Research on the Brand Innovation Strategy of China's Domestic New Energy Automobile

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Abstract. As one of the seven strategic emerging industries identified by the State Council, new energy automobiles play an important role in the structural adjustment and transformation and upgrading of China's automobile industry. Thus, based on the combing of existing relevant theories, this paper analyzes the development status of China's independent new energy automobile brand, discusses the opportunities, challenges and existing problems faced by its brand innovation, and puts forward the brand innovation strategy of China's independent new energy automobile on this basis.

Introduction

Nowadays, China's new energy automobile industry has entered the growth stage from the lead-in period. With the new energy automobile industry entering the post-subsidy and post-joint venture era, opening up has increased the challenge of new energy automobiles' domestic brands, the new energy automobile domestic brand innovation strategy should be more important than the product strategy and service strategy.

Thus, based on the combing of existing relevant theories, this paper analyzes the development status of China's independent new energy automobile brand, discusses the opportunities, challenges and existing problems faced by its brand innovation, and puts forward the brand innovation strategy of China's independent new energy automobile on this basis.

The Development Status of China's Domestic New Energy Automobile Brands

Status of Policy Side

The implementation of positive policies has given new energy automobile domestic brand the development of sufficient nutrients, so that new energy automobile domestic brand has been rapidly developed [1]. The current policy for new energy automobiles mainly includes three aspects: First, the accelerated subsidy mechanism for subsidies will be completely withdrawn in 2020; the second is to build the long-term effective development of the industry; the third is to liberalize the foreign-controlled ratio, which expands the automobile.

In general, the current policy orientation is no longer a government-led type, but a market-oriented one. However, the government has set industry standards for the development of the domestic new energy automobile industry, guiding the direction of enterprise development and making it more adaptable to the market.

Status of the Supply Side

At present, the new forces for car construction are in the early stage of development, and the mass production is relatively small. They mainly enter the Chinese market in the form of joint ventures. But the domestic new energy automobile market is still dominated by traditional domestic
brands. According to the statistics of the certificate of China Central Machinery Center, the top ten domestic sales of new energy passenger car market in 2019H1 are domestically produced independent brands [2]. The market share of these domestic new energy automobile brands is as high as 87.2%. According to the data of the China Automobile Association, 2019H1 domestic new energy automobiles sold 617,000 units, an increase of 57.7%. The top ten in the commercial automobile market accounted for 76% of the market share. Compared with this, it can be further seen that new energy automobile domestic brand has a first-mover advantage in the domestic new energy automobile supply end.

**Status of the Demand Side**

According to the data of China Automobile Association, 2019 H1 China's new energy passenger cars and commercial automobiles sold 563,000 and 54,000 respectively. In 2019 H1, new energy automobile domestic brands sold a total of 507,000 EV passenger cars, of which A. EV passenger car market share of 52.7% has replaced the previously popular A00 EV passenger car, which shows that EV passenger cars gradually develop to the high-end stage.

From the current consumption structure of the new energy automobile market, in the top 20 cities with new energy automobile ownership, the popularity of non-operating automobiles has reached 80%, which indicates that the main consumption structure of new energy automobiles is non-operating automobiles [3]. From the perspective of private consumers, private consumers have become the mainstay of the purchase of new energy automobiles in China. In 2018, the total number of private consumers purchasing new energy automobiles in China reached 555,000.

**Status of the Technology Side**

China's new energy automobile technology level has gradually matured, and the battery technology has made a major breakthrough [4], and the cruising range has exceeded 500 kilometers. These all indicate that domestic new energy automobiles have the ability to compete positively with fuel automobiles, which can be derived from the following three aspects.

First, for the whole automobile technology, in 2017, the average endurance of the first pure electric automobiles was only 202 kilometers. By 2019, the average production reached 361.9 kilometers. In addition, the energy consumption and consumption level of pure electric passenger cars have also been significantly increased, from the average power consumption of 12.7Wh/100km*kg in 2017 to 8.6Wh/100km*kg in 2019. Second, for battery technology, the level of power batteries for new energy automobiles in China has been increasing, from 100.1 WH/kg in 2017 to 150.7 WH/kg in 2019. Third, for motor technology, domestic new energy automobiles have installed more than 160,000 motors in 2018, of which permanent magnet synchronous motors account for 92.3%.

**The Opportunities and Challenges of China's Domestic New Energy Automobile Brand Innovation**

**Current Opportunities**

**New International Trade Relations.** The continued development of China's economy has made China seek to march from a "trade power" to a "trade power" and China's further expansion of reform and opening up and the deepening of the "Belt and Road" will bring greater development space to China's economy. It also means that China's corporate development opportunities and risks increase.

The formation and development of the open pattern marks the transformation of China's foreign trade from quantitative to qualitative. For domestic new energy auto brands, it is an excellent time to open up overseas markets and build world-class brands. It is extremely urgent for enterprises to enhance their own brand competitiveness, and the innovation strategy of independent brands needs to be deployed and implemented.
The New Energy Automobile Industry Has Entered a Growth Period. After nearly 20 years of development, domestic new energy automobile industry has exceeded 1 million production and sales, ranking first in the world. In 2018, the sales volume reached 1.256 million units, and the compound growth rate reached 87.5% in nine years. By June 2019, China's new energy automobiles had a total of 3.44 million automobiles, while the number of traditional fuel automobiles was 250 million. The penetration rate of new energy automobiles was less than 1.4%. This further illustrates the broad space for the growth of new energy automobiles in China. On this basis, China's new energy automobile independent brands must grasp the growth period of the industry, actively deploy innovative strategies, gradually form the core competitiveness of the brand, and break the inherent impression of consumers on the low-end of domestic independent brands. Companies should gradually build high-end new energy auto brands, so we should pay attention to the innovation strategy research of brand development.

Current Challenges

Domestic new energy auto brands are mainly faced with two urgent challenges of reducing costs and enhancing their own brand competitiveness [5].

With the withdrawal of the subsidy declining mechanism, the production cost of new energy auto companies is difficult to reduce in a short period of time. Companies either pass the cost to consumers or bear some of the costs themselves, which undoubtedly adversely affects the supply and demand of new energy automobiles. It also further increases the difficulty of competing with traditional fuel automobiles.

Foreign companies have accelerated the deployment of new energy automobile industry in China and have made certain progress. On July 28, 2018, domestic new energy automobile foreign share ratio limit has been canceled. And with the strengthening of the market leading, the multinational car enterprises in the domestic new energy car market layout is accelerating. According to the "Matthew effect", this will eliminate some of its own strength. In the future, the challenges and competition faced by independent brands will become more and fiercer.

Problems Exist in the Brand Innovation of China's Domestic New Energy Automobile

The High Degree of External Dependence on Core Accessories

Although the core component IGBT produced by domestic new energy automobile brand has formed a domestic breakthrough, it still has more than 90% dependence on the outside world, and IGBT is the main component of the motor controller, and it occupies the cost of the electronic control system. 40% or more. When most of the new energy automobile brands in China are producing complete automobiles, the parts still rely on imports, which makes most enterprises have the risk of “holding the lifeline” in the process of brand competition.

Therefore, China's new energy automobile brands must first master the production core technology, reduce the external dependence of technology, and then consider the corresponding brand strategy.

The Core Technology of Intelligent Network is Still Not Mature

New energy automobiles are characterized by the complementarity and complementarity of electrification, intelligence and network integration. The short reaction time of electric automobiles and the large battery capacity are the best carriers for intelligent and networked automobiles. However, domestic intelligent network new energy automobile core technologies such as data platform technology and positioning technology have not yet made breakthroughs, making the new energy automobile domestic brands in the field of intelligent network connection, while foreign brands such as Tesla in this field Leading. In the 5G era, the new energy automobile industry is bound to be the home of intelligent network new energy automobile competition. China's new energy independent brands should grasp the trend of intelligent network linkage, and take advantage of China's 5G technology to strive to achieve brand leadership in this field.
The Charging Infrastructure is Inadequate

As of June 2019, China’s public charging piles and private charging piles have just passed through 1 million. In 2015, the Ministry of Industry and Information Technology issued the “Guidelines for the Development of Electric Automobile Charging Infrastructure”, by 2020, China will add centralized charging. There are more than 12,000 power station replacements and more than 4.8 million distributed charging. There is still a big gap between them. In addition, the unreasonable layout of charging piles, the non-interoperability sharing, and the low overall utilization rate further indicate that there is still room for improvement in the construction of supporting infrastructure for new energy automobiles in China. On this basis, there is still a broad space for domestic brands to compete in the future of the domestic new energy automobile market. In the process of improving the charging infrastructure, the charging technology facilities of the self-owned brand cars also need to be matched, so that the brand can obtain certain advantages in the charging direction.

Brand Innovation Strategy of China's Domestic New Energy Automobile

Promoting Innovation Alliance

The domestic new energy automobile brand enterprises can form the innovation alliance, because of strong market orientation. On the one hand, technological innovation can not only bring tangible output such as new products and new processes, but also intangible technologies, knowledge and experience; On the other hand, technologically innovative new energy automobile companies are more concerned about future development. Therefore, the companies that constitute the innovation alliance can better play the feedback mechanism of this technology innovation, then form the brand effect.

The entire industry chain of the production and marketing process, through the introduction of the current innovative operating mechanism to solve the pain points in the market. The innovation alliance formed by the independent brand of new energy automobiles forms the information resource sharing through the use of the intelligent logistics network platform, can grasp the power and health status of the running automobiles in real time, and realize the active charging and maintenance through the mobile charging mode. The innovation alliance formed by China's new energy automobile brand enterprises can share the comprehensive strength of China’s new energy automobile brands through information and technology sharing, and then compete with foreign new energy automobile brands. This aims to stabilize the dominant position of domestic brands in the new energy automobile market.

Combining the Intelligent Platform Construction with Brand Innovation

First of all, domestic new energy automobile independent brand car research and development efforts should continue to increase, research and development of products for different target groups to meet diversified needs. Secondly, on the basis of satisfying the basic needs of consumers in the new energy market, intelligent introduction should be introduced into new energy automobiles and an intelligent platform should be established. Domestic new energy automobile enterprises could take advantage of the trend to carry out technological innovation through independent platforms through their own intelligent platforms, and weaken the brand effect of fuel automobiles. In the process of building an intelligent platform, the brand concept will be implemented, and the advantage of information technology will make the subjective impression of consumers on the new energy automobile brand gradually improve [6]. Followed by the promotion of the corresponding brand strategy, and then the brand effect, making the domestic brand occupy a dominant position in the new energy market at home and abroad.

Expanding Home Field Advantages and Improving Service Experience

Domestic new energy automobile independent brand enterprises use products that are more familiar with domestic consumers’ preferences and produce products that meet different consumer needs.
needs, and firmly grasp the advantages of domestic consumers' preferences. This makes domestic consumers more aware of the new energy automobiles' own brands; Secondly, the enterprises use the process of more perfect industrial chain layout, which makes the production cost of the enterprise lower and the sales channels are more, which makes it more competitive than the foreign brands; Finally, enterprises can use the local after-sales service to respond to the faster home theater advantage, improve the customer's after-sales service experience, and make domestic consumers more sticky to the new energy automobile's own brand, thus enhancing consumers' satisfaction with the entire brand. This result is a brand value effect.

Conclusions

Under the background that domestic new energy automobile brand will face the strong competition of foreign brands of new energy automobiles and the decline of industrial policies, this paper summarizes the problems existing in the innovation and development of domestic new energy automobile brands through literature reorganization. If the production of core components is highly dependent on external factors, the technical requirements of the accessories still need to be strengthened, and under the general trend of combining intelligent platforms with new energy automobiles, China's new energy automobile independent brands are not getting the intelligent core technology. Finally, the infrastructure of new energy automobiles is not perfect, which may limit the extent to which new energy automobiles' own brands are being expanded. Then the paper draws corresponding suggestions for the problems that exist. Such as the formation of innovative alliances between independent brands of new energy automobiles, increasing brand strength, combining brand building with intelligent platform construction.

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