

Research on Consumer Satisfaction of New Energy Vehicle Supporting Services —— Taking Chengdu Supo Community Users as an Example

Junzhi Xiang

North Bangkok University, Bangkok 10220, Thailand.

Abstract: In recent years, China has grasped the trend of a new round of scientific and technological revolution and industrial transformation, taken the lead in clarifying the national strategy of the development of new energy vehicles. Relevant parties take the initiative to act closely, cooperate, and strive to promote the industrial development to achieve remarkable results. The rapid expansion of the new energy vehicle market scale has driven the rapid improvement of the market competitiveness of the new energy vehicle products in China. With the support of national policies, new energy vehicles have gradually become the development trend of the automobile market. The gradual increase of consumer demand for new energy vehicles has promoted the improvement of manufacturers' product power and the rapid growth of sales of new energy vehicles. But the booming new energy vehicle industry has also produced many problems that are difficult to ignore. For example, in recent years, the spontaneous combustion event of electric vehicles occurs frequently, which has become the doubts of consumers when buying electric vehicles, and may also become a stumbling block to the development of the industry. With the transportation service more convenient and intelligent, the technology application innovation is active, and the level of digitalization, networking and intelligence of the industry is constantly improved. Some local governments and enterprises have jointly used smart technologies to innovate incentive mechanisms to stimulate residents' willingness to travel green. Relying on digital technologies such as the Internet, big data and artificial intelligence, intelligent and shared modes of travel have entered people's lives, which will help significantly reduce traffic pollution emissions. In the future, we should further uphold the concept of intensive development, innovate travel modes, deepen technology empowerment, improve the travel sharing rate, optimize urban transport capacity, and help transportation to achieve energy saving and emission reduction.

Keywords: New Energy Vehicles; Supporting Services; Satisfaction

1. Background

With the development of science and technology and the rise of the cost of fuel vehicles, the consumer demand for new energy vehicles gradually increases, which promotes the improvement of manufacturers' product power, and the rapid growth of the sales volume of new energy vehicles. The production and sales of new energy vehicles in China have been on an growth trend in the past decade. According to the evaluation results of the 2021 China's New Energy Vehicle Industry User Satisfaction Index (NEV-CACSI) released by the China Association for Quality in Beijing. In 2021, the user satisfaction index of China's new energy vehicle industry (NEV-CACSI) was 80 points (full score of 100 points), the same as that of fuel vehicles. Among them, the user satisfaction index of pure electric vehicles reached 80 points, hitting another record high, up by 2 points compared with the same period last year, increasing for six consecutive years. Plug-in hybrid 80 points, the all-time high. The industry believes that after nearly 10 years of development, China's new energy vehicles have been recognized by the majority of users. This is due to the continuous enhancement of research and development capabilities, the long-term accumulation of core technologies and the steady improvement of the quality level. The development of new energy vehicles has also directly driven the growth of related supporting services. As of September 2022, China's sales of new energy passenger vehicles accounted for 67% of the world, making it the world's largest sales country of

new energy vehicles. By 2030, it is expected that there will be 120 million new energy vehicles, requiring at least 20 million public charging piles. The total pile construction investment may need 2 trillion yuan, and the annual operation and maintenance cost of more than 1000 yuan to 3000 yuan per pile, which is a trillions of yuan scale market.

2. Research objectives

Analyze the impact of consumer satisfaction on the economy in the current supporting services of new energy vehicles.

Explore the mechanism of influence between several groups of factors.

Formulate targeted suggestions for the improvement of supporting services of new energy vehicles to provide highly reference suggestions for the marketing of new energy vehicles.

3. Range of study

3.1 Significance and value

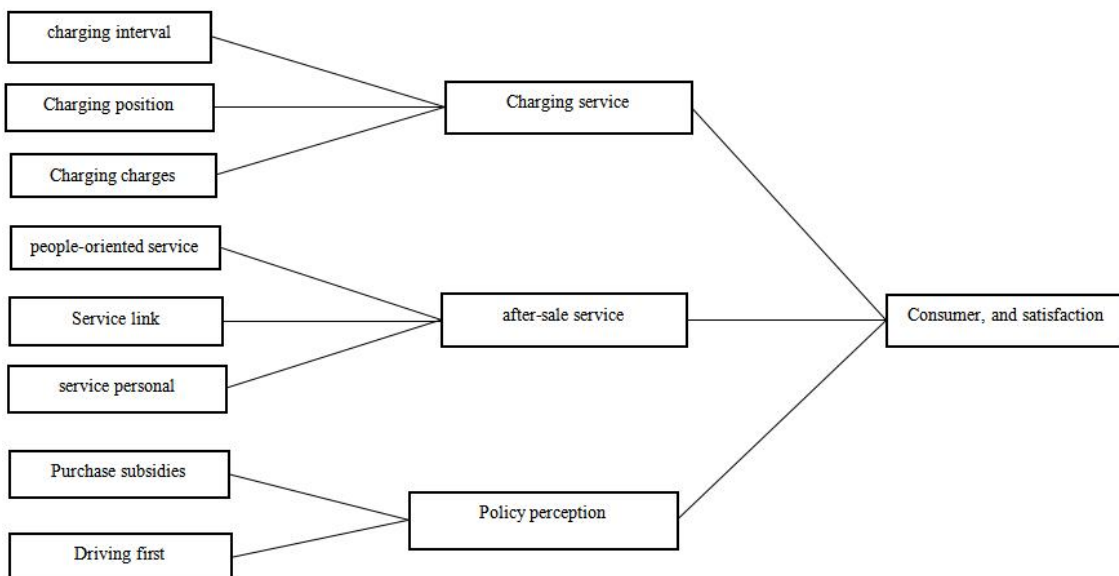
In terms of the theoretical value. This study on the basis of classic literature at home and abroad, from the perspective of customer satisfaction theory, analysis of the supporting factors of consumer satisfaction, build a can fully reveal the new energy automobile service influencing factors of consumer satisfaction model, help to enrich the literature of customer satisfaction theory, enrich and enrich the existing theory of customer consumption degree.

In terms of real value. This study has clarified the influencing factors of the supporting services of new energy vehicles on consumer satisfaction, so that the existing business operators can better meet the market demand, and provide theoretical support for the marketing strategy of the supporting services of new energy vehicles. This will help domestic automobile enterprise operators to better understand the satisfaction of new energy vehicle supporting services to consumers and obtain considerable economic benefits in their market have a certain practical value.

3.2 Regional demographic characteristics of the study

Based on the area limited by the research topic, the researchers strictly limited the research scope of the sample, distributed the sample area, the sample collection category was limited to Chengdu city in Sichuan province.

4. The conceptual framework of the study:



5. Theoretical principle

He Shu (2019), based on the development background of public charging pile for new energy vehicles, considered the construction cost, operation and maintenance cost, network loss cost, user consumption cost, user loss cost and land use cost and other elements, and constructed a target planning model with the minimum total social cost. Zhang Chunyan, He Hongjing, et al. (2020), according to the SOR model, to build the influence model of new energy vehicle user satisfaction and re-purchase intention. Xiong Yongqing, Qin Shufeng (2018) for following target users, the overall perceived satisfaction level of both policies of supply and demand of new energy vehicles is lower than that of leading target users, and the perceived satisfaction level of the demand side policies is lower than that of the overall supply side, and the bottleneck effect of purchase subsidy policies and tax relief policies on the demand side is prominent.

Correlation studies

Jabbari (2018) Improve the understanding of the role of market size in electric vehicle (EV) adoption by exploring the perspectives of consumers and infrastructure. The results show that even with existing incentives, the limitations of current technology, mainly price and range, and the type of the available vehicles, are the most important challenges for EV adoption. Davies et al. (2015) research pointed out that innovative products such as plug-in electric vehicles may need new marketing methods and sales methods.

Conclusion

Charging service: First of all, from the perspective of enterprises, we should establish and improve the service system to provide consumers with efficient charging service. Secondly, continue to optimize the supporting services related to new energy vehicles. After-sales service: If new energy vehicle enterprises want to be more competitive in the new era of the Internet of Things, they need to make a new improvement in product design, real-time product upgrade support, operation mode, after-sales service and other aspects, so as to achieve new breakthroughs. Policy perception: First, improve the "double integral" policy. Second, we will encourage local governments to study and formulate policies and measures to support the promotion and application of new energy vehicles, promote the early elimination and renewal of old vehicles into new energy vehicles, and create demonstration cities for the promotion of new energy vehicles.

References

- [1]Xiong YQ, Qin SF. Analysis of the difference of target user perception satisfaction of the bilateral policies of supply and demand of new energy vehicles [J]. Journal of Management, 2018,15 (6): 10.
- [2]Zhang CY, He HJ, Hu HY. Research on the new energy vehicle satisfaction model based on the SOR model [J]. Automotive practical technology, 2020 (13): 3.
- [3]Xiong YQ, Qin SF. Analysis of the perceived satisfaction of the supply and demand of new energy vehicles [J]. Journal of Management, 2018,15 (6).874-883.
- [4]Jabbari P. The Role of Market Scale in Electric Vehicle Adoption: Consumer and Infrastructure Perspectives[D].University of Washington, 2018.