Exploring the Road of Intelligent Payment of Public Transportation in China based on Bus Cloud Flash Payment

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Abstract. From the data published by China Internet Information Center referred to as CNNIN in July 2018, the number of mobile Internet users in China reached 788 million. In 2017, the number of people using mobile phones to access the Internet reached 98.3%. The increase in the number of mobile Internet users has provided unlimited power for China to promote the "Internet +" business model, and the bus as a stable collective economy in China has finally achieved the breakthrough of Internet+. In 2019, China's first- and second-tier cities blew for a while. "Cloud flash pay, a penny to take the bus" boom. Then, when the payment technology is gradually becoming more intelligent, some problems will surface. This article starts from the development of cloud flash payment in Shanghai, Nanjing and Chongqing, and takes the national policy, social welfare and modern scientific development concept as the basic requirements. An optimized route to adapt to the current comprehensive public transportation of public transportation payments.

Keywords: cloud flash, payment modern scientific development, concept payment intelligence.

1. Introduction

The original intention of the invention of public transportation is to establish a public interest perspective, which plays a fundamental role in urban construction, both economically and civilly. While smart phones have gradually changed from living and entertainment needs to essential needs for life, most of the convenience conditions of their own cameras have gradually turned into a payment tool. At the same time, due to the flexible and versatile interface of smart phones, most third-party payment platforms in China use the flexible interface to develop the bar code payment function. The main character of this article, “Broadway – Cloud Flash Pay”, is to merge the above two life styles aimed at the masses of our country so as to promote the change of the operation of the market payment mode under the environment of internet+. Cloud Flash Pay is an Internet payment app released by Bank of China in 2017. As of February 22, 2019, UnionPay travel codes have been in Shanghai, Guangzhou, Tianjin, Nanjing, Fuzhou, Xi'an, Chongqing, Zhengzhou, Yichang, Lhasa, Public transport in Xining, Nanning, Guilin, Quanzhou and Huainan is on the line, and more cities are gradually opening. Select “Car Code” on the homepage of Cloud Flash Pay APP, and open the exclusive bus code according to the normal application instruction process. "Car code" is different from the traditional product bar QR code. The bus code belongs to the "industry two-dimensional code" in the field of transportation. The citizens who follow the development of payment technology are free to buy recharge cards, queue up and change [1].

2. First, The Current Situation and Development Trend of "Bus Cloud Flash Payment"

2.1 Public Welfare Undertakings - Facilitating the Masses

In 2012, the "Guiding Opinions of the State Council on Urban Priority Development of Public Transportation" mentioned that cities should promote the development of Internet and build the supply force to the public transportation industry, ensuring that the general public is convenient to go out as the primary condition and strengthen the optimization of the riding conditions. “Safety, economy and efficiency are the goals to achieve.[2] “Cloud Flash Pay” is optimized from the convenience of payment, and the bus is improved by the passenger’s active “scan code” and passive
scanning “pass code”. The circulation rate has alleviated the problem of traffic congestion in a certain degree. From the price, the user who has paid for the new registration cloud will be able to ride for only one penny in a certain period, which is the most important factor affecting the purchase behavior of consumers. One ring - the price factor has accelerated the pace of urban network informatization. However, according to the survey during this period, some citizens who frequently use buses to go out having difficulties in using Internet-based apps; some citizens are cultured. The degree of difference, even the cloud flash payment products have a skeptical and negative attitude, the smart payment of the bus has not been fully popularized.

2.2 The Comprehensive Connection of Public Transportation is Imperfect

Most cities do not consider the development of “matching packages” with buses when they pay for the intelligent development of buses. For the purpose of some citizens going out, whether from the perspective of office or leisure, the next station may take the bus itself which is not the last "terminal". Although the urbanization of the traffic route planning in China is relatively comprehensive, which due to the different nature of the subway line and the bus line during the construction time, some citizens have to change to the subway after the station to go for work. However, most domestic metro lines still use the form of window ticket purchase and self-service machine purchase card. The intelligent optimization of transportation transfer payment has not been fully applied, which has caused serious lag in the development of the entire public transportation intelligentization.

2.3 The Development of Urban Greening has not Gone Deep

According to the guidance, according to the requirements of resource conservation and environmental protection, cities should vigorously promote the use of new equipment and new energy. According to Xinhuanet News, Chongqing City invested in the use of several new energy vehicles in April 19, and built charging piles at relevant sites. The new energy use is only in one district of Chongqing. It can be seen from the above electronic precipitation literature that the intelligent application of public transportation in urban areas is not closely related to the development of green public transportation in cities, and the overall coordinated development of cities should continue to be strengthened.

2.4 The Role of Intelligent Transportation of Public Transportation to the City - Adapting to Local Conditions

In China, each city has “extraordinary” points to support its economic development. Some cities rely on tourism to support, some cities rely on heavy industry support, and some coastal cities rely on a large number of handicraft industries. Then, in each city, with its local characteristics to develop the regional economy, according to the differences in the workplaces of various industries, the types of labor of the various industries, employees, the types of public transport are also different. Some cities in the travel destinations and mainstream transportation vehicles do not make timely popularization strategies. In the urban public roads, public transportation was covered by cloud flash, and some public transportation routes with large usage rates failed to receive timely payment intelligence application.

3. Second, The Strategies can be Adopted at this Stage

3.1 Macroeconomic Regulation and Control - cultural Popularization

Urban public transportation should continue to spread cultural communication along the principle of public transportation optimization. The problems brought about by the new payment of intelligent public transportation development will gradually emerge. The municipal governments should continue to improve the urbanized traffic rules and It is necessary to scientifically formulate and improve public transportation rules, rationally coordinate all kinds of transportation, and promptly
mark whether the bus allows intelligent payment at all bus station signs, so that passengers can quickly judge whether they need, or even whether the transfer is necessary. Need to exchange change. Each bus stop should be accompanied by a description of the convenience, security and policy of the cloud flash payment tool of the Bank of China logo, and indirectly from the citizen groups who need to take the bus to popularize social science knowledge.

3.2 Accelerate the Payment of Intelligent Equipment Investment - urban and Rural Integration

While applying intelligent payment to urban buses, it also provides Internet service facilities for the construction of control centers, parking lots, maintenance plants and parking sites, such as shared charging treasures, free WiFi and cloud flash payment registration process briefs. To ensure that intelligent payment is applied to the maintenance of buses, cities with conditions should encourage the use of new energy vehicles. Before the popularization of urban and rural express trains is popularized, large-scale payment and intelligent publicity should be carried out for all bus stations in cities and towns, and buses should be updated and maintained regularly to improve the overall public transportation capacity of the city.

3.3 Broadening the Source of Deduction for the Passenger Code

As the pioneer of China's third-party payment market - Alipay and China's largest mobile Internet chat platform - WeChat, these two apps hold a large number of payment people in China. The biggest advantage of cloud flash payment is that it can be used offline. For the northern region, most cities recognize the Bank of China business and do not like Alipay and WeChat as intelligent payment methods for buses. Then, on the basis of our nationals as the core, we can also use the cloud flash payment app for offline deduction while also adding the option of WeChat or Alipay debit. If it is used as offline, it will feel like this. If you reduce your competitive advantage, you can make some changes in the price. A variety of payment intelligent deduction channels will provide sufficient power for urban public transportation payment intelligence.

4. Conclusion

The intelligent reform of the form of bus code in China's bus payment form has been popularized in some areas in 2019. In order to accelerate the application of the public transportation industry nationwide, cities should add cultural knowledge first. Great efforts, accurate publicity in the people who need public transportation, and follow the example of private car citizens to participate in the construction of “energy saving and environmental protection, green city; secondly, the carrier of payment tools – smart phones, strengthen Its real-time service means optimizes the battery life of mobile phones from various transportation nodes. Finally, the government department can promote the joint use of multiple payment channels and simplify the using conditions of intelligent payment of public transportation.

References


