

# ***Industry Development Analysis of Shared Travel Platform Online Car-hailing Platform***

**Xinyu Lin<sup>1,a,\*</sup>**

<sup>1</sup>*Gaoxin No.1 High School, Xi'an, 710018, China*  
*a. 3168567454@qq.com*  
*\*corresponding author*

**Abstract:** Catering to the development wave of Internet +, The ride-hailing service, which combines public transport with the Internet's positioning system, has attracted many users. After that, many online car-hailing platforms represented by "Didi Dache" and "Cao Cao Chauffeur" emerged, which achieved great success through online publicity. Its appearance greatly facilitates people's life, and it can also meet the needs of different passengers through personalized services. Nowadays, the ride-hailing industry has entered a stage of steady development, but many problems have been exposed along with the development, and most people focus on safety issues. The development of ride-hailing has changed people's concept of life, so it is also caught in the conflict and contradiction of classic cars, like many new things. However, with the launch of "Guiding Opinions on Deepening Reform and Promoting the Healthy Development of Taxi Industry" and "Interim Measures for the Management of Online Booking Taxi Service", the state has also shown its support and affirmation for the business model of the online booking car industry. This study will explore the market development structure of ride-hailing and will focus on the current problems and solutions of the ride-hailing industry.

**Keywords:** ride-hailing, ride-sharing platform, safe travel, problem-solving, development strategy

## **1. Introduction**

### **1.1. The Imbalance Between Supply and Demand of Personalized, High-quality Travel**

Improvement of personalized, high-quality travel demand: With economic development, improvement of people's living standards, more frequent travel, and more flexible travel time and purpose, the demand for personalized travel services is gradually increasing [1,2].

It is too difficult to take a taxi, the service is too poor, and the supply and demand travel modes are insufficient: As the primary travel mode, the traditional taxi is challenging to realize the timely adjustment of the supply quantity, and it also has shortcomings such as weak bargaining power of passengers, challenging to guarantee the service quality, and difficult to realize timely and effective supervision.

Online ride-hailing enriches the public's travel mode and optimizes the personal travel experience. In particular, the unique car service for the middle and high-end market meets the service needs of diversified and high-quality users.

## 1.2. Technological Development Makes Ride-hailing Services Possible

Internet and intelligent mobile terminals: users can access the Internet at will to obtain information and services. Internet terminals have also laid a good foundation for tourism.

Location-based service technology: Through LBS (Location service) technology, the supplier and the demander can understand the service process in real-time.

Big data: At present, the way people travel is digitalizing. Through collecting, storing, and analyzing big data, the platform can further grasp the public travel habits and difficulties they may encounter and propose targeted solutions.

As a convenient car-hailing service, its birth can be said to facilitate people's travel and meet the needs of the tourism market, so the market has recognized it.

## 2. Industry Status

### 2.1. Conflict of Interest

As an emerging enterprise, the ride-hailing industry has developed rapidly with the typical advantages of the short period, high user experience, and personalized service. However, this has caused many complaints in the traditional taxi industry. With the continuous development of the market, the ride-hailing industry has filled many gaps in the process of using traditional taxis in terms of functions [3]. With lower prices and more diversified services, the ride-hailing industry has a broader development space than taxis. More importantly, compared with traditional taxi operators, the fixed fees related to ride-hailing are almost zero. In essence, asset-light companies eliminate many traditional pressures, and low operating costs have blown the taxi industry. From 2014 to 2016, the competition between ride-hailing and taxis became increasingly intense. Many traditional taxi practitioners staged large-scale strikes in many countries to express their dissatisfaction with the ride-hailing industry.

### 2.2. Security

#### 2.2.1. Take a Ride

While making people's life more convenient, online car-hailing also fails to avoid the occurrence of many security risks, among which the forms of passenger car safety risks mainly include violent crimes, privacy damage, and traffic accidents. Some low-quality drivers do not communicate well with passengers, which leads to passengers being verbally abused, threatened, or beaten. This phenomenon is also very worrying for passengers and will also make the online car-hailing industry not so good. Although the driver-side entrance of online car-hailing requires an understanding of the driver's driving condition and ability, there is no lack of traffic accidents caused by some drivers who violate the rules [4]. Most of these problems focus on drivers' quality factors, which also provide a direction for improving the future operating system and supervision mechanism of online car-hailing platforms [3].

#### 2.2.2. Payment

The rapid development of the online car-hailing industry has also brought some problems, manifested in the payment problems of some software with high frequency and a series of payment security problems caused by the unreasonable price increase and other reasons [5]. Online ride-hailing mainly targets short-distance orders within a city, while most passengers and even drivers do not know the charging rules for long-distance orders. Therefore, the insufficient publicity of some

charging standards leads to payment problems caused by the insufficient understanding of the content and also affects the payment security of the online car-hailing industry to a certain extent [4].

## **2.3. Profit Model**

### **2.3.1. Transaction Commission**

Some platforms have not only online car-hailing services but also in-city chauffeur services. After filling in the origin and destination on the APP, the system will automatically calculate the cost, and the chauffeur can choose to receive the order according to their location. However, the cost of a chauffeur is usually twice or even higher than that of the same distance. In the end, platforms earn commissions from matching deals. Many platforms can even analyze the daily travel distance and frequency of users by technical means based on the acquisition of GPS positioning information and then improve the probability of users preferentially choosing the platform according to the user's platform utilization rate. With the growth of platform activity, the number of orders increases, and the drivers become more active.

### **2.3.2. Advertising Revenue**

In addition to the traditional advertising exposure income, it also cooperates with many brands. For example, it provides brands with its design of e-taxi coupons for enterprises to provide users in the marketing process.

### **2.3.3. Finance**

Some platforms provide users with financial services, such as financial management, commercial insurance, credit loan, car insurance, fund, installment purchase financial loan, and so on. From simple travel demand protection and expansion to related financial services around travel, they can earn commissions or use funds to invest and improve the influence and competitive advantage of the platform. It even uses users' dependence on the platform, builds users' trust in the platform through services, and guides users to buy financial or financial products on the platform. Consumers are relatively conservative in their choice of financial products. Once they purchase financial products, it indicates that consumers have a high degree of trust in the platform.

### **2.3.4. Launch its Brand**

After some platforms launched travel, car maintenance, insurance, and other businesses, the business map of upstream and downstream travel built based on travel have realized the closed-loop of meeting the needs of travel users in terms of travel. As a result, it has improved the usage frequency and user stickiness of Didi Chuxing, transformed the original taxi-hailing software into a travel platform in the impression of users, expanded the influence of the brand, and successfully transformed Didi Chuxing from a functional software provider into a platform enterprise in the industry.

## **3. Current Situation Problem-solving Strategy**

### **3.1. Integration of Public Travel**

Currently, standard public travel tools include buses, taxis, and online car-hailing, and the integration of online car-hailing and taxis has entered the trial stage [6]. The differentiation of public travel transportation tools also inconveniences the standardization and unification of the overall market regulation, hiding the possibility of internal contradictions and conflicts in the industry. However,

due to the inertia of the long-term development of public transportation, the possibility of radical change through integration in the short term is low, but this does not mean that this part of the attempt does not need to be strengthened.

A more efficient and low-consumption environmental travel mode for urban transportation should be advocated. Especially in the current severe global environmental problems, the connotation of sharing travel and sharing economy displayed by online car-hailing is worth promoting. We can understand the scenery reasonably. Perhaps in the unwilling future, the integration of bus and ride-hailing will provide the possibility for the unity and timeliness of people's life and travel.

### **3.2. Regulation and Review**

Describing the various problems of the online car welcome action, it can be seen that the leading cause of the current problems lies in the imperfect monitoring and review mechanism. Therefore, based on the principle of changing current problems and improving the security of the user experience, the online car welcome must strengthen monitoring and auditing from the outset and quickly give back the problem-solving strategy in the future.

By actively promoting the behavior of feedback, the usage rate of the design of the online car greeting software can be maximized. The incentive mechanism needs to be appropriately increased to increase passenger feedback and enthusiasm to participate in the problems of online vehicle reception. The authenticity of feedback data shall be considered in the relevant review plan. To receive feedback from passengers, the platform must react quickly and log in on time as a media platform between passengers and drivers. Moreover, based on the assessment of the authenticity of the content of the feedback, by the respective operational specifications and with the content of the feedback, specific treatment measures must be analyzed explicitly according to the specific situation; Strengthen monitoring and networking to monitor real-time driving time, route and driving habits of vehicles and drivers and formalize records. The software terminal can have a voice service function in case of problems such as driver fatigue driving, driver deviation, driver violations, etc..

### **3.3. Complete Software Functions**

At present, the functions of major online ride-hailing software platforms are increasingly perfect, but combined with the current market situation; it can be found that there are still defects in the operation and use of specific software for both drivers and passengers, in other words, there is still apparent room for improvement. Integrating the opinions of some drivers and passengers, the author will hear from the driver and passenger sides, respectively.

#### **3.3.1. The Driver's Side**

(1) The operation of the software needs to be more automatic and can support voice control as much as possible to avoid some traffic accidents caused by unskilled drivers. Automation can reduce some traffic safety risks.

(2) Increase order route selectivity. Usually, there are multiple arrival routes for each order. In order to minimize conflicts caused by route selection, the platform as a third party provides options at the initial stage of order receiving, requiring drivers or passengers to choose to improve the software's humanized operation performance.

(3) Raise the entry threshold. Then, the driver's related documents can be displayed, and the dual protection process of face recognition needs to be added to avoid the situation of proxy drivers.

(4) If a random check is set up, the driver's driving condition shall be randomly checked, including physical and psychological aspects. To understand the potential problems that may occur when

drivers actually operate flash sales, and to prevent them in advance, to minimize the source's accident rate.

### **3.3.2. Passenger Side**

(1) Add real-time location sharing and sending functions to ensure the safety of passengers in the car.

(2) Integrate the advantages of different software terminals, take advantage of each other, and increase the use selectivity of passengers. In real life, the problem of inconsistent models is often dealt with in the following article, and the platform should add feedback options for follow-up problems.

Visible, the software uses the questions to improve practical problems that need feedback, and the results of the survey data analysis as the foundation; in other words, as a platform for software developers, need to build can be used in the software used available the virtuous cycle of ascension contains feedback, finishing, design, testing, to find and solve problems, prevention, the goal of the problem.

## **4. Market Development Scale Forecast**

### **4.1. The Number of Ride-hailing Platforms Keeps Growing**

According to statistics from the Ministry of Transport's National ride-hailing Regulatory Information Exchange platform, the number of licensed ride-hailing platforms in China has grown from 214 at the end of 2020 to 267 at the end of March 2022 [7,8,9].

### **4.2. The Number of Drivers Increases**

The cumulative number of ride-hailing drivers increased from December 2020 to March 2022. By March 2022, a total of 4.073 million ride-hailing driver licenses were issued in all regions, with a month-on-month increase of 0.5% [8].

### **4.3. Expansion of Vehicle Scale**

Released according to the Ministry of Transport 2016 seven ministries and commissions such as the Internet booking taxi service management interim measures ", a vehicle engaged in the management of a network of the car must conform to the corresponding standards and apply for booking taxi transport network, access to the Internet booking taxi transport vehicles can be engaged in the management of network about the car. As a result, by March 2022, a total of 1.634 million vehicle transport certificates had been issued in China, up 0.2% month-on-month.

### **4.4. Expanding User Scale**

According to CNNIC data, the scale of Chinese ride-hailing users continued to expand from 2016 to 2021, and by the end of 2021, the number of Chinese ride-hailing users had reached 453 million, an increase of 23.9% compared with 2020.

From the perspective of penetration rate, China's ride-hailing penetration rate fluctuated from 2016 to 2021. However, by the end of 2021, the penetration rate of ride-hailing reached 43.90%, an increase of nearly 7% compared with December 2020.

## 5. Forecast of Industry Development Trend

### 5.1. Development Trend

Integration of the upstream and downstream of the industrial chain [10], diversification of business models, and digitalization of industry development.

The car-hailing industry in China is in a rapid development stage. The integration of upstream and downstream industry chains, the diversification of business models, and the digitization and specialization of industry development are the major trends in the current development.

### 5.2. Development Prospect

The development prospect will be better under the support of the policy.

According to the 2021 Mobility Industry Market Insight report released by Wilson Auto Intelligent Decisions, the size of China's ride-hailing market is expected to reach 434.1 billion yuan in 2025, and the compound growth rate of China's ride-hailing market size from 2022-2025 is about 10%. With the growth of the industry scale and the entire market competition, the growth rate of the market size of China's ride-hailing industry may decline from 2026 to 2027, but there is still a growing trend. As a result, the expected growth rate is between 5%-7%, and the market size is expected to reach 487.8 billion yuan by 2027.

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