Research and analysis on the transformation of road passenger transport industry

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Abstract. How does road passenger transport industry service and breakthrough in limited development space, this has become a major issue in the field of transportation in recent years. In this paper, the effect and difficult of actual cases such as the combining road transport with tourism in the current development process of road transport are summarized. It is pointed out that the focus of passenger transport transformation is to closely combine the requirements of industrial transformation and upgrading and promote the deep integration of information technology with industrial management and services. Finally, corresponding suggestions are put forward for the innovative development of road passenger transport transformation.

1. Traditional passenger transport enterprises break the "siege" together

With the continuous improvement of high-speed rail, subway speed advantage, and high-density frequency, as well as the continuous upgrading of passengers' demand for high-quality and diversified travel, problems such as the concentration of passenger market to spend low and the continuous increase of labor cost have become increasingly prominent.

To do this, the GuangDong provincial department of transport launched the pilot reform of road passenger transport in 2016, making beneficial exploration for the transformation and upgrading of the passenger transport industry. Guangdong's leading enterprises in transport positively responded by digging into the resources of road passenger lines and making all-out efforts to promote the transformation and upgrading of road passenger transport. After more than a year of practice, on the basis of investigating the space-time distribution and the bus passengers demand, it has introduced and initially has established the brand effect of inter-city section, business, tourism and other patterns. Taking the pilot work of Guangzhou no.2 bus company as an example, From September 27, 2016 to June 18, 2017, with 50 passenger transport routes were customized, and 15 pick-up and drop-off points have been applied for, and a total of 11240 vehicle shifts have been sent, with 281,000 person-times, revenue of 860.4 million yuan, and the actual load rate is 59.43%.

During the Spring Festival travel rush, the enterprise provides campus customization services for passenger transport, helps the college students to go back home, and which can reach nearly 10,000 students safely. During the period of qingming, May Day and Dragon Boat Festival, enterprises combined the traffic and tourism policies to explored travel direct routes, providing door-to-door services for passengers, and expanding the new mode of customized passenger transport through the combination of travel.

Jiangsu province also actively responded positively to call for transformation and reform, the traditional road passenger transport enterprises represented by Jiangsu universiade have self-built in
ternet travel platform to provides customized travel service, optimize the supply and demand structure, extend the service chain. This explore new model for road passenger industry transformation and upgrading.

In May 2015, Jiangsu dayun established the road passenger transportation service platform-bus steward jointly with tongcheng network technology. The platform provides a variety of travel service options, such as "intercity carpooling", which provides cross-city travel services for door-to-door pickup; "Airport pickup" provides transport services from place of residence to the airport; "Custom buses" offer city commutes, one person, one person, etc. In terms of service guarantee, on-line customer service robots carry out real-time consultation and complaints. Offline customer service calls are available 24 hours a day. At present, the platform has already amounted to 10 million registered users, average daily ticket is about 80000 pieces, through cooperation with online ticketing platforms and enterprises, achieved data docking with 1008 passenger stations, networked ticketing has covered in Jiangsu, Shanghai, Zhejiang, Guangdong, Fujian, Yunnan six provinces, it presents a good development trend.

Whether the major traditional road transport enterprises in Guangdong province broke through the tight encirclement, or the typical transformation measures such as Jiangsu dayun adapted to the demand of market consumption upgrading, providing useful reference for the industry transformation and upgrading.

1.1. Innovate operation mode and activate internal vitality of passenger transportation
The traditional road passenger transport is the operation of timing, fixed point, fixed line, fixed personnel and fixed shift, which cannot meet the specific time and route demand of passengers at present, but also causes the idle waste of transportation capacity during the peak period. Enterprises carry out customized passenger transport service mode through innovation, accurately match capacity according to passenger demand, and change from "station to station" to "door to door", effectively realizing balance of supply and demand and resource integration, and fully activating potential vitality of road passenger transport.

1.2. Strengthen the main transport industry, give play to the advantages of road passenger transport
At present, the travel demand orientation of safe, reliable, economic efficiency, convenience and comfort is continuously enhanced, transportation enterprise has subdivided the travel market based on the personality needs of the passengers, optimized the line design and model structure, derivative the form of a multi-layered, high quality, precision passenger service, in addition, it forms dislocation competition with other transport modes, and promotes the effective connection of different modes, giving play to the advantages of flexibility and convenience of road passenger transport.

1.3. We will promote service upgrading and open up new avenues for development
Oriented by users' travel demands, the industry organization, transportation capacity resources and service process are reconstructed and reconstructed. The management efficiency is improved through constantly standardizing freight rate standards, assessment system, complaint handling, etc., and the service upgrade is continuously promoted. At the same time, it will be a strategic choice for the passenger transport industry to solve the development dilemma and realize rapid development by acting the link, strengthening cooperation with scenic spots and travel agencies, promoting the expansion and integration of industries, and opening up new ways of development.

2. Travel software brewing ecological change
In the traditional road passenger transport enterprises are considering how to guarantee the industrial advantage at the same time, domestic travel software represented by drops a taxi and ctrip has take advantage of advanced technology and effective marketing strategy in the passenger market quickly occupied a place, and with the posture of having a unique style has produced profound influence to the people to travel.
Through several years of deep cultivation, travel software has gone from the rough field into the era of intensive farming. Drops a taxi has a near-monopoly market share of 80% in the travel category of app. with 20 million daily orders. Its main business covers various modes such as taxi, private car, free ride, bicycle ofo, valet drive, minibus and taxi for the aged, serving more than 360 cities in China. Ctrip takes "the integrated development of transportation and tourism" as its core point, provides a series of travel services such as online chartered car, customized chartered car, line chartered travel, etc., which makes a new attempt to build a tourism transportation system with reasonable structure, perfect functions, outstanding features and excellent services.

The birth of travel software is an important breakthrough for industrial transformation and upgrading in the wave of "Internet + convenient transportation". The segmentation of travel demand and multiple rounds of screening in a few seconds, more accurate matching of supply and demand, accurate formation of user portraits, and drips of travel track data are converging into a new business ecology, and a "superbrain" of mobile travel data is about to emerge.

3. The industry's difficulties and problems

3.1. Pattern promotion is not yet mature
With the progress of reform wave, all passenger transport enterprises have explored the way of transformation in the form of pilot. Although they have achieved initial results, they have not formed extensive promotion and publicity. The public's recognition and acceptance level is not high.

3.2. Regional barriers are serious
Due to administrative barriers and competition of interests in the road passenger transport industry, local protectionism in some regions is serious, and the support for policies is different, which makes it difficult to achieve cross-provincial operation and give play to scale effect. Joining the information-based platform of other regional transportation enterprises means the transfer of user resources. Many enterprises are not highly motivated for their own interests.

3.3. Policy implementation is slow
In 2016 the ministry of transport of the People's Republic of China issued "the guiding opinions on deepening reform and accelerating road passenger transport transformation and upgrading ". We will expand reform in the line approval, site setup and price adjustment, has created favorable conditions for innovation, but due to the actual development, management and policy around the understanding there is a certain difference, work out detailed rules for the implementation of timely and to promote policy large enough.

3.4. Impact of malicious is serious
Many ride-hailing companies intend to take advantage of the policy advantages and use all kinds of malignant means to open a number of illegally customized passenger lines. Under the banner of sharing economy, the business environment of the industry has been seriously damaged, bringing great harm to the healthy, stable and orderly development of the industry.

3.5. Market regulation is inadequate
In the early stage of the development of new business forms, a number of business entities co-exist, and some non-operating vehicles of enterprises without business qualifications are connected to the network platform to participate in road passenger transport, etc., which can easily lead to major traffic and transport accidents caused by mass deaths and injuries. Due to the existing market regulatory loopholes, many business entities use the policies to wipe the edge and stray outside the supervision of the transportation authorities, which has certain safety risks.
3.6. Lack of safety management
Taxi application does give people travel brings a more efficient and convenient experience, but also exposed in the process of development of safety management, such as the subject of security responsibility is unclear, the technical safety of operating vehicles is not timely, and safety standards for ride-hailing services are not yet systematic, safety work remains to be strengthened.

3.7. Cross-border cooperation is lacking
Travel software is using super technical capacity and data-driven mode to seize the passenger market at the unique speed of the Internet. While traditional passenger transport enterprises hold on to the main business, actively explore the road of transformation. The two dominant forces are operating separately and have not formed a good cooperation mechanism. It will take time for the integration of the Internet and traditional industries to develop.

4. Suggestions for development in the industry

4.1. Strengthening policy support
We will give full consideration to the actual situation and difficulties in the transformation of the passenger transport industry and continue to increase support for business, to avoid reconstruction of resources, market competition, recommendations to strengthen local policy guidance, according to relevant ideas and principles of the guidelines on the regulation of road passenger transport services tailored a clear road passenger transport market main body in the industry access, security, dispute handling, supervision and evaluation and resource sharing of responsibility and moral duty, regulate the behavior of business services, protect the legitimate rights and interests of operational safety and related subjects, to ensure passenger transformation to be effective.

4.2. Full implementation of standards
Combined passenger transport industry emerging business characteristics and actual situation, should gradually establish a set of internal controls and external service safeguard mechanism, including the daily maintenance of vehicles, security and emergency rescue operations were performed specification standardization construction, and improve the custom service standard, improve service problems in the operation of the new forms of processing speed and enhance the effectiveness, and gradually thick through practice, the optimization standard, strengthen the industry standard of execution.

4.3. Deepen reform efforts
We made solid progress in streamlining administration, delegating power and improving services. Based on improving the list of powers and responsibilities, we will clean up and streamline administrative review and approval items, further improve the procedures for handling passenger business, and expand the autonomy of passenger businesses. We will actively and steadily push forward reform of passenger transport pricing to fully stimulate the vitality of various market players, optimize the supply structure and the allocation of resources among them, and promote cost reduction and efficiency in the industry, while creating more diversified service models.

4.4. Promoting regional connectivity
We will accelerate information sharing and resource exchange among provincial and regional platforms, and promote the networking of passenger data on a larger scale and in a shorter time. On the premise of ensuring information security and controllability, encourage the mutual integration of government public data and market data to form a road passenger transport big data system integrating travel data, consumption data and credit data, so as to optimize supply structure and expand service capacity. At the same time, it provides scientific support for the innovative development of passenger transport industry.
4.5. Strengthening of supervision

It is suggested to strengthen the clean-up of illegal platforms, strengthen the supervision of transport enterprises that provide operating vehicles for illegal platforms, guide transport enterprises to conduct business through legal and formal platforms, crack down on illegal online ride-hailing, and clearly distinguish between operating and non-operating vehicles. The management department should create conditions and innovate the way of supervision, attach importance to and apply the information-based means, strengthen the analysis and application of big data, facilitate the industrial transformation and upgrading, improve the effect of supervision and reduce the cost of supervision, strengthen the intensity of supervision during and after the event, and ensure the safety of road passenger transport.

4.6. Enhance coordination and communication

We should attach great importance to the communication between transportation and management departments in various regions, clarify the division of tasks between the responsible departments, and strengthen the promotion of passenger transport transformation from top to bottom in a coordinated and horizontal manner. We will create a synergistic mechanism for road passenger service, encourage and guide passenger transport enterprises to conduct in-depth cooperation with legal platforms in the purchase of tickets and the establishment of stations, so that legitimate road passenger transport enterprises and stations can participate in the pilot reform and benefit from the reform as a whole.

5. Conclusion

Whether it's a multi-industry regulatory reform innovation, or the transformation of a traditional passenger enterprise, or even the emerging ecology of the Internet corporation, it has adapted to the needs of market consumption, and it has provided a good example for the transformation of the road.

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