

## The Development Model of Smart Tourism City in Kunming under the Background of Free Trade Zone Policy

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**Abstract:** With the rapid development of society and economy, the domestic tourism industry has developed well. In recent years, the total tourism revenue of Kunming has maintained double-digit growth. Tourism has become the pillar industry of Kunming. Smart tourism combines artificial intelligence and a new generation of information technology. It is an advanced form of tourism development. Tourists, management departments and tourism enterprises will all benefit from this. This paper proposes a study on the development model of smart tourism cities in Kunming under the background of free trade zone policies. In this paper, the literature analysis method, quantitative analysis method and other methods are combined to study. This paper analyzes the current tourism situation of Kunming City in recent years, and obtains some development strategies of Kunming Smart Tourism City under the background of free trade zone policy through the compilation of relevant materials. This study found that Kunming's tourism development is in a good situation, and it also shows the tourism industry's strong contribution to Kunming's economy. In 2014, the total tourism revenue reached 17.3% of the city's GDP. The total tourism revenue in 2015 was the total tourism revenue in 2014. More than twice, the research results of this paper show that the development momentum of smart tourism cities in Kunming is very good under the background of free trade zone policies.

### 1. Introduction

With the continuous development of information technology, smart tourism has a series of advantages such as low cost, accurate information and strong interaction. More and more cities will use it as a new type of tourism information platform[1-2].

Yunnan Province is a province where China's tourism industry has developed earlier and has a higher awareness. Smart tourism is an advanced form of tourism development, which is to continue to deepen and transform on the basis of the existing[3], to make it more suitable for the development of economy and information technology[4-5]. Regardless of the maintenance of Kunming's tourism image; the orderly development of the tourism market; the increase in total tourism revenue will bring good benefits, especially in the context of the free trade zone policy[6-7], Kunming's tourism industry is particularly important, so the policy in the free trade zone under the background, it is very important to study the development model of smart tourism city in Kunming[8-10].

This article first introduces the definition of smart tourism, the connotation and characteristics of smart tourism construction, the concept, development stage and function of the free trade zone. Secondly, it analyzes the development of tourism in Kunming in recent years and proposes some Development Strategy.

### 2. Proposed Method

## 2.1 Smart Tourism

### (1) Smart tourism concept

Smart tourism is based on the Internet of Things technology to perceive various types of information. It uses various communication networks and the Internet to deliver various types of perception or control information. It combines various intelligent computing technologies such as cloud computing and fuzzy recognition to integrate various types of perception information for data analysis. To achieve intelligent decision-making, control and personalized services in tourism.

### (2) Features of smart tourism

"Smart tourism" is a cutting-edge tourism concept and form. With the development of information technology and social economy, people continue to understand and understand smart tourism, and the related concepts and understanding of smart tourism will be constantly enriched and developed in practice. In general, smart tourism has the following 5 characteristics:

1) Smart tourism is supported by the development and application of technologies such as cloud computing, the Internet of Things, sensor technology, the Internet, mobile Internet, triple play, intelligent terminals, personal mobile terminals, and artificial intelligence.

2) Smart tourism is centered on tourists, with the basic starting point being to fully meet the service needs of tourists "eating, housing, traveling, traveling, buying, and entertaining".

3) Smart tourism aims to provide travel agencies, scenic spots, hotels, government management departments and other tourism participants with more convenient and effective management and operation channels, thereby creating greater value as the fundamental task.

4) Smart tourism realizes intelligent decision-making, control and personalized services of tourism by integrating various perception information and data analysis.

5) Smart tourism is comprehensively applied to all aspects related to tourism, such as tourism public services, tourism enterprise services and management, tourism government affairs management and tourism e-commerce.

### (3) Construction connotation of smart tourism

#### 1) Modernization of infrastructure

Smart tourism actually achieves a benign connection between data and applications, such as the use of Internet of Things, RFID, GIS and other technologies to collect data, so that the data obtained is more accurate and complete; then on the basis of the previous step to achieve the transfer of data and information, this is need to apply sensor network, mobile Internet, unlimited broadband network facilities; and finally construct an all-round basic operating environment of the entire system to ensure the benign progress of various applications and service upgrades.

#### 2) Ubiquitous information services

Different from the traditional tourist system's passive reception of tourists 'needs, the smart tourism system needs to actively sense the tourists' needs and provide more complete service support, such as e-commerce services and information-related services for entertainment, resources, navigation, tickets, payment, etc. Type; provide tourists with ubiquitous services, regardless of anyone's ubiquitous services, including the integration of tourism information platforms, including destination information websites, destination mobile portals, tourism service hotlines, etc. The added value of medium satisfaction improves the satisfaction of tourists, creates diversified and personalized tourism services, and makes tourists exceed the expected experience when enjoying tourism services.

#### 3) Intelligent business management

Smart tourism not only faces tourists, but also provides real-time travel industry data for other users, such as government regulators and managers. These data can be effectively combined with expert systems, data mining, statistical analysis, etc. to evaluate tourist credit, evaluate service companies, and implement smart supervision; pre-test tourism resource protection, tourism product pricing, or tourism industry policies to achieve scientific decision-making; Improve the efficiency of resource allocation and improve the ability of rapid response and emergency management.

#### 4) Intensive industrial development

The limitations and shortcomings of the traditional tourism industry are destined to be reformed

and replaced by modern smart tourism. High-speed development of information technology will have a great effect on the improvement and innovation of traditional tourism, and smart tourism will play a very large role in the reorganization of tourism resources and industrial chains, thus making traditional tourism quickly transform into modern tourism. In order to produce a new model and form for the development of the tourism industry; the marketing model will shift from the inefficient traditional model to fast and efficient modern online marketing, optimize tourism brands, and improve cultural value; for tourism payment, with the help of a package of e-commerce services to build a complete online payment, mobile payment and credit system to extend the value chain; in the industrial structure, through the information sharing and business collaboration between tourism enterprises to achieve a resource-saving and environmentally friendly direction.

## **2.2 Free Trade Zone**

### **(1) Definition and development of free trade zone**

#### **1) Concept of free trade zone**

"Free trade zone" means "between two or more independent customs subjects, the elimination of tariffs and other restrictive trade regulations on trade liberalization." "The Pilot Free Trade Zone is a part of the territory of the Contracting Party, and any goods entering this part are usually regarded as outside the customs territory in terms of import tariffs." The difference between the Pilot Free Trade Zone and the general trade place is that the Pilot Free Trade Zone exists within the borders of the country. The country implements its bonded or tax-free policies, and generally isolates the special zone.

#### **2) Development of free trade zone**

The first stage existed in 1945 and before. European and Mediterranean countries are the main concentrated areas of similar forms of trade places with free trade zones, which are mostly an expansion of economic behavior of Western capitalism. The success of the establishment of free ports such as Copenhagen's free port in Denmark has led to the increase in the establishment of free ports and free trade zones by European trading powers. After that, Singapore, Djibouti and others slowly emerged as beneficiaries of the new free trade zone policy, the Tijuana Free Zone in Mexico in North America, and the Colonia Free Zone in Uruguay. In 1936, New York, the United States, became the first foreign trade zone in the United States. In general, this stage has a span of about three to four hundred years. Its notable features include slower development speed, the total volume is not large, and the distribution range is small, the production and operation types are thin, in order to engage in international trade. It is the main function.

The second stage was around 1946 to 1960. In this stage, the free trade zone gradually developed from Europe to parts of the Americas and Asia. At that time, the development of the free trade zone was rapid, and the major large ports all over the world actively participating in the construction of the free trade zone, especially after the emergence of processing industry from the free trade zone, has accelerated the enthusiasm of countries around the world for the construction of the free trade zone.

The third stage is in 1961 and later. At this stage, all countries in the world have basically gone through the preliminary exploration of the construction of free trade zones. The major trading countries in the world have established free trade zones of different sizes in different ranges. Therefore, the construction of the free trade zone has been formally valued by some countries, and it is believed that the construction of the free trade zone must be created during its development. The construction of the free trade zone has also been transformed from the original pure trade function of goods to an Comprehensive functions of trade, entrepot trade and economic reform. By around 1990, there were nearly a thousand different types of free trade zones in the world, 60% of which were distributed in developed countries in Europe and America. It is worth noting that the development of the market economy in the United States is relatively complete. The main reason is that the United States is constantly promoting free trade. Through the development of free trade, it has continuously injected new vitality into the American economy and promoted its continuous development.

## (2) Main functions of the free trade zone

The bonded area is a kind of area that adopts special policies on tariffs before the free trade area. Before the bonded area, all goods that pass-through customs need to pay customs duties. After that, the bonded area gradually appeared. As a new tariff policy area, the bonded area has many similarities with the free port in characteristics, but there are also certain differences, such as the degree of openness, supervision and management and functional design. As the most open area in the country before the free trade zone, the free trade zone is an integration of the existing free trade zone from the perspective of geographical location; from the perspective of policy system, the free trade zone is a free trade zone after multi-dimensional promotion.

Compared with traditional bonded areas, the policy restrictions of free trade areas in the areas of free currency circulation, free trade, free entry and exit of people and goods, and free storage of goods are much looser than those in bonded areas. To promote economic development is the original intention of China to build a free trade zone, especially through customs to achieve bonded measures. China has continuously tried the development path of the construction of free trade zones, actively learned the relevant advanced experience of the construction of free trade zones in other countries in the world, and connected with the actual development of our country's economic development, and strived to find a development mode suitable for China's national conditions. In the process of exploring and constructing a free trade zone, China adheres to the consistent style of reform and opening. It first conducts pilot preliminary exploration from the economically developed areas in the southeast coast. When the exploration is more mature, it extends to the north coastal area. A kind of direction-oriented, re-formed free trade zone construction method can make China's free trade zone construction take a lot of detours, and the free trade zone system built on this basis will greatly promote our country's economy. The development of a free port is the root of the construction of a free trade zone. Without the existence of a free port, it is difficult for a free trade zone to exist independently. This is because the establishment of a free trade zone because its main function is to attract goods from other countries and regions. For the development of a series of related industries, if there is no free port, goods from other countries will be difficult to enter. Of course, with the development of the global economy, there are now some free trade zones in some inland border cities. China's development stems from the free port, but it has been sublimated on the basis of the free port. The free trade zone also allows foreign investment to build factories.

## 3. Experiments

### Research Method

#### (1) Literature analysis method

This paper uses the literature analysis method to sort out the definition of smart tourism, the connotation and characteristics of smart tourism construction, the concept, development stage and function of the free trade zone and other research results, which lay the theoretical foundation for this paper.

#### (2) Data analysis method

Choose well-known domestic and foreign publications to conduct in-depth analysis of smart tourism research, understand and absorb their relevant opinions and views on the development of urban smart tourism cities, and find further support for the development of urban smart tourism cities.

#### (3) Quantitative analysis method

Use quantitative statistical methods to analyze the survey data, understand the construction of smart tourism in Kunming and the total number of tourists from 2014 to 2019, and provide data support for the research of the subject.

## 4. Discussion

### 4.1 Analysis of Kunming Tourism Status

Kunming has established tourism as an important pillar industry and pushed tourism to the forefront of development. Table 1 shows the percentage of the total number of tourists (including domestic and international) and total tourism revenue information received by Kunming in 2014-2019.

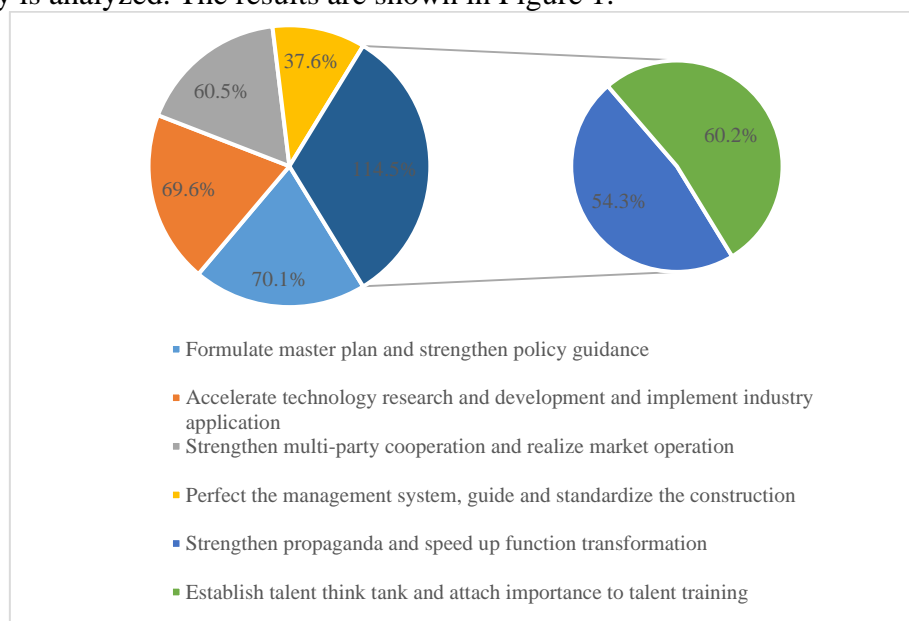
**Table 1.** Overview of tourist reception, total tourism revenue and percentage of GDP of Kunming in 2014-2019

Particular year	2014	2015	2016	2017	2018	2019
Number of tourists received (10000)	2239	2508.2	2733.62	3115.02	3557.35	4102.5
Year-on-year growth	10%	12%	8.98%	13.95%	14.2%	15.3%
Total tourism revenue (100 million yuan)	156	168.9	197.12	226.34	284.81	367.25
Year-on-year growth	12.9%	8.02%	16.69%	14.79%	25.8%	28.9%
Percentage of GDP	12.9%	12.01%	12.3%	12.5%	17.3%	14.6%

As can be seen from Table 1, Kunming's tourism industry has developed well in recent years, especially in recent years, regardless of the total number of tourists or the growth rate of total tourism revenue, the growth rate of tourism revenue has increased year by year, especially in 2014 and 2015, the total tourism revenue growth has reached 26.8% and 28.9 %, Showing the excellent situation of Kunming's tourism development, and also showing the tourism industry's strong contribution to Kunming's economy. In 2014, the total tourism revenue reached 17.3% of the city's GDP. The total tourism revenue in 2015 was the total tourism revenue in 2014. The income is more than twice.

#### 4.2 Development Strategy Analysis of Kunming Smart Tourism City under the Free Trade Zone Policy Background

The development strategy of smart tourism city in Kunming City under the background of free trade zone policy is analyzed. The results are shown in Figure 1.



**Figure 1.** Development strategy of Kunming smart tourism city in the context of free trade zone policy

It can be seen from Figure 1 that in the context of the free trade zone policy, Kunming's smart tourism development needs to develop better:

(1) Formulate overall plans and strengthen policy guidance

Define and restrict the content connection and combination between the various levels of the smart tourism service system and the service objects. The plan is based on the four major systems of the city's smart tourism system to formulate the overall planning content, and at the same time organically integrate with other cities' supporting security systems such as public security, transportation, industry and commerce, health, medical care, and quality inspection to fully play the role of planning guidance.

(2) Accelerate technology research and development and implement industry applications

The construction and promotion of the city's smart tourism service system must rely on the technical research and development required to strengthen the construction of the system at all levels, and implement it as soon as possible into practice, actively support and promote the construction of the city's smart tourism service center and application support platform to ensure the tourism information Accurate and timely updates and the stability and effectiveness of infrastructure performance, increase the construction of Internet data exchange centers, promote the modern office of tourism enterprises and tourism authorities, and rationally arrange tourism consultation points, major distribution points of tourists and touch screens and LEDs of attractions Display and other equipment.

(3) Strengthen multi-party cooperation to achieve market operation

The construction of a smart tourism service system requires huge human, financial and material input, and a market-oriented operation model that takes the government as the guide, corporate investment as the main body, financial institutions and other social funds to participate together. Related grants, tourism development guidance funds, financial institution loans, capital market financing, private direct investment, various social donations and sponsorships, and project financing.

(4) Improve the management system and guide the standard construction

The construction of a smart tourism service system involves the operation process and social operation mechanism of the enterprise. Systematically and comprehensively manage and promote the construction of a smart tourism service system.

(5) Increase publicity efforts and accelerate function conversion

Through proper marketing and promotion, improving tourists' awareness and perception of urban smart travel services can effectively increase the utilization rate of smart travel services, and then promote the informatization level of urban tourism.

(6) Establish a talent pool and pay attention to talent training

Relying on the domestic leading enterprises in the smart tourism industry, building an intellectual base for academic research, technology and product research and development, and talent training for smart tourism, starting a smart tourism talent think tank project and high-tech tourism talents on the Internet.

## Conclusions

As a new opportunity for the development of Kunming's tourism industry, the free trade zone policy has a negligible impact on the development of Kunming City. Kunming City should make full use of the free trade zone policy to achieve its own tourism industry and establish a free trade zone for other regions in the future. Provide valuable experience to promote the development of China's overall economy. This article studies the development model of smart tourism city in Kunming City under the background of free trade zone policy, and the results show that the development trend of smart tourism in Kunming City is very good.

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