

Analysis of New Energy Vehicle Marketing Strategy - Taking Xiaomi as an Example

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Abstract. The global automotive industry is accelerating its transformation to new energy vehicles, affected by climate change, energy crisis, and policy promotion. As a leading technology company in China, Xiaomi announced its entry into the new energy vehicle industry in 2021 and launched its first smart electric car Xiaomi SU7 at the end of 2023. This study analyzes the marketing strategy of Xiaomi's new energy vehicles and explores its advantages and challenges in a highly competitive market environment. This paper adopts case analysis, data comparison, and policy analysis methods to discuss market segmentation, product differentiation, and channel expansion. The results show that Xiaomi has successfully shaped a differentiated competitive advantage by relying on its smart ecosystem, smart driving technology, and cost-effective strategy. At the same time, the combination of online direct sales and offline experience stores has increased market penetration. However, Xiaomi still faces challenges in brand awareness, supply chain management, and after-sales service. This study believes that Xiaomi should deepen the integration of smart ecology, optimize the supply chain, and increase investment in autonomous driving technology to enhance its market competitiveness.

1 Introduction

In recent years, the global automotive industry has been undergoing profound changes, and new energy vehicles have become a key force in promoting sustainable development [1]. Faced with global climate change, energy crisis, and policy support, governments around the world have promoted the new energy vehicle industry to reduce carbon emissions and optimize the energy structure.

The global carbon emission situation is severe. The transportation industry accounts for about 23% of global carbon emissions, of which road transportation contributes more than three-quarters of emissions. At the same time, the International Energy Agency (UNFCCC) pointed out that global oil consumption is still high, reaching 99 million barrels per day in 2022 [2]. The instability of energy supply has further promoted the market demand for new energy vehicles.

Driven by both policies and market demand, the new energy vehicle industry has grown rapidly [1]. In 2023, global new energy vehicle sales will exceed 14 million units, of which

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the Chinese market will account for nearly 70%, becoming the world's largest new energy vehicle market [3]. Against this background, traditional automakers and emerging car manufacturers have entered this field, hoping to gain a competitive advantage in the transformation of intelligence and electrification.

Xiaomi announced its entry into the new energy vehicle industry in 2021 and launched its first smart electric car, Xiaomi SU7, at the end of 2023 [4]. Xiaomi's entry into this field is not accidental, but a strategic decision based on its long-term accumulation in the fields of smart hardware, IoT, and smart ecosystem, combined with the market opportunities of the new energy vehicle industry [4].

Xiaomi has significant advantages in the fields of smart ecology and IoT. Its artificial intelligence Internet of Things (AIoT) platform has connected more than 624 million devices, covering multiple fields such as smart home, smart health, and smart office. Xiaomi Auto can make full use of this ecological resource to achieve seamless interconnection between cars and smart homes, providing users with a smarter travel experience [5].

Xiaomi has accumulated deep R&D capabilities in smart technology. Its self-developed chips, operating systems and artificial intelligence algorithms have been widely used in smartphones and smart home products. These technologies also provide support for Xiaomi Auto's smart driving and human-computer interaction systems. The launch of the HyperOS operating system enables cars, mobile phones, homes and other devices to achieve seamless cross-platform connection, laying the foundation for future smart travel scenarios.

Xiaomi has always been known for its highly cost-effective strategy and has advantages in supply chain management, cost control and direct sales model. After entering the new energy vehicle market, Xiaomi hopes to reduce production costs through efficient supply chain integration and scale effect, so that consumers can get high-end smart electric vehicles at a more competitive price.

With the development trend of intelligence and electrification, the new energy vehicle industry is in a stage of rapid growth. Lei Jun once said that the automotive industry is undergoing a transformation similar to the smartphone industry, and intelligence and networking have become important factors in determining the competitive landscape of the industry. Xiaomi hopes to occupy an important position in the new energy vehicle market with its own technological accumulation and ecological resources.

2 Research objectives, methods and analysis framework

This study aims to analyze the marketing strategy of Xiaomi's new energy vehicles, explore how it builds its advantages in a highly competitive market environment, and provide a reference experience for the industry. This study adopts case analysis, data comparison, and policy analysis methods, taking Xiaomi SU7 as the main case, and deeply studies its product positioning, technological innovation, and market promotion strategy. At the same time, by comparing data with competitors such as Tesla and BYD, Xiaomi's performance in market share, pricing strategy and user feedback is evaluated. In addition, combined with the national new energy vehicle policy, the impact of the policy environment on Xiaomi's new energy vehicle marketing strategy is analyzed.

The framework of this study mainly includes four aspects. First, the product positioning of Xiaomi's new energy vehicles is studied, including core features such as intelligent interconnection, high-cost performance and ecological closed loop. Secondly, the application of technological innovation in intelligent driving, energy conservation and environmental protection, and human-computer interconnection is analyzed [6]. Then, the specific implementation of the marketing strategy is discussed, including brand positioning, channel layout and user operation strategy. Finally, the future development trend of the new energy

vehicle industry is studied, and the potential opportunities for Xiaomi in this market are explored.

3 Analysis of Xiaomi's new energy vehicle products

3.1 Product positioning

The product positioning of Xiaomi's new energy vehicles fully utilizes its experience in the field of smart technology and focuses on the three core features of smart interconnection, high-cost performance and ecological closed loop to make market layout. Relying on the smart interconnection ecosystem, Xiaomi's new energy vehicles can achieve seamless connection with Xiaomi mobile phones, tablets and smart home devices to enhance the smart driving experience. In addition, Xiaomi always adheres to the high-cost performance strategy, reducing costs by optimizing supply chain management and reducing intermediate links, so that consumers can buy high-end new energy vehicles at a more affordable price. Xiaomi cars are also further integrated into the Xiaomi smart ecosystem to achieve smart linkage between cars, homes and appliances, creating a complete smart life experience.

3.2 Technological innovation

Xiaomi cars have made many innovations in smart driving. Its autonomous driving system is equipped with multi-sensor fusion technology, including lidar, millimeter-wave radar, ultrasonic radar and high-definition cameras, supports L3 autonomous driving functions, and plans to upgrade to L4 in the future [7]. In addition, the vehicle has advanced driving assistance functions such as smart parking, automatic lane changes and adaptive cruise control to improve driving safety and convenience. Through OTA remote upgrade technology, Xiaomi can continuously optimize the autonomous driving system so that users always have the latest software experience.

3.3 Energy saving and environmental protection

Xiaomi's new energy vehicles use an efficient battery management system (BMS) to optimize charging and discharging strategies, and improve endurance and battery life. Its battery energy density reaches 190 Wh/kg, and it is equipped with a large-capacity battery of 101 kWh. The cruising range can reach 800 km under CLTC conditions [8]. In addition, Xiaomi cars support 800V high-voltage fast charging technology, which can replenish 350 km of energy in 15 minutes, greatly shortening the charging time and improving the convenience of use. The intelligent thermal management system ensures that the battery can still operate stably in an environment of -30°C to 55°C, reducing the impact of low temperature on battery life. The lightweight body design uses aluminum alloy and high-strength steel structure to reduce the weight of the entire vehicle by 15% to 20%, further reducing energy consumption. The regenerative braking system can recover 20% to 30% of energy during braking, improving endurance efficiency.

3.4 Human-machine interconnection

Xiaomi Auto relies on its smart ecosystem to create a cross-device collaborative smart travel experience. The vehicle is equipped with Xiao Ai smart voice assistant, which supports voice control of navigation, music and in-car air conditioning, and can remotely control smart devices at home. Based on the HyperOS car system, the vehicle can be seamlessly connected

with Xiaomi mobile phones and tablets to synchronize navigation, music and schedules. Through the smart home linkage function, users can set the away mode, and the home appliances can be automatically turned off after getting in the car, or the car can turn on the air conditioner and water heater in advance when approaching home. In addition, Xiaomi Auto uses UWB ultra-wideband technology to support sensorless unlocking, and users can automatically unlock the vehicle with a Xiaomi mobile phone. OTA remote upgrades ensure that the vehicle system is kept up to date and improve the continuous optimization capabilities of user experience.

4 3. Analysis of Xiaomi's new energy vehicle marketing strategy

4.1 Market segmentation and target positioning

The market segmentation and target positioning of Xiaomi's new energy vehicles fully reflect its advantages in the field of smart technology and are closely integrated with the brand's existing user groups. The new energy vehicle market is highly competitive, covering high-end, mainstream and entry-level market segments. Xiaomi Auto did not directly enter the high-end market, but adopted a differentiated strategy, positioned in the mainstream market, and attracted young consumers and technology enthusiasts with intelligence and high-cost performance as the core.

The target users of Xiaomi's new energy vehicles mainly include young consumer groups, technology enthusiasts and users who pursue smart ecological experiences. First, young consumers pay more attention to the intelligent experience and have a high degree of dependence on the Internet ecology, and Xiaomi Auto's HyperOS car system, smart home linkage and other functions are highly consistent with the needs of this group. Secondly, technology enthusiasts tend to focus on cutting-edge technologies, and Xiaomi Auto's innovations in smart driving, BMS battery management, high-performance chips, etc. make it attractive to this group. In addition, Xiaomi's existing Mi Fan group has a strong loyalty to the brand, and this group is more likely to accept the expansion of Xiaomi's ecological products, including new energy vehicles.

Xiaomi's market positioning revolves around "smart electric vehicles", emphasizing the integration of smart technology and lifestyle. Compared with Tesla's focus on the high-end market, Xiaomi has chosen a strategy that is more in line with its brand tone, that is, through intelligent ecology, cost control and high-cost performance, it provides new energy vehicle products with rich intelligent experience and more competitive prices.

4.2 Product differentiation marketing

In the fiercely competitive new energy vehicle market, Xiaomi relies on differentiated advantages such as smart interconnection, high-performance battery management and ecological closed loop to enhance its market competitiveness.

First, Xiaomi's new energy vehicles deeply integrate its AIoT ecosystem, allowing users to achieve a seamless connection between mobile phones, cars and smart homes. For example, users can remotely adjust the air conditioning temperature at home before getting in the car, or control the devices inside and outside the car through the Xiao Ai voice assistant. This ecological closed loop not only improves the user experience but also enhances the brand's market stickiness [5].

Second, in terms of battery management and battery life, Xiaomi uses high-energy density batteries and combines them with an intelligent BMS management system, which enables it to have longer battery life and safer battery management among models of the same level.

Supporting 800V fast charging technology, it can recharge 350 kilometers in 15 minutes, improving charging efficiency while also enhancing the product's competitive advantage.

In addition, Xiaomi uses advanced autonomous driving assistance systems in terms of intelligent driving, integrating multiple sensor solutions such as laser radar and millimeter wave radar, providing intelligent parking, automatic lane change, adaptive cruise control, and other functions, and continuously optimizing the driving experience through OTA remote upgrades. Compared with traditional car companies, Xiaomi places more emphasis on intelligent upgrades and software optimization, which meets consumers' demand for intelligent and sustainable upgradeable products.

4.3 Channel expansion and online and offline integration

Xiaomi's new energy vehicle sales channels adopt an online and offline integration strategy, combining Internet direct sales and experience store models to enhance users' car buying experience and reduce channel costs [9].

In terms of online sales, Xiaomi relies on existing e-commerce channels, such as Xiaomi Mall, Tmall, JD.com, and other platforms, to promote direct sales models. This model can reduce intermediary costs, improve price competitiveness, and accurately reach potential consumers through Internet data analysis. In addition, Xiaomi's community marketing system, such as Mi Fan Community and social media interaction, also provides a strong user base for the promotion of new energy vehicles.

In terms of offline sales, Xiaomi adopts the direct-operated experience store model and has set up Xiaomi Auto Experience Centers in major cities across the country. These experience stores combine the existing offline layout of Xiaomi Home, allowing consumers to experience the intelligent functions of Xiaomi Auto firsthand. At the same time, Xiaomi is also exploring cooperation with automobile sales channels, such as 4S stores and travel service platforms to expand the sales network [10].

To further enhance the user experience, Xiaomi has also created an integrated after-sales service system, including online appointment maintenance, remote vehicle diagnosis, OTA upgrades and other functions to enhance users' trust in the brand.

5 Conclusion

Xiaomi's new energy vehicles have occupied a place in the fiercely competitive new energy vehicle market with its core competitiveness such as intelligent interconnection, high cost performance and ecological closed loop. Its product positioning is precise, making full use of Xiaomi's advantages in the fields of intelligent hardware, artificial intelligence and the Internet of Things to create a unique intelligent travel ecosystem. Through a high-energy density battery management system, intelligent driving technology and online and offline integrated sales channels, Xiaomi has established a differentiated competitive advantage over traditional car companies and new car-making forces in the new energy vehicle market.

Although Xiaomi Automobile has gained certain market attention, it still faces some challenges. First, the competition in the new energy vehicle market has intensified. Companies such as Tesla and BYD have advantages in brand awareness, supply chain integration and production capacity. Xiaomi still needs to further optimize its supply chain management and production capacity to ensure market competitiveness. Secondly, the development of intelligent driving technology is still in a continuous iteration stage. Xiaomi needs to accelerate the research and development of autonomous driving technology and improve the intelligence level of driving assistance systems. In addition, the after-sales service system still needs to be further improved to enhance consumers' long-term trust.

In the future, Xiaomi's new energy vehicles should continue to deepen the intelligent ecosystem and optimize the user experience through the synergy of software and hardware. With the growth of the new energy vehicle market, intelligence, lightweight and sustainable development will become the development direction of the industry. Xiaomi can further explore renewable energy charging solutions, intelligent traffic data optimization and Internet of Vehicles safety systems to enhance the core competitiveness of its products. At the same time, Xiaomi can also expand overseas markets, enhance brand influence through globalization strategies, and further expand its market share.

Overall, Xiaomi's new energy vehicles have obvious advantages in intelligence and ecological integration. In the future, it needs to form a more stable competitiveness in the new energy vehicle industry through technological innovation, market expansion and brand building, and bring more possibilities to the global smart travel market.

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