

# NIO Automobile Strategic Management Analysis

## -- Based on the SWOT Model

Shengye Jiang\*, Jingxuan Qi, Lei Jin, Peilun Han, Yaling Zhou

Shandong University of Science and Technology, Jinan 250031, Shandong, China

\*Corresponding author's email: xisheng2021@outlook.com

### Abstract

In today's society, the rapid development of economy and technology, the birth of new energy vehicles to solve the environmental and energy problems brought by traditional fuel vehicles. At the same time, the great potential of new energy vehicles in achieving the goal of clean, efficiency and sustainable transportation has also attracted the attention of the world. This paper takes NIO, a well-known brand of new energy vehicles, as an example, combined with the strategic perspective of SWOT model, puts forward reasonable suggestions for them, provides certain reference for new energy vehicle company to effectively participate in the international development, and contributes "Chinese power" to the upgrading and development of the global automobile industry.

### Keywords

NIO Automobile; SWOT Model; Operation and Management.

## 1. Company Profile

NIO is a company that integrates the research and development, production, sales and service of high-performance intelligent electric vehicles, and is a representative company of China's Internet car manufacturing forces. NIO was officially founded in 2014. In 2018, NIO completed the listing on the New York Stock Exchange, raising 1 billion US dollars with a valuation of 6.4 billion US dollars. At present, it has set up research and development and production departments in 12 places around the world, and initially established a user service system covering the national market. NIO is mainly characterized by globalization, new energy, intelligence and high-end, and is committed to leading the future technology development trend of Electrification, Intelligence, and Interconnection. In the era of intelligent electrification, it is committed to building its own high-end brand in China.

## 2. Strategic Management Analysis of NIO Automobile based on SWOT Model

It only took a few years for NIO to develop into a leader of middle and high-end electric vehicles in China, and its development speed and development strength are only few in the whole industry. However, compared with the leaders of the domestic and foreign automobile industry, NIO also needs to conduct accurate research and identification of the external environment of the industry and its own internal situation, formulate a reasonable development strategy, and enhance the competitiveness of the company. The comprehensive strategy evaluation will be conducted through the SWOT model.

### 2.1. Strengths

(1) Focus on user experience, and have strong user stickiness. The core management team of NIO is all composed of leading company elites with comprehensive background inside and

outside the industry, with rich experience in company management and Internet marketing. The combination of online and offline marketing model has built the company's unique user ecology. At the same time, develop NIO Life, peripheral sales, improve the core competitiveness of the company through brand empowerment, and increase the product premium.

(2) Strong funds, strong independent research and development ability. The charging pile made a major breakthrough, and the innovative discharge function realized the power balance interaction between the vehicle and the power grid; In 2023, the independently developed laser radar master control chip "Yang Jian", as the first self-developed chip of NIO, deeply matched the development trend of artificial intelligence. In recent years, its R & D expenses have been increasing. The continuous R & D investment can not only promote the intelligent upgrading of products, accelerate the construction of product matrix, and keep the product technology in the leading position in the industry.

(3) The marketing model is advanced. The all-round user service system mode adopted by it distinguishes it from general new energy automobile manufacturers to a great extent. The special app built provides users with automobile purchase and after-sales service. The biggest bright spot is that it can provide convenient charging, power exchange and upgrading services for car owners. The user experience is greatly met by three battery upgrading schemes, namely, day, month and year. The supporting charging pile technology has made new breakthroughs.

(4) Product positioning advantages. NIO is positioned in the high-end market, and its technological innovation and product research and development closely follow the market positioning. It has developed patents such as V2G charging pile and lidar, and gradually integrated into the high-end market. At the same time, some products begin to move to the low-end market, to some extent to amortize production costs and generate cash flow more quickly.

## 2.2. Weaknesses

(1) Prices remain high and will face sales risks. NIO focuses on high-end luxury brands, but it is also likely to be involved in the price war of new energy vehicles. The rising cost of batteries and the supply of power exchange services have forced NIO to continue to raise its selling price, which may fall into a loss situation, further increasing its operational risk.

(2) Cross-border products pose risks. NIO focuses on the positioning of high-end and diversified markets, but there is a cross-border idea in market selection, and the operation of attacking the relatively mature and stable mobile phone market of leading enterprises may weaken NIO 's advantages. The excessive growth of pursuing diversification may bring internal diversified management risks to NIO.

## 2.3. Opportunities

(1) Preferential policy support. In recent years, China's car ownership has been increasing. Under the vision of "carbon peak, carbon neutrality", reducing carbon emissions and oil and gas pollution in the automobile industry is in line with the common aspiration of people around the world. In recent years, the state and the government have promulgated relevant policies to reduce the purchase tax on new energy vehicles to reduce the purchase cost of new energy vehicles to encourage the development of the industry.

(2) Internationalization process facilitates cooperation and exchanges. NIO adheres to the global concept, and has held press conferences in London, Munich and other places in the early stage to conduct global collaborative research and development. At the same time, the company took -- Norway, the European country whose first electric vehicle sales exceeded that of fuel vehicles, as a step towards the overseas market, and independently built the supporting infrastructure for new energy vehicles in the local area, and steadily improved its international popularity.

(3) Technological progress and broad market prospects. The improvement of green environmental protection technology of new energy vehicles makes it more consistent with the development of The Times compared with traditional fuel vehicles. The competitive advantages of high energy and low consumption, high efficiency range and low pollution make the car market like NIO have a broad prospect.

## 2.4. Threats

(1) Operational risks threaten and profitability is weak. According to the announcement issued by NIO automobile, the sales volume of products in 2022 reached only 82% of its sales target, and the sales cost increased significantly, resulting in great sales pressure.

(2) The market competition is fierce and the management experience is insufficient. At present, the new energy automobile industry has not yet formed an absolute scale effect, and the market pattern is unstable. NIO's external financing scale is expanded, the construction of management team is not synchronized, and R&D costs are difficult to control while R&D costs are heavily invested.

## 2.5. The Operation Management Strategy According to SWOT Strategy Analysis Matrix

**Table 1.** strategy analysis matrix of WT, WO, ST, SO

Strategy	Scheme
WT strategy (Eliminate weaknesses and threats)	In the face of <b>w</b> weakness and business competition threat, it is crucial to do a good job of reasonable capital planning in order to achieve all aspects of cost control and risk management.
WO strategy (Use opportunities to improve weaknesses)	In the full momentum of the new energy vehicle market, learn from the company management mode of excellent car company, and do a good job in the company management innovation.
ST strategy (Use your Strengths to address threats)	We should give full play to the internal advantages such as thoughtful service and high research and development investment, clarify the product positioning, strengthen the publicity with the core competitiveness advantages, and play a role in sales.
SO strategy (Use strengths and opportunities)	With the help of national policy support and independent research and development technology progress, improve their own product quality, optimize financing plans, and enhance the basic strength of the company.

## 3. NIO Automobile Operation and Management Problems

Compared with some developed countries, China's new energy automobile industry started late, but it is in an important stage of development. As an emerging industry and strategic pillar industry in China, the technology upgrading of new energy vehicles is very fast. As a leading company with high brands in the industry, NIO automobile is also facing various company management problems in the process of development, even some problems that need to be urgently faced and solved at present, which need to be carefully considered and seriously solved by company.

### 3.1. Research and Development Costs Remain High

The r & d expenses of NIO show a trend of substantial growth year by year. In 2022, the r & d expenses of NIO reached 52% of the cost. Through the survey and comparison with other brands, it is found that NIO should not only develop multiple brands, but also independently develop the key parts of the whole industrial chain, and invest in other fields outside of automobiles. In order to better occupy the market, in addition to "NIO", which has been used since its listing, NIO also has new sub-brands such as "Alps" and "Firefly". "NIO" brand itself many products need to spend a lot of research and development costs and the two new brands need to make a large investment in research and development.

### 3.2. High Supply Chain Cost

Compared with traditional vehicles, new energy vehicles have a stronger demand for high and new technologies, and they cannot solve the problem of industrial chain through simple "parts purchase" like traditional vehicles, so the supply chain construction is important. Meanwhile, NIO's market positioning is high-end brand vehicles, which has high requirements for product quality and product differentiation. From 2020-2022, the covid-19 epidemic broke out, the external economic environment was affected, and manufacturing company were seriously impacted. Under the combined influence of these points, the number of upstream suppliers was scarce and the bargaining power with suppliers was weak, resulting in high supply chain costs.

### 3.3. Risks to Face When Entering New Markets

NIO focuses on diversified business models, expands its business direction, and invests in corresponding energy industries and energy companies; Engaged in the research and development of key components throughout the entire new energy industry chain, ranging from automotive chips to automotive seats; NIO is also attempting to enter the mobile phone industry.

Facing the current "severe" situation, NIO has chosen to create a new mobile phone industry. The positioning of mobile phones as an affiliated product of NIO automobile is more dependent on the premium effect of NIO automobile brand. Under the current circumstances, trying to enter the mobile phone market dominated by well-known brands may not achieve the ideal results.

### 3.4. The Rapid Expansion of Company Brings Internal Management Risks

Like many rapidly developing company groups, with the expansion of NIO's financing scale and the increase of various new business segments, the overall number of people in NIO has exceeded 30,000, more than other company. However, the large expansion of the number of people has not fully kept up with the rapid expansion and development of NIO. The construction of various management systems, such as internal sales management, supply chain management, financial planning management and human resource management, needs to be quickly followed up and improved to support NIO's competitive strategy of becoming stronger and bigger.

## 4. NIO Automobile Operation and Management Countermeasures

Based on the above analysis and research data and issues, NIO Automobile should take a series of measures to support the strategic development of the company, enhance core competitiveness, maintain sustainable and healthy development, and shoulder the responsibility of being a socially responsible automotive brand.

### 4.1. Increasing Sales

The founders of NIO have the operation experience of Internet company. The focus of NIO is to build a high-end electric vehicle brand; more attention should be paid to the user experience, hoping that users can feel the service beyond the expectation through meticulous and thoughtful service. Therefore, it clearly refines its NIO product brand positioning for market competition, clearly divides the product price system and product layout, carries out targeted brand publicity and launch, and strives to maintain the continuous growth of sales in each market segment in the fierce market competition.

### 4.2. Company Management and Construction

In order to meet the management needs of the rapid development and growth of company, the managers of NIO should innovate the original management ideas, actively promote management reform, efficiency reform and quality reform in company management, and enhance total factor productivity, so as to meet the needs of the rapid development of company and the rapid change of business environment.

NIO is listed on the US stock market for financing, and corporate management should strengthen the comprehensive quality improvement of management personnel, establish corresponding performance evaluation systems, improve the efficiency of economic decision-making, and maintain sustainable development advantages in external market competition and internal business management.

### 4.3. Strengthen Brand Promotion

NIO should also open up its own marketing and promotion channels in the production process. At present, NIO's own publicity and promotion efforts are still lacking, and some people's understanding of new energy vehicles stay in well-known automobile company such as Tesla and BYD. NIO should clarify its own market brand positioning and formulate the correct marketing strategy. Adopt new media marketing, information technology and other ways to improve their own influence, better tell a good brand story, brand publicity and promotion.

## 5. Summary

At present, for China's new energy vehicle industry, the government has strengthened market supervision and control, and continued to carry out policy support, which is conducive to the development of the industry. New energy vehicles are an important direction of the development of the automobile industry, and electrification, intelligence and networking will be the future research and technology development trend. If the problems existing in the above analysis are solved, NIO will transform its scientific and technological research and development results into economic benefits. The public will also benefit from it and strengthen their confidence in NIO's development.

As the leader of high-end new energy vehicles, NIO has taken the initiative in the future development trend of the industry. However, in the subsequent development, NIO needs to reasonably plan and develop, reasonably prevent and control risks, continue to make intensive efforts, and strive to contribute "China's strength" to the upgrading and development of the global automobile industry as soon as possible.

## References

- [1] Wen Wen. Research on development strategy of NIO automobile[D].Chengdu, China: Southwestern University of Finance and Economics,2021.

- [2] Ming Chen. An empirical study on government subsidies promoting the development of new energy automobile complementary industry - a threshold effect test based on the data of listed companies[J]. Value Engineering, 2023,42(18):13-15.
- [3] Zhishuang Wang. Evaluation and optimization suggestions on financing efficiency of new energy automobile company - Taking NIO automobile as an example[D].Beijing, China: Beijing Foreign Studies University,2023.