

# Research on the development status and problems of shared parking spaces

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## Abstract

Shared parking spaces are based on geographic location and Internet technology, and the nearby shared parking is realized through an APP, which promotes the effective use of idle parking spaces, alleviates traffic congestion, and realizes full utilization of resources. Opportunities and challenges often coexist. Today, shared parking is facing multiple difficulties in the development process, such as many interests, technical difficulties, and high capital expenditure, which hinder the development of shared parking models. Therefore, in order to promote the optimal development of shared parking spaces, it is necessary in order to analyze the current situation, excavate problems, and propose effective solutions.

## Keywords

Shared parking space; present situation; problem.

## 1. Introduction

Based on a large audience, shared parking spaces have emerged in recent years, aiming to solve the problem of urban congestion and optimize the allocation of parking resources, and have achieved certain results in the initial development process.

## 2. Definition of Shared Parking

The concept of "shared parking" was first proposed in the book "Shared Parking Lot" published in the United States, which is defined as: the characteristics of parking generation at different times of the day in different land use areas in the application area are different, and different land uses share parking spaces. [1] At this stage, with the promotion and application of "Internet +", the online shared parking mode has become the mainstream. It mainly relies on Internet information technology to fully integrate the existing parking resources and share the temporarily idle parking space with users who are in urgent need of parking. Shared parking resources include not only public parking lots funded by the government for citizens, but also commercial parking space provided for citizens in shopping malls and private parking space in residences. These different types of parking spaces rely on the Network Technology, making full use of idle parking space, helps to improve the efficiency of parking space, and solves the dilemma of "difficult parking" in cities to a great extent.

## 3. Analysis of the development status of sharing parking space in China

The sharing concept is based on the initial promotion of the shared parking model, the development wave based on the sharing concept and the universality of the APP mobile customer use segment, which has formed a good development foundation and has excellent development prospects. [2] At present, the market demand for shared parking spaces in first-tier cities such as Guangzhou and Shenzhen in China is particularly huge, which effectively

solves the problem of urban traffic congestion, and does not require any increase in the cost of land development and use, and has received high support from government departments. .

However, since the development of shared parking space in China is in the initial stage, there are still many deficiencies in the level of publicity and lack of entrance effects. The publicity level of the shared parking model, both offline and online, is relatively low, which directly hinders the low popularity of shared parking space in my country, and fewer users know about this model. There are difficulties in the publicity process of shared parking spaces, which are based on the fact that there are many interest groups involved in the development of shared parking spaces, which lead to certain hidden danger of information leakage during the sharing process. At the same time, in the process of publicity of shared parking spaces, the participation of various parties such as property management companies, parking lots, owners and government departments is also required to exert its effective value, and the interests of any party cannot be obtained in the implementation process. The guarantee will hinder the development of sharing parking space.

Therefore, from the perspective of the development status of shared parking space in China, there are many problems in the initial stage of development, but based on the large-scale user market of shared parking spaces, it will have great development space in the future.

#### **4. Problems existing in the development of sharing parking space**

(1) People 's willingness to accept shared parking spaces is not high

In the development process of shared parking spaces, it can effectively cooperate with various types of parking spaces such as private parking space, commercial parking space and free parking space. However, at the executive level, many owners of private parking spaces are reluctant to share private parking spaces, because the benefits of shared parking spaces for the owners are not considerable, and after the owners share their personal private parking spaces on the shared parking space platform, It may lead to the disclosure of personal information and cause unnecessary trouble. [ 3] Specifically, first, some citizens do not need to park, but call the owners at will to advertise or deliberately disturb the owners of the parking spaces. Second, some tenants did not strictly follow the parking regulations. After the parking time was up, they did not drive away in time, which brought great trouble to the owner of the parking space.

At the same time, in the model of developing shared parking space, if the community opens the permission for foreign vehicles to enter the parking lot, it may cause opposition from other owners and cause great pressure on property management. Vehicle information is checked and confirmed. In addition, after a strange vehicle enters the community and parks, if it scratches other vehicles, it still needs to face compensation. It is difficult to determine whether the compensation is borne by the owner or the owner of the vehicle bears full responsibility.

(2) There is a risk of information leakage in the APP

In an environment where the online parking space sharing model has become the mainstream, in order to realize the sustainable development of this model, the safety and efficiency of the APP have become the basics. However, due to the fact that the online shared parking space model in my country is still in the initial stage of development, the technical achievements of relevant personnel in my country are relatively weak, resulting in problems such as insufficient smoothness and payment delay in the use of the APP, which affects the user experience of customers. .

At the same time, in the process of using the APP, people need in order to register users online. During the registration process, they are required to fill in the ID card, home address, phone number and vehicle information in detail, which will lead to people in the process of registering the APP. There are personal concerns and there is a danger of information leakage.

### (3) Insufficient publicity of shared parking spaces

At this stage, the shared parking space model has not been promoted nationwide, but is only in the pilot stage in some first-tier cities, resulting in a lack of awareness of the model by many people and hindering the model from achieving results in practical promotion.

Although, in the current network environment, the dissemination of information is more efficient without the constraints of preliminary time and space, and people obtain information more quickly. However, there is insufficient information about shared parking space in the current network environment, and there are few traces of shared parking patterns. At the same time, in terms of outdoor advertising, because the shared parking spaces are in the initial stage of development and the interests of all parties are difficult to coordinate, managers are reluctant to risk investing too much cost in outdoor advertising, focusing more on advertising. Putting it on the paper media with low price and fewer people reading it leads to fewer people who know about shared parking space in China, which hinders the deepening development of shared parking space in China.

## 5. Optimal development strategy of sharing parking space

### (1) To ensure that the interests of all parties are not harmed

In the development process of shared parking spaces, it is necessary in order to coordinate the interests of owners and property owners. Therefore, in order to further promote the development of the shared parking space model, government departments play an active role in it.

On the one hand, government departments can implement incentive policies for parking space owners, and owners who provide more shared parking space on the platform can get some points. These points can be used as resident consumption coupons to reduce or exempt certain funds or discounts in the process of consumption by the owners. In the process of parking, if there is a situation where the parking space is occupied and the passengers who rent the car do not leave repeatedly, the platform can cooperate with relevant departments to introduce mandatory car-moving measures, deduct points for customers who do not keep their reputation, and directly remove their cars.

On the other hand, in order to facilitate the management of parking space in the property, intelligent management technology can be introduced to improve the management efficiency of the property. Further, the entrance of the community parking lot can be combined with the intelligent management of the platform, and the information of foreign vehicles can be registered in time by the judicious management system of the operator, allowing vehicles that need services to enter. At the compensation level, clear compensation standards can be formulated, and this problem can be resolved by improving insurance claims.

### (2) Increase technical investment in APP

To further implement the online shared parking space model in China. It is necessary to increase the technical investment in the APP to ensure that the background is very smooth during the operation process and avoid stock behavior. At the same time, the APP can also cooperate with surrounding shops and tourist attractions to provide personalized parking solutions to meet people's travel purposes, so that customers can feel the humanization of the shared parking space service, so as to continuously improve customer stickiness.

### (3) Improve the publicity mechanism

For online shared parking space model initially developed in China. Focusing on the construction of a diversified publicity model can make more user groups aware of the shared parking model and increase the popularity of shared parking.

On the one hand, the platform needs to actively use the online media platform to cooperate with social apps with large audiences such as Douyin, Weibo, WeChat, etc., to place advertisements, and to increase the popularity of the shared parking space model. At the same time, shared parking space can also learn publicity models such as contributing bicycles, or actively cooperate with shared brands, so that consumers can accelerate their understanding of shared parking models.

On the other hand, it is necessary in order to pay attention to the construction of outdoor advertising. During the development of shared parking spaces, attention should be paid to placing advertisements in crowded business districts, around elevators and in parking lots, so that more people can give attention to this model. In order to increase the popularity of this model, the platform can collaborate with idol stars to promote the development of this model through the fan effect. At the same time, in order to let more people understand the advantages of this mode, the platform should pay attention to the design of posters, and at the same time pay attention to aesthetics, and transmit product information, so that more people can participate in the use of this mode, so that more people can participate in the use of this mode. We will do our utmost to deepen the development of our country.

## 6. Concluding remarks

All in all, with the continuous improvement of people's living standards in our country, the concept of popularization and sharing of vehicles has gradually taken root in the hearts of the people, prompting the emergence of the shared parking space model, which effectively solves the problem of the shortage of parking spaces. At this stage, my country's shared parking space is still in the initial stage of development, and have achieved certain results in the development process and are facing certain difficulties. Based on the current situation, this paper finds that there are three problems in the development process of contributed parking space: people's low acceptance of shared parking spaces, the risk of information leakage in APP, and insufficient publicity of shared parking spaces. There are three countermeasures in terms of damage, increasing technological investment in APP, and improving the publicity mechanism. It is believed that the shared parking space model will solve these problems in the process of development. Give full play to its unique resource optimization value, and bring convenience to every citizen's travel.

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## References

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