tourist attractions take marketing, infrastructures, scenic resources, tourist security and so on as the center of the management works. However, as the change of modern tourist’s demands, the management center should place more emphasis on the management of the tourist’s experiences on the basis of traditional tourism, rather than the inconvenience experiences such as “waiting for three hours, just viewing for one hour”, or “being lost in tourist attractions”, and other extreme bad experiences for the tourists. The traditional management mode seriously restricts the intelligent development of the tourist attractions.

3.2 The construction of intelligent platform is unscientific, and the information lacks symmetry and integration.

Information is an important factor that influences tourists’ choice of tourist attractions. Shaanxi Province has a large number of high-quality tourism resources, which not only include the well-known terracotta warriors and horses, but also the “cyber star city”----Xi’an, as well as the Huangdi Mausoleum, the Hua Mountain, the Wild Goose Pagoda, and many other cities and tourist
attractions that are full of historical culture and modern charm. These tourist attractions need reasonable channels to achieve effective publicity. However, the investigation shows that the platform construction of tourist attractions in Shaanxi Province is not scientific, and the information is lack of symmetry and integration.

First of all, from the perspective of platform construction, the content of tourist platform in Shaanxi Province is not comprehensive enough. The content on the platform is just some simple introductions about the tourist attractions, such as the contact information, price of admission ticket, and so on.

Secondly, from the perspective of information, because the platform construction lags behind, so the tourist can not have the comprehensive information about the tourist attractions. For example, whether the roads in the tourist attraction are spacious; if there are sufficient parking spaces for self-driving tourists; the signal of the telecommunication in the area is good or not; whether it covers wireless network; and whether there is prone to extreme weather such as floods and so on. All these will affect the tourist’s choice of choosing which tourist attraction to visit.

Finally, it is the integration of information. We take the famous Terracotta Warriors and Horses in Shaanxi Province for example. In the Terracotta Warriors and Horses, it have already actualized the initial intelligent construction, including the entrance control system, the intelligent ticketing machine and ticket checking system, the monitoring system, the propaganda system, and so on. However, the data between different systems can not be shared, and the data in different systems are lack of necessary analysis, which reduces the efficiency and quality of the intelligent system.

3.3 Lack of precision in intelligent marketing

In modern marketing, which takes big data technology as the core, the most important thing is to realize the precision of marketing, but in the investigation of the intelligent construction of tourist attractions in Shaanxi Province, there are still some shortcomings in its marketing works. First, it is lack of accurate positioning of the customs. The author found that the tourist attractions in Shaanxi Province, at present, there are only a few small platforms that propagandize the tourist attractions such as “Shaanxi Travel Group” and so on, no matter in aspect of marketing promotion or that of customer positioning. What’s more, the tourist attractions, which are propagandized by the mainstream media such as newspaper and television, account for only about 0.7% of the total number of the local tourist attractions; at the same time, the contents of propagandas are also several well-known tourist attractions, and the propagandas are lack of classification description of the characteristics of tourist attractions, this kind of propagandas are difficult to lead accurate customers’ behavior. By observing the marketing communication mode of tourism in Shaanxi Province, we can also see that almost all tourist attractions are lack of communication with consumers, the tourists can not understand the information of the tourist attractions in time, so it blocks the further development of their marketing works.

4. Suggestions on the improvement of the intelligent development of the tourist attractions in Shaanxi Province from the perspective of big data

4.1 Changing the management mode and using big data technology to precisely position the center of management

Whether the management mode is scientific or not has a direct impact on the intelligent development of the tourist attractions in Shaanxi Province. So, it is necessary to change the management mode according to the existing problems and use big data technology to achieve the precise positioning of the key part of the management works. The tourists’ experiences should be placed in the important position of the management works, and the requirements and expectations of the modern tourists should be analyzed by big data technology, so as to improve the tourists’ experiences to the largest extent. For example, the identity confirmation of the tourists could be carried out by the smart phones, so that the tickets can be acquired and checked quickly; it is also feasible to update all kinds of information about the tourist attractions, such as the flow of tourists,
the surplus of parking spaces, the capacity of the nearby restaurants, the location of toilets and bicycles in the tourist attractions, and so on, which should be pushed to the visitors’ smart phones in real time via the network. It is convenient for tourists to adjust the tour route according to the actual conditions and to choose the dining place and time. The tourist attractions also can push real-time information to the tourist’ smart phones, so the customs can easily get the information in time, at the same time, the tourist attractions can improve their ability of intelligent management.

4.2 Actualizing the integration of the information of different intelligent platforms by big data technology

The intelligent platform and information are the important factors that influence whether the tourists choose a tourist attraction or not; therefore, the tourism attractions in Shaanxi Province need to realize the integration of the information of different tourism attractions in Shaanxi Province according to the current platform construction conditions and the specific problems.

First, it is important to strengthen the cooperation between the big data platforms. In the current market situation, the method of building the local tourist platforms is not reasonable; on the contrary, the professional tourist platforms, such as Ctrip, TuNiu, etc, have lots of users. Therefore, the tourist attractions in Shaanxi Province can cooperate with these platforms, so as to achieve effective platform construction by using big data technology. The tourist industry in Shaanxi Province needs to establish data integration system among various tourist attractions, and timely release these data to the cooperative platform, so as to promote the intelligent management of the tourism. It is also feasible to develop the related APP, so as to provide the comprehensive information services for the users, such as the traveling information, the marketing advertisement, the traveling propaganda, the map of the tourist attraction, and so on.

Second, it is important to strengthen the construction of big data information. The relevant department of Shaanxi provincial government needs to make a development plan, so as to publish the unify catalogue of basic information resources of tourism in Shaanxi Province, and clearly explain all segments and elements of tourism area, tourism products, service, supervision, and so on. At the same time, it is feasible to make relevant APP, so as to realize comprehensive information services, such as travel information, marketing advertisement, travel propaganda, map of tourist attraction, and so on. What’s More, the tourist attractions should timely optimize the actual conditions of the tourist attractions according to the consumers’ experiences. On this basis, it is also necessary to strengthen the integration of information, it would be best if they could provide a universal platform to the tourists for their identification, ticket checking, service requirements, etc., by which the tourists could get the maximum convenience and the best experiences.

4.3 Carrying out intelligent targeted marketing by means of big data

The tourist attractions in Shaanxi Province should adopt the management mode of intelligent tourism and use big data to realize intelligent targeted marketing. First, it would be best to quickly obtain the tourist’s preferences and requirements by the platforms, and then, to fulfill the preferences and requirements by providing relevant information and services for the tourists; at the same time, to form the information sharing mechanism between different tourist attractions, so as to decline the cost of information collection. Second, it is necessary to build a management mode for analyzing the tourists’ information by big data technology, such as their ages, education backgrounds, hobbies and so on. By means of analysis, it can effectively find out the valuable information, and accurately portray the tourists according their different personal conditions. Third, it is important to pay attention to the interaction with tourists and answer the questions of tourist in time. The tourist attractions can also actively inquire the tourists about their requirements for improving their tourist experiences if it is necessary, so as to understand the tourists’ requirements and actualize the targeted marketing on the basis of smooth communication between the both sides.

5. Conclusion

In a word, the intellectualization of tourist attractions has become an important embodiment of
the development of tourism, and the use of big data technology can better realize the intelligent management, intelligent information and intelligent marketing of the tourist attractions. However, the intelligent construction of the tourist attractions not only is a systematic, comprehensive project, but also needs careful thinking and continuous improvement.

References
