

## Research Article

# The Development Status and Trend of Urban Smart Tourism Based on Internet of Things Technology

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The rapid economic development and the improvement of people's living standards have prompted the rapid development of tourism. And in the era of big data, it is inevitable for economic and technological development to apply IoT technology to various industries. The application of Internet of Things technology in the tourism industry conforms to the development of the times, promotes the upgrading of the industry, and also promotes the emergence and development of smart tourism. At present, the development of smart tourism provides convenient and timely services for people's travel and also improves the management level and reception capacity of tourist destinations. Therefore, this paper conducts an in-depth discussion on the urban smart tourism based on the Internet of Things technology and summarizes the development status of urban tourism. And based on the current development situation to predict the future development trend of urban smart tourism and the future development plan of smart tourism, this paper discusses the current problems of smart tourism in order to promote the healthy and sustainable development of urban smart tourism. The research in this paper has great reference significance and practical guiding significance for the healthy and stable development of smart tourism in the future.

## 1. Introduction

At present, the development of modernization, informatization, and internationalization brings opportunities for the operation of traditional tourism. The new tourism industry changes its operation and management mode through informatization, innovates the concept of tourism service through modernization, and expands tourism methods and development channels and service modes through cloud computing and Internet of Things technology [1]. However, the phenomenon of "smart tourism" outweighs the actual effect. The country's high attention has made tourism companies embark on the reform of "smart tourism". However, it did not conduct too much market research and also deeply understand the needs of tourists for tourism. The "smart tourism" project that does not meet the needs of tourists not only does not make tourists feel convenient but also makes it difficult for tourist attractions to complete their own transformation and upgrading [2]. Of course, as an advanced science and technology, the application of Internet

of Things technology in the development of tourism has a great role in promoting the development of tourism, and the development space of smart tourism is even greater.

Due to the vigorous development of tourism and its existing problems, many scholars have studied the problems and solutions in tourism. At the same time, the development of smart tourism has also attracted the attention of scholars, who have studied the development of smart tourism and are looking for ways to reform and innovate tourism. Among them, ATB demonstrates the potential value that spatial and semantic analysis of social media information can provide to smart tourism ecosystems. He found that social media analytics can capture spatial patterns in cities related to user presence, context, and topic engagement. He also outlines how these models can serve as inputs for smart city tourism value creation [3]. Although his research has a certain reference value for the innovation and reform of the tourism industry, there is no relevant technical support. Romao J conducts a structural modeling analysis of the performance determinants of urban attractiveness from the perspective of

the residential population and international tourism demand. The analysis revealed a precarious balance between liveability, environment, population, visitor numbers, and growth [4]. Although Romao's research analyzes the development of tourism in combination with the city's attractiveness, it lacks actual demonstration data. García-Hernández combines a compilation of information on initiatives and measures from public tourism planning documents with semistructured interviews with those responsible for managing smart city strategies and sustainable development projects. The results show that a growing number of destinations are challenged with the need to generate knowledge useful for managing tourist overload [5]. Although his research has practical significance, it rarely involves the transformation and upgrading of tourism. Mozghovyi studied the main characteristics of smart destination development. Its findings can be used to plan the further development of smart tourism destinations and the corresponding adjustment of tourism innovation policies [6]. Although his research has certain reference significance for the reform and upgrading of smart tourism, he has not conducted in-depth discussions on the development of smart tourism. Although their research has shortcomings, it has certain reference value for the upgrading of traditional tourism and the long-term and sustainable development of smart tourism.

This paper studies the development status and development trend of smart tourism. This paper can deeply analyze the problems existing in the current development of the tourism industry and provide convenience for tourists to travel with the intelligent technology of information technology. But the application of high technology to the tourism industry has to be implemented in the end. The research on smart tourism in this paper can prevent the entry of smart tourism from being kidnapped by technology and money and liberate the development of smart tourism from the kidnapping of the core concepts of traditional tourism. It promotes the need for tourists to become a guide for the development of smart tourism. Considering the individual needs of tourists to further promote the improvement and perfection of the smart tourism industry chain, this paper makes the development of smart tourism expand in a larger scope and in more aspects to seek improvement [7]. It can promote the healthy and sustainable development of smart tourism and achieve a two-way balance between tourism's economic benefits and environmental benefits.

This paper also has the following innovations in the research on smart tourism: (1) Improve the original tourism industry chain with the Internet of Things information technology, thereby improving the efficiency of tourism management, the quality of tourism products, and the satisfaction and experience of tourists. (2) Using the Internet of Things technology to intelligentize the infrastructure of the tourism industry, promote the service capability and service quality of the scenic spot, realize the sharing of tourism resources, and expand the tourist source base of the scenic spot. (3) The development status of smart tourism is monitored by the Internet of

Things technology. This paper ensures a two-way balance between its development and environmental protection. At this time, the balanced development of smart tourism not only ensures economic benefits but also ensures environmental benefits.

## 2. Methods to Analyze the Current Situation and Trends of Urban Smart Tourism Development

*2.1. IoT Technology.* IoT technology is the third revolution of information technology, including sensor technology, embedded system technology, RFID technology, intelligent technology, nanotechnology, and other key technologies, as shown in Figure 1.

The Internet of Things technology plays an important role in the industrial upgrading of the tourism industry. Especially in the role of building a travel online service platform, basically, all service systems will involve the Internet of Things technology, including the travel information on the platform that needs to be stored through the communication network. Therefore, the Internet of Things technology plays a key role in the development of smart tourism, especially sensor technology, intelligent technology, and embedded system technology [8, 9]. The application of sensors in smart tourism is generally used for ticket checking and ticketing. We need to check tickets when we travel to tourist areas every day. The application of sensors in this area saves us a lot of time [10].

Generally, there is more than one ticket gate in a scenic spot; that is, if there are multiple ticket gates, multiple sensors are required, so the sensing technology applied by the sensing device is the same [11]. We set the wireless sensor network to have  $N$  nodes distributed in a square detection area of length  $M$ . The nodes of each sensing device transmit the detected tickets to the identified router node  $X$  through multiple nodes. Then, it will be forwarded by the  $D$  router nodes and finally passed to the identification system in the overall IoT platform to identify the validity and correctness of the ticket, and at the same time, it can also record the amount of passenger flow through the ticket gate. The internal network structure of the sensor device is shown in Figure 2.

The nodes in the sensor can adjust their own maximum communication distance  $S$  according to the range of the communication network [12, 13]. If the geometric distance  $d$  between node  $i$  and node  $j$  is smaller than  $S$ , there is an edge between node  $i$  and node  $j$ . The statistical process of the passenger flow of the IoT platform is as follows:

$$\begin{aligned} D_3 &= \frac{N_3}{X_3} * \varphi, \\ D_1 &= \frac{N_1}{X_1} * \varphi, \\ D_2 &= \frac{N_2}{X_2} * \varphi. \end{aligned} \quad (1)$$

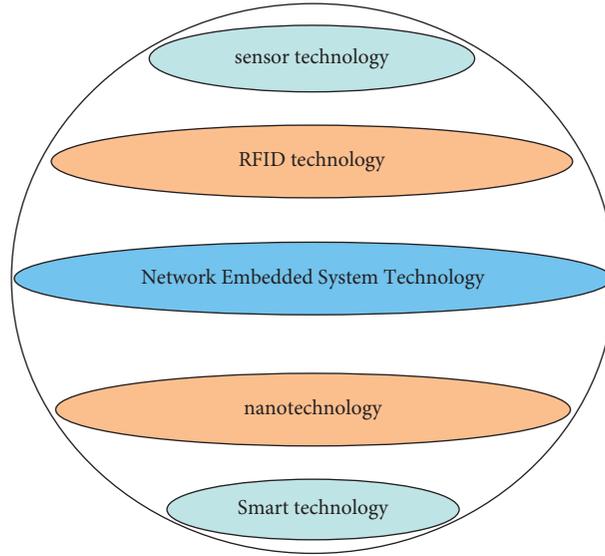


FIGURE 1: IoT technology.

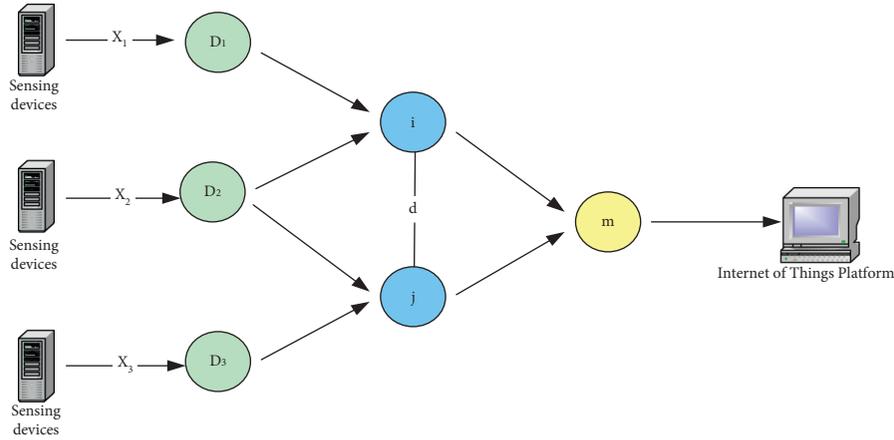


FIGURE 2: The internal network structure of the sensor device.

Each sensor device will have tourists checking tickets to enter the tourist area, so it is necessary to calculate the number of tickets in each sensor. In the following formula,  $\varphi$  is a parallel matrix, and its form is as follows:

$$\varphi = \begin{bmatrix} M & M \\ M & M \end{bmatrix}. \quad (2)$$

This matrix represents a communication range of the monitoring area. After calculating the ticket checking quantity of each sensor ticket checking equipment, it needs to be aggregated to the transmission nodes  $i$  and  $j$  of the third layer, and then, the formula for calculating the quantity  $Q$  of the aggregated nodes  $i$  and  $j$  is as follows:

$$\begin{aligned} Q_i &= \left(D_1 + \frac{1}{2}D_2\right) * \int_v^t S, \\ Q_j &= \left(\frac{1}{2}D_2 + D_3\right) * \int_v^t S, \end{aligned} \quad (3)$$

where  $t$  represents the transmission time of the number of tickets, and  $v$  represents the transmission speed of the information. Then, the total amount of ticket checking information is calculated as follows:

$$Q_m = \sum_v^t (Q_i + Q_j) * \frac{1}{2} * \int S. \quad (4)$$

In this way, the Internet of Things platform can be used to record the daily passenger flow of the scenic spot, and the environmental capacity of the scenic spot can be predicted. It promotes the balanced development of the scenic area's ecology and the sustainable green development of the scenic area, so as to achieve the balanced development of the environment and economy. Of course, if there are many tourists, the scenic spot needs to increase the ticket checking equipment; that is to say, the sensor technology will newly add node  $b$  in the square communication area of length  $M$ . The additional sensing devices will select the communication route with the best signal to connect. Then, the

probability of node  $b$  selection depends on the number  $N$  of nodes, the speed of information transmission, and the time of information transmission, and the following rules are followed.

$$\prod (b) = \frac{N_X Q_m}{\sum_v^t d} * \bar{\omega}. \quad (5)$$

Among them, the form of  $\bar{\omega}$  is as follows:

$$\bar{\omega} = \left\{ \begin{array}{ccc} M & t & M \\ D_1 & Q & D_3 \\ M & v & M \end{array} \right\}. \quad (6)$$

In the Internet of Things, there is also an application of embedded technology. Embedded system technology is application-centric and computer-based. We can see that many scenic spots will develop WeChat public accounts or other IoT platforms to announce the dynamics of scenic spots in real time and do a good job in publicity. Embedded technology makes the infrastructure of the scenic spot more and more intelligent, so the embedded system needs to be installed on the equipment of the scenic spot, and then, to run the system, it is necessary to set up a program to automatically identify the information. Embedded systems need to input a lot of scenic information and command programs. Since the equipment in the scenic area will have subequipment and general equipment, the function of the subequipment is to summarize the obtained information into the general equipment. The principle of how to implant the command program into the embedded system is as follows:

$$\begin{aligned} x_{\text{demand}} &= \sum_v^t d * (Q * M) * \int_r^i S, \\ x_{\text{demand}} &\longrightarrow x_{1(\text{accept})}, \end{aligned} \quad (7)$$

where  $t$  is the transmission time of the wireless network,  $v$  is the network speed of the wireless network,  $d$  is the geometric distance between the devices,  $i$  is the weight generated by the system during command transmission,  $r$  is the threshold in the system, and  $S$  is the maximum communication distance of the equipment in the scenic area. Because the command is transmitted from the main device to the subdevice, the mapping principle is used to achieve the function of successful command transmission. To gradually introduce information into the system, it is necessary to sort out the information into the system in layers. Generally, the information is digitized into three paths in the embedded system, and the quantity transmitted by each path is different, which needs to be determined according to the location where the equipment in the scenic spot is placed. Then, the calculation of the information amount  $U$  of these three paths is as follows:

$$\begin{aligned} U_1 &= \frac{\prod_v^t Q}{d_1} * i_1 * r * \psi, \\ U_2 &= \frac{\prod_v^t Q}{d_2} * i_2 * r * \psi, \\ U_3 &= \frac{\prod_v^t Q}{d_3} * i_3 * r * \psi. \end{aligned} \quad (8)$$

In the formula,  $\psi$  is a parallel matrix with the following form:

$$\psi = \begin{Bmatrix} 1 & i \\ r & 2 \end{Bmatrix}. \quad (9)$$

This matrix is to prevent information from being lost during transmission and to ensure the integrity of the information. Then, the amount of information transmitted from the subdevice information to the total system is

$$U = (U_1 + U_2 + U_3)^2 * i * r. \quad (10)$$

The information input in the embedded system can process the information in the system according to the instruction. The final generated information can be used for reference by the staff of the scenic spot while formulating the related matters of the scenic spot and using the Internet of Things technology can promote the long-term development of the scenic spot.

*2.2. Development Status of Urban Smart Tourism.* There are different folk customs and natural scenery all over the world, and different history and culture have created a variety of tourism resources, which are the basis for the development of tourism and the resource base for the development of smart tourism [14]. At present, with the rapid development of modern tourism and the increasingly perfect infrastructure, coupled with the combined effects of science and technology, tourism resources, geographical location, and natural environment, compared with other tourist destinations, urban tourism has shown relative comparative advantages in the competition of various elements of tourism [15]. The advantages of tourism development are shown in Figure 3.

Urban transportation is an important foundation for the development of the urban tourism industry, and it is also the basic condition for the implementation of the online functions of the smart tourism industry, which directly determines the development level of the smart tourism industry [16]. At present, the transportation infrastructure is becoming more and more perfect. High-speed rail, plane, urban subway, highway, etc. have greatly shortened the distance between home and tourist destinations. It facilitates people's travel and provides a transportation infrastructure foundation for the development of tourism. People's enthusiasm for tourism has also promoted the rise of tourism enterprises, which has made tourism enterprises around the world show a prosperous and vigorous development trend, and the growth of tourism enterprises has provided a stronger market theme support for the development of urban smart tourism [17]. And under the downward pressure of the world economy and the gradual slowdown in the growth rate of the world economy, the world tourism market is still hot, and the strong market has laid an excellent foundation for the development of smart tourism. In order to promote the development of smart tourism, it is very necessary to use the development of Internet of Things technology. The development of various smart platforms

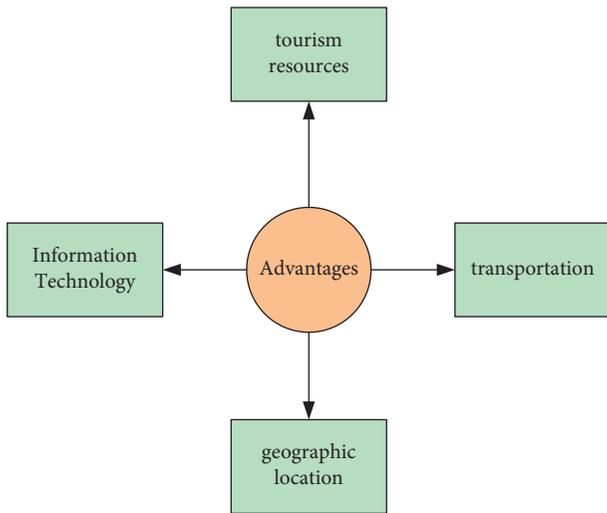


FIGURE 3: Advantages of tourism development.

provides technical support for the development of smart tourism. And the development of tourism is inseparable from the source of tourists, and the development of the economy provides the economic foundation for people’s tourism [18].

But smart tourism is a high-investment information infrastructure construction. At present, the use of IoT technology to build a smart tourism platform requires a lot of capital investment, but the similarities and differences in the understanding and acceptance of smart tourism in various places have led to an extreme imbalance in the development of smart tourism in various cities and towns. It shows the phenomenon that tourist attractions with strong comprehensive strength develop fast, while those with weak comprehensive strength develop slowly. Therefore, people’s cognition of the development of smart tourism still needs to be improved [19]. Although the development of smart tourism started late and started quickly, and with the continuous improvement of the informatization of the tourism industry, the enthusiasm for the development of smart tourism has gradually been ignited around the world, showing a great development momentum [20]. With the continuous injection of capital and the continuous increase of smart tourism projects, the development of smart tourism in cities and towns is in full swing, and the continuous improvement of the infrastructure of smart tourism also promotes the industrial upgrading of the tourism industry, the application of Internet of Things technology, and also makes the service equipment of the scenic spot more intelligent. Although the level of intelligence continues to improve, there are still many problems that have hindered the development of smart tourism. Because of the late start of smart tourism, the level of informatization is relatively low. People’s understanding of smart tourism is not comprehensive enough, and there is no unified smart tourism development plan, which makes the information systems in various places independent of each other, and the distribution of resources is extremely unbalanced. A larger data and information sharing platform cannot be formed on regional platforms, which reduces the development quality of smart tourism [21]. Although the current

smart tourism still has many development problems, the development of smart tourism is still moving towards a more intelligent and standardized direction. The development trend of smart tourism is shown in Figure 4.

The overall development of intelligent tourism is moving forward. Although there are still some problems in the current development, it still occupies a great development advantage. Policies, capital, technology, and resources are all advantages of urban smart tourism, so there is great potential to promote the development of smart tourism [22]. The development of smart tourism is specific as the measurement indicators in Table 1.

*2.3. Smart Tourism Based on IoT Technology.* At present, the development of Internet of Things technology has promoted the industrial upgrading of the tourism industry and, to a certain extent, the intelligentization of the tourism industry. By using the smart tourism platform constructed by the Internet of Things technology, the tourism resources can be integrated by using technology. Through the use of mobile communication networks for publicity and dissemination, for example, we can learn about tourist attractions anytime and anywhere on mobile smart devices, and we can see many classic promotional videos on TV, which are all with the help of Internet of Things technology [23]. The development of the tourism industry with the help of IoT technology can promote the strength and breadth of its promotion. The smart tourism IoT platform services are shown in Figure 5.

In Figure 5, the Internet of Things can provide various detailed introductions of tourist attractions, such as cultural introductions of scenic spots and recommendations of scenic spots near scenic spots, and it is convenient for tourists to plan travel routes and places to visit in advance. Of course, it is also possible to intelligently recommend travel routes and travel hotel restaurants, so that tourists can more easily find their foothold in the tourist destination. Therefore, smart tourism provides tourists with more convenient services and understands tourists’ preferences in a timely manner, so smart tourism attracts a large number of tourists [24]. And the tourism public service platform includes the system as shown in Figure 6.

The tourism service management platform system as shown in Figure 6 mainly includes a ticket sales system, an integrated management system, a tour guide system, a public transportation system, and the like. At the same time, it can also provide a platform for tourists to express their travel thoughts and share their travel thoughts with others. It provides a practical and effective reference for other people’s travel strategies, and tourists can plan their own travel routes more intelligently, effectively enrich their travel experience, and meet their own travel needs. The ticketing system effectively reduces the work of the tourist service station, greatly improves the work efficiency, and also saves a lot of unnecessary wasted time for tourists.

At the same time, smart tourism based on the Internet of Things technology has made the management of tourist attractions intelligent. Scenic area managers can use the Internet of Things technology to build a comprehensive



Tourism information

FIGURE 4: Development trend of smart tourism.

TABLE 1: Measurement metrics.

Influence factors	Measurement.
Policy	The government supports capital investment in smart tourism GDP
Capital	The per capita urban disposable income Total investment in urban tourism Number of smart tourism projects
Tourist communications	Tourist traffic command center Tourist highway kilometres
Human resource	Tourism employment Number of foreign language tour guides
Level of technological progress	Investment in smart tourism research and development Smart tourism r&d personnel
Intelligent service level	Travel agency personalized service level Number of hotels with reservation service

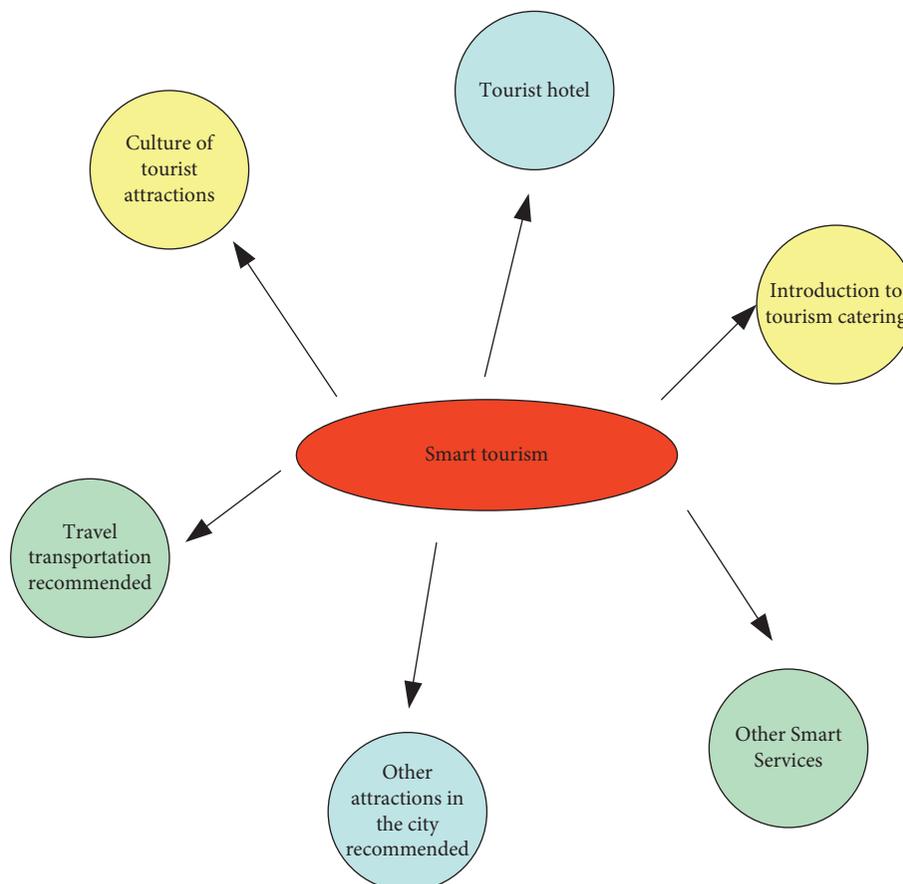


FIGURE 5: IoT platform services.

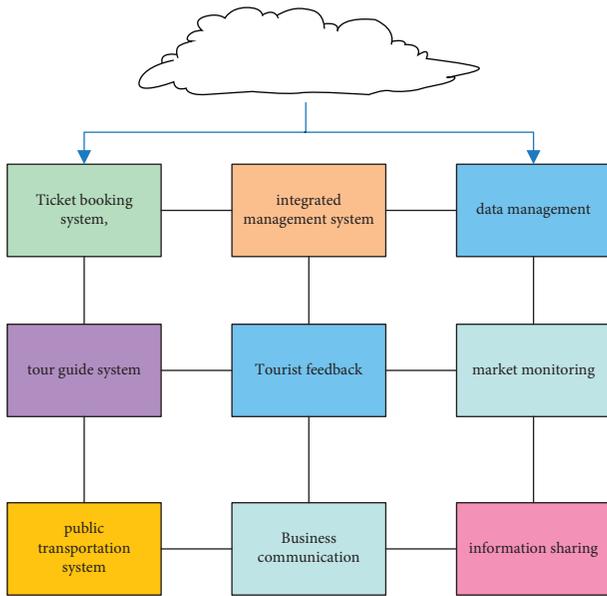


FIGURE 6: Tourism public service platform system.

monitoring network to facilitate the effective management of tourist attractions [25]. With the help of IoT technology, managers can effectively understand the tourist reception capacity of scenic spots. It promotes the sound development and protection of the scenic environment and infrastructure, grasps the passenger flow in a timely manner, improves the management level of the scenic spot, and provides tourists with a more relaxed and comfortable play experience. In addition, the Internet of Things technology center can also be used to build a tourism information platform to provide tourists with more convenient information services in various aspects such as food, housing, shopping, travel, and entertainment. It makes the related service business of the tourism industry more closely, so as to truly promote the economic development of the tourism industry in an all-round way. In the urban smart tourism, the town itself has a large population, so it is necessary to consider the population carrying capacity of the town to ensure the environmental construction of the town. It promotes the healthy and green development of the urban environment but also promotes the healthy development of tourism and the improvement of urban infrastructure. In a word, the development prospect of urban smart tourism based on Internet of Things technology is very broad, and the improvement of economic level and the improvement of life quality provide a solid foundation for the development of smart tourism.

### 3. Experiment and Analysis on the Current Situation and Trend of Urban Smart Tourism Development

**3.1. The Current Situation of Urban Smart Tourism Development.** In recent years, the development of economic level and the improvement of people’s quality of life have provided a financial basis for people to travel abroad, and the number of scenic spots is increasing every year. Table 2

shows the number of A-level scenic spots in China in 2020, and Figure 7 shows the statistical changes in the number of A-level scenic spots in China from 2017 to 2020.

It can be clearly seen from Table 2 and Figure 7 that the number of A-level scenic spots in China is increasing every year, and the number of A-level scenic spots in 2020 has reached 13,332. Among them, the number of 5A-level scenic spots is also increasing year by year, which shows the rapid development of tourism. There are tens of thousands of A-level scenic spots, and the number of other scenic spots has increased. The annual 5A-level scenic spots are also growing. It can see in the broken line in Figure 7, and it can be seen that new 5A-level scenic spots appear every year. It can be said that the abundance of tourism resources has provided a solid resource foundation for the development of smart tourism. And in recent years, the development of smart tourism has reduced the difficulty of travel itinerary planning for independent users and the information barriers of tourist areas and has prompted individualized needs to be met accordingly. The growth of the number of independent travelers and the transaction volume of online travel relying on the development of smart tourism are shown in Figure 8.

It can be seen from Figure 8(a) that the number of self-guided marches is increasing year by year, and especially in 2020, the number of self-guided walks will reach about 10 billion. According to Figure 8(b), the online transaction volume is also increasing year by year, indicating that the development of smart tourism is becoming more and more mature, and it has gradually entered people’s field of vision. Its customer base is also getting wider and wider, and it has a solid customer base. At present, the development of smart tourism is still thriving. Although there are a series of problems, it is far from the convenience brought by the development of smart tourism to tourists, and tourists can get a better travel experience.

**3.2. The Development Trend of Urban Smart Tourism.** Tourism is inseparable from the economic foundation, so the development of tourism depends on the development of the economic level. To analyze the development trend of smart tourism, it is necessary to understand the economy of the country and the people, as well as the popularization speed of electronic products and people’s understanding of smart tourism, so as to promote the industrialization and resource integration of smart tourism. Then, China’s domestic GDP and growth rate are shown in Figure 9, and the per capita GDP of some provinces and cities is shown in Table 3.

It can be seen from the figure that China’s GDP has increased year by year, and although the growth rate is sometimes fast and sometimes slow, the overall economy is developing upwards, so the economic development of the country can drive the development of tourism, and the development of tourism can also promote the economic development of the country, and the two promote each other. Therefore, the national economy maintains a stable operation, and the development of tourism will also push forward the development. And the state’s capital investment in smart tourism is shown in Figure 10.

TABLE 2: Number of A-level scenic spots in China in 2020.

Levels	Amount
Number of A-level scenic spots	13332
Number of 2A and 1A tourist attractions	2069
Number of 3A-level scenic spots	6931
Number of 4A-level scenic spots	4030
Number of 5A scenic spots	302

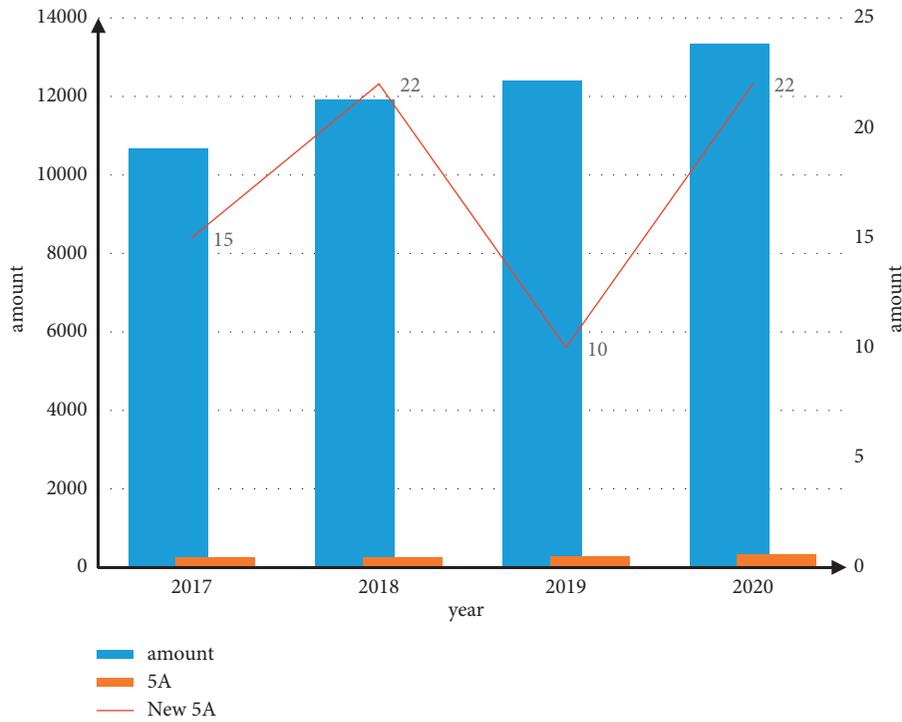


FIGURE 7: Number of A-level scenic spots in China from 2017 to 2020.

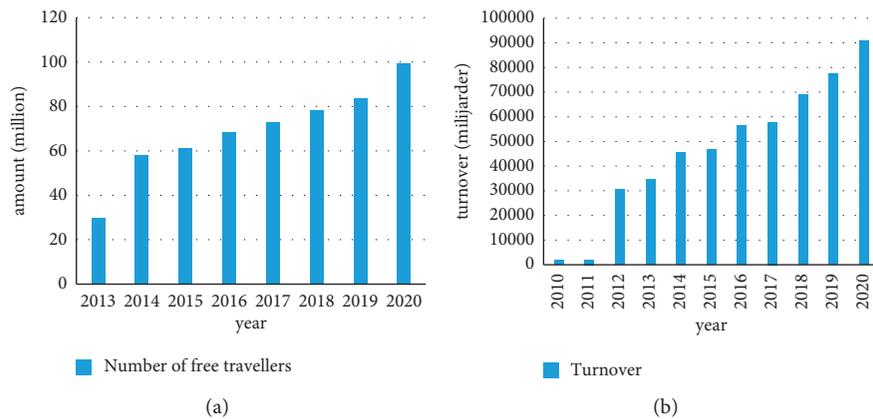


FIGURE 8: Development of smart tourism platforms. (a) Growth in the number of independent travelers. (b) Online travel transactions.

As can be seen from Figure 10, the country invests capital in the development of smart tourism every year, especially in 2017, when the capital invested 1.2 billion yuan, vigorously promoting the development of urban smart tourism. And every year, funds are invested in the development of the self-contained tourism industry.

3.3. Summary of Experiments and Analysis. From the analysis of the development status of smart tourism, it can be found that the development of smart tourism is not only supported by the Internet of Things technology but also has a large and rich resource base, a base of tourists, and an extremely wide tourism market. The use of smart tourism

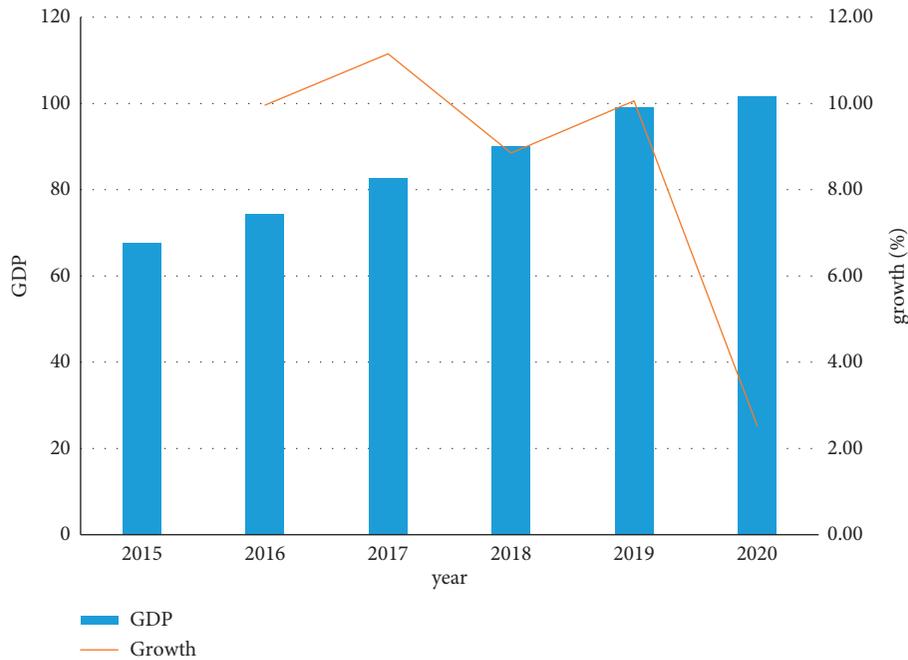


FIGURE 9: China's domestic GDP and growth rate.

TABLE 3: GDP per capita in some provinces and cities.

Provinces	Per capital GDP
Beijing	174904
Yunnan	51943
Jilin	51141
Guizhou	46228
Shanghai	155606
Anhui	63383
Jiangxi	56854
Guangdong	87897

service platforms by tourists is also increasing, and the online transaction volume is also increasing year by year. Although the current smart tourism service platform still has some problems, it also provides great convenience for tourists. And the growth of the national economy and the growth of personal GDP also provide an economic foundation for people to travel. It also promotes the development of smart tourism. From the analysis of the development trend of smart tourism, it can be found that although the development of smart tourism has been limited to a certain extent, the state still has the support of policy and funds for the development of smart tourism, coupled with the continuous development of the economy, the progress of science and technology, and the gradual improvement of the online tourism service platform. The development trend of smart tourism based on the Internet of Things technology is accelerating, and the development of scenic infrastructure is

very promising and is developing in the direction of smart, green, and sustainable development.

#### 4. Discussion

This article first expounds the Internet of Things technology. At present, the application of the Internet of Things technology is very extensive. The application of the Internet of Things technology in tourist attractions can help the management of scenic spots and the construction of infrastructure. In the traditional tourism industry, it is very difficult to calculate the passenger flow of scenic spots. However, with the development of smart tourism, it is very convenient to know the passenger flow of the scenic spot, and at the same time, it can accurately measure the carrying capacity of the scenic environment. The Internet of Things technology has a great role in promoting the industrial upgrading of the tourism industry. It can promote the intelligentization of the infrastructure of the scenic spot, monitor the environmental changes of the scenic spot in time to make relevant policy adjustments, and ensure the sustainable development of the scenic environment. At the same time, it can also use the Internet of Things technology to promote tourist attractions, so as to promote the popularity and influence of the scenic spots. Tourists can leave their feelings about the scenic spot on the Internet to promote resource sharing and expand the tourist source market of the scenic spot.

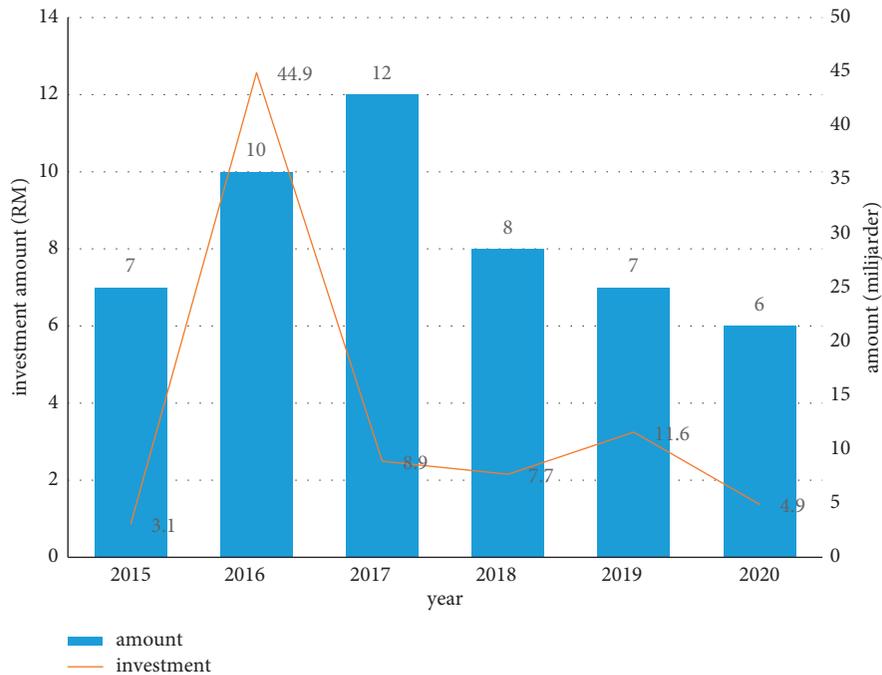


FIGURE 10: National capital investment in smart tourism.

This paper analyzes the development status of smart tourism and finds that the development of smart tourism is extremely fast, but there are also many problems in the process of rapid development. Therefore, we need to effectively control the development of smart tourism, and at the same time, we need to understand the concept of smart tourism. Do not rush to see its earnings growth, only by grasping the concept of “wisdom” well and then building the brand development of smart tourism can promote the long-term development of smart tourism. The existing development problems of smart tourism, such as imperfect infrastructure and false propaganda, are solved. Various tourist information service systems in scenic spots are improved to promote more intelligent online services. At the same time, let people know about smart tourism projects, gradually promote smart tourism into life, make it normalized, and promote the healthy and sustainable development of smart tourism.

This paper analyzes the development trend of smart tourism. According to the country’s GDP growth and per capita GDP growth, the increase in people’s income also provides the possibility of tourism, and the upward development of the national economy can naturally promote the development of smart tourism. And the economy is an important pillar of the development of tourism. Only when people’s living standards improve, there may be funds to travel, so the development of smart tourism will be faster. And smart tourism is an industrial upgrade of traditional tourism. With the support of national policies and capital investment, the development of smart tourism will get better and better. The development of smart tourism is not only supported by the base of tourists but also by funds and national policies. Of course, under the

premise of rapid development, it is still necessary to monitor and control its development with the help of Internet of Things technology to ensure that smart tourism develops in a good trend.

## 5. Conclusions

The smart tourism industry with IoT technology discussed in this paper is an emerging industry. It is produced with the current industrial upgrading and technological development, and it is also an upgrade of traditional tourism, which can ensure the healthy and sustainable development of tourism. At present, the rapid development of smart tourism has brought great economic benefits and can provide more convenient services for tourists, so smart tourism is widely respected. However, in the case of its rapid development, some problems have also appeared, resulting in an extremely unbalanced development. Therefore, under the premise of the development of smart tourism in the future, it is necessary to use the Internet of Things technology to control it, which is a more balanced development of smart tourism. With the support of funds and policies, the development of smart tourism is in full swing, and its development will be more perfect and more sustainable in the future, achieving a two-way balance between development and the environment. Of course, the analysis of the current development status of smart tourism in this paper is not very comprehensive. It is hoped that later research on smart tourism can analyze it better and more comprehensively and promote the healthy and stable development of smart tourism.

## Data Availability

No data were used to support this study.

## Conflicts of Interest

The authors declare that there are no conflicts of interest regarding the publication of this article.

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