

Reform with Smart Code to Achieve Actual Performance

-The first anniversary of the launch of Xian "Taxi Smart Code"

By Liu Yishen

As a famous historical and cultural city, Xi'an features profound traditional culture and strong vitality, for it was not only an ancient capital of thirteen ancient dynasties but also a modern city, which creates an all-inclusive urban atmosphere. In this city, the combination of traditional cruising taxi and modern mobile Internet gave rise to a road of integrated development of new and old business.

On August 27, 2019, "Taxi Smart Code" was officially launched in Xian, indicating that roadside taxi hailing has entered a new era of Internet experience. Over the past year, Xian Taxi Administration Office and DiDa Chuxing have been working closely with the taxi industry, continuously optimizing products and providing better services, which has brought real changes to the taxi industry in Xian.

Integration of Multi-dimensional Data Gives Roadside Taxi Hailing the Efficiency of Online Taxi Hailing

"Sir, I'm going to the Bell Tower." "Which specific street are you going to, east, west, north or south? I'll park closer for you." "Sorry, I don't know the way." Although the roads in Xian are called "square chessboard roads", for those who are born with a poor sense of direction, they still have the embarrassment of "getting on a taxi but not knowing the destination".

"However, with the smart code, this situation has become less," said Mr. Luo, the driver of Xian Qianjin Taxi (Group) Co., Ltd. When passengers get on a taxi and scan the "taxi smart code" to enter the destination, they can choose to send the route to the drivers "DiDa taxi driver App", and the driver can navigate directly with one click, which is really convenient and efficient. According to statistics, the "one-click navigation" function is used 7,800 times a day on average.

On August 27, 2019, the taxi industry in Xian officially launched the first "taxi smart code" in China, which integrates multi-dimensional data such as mobile payment data, taximeter data and taxi real-time positioning data. After passengers take a taxi, they can realize real-time travel query, service evaluation and complaints, aggregate payment and use a variety of travel tools by scanning the code once.

"Our team developed this taxi smart code, hoping to make it easy for passengers to enjoy Internet services by hailing a taxi on road." ZHU Min, vice president of DiDa Chuxing products and general leader of smart code, said.

With the development of mobile Internet, passengers are accustomed to turning

on their mobile phones to call online ride-hailing, and inquiring about driver information, service scores and specific location information at any time. However, when the scenario changes to the traditional taxi calling on road, passengers will find that it has a very weak connection with the mobile phone. Most passengers may just scan the QR code for payment at the end of their travel, but they are unknown about the driver, taxi and trip information.

"For example, who is the driver, what is the performance of the drivers service in the past, where is the taxi moving now, when it can reach its destination, whether the driver has taken a detour, how to contact the driver when passengers find they lost something after getting off. These are all things that passengers do not know," said ZHU Min.

Is this because there is no data available for traditional taxis? ZHU Min introduced that the digitalization of taxis in most cities in China has actually done a good job for infrastructure construction. For example, the relevant departments have the real-time position of a driver, the track of a journey, the pricing of each journey and other data. However, these data are scattered and isolated, and they do not give passengers an intuitive sense of value or an integrated service experience.

In order to solve this problem, Xian Taxi Administration Office cooperates with DiDa Chuxing to dock the taxi data information system in real time, thus integrating the data into every link of passenger's travel, actively meeting the passenger service needs in the Internet environment, and ultimately giving them the service experience of "knowing all information by scanning". Since February, more than 50 million people have scanned the smart code, and the at most more than 400, 000 people scanned the smart code per day.

After passengers get on a taxi, they can scan the QR code and get a series of services such as route navigation, real-time track viewing, travel sharing, bill details, online payment, service evaluation and so on.

"The purpose of our promotion of smart codes is to find a suitable development direction for Xian in terms of the transformation and upgrading of cruising taxi, which can promote the healthy development of the industry and provide more services for passengers," said WANG Jian, director of Xian Taxi Administration Office. After the investigation, Xian decided to promote the transformation and upgrading of cruising taxi with the goal of improving the service experience of taxi hailing passengers, so that roadside taxi-hailing passengers can also enjoy some of the service functions of online car-hailing. "Smart code has initially achieved our expected results". In 2021, the 14th National Games was held in Shaanxi, and the promotion and application of smart code provided strong support for the Xian taxi industry to ensure the 14th National Games. Up to now, 90% of taxi orders in Xian have been digitized through smart code.

Accurate prediction of taxi demand and Double upgrade of Driver and

Passenger Experience

"I think there has been a noticeable change in the service of Xian taxi drivers during the year and it also changed my original view about taxis." Mr. Gao, a member of the public, has a lot of feelings when it comes to improving the service of taxi drivers.

Nowadays, taxi drivers in Xian generally attach great importance to the evaluation of passengers. Not only can passengers evaluate their trips in real time through smart code, but also taxi operators can view the evaluation content in the background and communicate with the corresponding taxi drivers to solve the problems displayed in the evaluation.

With the evaluation mechanism of "Taxi Smart Code", the taxi industry in Xian has received more than 24 million service evaluations, with as many as 190,000 evaluations per day, and each driver has received more than 10 evaluations per day.

Ms. Li, said that in the past whether she could take a taxi depended on luck, and that she did not know how long it would take her to find an idle taxi. Later, through the "Taxi Smart Travel" Wechat applet, she could know the situation of the surrounding taxis in real time, and she no longer need to wait "silly" for a taxi on the roadside.

On November 25, 2019, DiDa Chuxing upgraded the "Taxi Smart Code" in an all-round way, launched the "Taxi Smart Travel" applet, and added the function of "Hailing Assistant".

Xian citizens search for the "Taxi Smart Travel" applet on Wechat, and click to enter the applet to see the two sections of "Hailing Assistant" and "Online Ride-hailing" on the home page. In the "Hailing Assistant" section, the system will automatically recommend three best taxi hailing points nearby. Clicking one of the taxi hailing points, the applet can show the number of idle cars passing by the taxi hailing point within 15 minutes, the license plate number of each taxi, the actual distance from the taxi hailing point and the expected arrival time. If there is no idle taxi nearby, the system will recommend citizens to check other taxi hailing points, or enter the "Online Ride-hailing" section to book a taxi, which can help citizens plan their travel mode rationally and avoid the occurrence of roadside waiting.

In addition, the "Taxi Smart Code" launched by DiDa Chuxing uses Internet of Things technology to integrate the information data of taxi hailing, predict taxi demand through travel demand thermodynamic map and big data analysis, rationally allocate urban taxi resources during peak hours, and help taxi drivers reduce empty-loading ratio and improve their operational efficiency.

Mr. Luo, a taxi driver, said that DiDa Chuxing has a hot broadcasting function on the drivers side, which can broadcast the taxi hailing of passengers nearby

by voice. Drivers only need to tap the screen to view the situation, which not only will not disturb their driving, but also reduce the empty-loading ratio.

On February 21, DiDa Chuxing upgraded the "Taxi Smart Code" again and launched the "Healthy Travel Registration" function to ensure the safety of returning to work and facilitate epidemic prevention and control as well as traceability. Passengers only need to scan the "Taxi Smart Code" in the taxi, enter their mobile phone number, name, ID card number and other information, and complete the registration in one minute. As of mid-August, more than 6 million Xian citizens registered by real name by scanning the smart code.

"After the upgrade, some of the functions of the smart code make the cruising taxis more advanced." Driver Luo said that the real-name registration function added a voice broadcast option. During the epidemic, after passengers get on a taxi and register their real names, the driver can directly hear the voice broadcast of the registration results. "This is very convenient. I don't need to be distracted to check. I can feel that the smart code is continuously optimizing the experience."

On July 3, "Hailing Assistant" was upgraded in an all-round way. Passengers can call all idle cars within 5 kilometers with one click. At the same time, passengers can accumulate mileage points by scanning the "Taxi Smart Code", and passengers with long mileage and more points will enjoy the rights and interests of exclusive voice broadcasting and priority handling of complaints.

On July 29, DiDa Chuxing's "Taxi Smart Code" added the function of issuing electronic invoices, and all the "public" taxis in Xian can provide electronic invoices. This is the first time in China to realize the real-time correlation between the amount of taxi electronic invoice and the in-taxi meter.

Over the past year, the functions of "Taxi Smart Code" and "Hailing Assistant" have been constantly upgraded, and the car hailing habits of Xian citizens have also changed.

Digitalization, Online and Integration to Achieve Intelligent Operation for Win-win Results

Many people say that "taxi" is a sunset industry and will be replaced by online car-hailing, but DiDa Chuxing has special confidence in the taxi industry.

Compared with online car-hailing, the traditional taxi industry does have some drawbacks. For example, there are a series of problems such as insufficient service supervision, poor passenger experience, low degree of digitalization and insufficient personalized service. "However, these are also huge space for the industry to make progress," said ZHU Min.

In view of the reform of taxi industry, DiDa Chuxing proposes the concept of "Taxi - New Travel", and realizes the intelligent operation of urban taxi transportation through the "three reform solutions", i.e., Digitalization, Online,

Online and Offline Integration, to improve passengers' satisfaction and industry efficiency.

ZHU Min said that, for passengers, "Taxi Smart Code" is a "tool" to experience digital services. By simply scanning the code, they can conveniently enjoy the upgrade of travel service experience brought by the Internet.

On the other hand, "Taxi Smart Code" is also the entrance of taxi digital service. The digitization of passengers trip information can feed the taxi industry with massive service data and bring the entire taxi industry's services into the mobile Internet era.

As early as August 24, 2018, DiDa Chuxing launched the Phoenix Taxi Cloud Platform, which helps taxi companies improve their management refinement and efficiency from three dimensions: sharing data related to driver orders and service evaluation, building a complaint linkage handling mechanism, and online collaborative office.

"Smart code mainly solves the problem of information asymmetry between passengers and drivers, and facilitates passengers to hail a taxi and drivers to take orders," said Cai Shaoqu, deputy director of the Urban Public Passenger Transport Management Department of the Road Transport Administration of the Hubei Provincial Department of Transportation. The smart code could also assist the management department in supervising the operation, grasping the market supply and demand situation, and providing a basis for the formulation of policies such as capacity delivery and pricing regulation.

Shen Lijun, president of City Intelligent Information Technology Research Institute, believes that "Taxi Smart Code" has improved the efficiency and service of the whole cruising taxi industry from three levels: management department, operation enterprise and passenger, so as to achieve a win-win result.

Originally, the management department had fewer "effective means" and could not deal with passenger complaints in time. Now, passengers can evaluate the service online with the smart code, and the management department can understand the evaluation content through the background, which not only broadens the channels of passenger complaints, but also strengthens the supervision of the management department.

Originally, the information obtained by the operating enterprises was limited and the capacity could not be dispatched in time. Now, according to the travel data collected by "Taxi Smart Code", the operating enterprises can effectively predict passenger travel and monitor the process in real time, so as to flexibly dispatch drivers and vehicles and improve the efficiency of operation and management.

On the passenger level, "Taxi Smart Code" provides them not only digital travel experience, but also safety assurance. Passengers can scan the code to check

the service evaluation and real-time track, and share the journey with relatives and friends, which adds a guarantee for passengers to travel safely.

On August 31, 2019, at the 2nd Cruising Taxi Reform and Development Policy Seminar, Xian, as a benchmark city for the reform and development of cruising taxis in China, as a representative of the taxi industry, introduced the application of "Taxi Smart Code", shared the path and achievements of the reform and development of cruising taxis in Xian, and provided a reference for the national industry reform and development. It was widely recognized by the participants.

Since the launch of "Taxi Smart Code", Xian has welcomed the competent departments of Tianjin, Shijiazhuang, Hangzhou, Jinan, Chengdu, Zhangjiakou, Yulin, Nanjing and other cities to visit and study, exchange the development experience of the taxi industry in Xian, and provide more feasible path reference for the digital upgrading of the taxi industry in other cities.

"After one years landing application, the smart code has achieved phased results, and its effectiveness and sustainability have also been verified," said Shen Lijun. The application and promotion of "Taxi Smart Code" is reproducible. Although the taxi industry in different regions faces different problems, there are some commonalities among the demands of management departments, operating enterprises and passengers.

"Taxi Smart Code" is a way for cruising taxis to explore the integration of "Internet +" and the old and new business models. Cai Shaoqu said that as long as it was conducive to the development of the industry, drivers and passengers, cities may as well try to let the market develop freely. However, when it develops to a certain scale, the management department needs to carry out actual supervision and normative guidance.