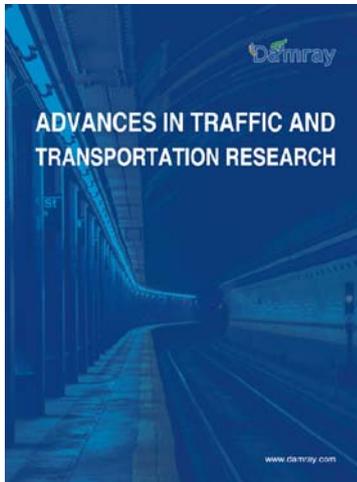


Research on the Impact of Internet+ on Road Transportation Safety Management



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Abstract

At present, China's economic development momentum is rapid, the transportation industry has also made proud achievements with the vigorous development of the economy, whether in the establishment of transportation arteries or the construction of transportation hub, there are earth-shaking changes. However, as the traffic fortress constantly open, bring convenience to people travel at the same time, the transportation safety problem has also been the focus of the social people from all walks of life, has become one of the current hot social topic, this paper discusses Langfang taxi traffic safety management issues, through the study on the Internet under the highway traffic safety management. In-depth analysis of the measures and impacts hopes to provide a valuable reference for China's transportation safety management.

Keywords

Internet +, Highway Transportation, Safety Management, Impact

1. Introduction

"Internet +" as a new economic form, through the Internet information technology to achieve the joint development of the Internet and traditional industries, in the Internet + transportation, a traditional industry for joint development, can improve the current transport safety management problems to a large extent, through the centralization of transport resources Optimization of allocation, so as to ensure that transportation management can be carried out smoothly, to enhance the development of China's transportation industry has very important practical significance, by relying on Internet information technology, to achieve the deep integration of the Internet + and transportation safety management development.

2. Brief description of "Internet +"

With the development of Internet information technology, all walks of life through the integration of Internet information technology derived from the new industrial chain is innumerable. The "Internet +" concept was first proposed in 2012 at the Fifth Mobile Internet Expo, as a favorable channel for "mass entrepreneurship and innovation" in various industries. In 2015, Ma Huateng submitted a proposal on "Internet +" as the driver to promote the innovative development of China's economy and society", which encourages all sectors of society to use "Internet +" as the driver of innovation by advocating In addition, the "Internet +" can also promote the effective integration of cross-border industries, thus enabling the development of national economic benefits and people's livelihood, and enabling China's economic development to enter a new stage of development. Stage, in a new economic form, to promote the "Internet +" and the traditional industrial chain innovation development, so as to achieve the purpose of industrial upgrading to enhance the economic productivity of the whole society to increase the value of wealth [1].

3. The current situation of road transportation safety management

According to the relevant departments of investigation and research, in 2018, a total of 244,937 various types of traffic accidents occurred in China, of which 63,194 deaths due to traffic safety, the total number of injuries 258,532, the final direct property losses up to 138,456,000 yuan, etc., from the above data will be able to see the direct consequences of traffic safety problems, in China's rapid economic development Behind the rapid development of China's economy, people's material needs and disposable property are becoming more and more affluent, which has led to the proliferation of private cars, civilian cars, operating motor vehicles, etc. As of 2017, the number of private cars has grown from 105.01 million in 2013 to 205.75 million in 2017, an increase of 96%, while the operating motor vehicles among the cabs up to 1.4 About 1.4 million vehicles, compared with 2017 year-on-year growth of 0.3%, and in this process, with the sharp increase in road transport vehicles, traffic safety accident frequency rate has also risen sharply, in order to effectively avoid this problem, related to road transport safety management mechanism should be constantly improved, in order to make our country's economy high speed development at the same time present positive development trend.

4. Impact of Internet+ on road and transport safety management

4.1. Promote the improvement of transportation safety supervision mechanism

The improvement of transportation safety management mechanism has a vital role in the development of the transportation industry, and in the process of transportation management, through the analysis of transportation safety results data, so that it can be effectively used for road traffic transportation safety management departments to assess and check the road safety conditions, so that in the process of assessment and inspection can achieve the improvement of transportation safety management This is a long-standing road transport management concept and management approach in China [2]. However, in the era of "Internet +", information services related to road transportation safety management gradually tend to informatization and digitalization, through the sharing of transportation information, so that passenger information and cargo information can be based on the "Internet +" Under the "Internet +" to achieve a full range of supervision and management, and for transportation in the illegal vehicles, can use the "Internet +" way to carry out intelligent supervision, in this process by improving the ability to supervise transportation safety, so that the highway traffic safety transport problems can be effectively controlled, and the specific situation of vehicle travel and travel Demand and population migration, etc., can also rely on big data information to provide effective data for traffic safety management, by relying on Internet technology and information technology development, so that the "Internet +" and the transport industry safety management can be achieved through the joint development of the transport safety management mechanism for continuous improvement.

4.2. Promote the continuous enrichment of transportation safety management data content

Traditionally, in the transportation industry, the investigation of relevant safety management data and the collection of relevant information data. Most of them are completed by means of questionnaires, in which not only the actual work efficiency is low, but also the work is relatively difficult and dangerous, in addition, the long time spent is also one of the important problems in the traditional transportation safety data collection, and the number of private cars, public vehicles and operating motor vehicles (cabs) is growing rapidly, and the use of traditional questionnaires Therefore, the application of Internet information technology is particularly important. By realizing the continuous joint development of "Internet +" and transportation safety management data integration, it is possible to use relevant technology to realize the continuous integration and classification of overall data in the actual traffic safety and transportation management

process. Improve the accuracy of the data at the same time can also guarantee the actual work efficiency, for reducing the probability of highway transportation hazards also has an important control role. In addition, through the use of "Internet +" related technology, can also make the transport safety management of management data continue to improve, to provide strong data support for the development of transport industry safety management.

4.3. Promote the centralized and optimal allocation of road and transport resources

The establishment of a comprehensive and systematic road transportation network requires the joint development of "Internet +" and the transportation industry, through strengthening the collection of data related to the process volume and state volume in road transportation, so that the process of road transportation can realize the road transportation infrastructure, means of transport, information data, etc. In addition to the centralized and optimal allocation of transportation resources, the sharing of data resources in the road transportation industry can also be realized through the joint development of "Internet +" and transportation, and the open sharing of data resources can also be used for online query of road transportation information network and related service information such as online taxi, making road Transportation safety issues can be guaranteed, which is conducive to the safe and stable development of China's transportation industry. The problem of overloaded cabs, for example, can be avoided through the effective collection of relevant data.

4.4. Promote the construction of intelligent transportation infrastructure

As early as August 6, 2020, China's transport sector in the "guidance on promoting the construction of new infrastructure in the field of transport" (referred to as "guidance") issued, there is a clear proposal: "driven by technological innovation, digitalization, networking, intelligence as the main line, to promote the effectiveness of transport, expand the function, increase the dynamic energy as the guide, to promote Transport infrastructure digital transformation, intelligent upgrading, the construction of convenient and smooth, economic and efficient, green and intensive, intelligent and advanced, safe and reliable new infrastructure in the field of transportation." In addition for the creation of efficient and integrated intelligent transportation infrastructure, but also by promoting the application of new energy, new materials, such as highway electronic non-stop charging system (ETC) gantry applications, etc., is conducive to the role of intelligent transportation infrastructure construction, and the construction of intelligent transportation infrastructure is inseparable from the support of information technology, through the "Internet +" the continuous integration of relevant technologies, is conducive to promoting the reform and development of road transport industry innovation and development, and only the continuous improvement of intelligent infrastructure can make the effectiveness of the new technology to play effectively, such as the development and application of driverless cars in China, it is the accuracy of traffic signs and markings put forward very high requirements.

4.5. Promote the rise of comprehensive service quality of relevant roads

For the management of highway transportation safety needs to be considered from multiple angles and multiple thinking, in terms of the actual development of China's road transportation industry, in order to further improve the effectiveness of transportation safety management, it is necessary to combine the application of "Internet +" related technology and highway transportation safety management at the early stage of highway construction. Transportation safety management, to provide effective protection for highway traffic safety transportation, and in the process of highway construction, can also use Internet information technology to effectively improve the level of transportation safety, in addition to the use of Internet technology for the whole process of highway construction safety issues for specific planning, but also to effectively control the highway transportation hazard index, so as to promote the relevant highway comprehensive service quality straight line Up, for daily transportation management and the use of related technology have an important role, but also to achieve the overall protection of transportation safety, effectively promote the safe operation of highway transportation, in terms of safety management, but also to promote the efficiency of work on the basis of reducing the occurrence of traffic accidents [3].

5. "Internet +" in the specific strategy analysis of highway transportation safety management

5.1. Strengthen the management of key operating vehicles (cabs)

In terms of such operating vehicles as cabs, the main operating cost is postage, of course, with the development of new energy vehicles can also be to a certain extent to avoid this problem, but for cabs, the number of people using oil cars for many years is not a few, in the process of oil car operation of the same oil and distance location, cab drivers will generally selectively pull more passengers to balance the amount of fuel consumed, and in this process will be part

of the fluke There will be part of the fluke drivers "pull more fast" phenomenon, through desperate ways to earn more money, and in this process, such as a fluke did not occur in traffic accidents okay, once the consequences of traffic accidents due to overloading and overcrowding is unimaginable, so the use of "Internet +" to increase the management of cabs is one of the most important events in the current transport safety management. Take Weifang city cab as an example, there are about 2262 cruising cabs and 2183 net cabs in the central city, through the market regulation of Weifang city net cabs in recent years, the current development status of net taxis can meet the needs of public travel, and in order to further protect the safety of vehicle travel, Weifang city public security department for net taxis travel has Through this regulation, the management of cab vehicles in Weifang City can avoid the situation of vehicles nearing the end of their service life and continue to be on the road, which can bring protection for people's travel safety and also make use of "Internet +" related technology to make The management of highway traffic safety and transportation can be implemented continuously.

5.2. Strict management of driver safety

As the number of motor vehicles continues to increase the driver's team is also expanding, the driving group area multi-faceted at the same time road transportation safety problems are gradually exposed, such as speeding, overloading, overcrowding and other illegal problems are becoming more and more serious, making it difficult to get effective protection of road traffic safety, and in the "Internet +" background Under the background of "Internet +", the risk coefficient of drivers can be quantitatively evaluated, through the Internet information technology can be risk and safety assessment of the driver's travel trajectory and the specific operation information of driving, so as to achieve the purpose of strict management of driver safety, in order to ensure the development of China's road transportation safety management.

5.3. Strict management of highway operation safety

Highway operation safety is generally in addition to the driver's own safety quantification problem thought, for the specific road conditions of the highway should also be strictly managed, like complex road sections need to be through the actual operation of the highway for comprehensive perception, through the construction of complex traffic operation safety characteristics and risk assessment mechanism, with the help of cloud computing way to build risk evaluation model, to achieve active management of complex road sections; and for regional In the case of regional road networks, there is generally a high traffic flow, especially during holidays and the morning and evening peak periods, etc. In the face of this problem, it is necessary to analyze the congestion nodes of traffic roads with evaluation mechanisms and realize the effective management of highway operation safety by connecting smart phone terminals and Internet platforms [4].

6. Conclusion

In summary, in the "Internet +" era, in order to better develop road transportation safety management, it is necessary to integrate the development of the two. It can provide a strong data security for the development of China's transportation industry through the application of transportation management.

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