Research of Automobile Industrial Development Policy under the Background of “Internet + Automobile” Strategy

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Abstract. Confronted with Internet companies entering the automotive industry, the subversive revolution was caused by "Internet + automobile" to the traditional automotive industry. Through introducing of" Internet + automobile "strategy, the development trend of "Internet + automobile" was analyzed, and the facing challenges were analyzed from technology, industry, policy level. Finally, under the background of "Internet + automobile" strategy, the development of the automobile industry policy recommendations were proposed from the industrial development, technical route and specification, automobile private custom, car rental industry, the second-hand car business and Internet marketing. The policy recommendations proposed have a positive role to guide the automobile industry healthy and orderly development.

Introduction

Recently whipped up a wave of Internet business building cars boom, Letv, Huawei, Tencent and other Internet companies have entered the field of building cars. Beijing auto and Letv helded together to create the ecosystem of internet smart car, Foxconn and Tencent and China Harmony Auto Holding Limited announced the "Internet + smart electric car" framework for cooperation, Alibaba teamed up with SAIC "bet" Internet + automobile technology, Baidu is studying of driverless cars, Huawei and Dongfeng teamed up to launch Windlink, Tesla business idol of millet to push "Misra". Major domestic Internet giants have been involved in "Internet + automobile" [1].

"Internet + automobile" is a revolutionary fusion, is a redefinition of the traditional car, will bring far-reaching effect to the automobile industry in the future, cause great changes in the pattern of the automobile industry. Through introducing of" Internet + automobile "strategy, the development trend of "Internet + automobile" was analyzed, and the facing challenges were analyzed from technology, industry, policy level. Finally, under the background of "Internet + automobile" strategy, the development of the automobile industry policy recommendations were proposed from the industrial development, technical route and specification, automobile private custom, car rental industry, the second-hand car business and Internet marketing. The policy recommendations proposed have a positive role to guide the automobile industry healthy and orderly development.

"Internet + Automobile" Strategy

"Internet + Automobile" Action Plan

With the firstly proposed to the call of the "Internet + action plan" in the two sessions of our country, promoting the combination of the modern manufacturing industry with the mobile Internet, cloud computing, big data and networking, making "Internet +" boom sweep the fusion of various industries[1]. Internet and traditional industry has increasingly become a hot concern, cross-border
integration of the Internet to the traditional industry brings revolutionary influence [2]. The essence of "Internet + " is the online and datamation of the traditional industry through The transformation of the Internet[3].

"Internet + Automobile" Strategy

The birth of "Internet + automobile" is the revolution of automobile industry, was originated from the cross industrial cooperation between the Internet and car [4]. "Internet + automobile " strategy is to realize harmonious unity of the "human - vehicle - Road - environment", which cars have intelligent computer control, wireless Internet communication, vehicle mobile terminal function.

"Internet + Automobile" Development Trend

The Cooperation between Internet Companies and Car Enterprise is an Inevitable Trend

The cooperation between Internet companies and car enterprises is the inevitable trend [5]. Bilateral cooperation has their own value orientation and realistic need: to enrich the content of the vehicle in the form of integrated Internet, meeting the user rich senses is the technical advantages of Internet companies; Owning a hundred years automobile manufacturing process, to ensure safe driving is the car enterprises advantage. For better meeting the humanized service requirements, only two complementary advantages, technical cooperation, achieving "win-win" situation for.

Human Service is the Starting Point of Cooperation

Human being is the user of a car, satisfying people's sensory experience is automotive development direction in the future [5, 6]. Increasing the proportion of service income is the inevitable way of successful transformation of enterprises, and "Internet + automobile" owning the characteristics of the Internet have fully release the potential service ability. Around the vehicle active safety, vehicle cruise system based on information, entertainment and anti-jam driving experience, and post market service experience including: marketing, insurance and maintenance are the key and breakthrough point of cooperation between Internet companies and car companies [7, 8].

The Sensory Experience is the Key of Vehicle Control Development

Automotive pressing, welding, painting, assembly and chassis, engine, body, electrical equipment, four total assembly have been already mature technology, and the sensory experience of vehicle control development is the soul of "Internet + automobile", which is the difference key from the traditional car [6].

New Energy Vehicles is the Breakthrough of the "Internet + Automobile"

The real reason of opening up the producing of new energy vehicles to Internet enterprises is that Internet companies have advantage of the intelligent management technology development for battery system. The new energy vehicles have the inherent advantages of the integration of "Internet + automobile", "Internet + automobile" will firstly breakthrough in the development and application of new energy vehicles, with mobile internet the depth of integration will become an important development direction of new energy vehicles.

"Internet + Automobile" Facing Challenge

Technical Level

System security and information security risks: in big data model, automotive personal privacy leaks more easily, data transmission are more likely to be intercepted, "Internet + automobile" are lacking of a unified and perfect dynamic information security technology support system. In the fusion process about smart car, the mobile Internet and car networking is bound to face new security
challenges [5]. If everyone can control the car through the Internet of critical systems, it will bring significant security risks. The long test cycle: The long test cycle of the automotive industry compared to the Internet industry is more longer, the testing cycle of vehicle terminal in every generation tends to go through safety testing period of 1~1.5 years.

**Industry Level**

The traditional car market still has growth potential: in 2015, although the traditional car growth has slowed, but the market was still growth space, new profit point was unclear, the manufacturers intervention was little. The manufacturer cost considerations: The technology costs and marketing costs needed to develop a new "Internet + automobile" is high, so that manufacturers would not take the risk.

The "Internet + automobile" development was controlled by the communications industry[9]. Automotive eco system in the car forms a closed system, but it must to form an open system between vehicles and the system, and the cars driving on the road have very high requirements on the mobile communication network. Automotive eco system can only rely on wireless communication network, it is very high for the operator to construct the network. At the same time, the automotive eco system is also controlled by network.

**Policy Level**

National policy influence significantly. 2014 November, the national development and Reform Commission launched < The interim provisions for new pure electric car production enterprises to invest in the project and take the production access management (Draft) >, plans to release a pure electric vehicle production admission conditions. From the basic conditions for enterprises to invest, investment projects, investment projects application and approval of new enterprises production access management made clear provisions. In addition to the acquisition or other vehicle enterprise cooperation, the hope of the Internet companies would enter separately into pure electric vehicle production in the field is frail[9]. So the policy changes have a crucial impact on Internet companies entering the automotive industry.

The technical standard policy problem. At present the car networking in our country has been provided with the market and institutional basis, but there are still many problems in terms of technology and industry system construction[9]. On the one hand, Chinese enterprises were lack of accumulation of technology, key technology research and development lag, market development and the construction of supporting facilities can not meet the needs of large-scale development Internet + automobile". On the other hand, there has not yet formed a complete industrial chain between enterprises and consumers in the construction industry system, government departments, motor factry, and effective coordination mechanism. The lag related technical standard of internet industry was not been unified and also restricted its development. The inspection technology and international standard for "Internet + automobile" are almost blank. The is difficult to come into contact with international standard.

"Internet+ Automobile" Industrial Policy

The Introduction of the Develop New Policies for "Internet + Automobile", Accelerating the Development of Automobile Industry " Internet + Automobile "

The comprehensive clear "Internet + automobile" definition, designating the form of "Internet + automobile". The specific support guiding policies were introduced in market access, industry oriented, the construction of credit system.

Promoting the transformation and upgrading of traditional auto industry relying on the Internet, encouraging car companies to use of Internet technology to change the traditional marketing network marketing model and service mechanism, enhancing the breadth and depth of services, increasing the
proportion of service income. Studying on the policies to attract and nurture the Internet enterprises, encouraging the Internet industry and automobile manufacturing industry to further integration.

**Establishing Scientific and Reasonable Internet Car Technology Development Route.**

National should guide and encourage the development of "Internet + automobile" technology and related industries should actively carry out intelligent vehicle research and industrialization, focusing on the development of the automotive integrated information technology, intelligent and interconnect integration technology, unmanned technology. The government should promote enterprises solve related technical barriers, and to form a standardized, formulate scientific and reasonable" Internet car" technology development route.

**Making the Technical Specification Security for Internet of Vehicle Safety**

As soon as possible to develop Internet vehicle safety and anti-theft of technology standard mandatory requirements, establish relevant industry standards and norms to protect the privacy of the owners, gradually establish dynamic security protection system, set up internet vehicle product certification and testing organizations, formulate scientific market admission management system, make certification and testing work rules, to develop intelligent vehicle safety inspection and testing standards, gradually bring into line with the international standard.

**Introduction to Promote the Rapid Development of Automobile Private Custom Protection Measures**

With the rapid development of China's automobile market, consumer demand showing a variety of regional, multi-level, multiple personality characteristics, consumer personality, self-conscious, the requirements for the vehicle had been changed from the simple means of products to more personality direction. From luxury to ordinary cars, private custom perfectly reflects the owners personalized and luxury demand. Although, at present in the domestic automotive private custom is still in the initial stage, but with the boost of "Internet + automobile" storm, private custom will been developing trend of automobile industry in China, which is the new growth point of profit. Consumers can according to their interests and needs, through the Internet free quickly select models and configuration, finally by the dealer responsible for vehicle safety. In order to ensure the rapid and healthy development of private custom. The private custom measures has been introduced by the state needs as soon as possible.

**Strengthen the Integration of the Car Rental Industry and the Depth of the Internet.**

Strengthen the car rental industry and the Internet the depth of integration, forming of new power for the development of the industry. The State encourages the car rental industry to make full use of a new generation of information technology, accelerate the automotive services of the Internet and data services online, use data to fully tap the value of various types of data resources, innovative business model and service model, promote the healthy development of the car rental industry. Establishing channels for docking data with the Public Security Bureau and the Bureau of traffic control, to realize data sharing, the data filtering function and establishing system authentication system.

**Accelerating the Development of the Internet Second-hand car Business**

The State encourages the circulation of second-hand car, to accelerate the development of the Internet second-hand car business. Relevant departments should actively create conditions. Internet second-hand vehicle transaction management approach were unified and standardized, the second-hand car field were infiltrated, the second-hand car trading tax collection methods were adjusted, the enthusiasm of the second-hand car business were stimulated. Internet second-hand car trading activities been convenient, the Internet second-hand car trading were nurtured and developed.
**Introduction of Policies to Promote the Automobile Marketing Internet**

Introduction of policies to promote the automobile marketing internet, promote the automobile marketing to a new sales channels constitute diversified pattern of development, such as vertical websites and mobile terminal, to promote the development of electronic commerce, meet the needs of the development of enterprise sales chain reconfiguration, while strengthening the management of Internet marketing, regulate the activities of car service marketing, explore the Internet and the store to match the new sales model.

**Summary**

"Internet + automobile" is a subversive revolution to traditional auto industry. The cooperation between enterprises, Internet companies and traditional car is an inevitable trend in the development of Internet + automobile, car humanization service is the focus of cooperation, and new energy vehicles is the key breakthrough. "Internet + automobile" is facing severe challenges in technology, industry and policy the level, only as soon as possible on the introduction of "Internet + automobile" to develop new policies, accelerate the development of automobile industry, introduce the scientific and reasonable technology roadmap for "Internet + automobile ". In order to promote the healthy and orderly development of the industry for "Internet + automobile ", focusing on the development of the Internet of vehicle safety and technical specification security aspects. strengthening the depth integration between car rental industry, second-hand car business marketing the system and the Internet.

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