

Strategic Marketing Analysis of NIO: A Case Study on Electric Vehicle Industry in China

Yun Zeng^{1,*}, Xun Yao², Simin Yang³, WeiHsiang Hsu¹

¹Business School, The University of Queensland, Brisbane, 4072, Australia

²Business School, Southwest Minzu University, Chengdu, 610041, China

³Business School, China University of Political Science and Law, 100088, China

Abstract. The global economy was further weakened after the Covid-19, while the New Energy Vehicle (NEV) industry has shown strong growth and resilience. Among numerous NEV companies, NIO, headquartered in Shanghai, stands out in the market with its innovative marketing approaches. This paper employs a blended research methodology involving semi-structured interviews and longitudinal data analysis to delve into NIO's marketing strategy. The case study encompasses multifaceted explorations: firstly, a comprehensive assessment of NIO's marketing strategy is conducted, encompassing external environmental analysis, internal resource evaluation, and core competency identification. Secondly, NIO's core marketing methods are critically examined, covering marketing mix, market segmentation, STP (Segmentation, Targeting, Positioning) strategy, strategic partnerships, and Corporate Social Responsibility (CSR) initiatives. Thirdly, the research highlights challenges presently faced by NIO's current marketing strategy, and provides pragmatic recommendations. The innovation of the article is that it provides a specific and practical supplement to the market research of the new energy vehicle industry by a case study, which is of great significance for the sustainable development of the electric vehicle industry and environmental protection. Furthermore, the exploration of NIO's market strategy offers fresh perspectives for other enterprises within the same industry seeking to navigate the market landscape.

Keywords: NIO, Electric Vehicle, New Energy, Strategic Marketing, Marketing Analysis, Strategic Management.

1 Introduction

Founded in 2014, NIO is a Shanghai-based new energy vehicle company with a number of global R&D centres and production bases, as well as several on-site shops, and a current market capitalisation of approximately \$13.14 Billion (Ycharts, 2023). NIO has been successfully launched in the United States, Hong Kong, China, and Singapore in 2018, and its market area mainly covers China, Denmark, the Netherlands and other countries.

Currently, the global economy in general is presenting a weak state after the influence of Covid-19 (The World Bank, 2023). Many industries have shown a tendency for profits to shrink or even fall as a result of overall market underperformance. Strangely, the new energy industry has performed better and is now growing more rapidly (Statista, 2022). Meanwhile, in the face of energy shortage and demand for environmental protection, countries have tried to seek new energy supply or energy transition. And in the process of energy transition, new energy technology is taken as the most potential technological alternative at present (Balcilar et al., 2019). New Energy Vehicles (NEV), one of the representative

industries of new energy technology, has developed from a fledgling stage to a white-hot stage. Among them, brands such as Tesla, BYD, Volkswagen, BMW, Nissan, Hyundai, NIO, Xpeng etc. are battling for the EV market (Narayanan, 2022). As a representative of the new energy vehicle industry, NIO is still able to occupy the top 10 in the market against other EV brands (Corby, 2021), and its unique, mixed marketing model is an example to be learnt for other EV companies in the same field. The in-depth analysis of NIO marketing strategy is partly due to the fact that there are fewer studies on new energy electric vehicle companies and they mainly focus on the technical aspects. On the other hand, it can also provide new practical evidence for the theoretical aspects of modern marketing strategies such as relationship marketing and innovation.

Based on the above realities, research gaps and practical value, this case study concentrates on the following aspects: (1) A comprehensive analysis of the marketing strategy of NIO, a service company in the electric vehicle (EV) industry. The article detailedly discusses various aspects, including analysis of the external environment, internal resources and capabilities; (2) A critical assessment of NIO's core marketing

* Corresponding author: yun.zeng@uq.net.au

strategies including marketing mix strategy, STP strategy, strategic alliances and networks, and corporate social responsibility (CSR) initiatives; (3) Exploring the current marketing strategy problems of NIO and giving relevant recommendations.

2 Literature Review

2.1 Electric vehicle

Electric Vehicle (EV) or Electric Vehicles (EVs) has different definitions in different fields. From a social point of view, EV now is becoming a popular and environmentally friendly means of transportation. From the perspective of energy, new energy is a resource that is different from traditional energy, which includes wind energy, solar energy, tidal energy, hydroelectric energy, nuclear energy and so on (J. Zhang, 2018), and new energy vehicle is the practical application of new energy technology (Taibi et al., 2018). In the field of engineering, EV is another form of development of automobiles, which employs an emerging electric drivetrain to support operation (Zarazua de Rubens et al., 2020). From the market segmentation point of view, EVs can be categorised into battery-electric vehicles, gas-electric hybrids and plug-in hybrids (Mangram, 2012). The role of EV has different explanation in different fields. From an environmental protection point of view, the use of EVs is effective in reducing CO₂ emissions in practice. From an economic point of view, the battery recycling model and optimised network configuration of EVs can efficiently reduce the total cost of production and the cost of environmental governance in society (Wang et al., 2020). In the energy transition, EVs are an important way for governments to achieve decarbonisation targets and reduce oil energy dependence (Breetz & Salon, 2018). From a policy perspective, new energy vehicles have well tested the level of the government's modern governance capacity and put forward challenges to the government's ability to build infrastructure (L. Zhang & Qin, 2018). From a market perspective, it can be a good opportunity for the introduction of EVs to form a new economic growth point, contributing to regional economic growth while satisfying consumer demand for smarter conventional vehicles (Pang et al., 2023). In summary, the Electric Vehicle is one kind of vehicle with emerging technology that distinguishes traditional energy sources running on electric drivetrains, which has a deep impact on various aspects.

2.2 Strategic marketing

Strategic Marketing is not only a complex concept but also a field in Marketing, and EV can't be separated from the use of strategic marketing in business. About NIO's strategic marketing aspects, there are internal and external environment assessments, core marketing strategies, marketing mix strategies, STP strategies, strategic alliances and networks, and corporate social responsibility etc.

For assessing the internal and external environments of NIO, the article focuses on the PSETEL framework, Five forces analysis framework and Strategic group analysis model. PESTEL (Aguilar, 1967), first proposed by Aguilar, provides a framework for organisations or industries to analyse the macro-environment in a series of dimensions such as political, economic, social and technological, etc. NIO focuses on both political and technological aspects in its external market analyses to identify the opportunities and challenges that exist externally. Five forces analysis (Porter, 1979) was firstly proposed by Porter, the model mainly analyses the micro market competitive environment from five perspectives: new entrants, suppliers, buyers, substitutes, and competitive rivalry. By analysing NIO's competitors, suppliers, substitutes, etc., the current strengths and weaknesses of NIO can be clearly sorted out. Strategic group analysis (Kasabov, 2015) is one of the effective models for analysing the competitiveness of a product, which was provided by business organisations. Through the analysis of NIO's price and product line, it is good to capture the multiple combinations of competitive tactics that NIO adopts in terms of product competition, which can know how NIO shapes its own product competitive advantage. The 4Ps (McCarthy, 1964), also known as marketing mix strategy, are tools that help a company achieve its marketing objectives in four respects: product, price, place and promotion. Finally, STP (Dibb, 1998) provides additional illustrations to help analyse how NIOs can remain differentiated and achieve sustained profitability.

To sum up, Strategic Marketing is a strategic management tool that involves analysing and making use of a series of aspects such as the internal and external market environment, market stakeholders, product marketing, etc, which aims to help organisations better understand the situation, make use of the advantages and avoid the weaknesses, and thus achieve the goals of organisational resource integration and sustainable profitability.

3 Methodology and Data

3.1 Methodology

This case study mainly adopts two mixed research methods, qualitative and quantitative. Through exploratory and descriptive methods can grasp the specific practices of the new energy industry in detail, at the same time it also can provide more insights or new ideas for the development of the new energy vehicle industry. Mixed research methods involve the use of both quantitative and qualitative approaches to the same research issue (Schrauf, 2016). Most agree that mixed research methods are more comprehensive and preferable to single methods (Given, 2008). The use of mixed research methods can better circumvent biased conclusions and obvious errors to draw more reliable conclusions.

The article mainly selected depth interviews in the qualitative research methods. Qualitative research has numerous benefits and is used in this article in order to

better explore patterns and interrelationships between concepts (Reis et al., 2019). For example, the qualitative interviews provide a clearer understanding of NIO's special status and contribution to the electric vehicle industry, and the importance of the market strategy adopted by NIO in achieving NIO's business objectives. In addition, the interviews are done according to the relevant market strategy framework, which can effectively distil NIO's regularity and practical experience in operation. Observations and Ethnography were not picked for the article. For case study, the article needs to meet a specific topic and find out a more detailed situation, and the records that are not categorically selected may not be able to achieve the results of the present case study. Of course there are some disadvantages of depth interview, for example, due to the respondent's standpoint, there may be a relatively subjective point of view of the answer, or even a biased point of view (Roberts, 2014). In addition, there may be different quality of responses depending on the level of knowledge of the interviewer (Kvale & Brinkmann, 2015). Ultimately, depth interviews were chosen as one of the methods for this case study because it can better meet the needs of the thematic study on the one hand, and on the other hand, it can better illustrate the relationship between concepts, narrow down the research scope, and provide more conclusive evidence.

The article selected secondary data in Quantitative research methods. The advantage of quantitative is that the use of numbers to better illustrate the correlation between elements more intuitively and objectively, and at the same time through the definitive data can well improve the accuracy of the results (Lemercier et al., 2019). However, the article did not use experiments because this study is more placed in a real situation to analyse and summarise the laws, while experiments are more dealing with simulated situations, and the conclusions drawn lack enough practicability, thus there is a certain amount of bias (Morris et al., 2019). Admittedly, secondary data also has its limitations, which exist that part of information is not easy to obtain and has poor timeliness (Tripathy, 2013), so secondary data is more often used as an auxiliary research method. Eventually, the study adopts secondary data for quantitative explanations, on the one hand, because the use of publicly available secondary data can be more objectively and clearly compared with other competitors, and on the other hand, it is also easy to make complementary longitudinal analyses of the cases.

3.2 Data collection and analysis

The article uses many sources of data to support it. The data were mainly sourced from primary data collected through depth interviews and secondary data provided by relevant materials. In order to obtain deeper insights and extract more reliable conclusions, multiple data collection methods were adopted in order to move away from reliance on a single method of data collection (Casey & Murphy, 2009). The evidential inputs to the arguments and conclusions provide a clear understanding of the

reasons for the marketing strategies taken by NIO in its operations and why it has achieved the outcomes.

The Depth interview mainly adopted a semi-structured approach, which includes relevant key words such as "New Energy", "Electric Vehicles", "Marketing Strategy", etc., but focuses on common and specific marketing strategies adopted by NIO in the electric vehicle industry. Semi-structured interviews are one of the most important methods of obtaining valuable information, and there is a need for necessary standardisation and control towards semi-structured interviews to ensure the research's scientific validity and reliability. (Diefenbach, 2009). Based on this view, we believe that small semi-structured interviews are necessary to obtain accurate and deep information. At the same time the interviewees need to be considered both comprehensive and integrative. Therefore, the interviews in this article involve both managers and frontline workers, who come from three departments: sales (fellow), operations (UC) and marketing (BD). In total, 12 key informants were interviewed in two representative cities in China, Shanghai and Chengdu. Each interview lasted approximately 45 minutes. The length of the interviews varied depending on the interviewee's understanding of the topic and their own knowledge, work experience, and cognition, and the duration of the interviews varied from long to short, and the content varied from more to less, so that moderately succinct interviews were within an acceptable and reasonable range. During the interview, the researcher recorded the information using text and audio respectively. At the end of the interviews, the audio coding tool was used to transcode the audio and output it into a corresponding transcript. At the same time, we double-checked the collected data and made manual corrections and modifications to the wrong text combined with the audio. Finally, the interviews were saved in the form of text.

In addition, according to the principle of Triangulation (Gibson, 2017), in order to explain the correlation between things more directly and objectively, and at the same time, the accuracy of the explanation of the results can be well improved through definitive data, this article also adopts the way of secondary data as an auxiliary evidence. The use of secondary data for quantitative explanation, on the one hand, because the use of public secondary data can be more objective and clear comparison with other competitors, on the other hand, the data as the support can make the argument more convincing. In the collection of secondary data, the team researchers mainly focus on the company's website, consulting company reports, thematic news reports, industry research articles and other channels to collect information. In the company's website, researchers mainly focus on NIO and its competitors' product information, sales data of previous years, company news, etc. for data mining, which can be used as relevant evidence of the implementation process and results of the company's marketing strategy. In the relevant research reports, we have selected some documents and related data for use in this article by searching for keywords such as "new energy", "electric vehicle", "marketing strategy", "NIO" etc.

4 External Environmental Analysis

4.1 PESTEL analysis (macro-environment)

4.1.1 Political factors

China is actively promoting, developing and producing new energy technology, making developing new energy vehicles (NEV) a national strategy. In 2020, the State Council issued circular projecting significant advancements in various areas, including batteries, driving motors, and vehicle operating systems, within the NEV industry (New Development Plan for NEVs Unveiled, n.d.). Furthermore, China has implemented measures such as purchase tax exemptions and optimized fiscal subsidies to support the growth of new energy vehicles. Moreover, NIO has experienced rapid growth in China, aided by favourable policies and financial support from local governments.

4.1.2 Technological factors

China's world-leading battery technology accumulation and the rapid development of the NEV market offer NIO opportunities for continuous technological innovation. To address the challenge posed by slower charging speeds compared to the rapid pace of electricity consumption, NIO has invested significantly in developing its battery-swapping technology, known as BaaS (Battery as a Service) battery rental service. This strategic move has attracted numerous new customers and generated substantial cash flow for the company.

4.2 Five forces analysis (industry environment)

4.2.1 Threat of new entrants

The interviewee said, "*There is a restricted entry of potential competitors into the NEV industry*". In China's NEV industry chain, the development of core components is gradually separating from vehicle manufacturers. Downstream automakers can outsource batteries, electric control systems, and motors, while collaboration with other companies can facilitate the development of intelligent chips, thus lowering the entrance threshold.

4.2.2 Bargaining power of suppliers

Upstream suppliers hold an advantageous position, as they can easily drive up the prices of batteries and chips. NIO's Full Year 2022 Financial Report indicates that vehicle margins have decreased due to increase the cost per unit of batteries (NIO, 2023b). This adds pressure on NIO's product cost and may weaken NIO's negotiating space in the market to some degree. However, strategic alliance is one of the effective ways to cut down the cost, which can increase the bargaining power of the purchaser by sharing the investment to reduce the cost of battery purchasing (J.-B. Wang & Huang, 2021). Specifically speaking, NIO could collaborate with other EV brands in

the market to establish an EV alliance, negotiating prices with suppliers as part of the alliance, thus controlling purchasing costs as much as possible.

4.2.3 Bargaining power of buyers

The bargaining power of buyers is determined by various factors such as their primary purchasing criteria (quality, reliability, service, convenience), sensitivity to price changes, customer size, and availability of substitutes (DePamphilis, 2022). NIO's customers have low bargaining power, primarily consisting of individuals, with the presence of numerous brands offering various substitutes. According to the data provided by the interviewee, "*its distribution of purchases can be approximated as follows: individual purchases make up roughly 50%, friend recommendations account for about 40%, and group purchases constitute approximately 10%*." The research found that customer engagement increases customer identification with the brand and increases interactions with other customers, which makes other customers strengthen comprehension and trust. It ultimately makes the organisations reduce advertising and operational costs and increase the profit margins that the organisations get from their products (Petzer & van Tonder, 2019). As a result of this, NIO significantly reduces the cost of trust, allowing firms to bargain with consumers with greater negotiation and profit margins, as well as making it easier to transact orders. Furthermore, research has found that customer commitment has a positive and dramatic impact on customer loyalty, consistently influencing consumers' future purchases (Tetty et al., 2023). NIO also goes about enhancing customer loyalty to the brand by way of promises. Although NIO's products are mostly one-off deals. But NIO offers various welfare promises to its loyal customers, which leads to a lot of second-order deals recommended by the loyal customers for NIO. NIO also goes about enhancing customer loyalty to the brand by way of promises. Although NIO's products are mostly one-off deals. But NIO offers various welfare promises to its loyal customers, which leads to a lot of second-order deals recommended by the customers for NIO. For example, the provision of free lifetime power change service, according to an internal employee who told us, "*Users who purchase NIO's EV products are entitled to 4-6 free power changes per month.*"

4.2.4 Threat of substitutes

Conventional gasoline-powered vehicles, electric bicycles, electric scooters, and public transport systems are potential substitutes that can decrease the demand for NIO's products.

4.2.5 Intensity of competitive rivalry

NIO faces intense competition from established brands like Tesla, Xpeng and Li Auto and new entrants from high-end traditional vehicle brands like Benz, BMW and Audi.

4.3 Strategic group analysis

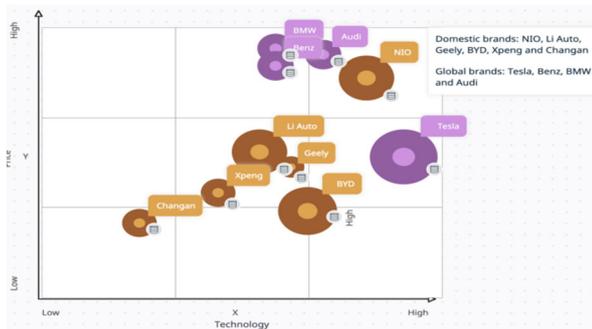


Fig. 1. Strategic Group Analysis.

Figure 1 illustrates the strategic group analysis related to NIO. As the interviewees mentioned, “the competition of EV strategic group is intense.” Based on the SGA table above, NIO operates within the strategic group of firms with high-priced products and high technology targeting high-net-worth customers. NIO is one of the market leaders in China’s NEV, as mentioned by the interviewees. Below are the primary marketing methods employed by NIO:

4.3.1 Differentiated services

Same as Li Auto and Xpeng, NIO currently relies on OEM factories for full vehicle production. Its level of product homogeneity is high while developing its chips in collaboration with a partner. Rather than depending on suppliers and ready-made components and software, Tesla has the highest level of technology and a distinct approach to producing almost everything internally (Agatie, 2022). To gain a competitive advantage, NIO invested a significant amount of money to establish a unique product line with innovative features like the "Power Swap" battery swapping system. Besides battery technology, NIO also pays more attention to the development of other technologies related to the user's service experience. The interviewee, Qiang, indicated that "NIO may not be too competitive in price compared to other competitors in EV, but in terms of the user's driving experience, AI NOMI, exterior and interior design, etc. NIO has fully considered the user's comfort, convenience, and interactivity." Meanwhile, the business development with user's daily life, which makes NIO's strong connection with user's daily life, creates more interaction and connection with users (McKinsey, 2022). From the product itself to the user's daily life, NIO has always adhered to maintaining a differentiated path of development from other competitors.

4.3.2 Word-of-mouth marketing

NIO's mission is to create a joyful lifestyle by fostering a sense of community by developing premium intelligent electric vehicles (NIO, 2023a). NIO has provided its customers with a high-end, personalized experience, such

as camping, skiing, vehicle customization, and after-sales support. By prioritizing customer experience, NIO has built strong customer loyalty and advocacy with its customers.

4.3.3 Digital marketing

Before establishing NIO, William Li established YICHE, a Chinese automobile information company known for its Internet marketing and user operations expertise. Drawing upon his past success, NIO significantly emphasises leveraging digital marketing channels to connect with its target audience effectively.

high costs associated with the R&D of the battery swap system and substantial marketing expenses. Moreover, the founder is dedicated to targeting individuals with high net worth. As a result, NIO vehicles are priced at a premium compared to other domestic brands and Tesla. NIO has successfully distinguished itself in the competitive EV market through a strategic blend of the above factors: high pricing and advanced technology.

5 Internal Resources and Capabilities

Resources	Valuable	Rare	Inimitable	Non-substitutable/organization	Advantage
Manufacturing and Production	Small purple circle	Small white circle	Small white circle	Small white circle	Competitive Disadvantage
Product Portfolio	Medium purple circle	Small white circle	Small white circle	Small white circle	Competitive Parity
Distribution Model	Large purple circle	Small white circle	Medium purple circle	Small white circle	Temporary Competitive Advantage
Service	Large purple circle	Large purple circle	Medium purple circle	Medium purple circle	Competitive Advantage
Marketing Strategies	Large purple circle	Large purple circle	Small purple circle	Large purple circle	Sustained Competitive Advantage

Fig. 2. VRIN Framework.

5.1 Manufacturing and production

Similar to its rivals, NIO’s factories were constructed in the suburbs of a second-tier city in China to take advantage of lower labour costs and favourable policies from the local government. According to the interviewee's response, although NIO has many component factories and warehouses located in different regions, OEMs are concentrated in Hefei, which leads to relatively high transport costs from OEMs to warehouses in different provinces, increasing the supply chain costs of the products. At the same time, it is also an important element to be concerned about the time spent on transport. In addition, due to the OEMs are too centralised and the lack of production capacity conflicted with the growing market demand, which shows the long delivery period of the car to the customer. Overall, this capability of NIO is at a competitive disadvantage.

5.2 Product portfolio

NIO offers a range of products, “targeting individuals with a high net worth and a passion for a fulfilling lifestyle”, said the founder. With BYD, BMW, and other brands entering the lucrative segments, this tangible recourse cannot be considered rare and inimitable. Thus, it is already becoming a competitive parity.

5.3 Distribution model

Instead of partnering with car dealers and implementing a traditional distribution channel, it established a model including online stores for direct purchases and company-owned physical centres like its main competitors, including Tesla and Li Auto. Therefore, this resource is a temporary competitive advantage.

5.4 Service

Long-distance replenishment of energy is the biggest shortcoming of electric vehicles. As a downstream element of the NEV industry's service terminal, only a few companies have established swapping power stations, but the quantity is relatively small. Power switching station has been NIO's core tangible resources, and BaaS has emerged as a value-added service that represents NIO's primary means of recharging and has established itself as the company's secondary growth trajectory. Through the provision of distinctive services that prove difficult for competitors to replicate, NIO has found a competitive business scope.

5.5 Marketing strategies

NIO can cultivate customers' dependence by engaging in activities with them and has even successfully organised customers to pay voluntarily for leasing advertising space to NIO for promotional purposes. NIO's valuable word-of-mouth marketing as an intangible resource has been its core marketing asset. Its unique formation process makes it challenging for most competitors to develop these three elements in synergy.

6 Core Marketing Strategy

The development of new energy vehicles has been elevated to a national strategic level in China, which has resulted in domestic brands receiving significant attention. NIO is considered a leader in China's NEV industry, with some of the brand's main competitors in China including Tesla, BYD and Xpeng. While Tesla dominates the sector, NIO is making a strong case for itself as a reliable long-term competitor. NIO stands out from its competitors by placing a solid emphasis on the user's experience and feedback during the creation and enhancement of its products.

The core marketing strategy of NIO is concentrated on establishing a premium brand image and enhancing the user experience of our customers (NIO, 2020a). The company uses experiential marketing to connect customers with the brand through cars, creating a unique lifestyle that includes products, services, experiences, and community. NIO's marketing strategy enables them to establish a deeper connection with their customers, resulting in robust user loyalty and a ripple effect (Dacko,2008). Furthermore, NIO's high customer referral rate has contributed to its continued success in sales, with 60% of its 2023 orders coming from repeat customers

who referred others, keeping the company a strong identity in the industry (Li, 2023).

NIO is unique among Chinese NEV brands, with high performance and the ultimate service system to build competitive differentiation. NIO specializes in innovative and advanced features, incorporating leading-edge technologies into electric vehicles, such as advanced battery systems and autonomous driving features. With its product attributes, NIO has innovatively launched the Battery as a Service (BaaS) model, an important point of differentiation for NIO. BaaS allows consumers to rent batteries instead of buying them, which reduces the barrier to purchase and provides flexibility to a certain extent (NIO, 2020b).

7 Marketing Mix Strategy

Traditional marketing consists only of the 4Ps: Product, Price, Distribution and Promotion. The new 7P marketing mix adds three service components to the 4Ps: People, Process and Physical Evidence (Masterson & Pickton, 2014). NIO's effective management of the 4Ps has provided the foundation for its service marketing success. Also, the firm maintains a strong market position by delivering outstanding customer experience services in terms of people, process and physical evidence, enhancing customer satisfaction and loyalty.

7.1 Product

The interviewee, Song, indicated that NIO's product portfolio is generally oriented towards innovation according to customer needs. NIO has three major product lines, ET, ES and EC. NIO has adopted a high-to-low product layout that it first released the million-dollar supercar EP9, followed by luxury SUVs and Sedans. NIO Automotive's emphasis on technological innovation is critical to its product strategy. The firm's vehicles are equipped with leading-edge automotive technologies such as wireless phone charging and sensor trunk, the advanced autonomous driving assistance system NIO Pilot and the NIO exclusive NOMI artificial intelligence interaction system.

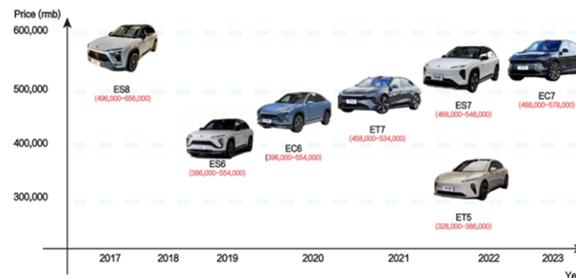


Fig. 3. NIO Product Matrix.

7.2 Price

Figure 3 plots the NIO's product matrix based on the corresponding data released by the NIO physical shops. It's clear to see that NIO primarily adopts a mid-to-high-

end pricing strategy, directly benchmarking against luxury cars such as BMW, Mercedes-Benz and Audi, with prices ranging from RMB 350,000 to 600,000. The CEO of NIO, William Li, has said that *“the pricing strategy is based on value. The truly premium car should equip with the leading technology, service and quality facilities.”* This means that NIO's premium is achieved through the additional value generated by its services. The perceived value and benefits customers receive from NIO's products and services justify its pricing strategy.

7.3 Distribution

According to interviewee Song, NIO employs a direct sales model. With the NIO APP as the core online channel and the NIO House as the core offline channel, it covers a broad customer base and provides a seamless and convenient buying experience. Users could access the NIO APP for product information, personalize configurations, schedule test drives and make orders. This application also provides users access to the NIO ecosystem, including charging services, software updates and customer support. Next, users can explore NIO products in offline shops NIO House and NIO Space, interact with product experts and have a test drive for purchase.

7.4 Promotion

According to interviewee Song, NIO employs a direct The NIO promotional strategy is not aimed at increasing sales but instead focuses on reinforcing the emotional connection between users and NIO. Thus NIO has implemented an integrated marketing approach to communication, utilizing a variety of digital channels and strategies to connect with its tech-savvy audiences. This brand has created its content ecosystem within its app, both a medium for disseminating content to users and a platform for engaging with them online. The interactivity of these platforms allows NIOs to interact directly with customers, solve problems and create a sense of community. It is worth mentioning that NIO 333FE teams participated in the FIA Formula E Championship since 2014, a global race that relies on all-electric power. NIO demonstrated its technical capabilities that proving the performance and reliability of its electric vehicles and generating remarkable brand exposure on a global scale (NIO, 2021).

7.5 People

Interviewee Song mentioned that in terms of human resources, NIO plans to recruit more diversified and innovative talents to support the creation of user scenarios and offers a series of talent strategies as core support. First, NIO presents its unique management model, the VAU system. The system enables employees to clearly perceive the value created by the company and the department, thus setting their short-term objectives. Next, the NIO Career Path is a dual career path for management and professional development. The specialist pathways are

divided into positions according to job responsibilities and competencies, providing opportunities for professionals in different directions. In addition, NIO introduces the Sparks programme for new graduates entering the company, which involves a comprehensive, three-year life-cycle training cycle.

7.6 Process

From initial contact to post-purchase assistance, NIO simplifies the entire process to ensure a convenient and efficient customer experience. During the delivery process, customers are kept informed of the status of their orders, production updates and delivery schedules. In the after-sales sector, NIO supplies convenient maintenance and repair options and innovative solutions such as battery replacement. In addition, customers could use NIO App to obtain their vehicle information, schedule service appointments, and monitor charging status. NIO also provides 24/7 customer support, ensuring that customers receive prompt assistance when they need it. The firm encourages its customers to use its app to provide feedback and suggestions so that it can continuously optimize and refine the overall user experience.

7.7 Physical Evidence

The physical marketing strategy of NIO aims to create memorable brand experiences. The stylish and visually appealing showroom and service centre provides an immersive environment for customers to interact with NIO electric vehicles. With personalized delivery experiences for their products, NIO reinforces customers' perceptions of quality, innovation and reliability. Furthermore, NIO has conducted patent development for charging and power exchange devices. NIO's investment in charging stations and infrastructure development ensures customers can use the charging facilities easily. The firm operates an extensive network of charging stations, with fast charging stations, battery replacement services and home charging solutions to enable more straightforward and hassle-free use.

8 Segmentation, Targeting and Positioning (STP) Strategy

The STP strategy of NIO has enabled the company to effectively target specific customer segments and develop a long-term plan based on positioning objectives. Segmentation divides consumers into buyer groups based on specific common characteristics (e.g., demographic profile, lifestyle, purchasing behaviour, etc.). Four conventional market segmentation methods are commonly used in marketing research, which are geographic, demographic, psychographic and behavioural. In contrast, contemporary segmentation approaches, such as behavioural and needs-based segmentation, aim to investigate in more excellent depth consumers' behaviour, needs and preferences (Goyat, 2011). Long usage cycles of vehicles lead to their infrequent purchase. The majority of consumers only buy one or two cars in their lifetime.

Therefore, the vehicle's price and performance are customers' primary concerns. As a result of iiMedia's market research, Chinese new energy vehicle consumers and potential consumers are concentrated in first and second-tier cities, aged between 31-40 years old and most are married with children. The buyers are predominantly males with high education and middle to high income (iiMedia, 2022).

NIO vehicles are targeted at the mid-to-high end, and the company considers income levels and affordability based on socio-economic segmentation, offering users a range of pricing options. NIO has identified the market's potential and has further targeted its customers: technology enthusiasts and environmentally conscious customers. NIO targets customers in urban areas with a higher concentration of potential consumers. Urban centres tend to offer better-charging infrastructure, consistent with NIO's emphasis on providing convenient charging solutions. Moreover, the brand positioning of NIO is dedicated to creating a vision of an enjoyable lifestyle for its users through high-performance intelligent electric vehicles with the ultimate experience for users. NIO uses the brilliant high-end car as the core to develop a premium lifestyle ecosystem. Becoming a car owner implies joining the NIO community, using this as a threshold to differentiate between "NIO owners" and "ordinary people".

9 Strategic Alliances and Networks

In order to guarantee a competitive advantage in the markets, the company tends to adopt various strategic alliances, including equity joint ventures, minority equity and nonequity (Das & Rahman, 2010). NIO has adopted various (mixed) strategic alliance relationships based on the interview. Financially, NIO has signed financing relationships with several companies to share its' market share of ownership, which comprise a joint venture relationship. On the service, firstly, NIO has signed agreements with some organizations such as CNPC, SINOPEC, and Power Construction Corporation of China to co-develop the charging stations and cooperate in establishing its car battery charging business, which forms a partnership relationship. In addition, the strategic cooperation with the Longhu Mall network provides sustainable development for its physical store's operation. Finally, due to the high cost of after-sales service, NIO usually seeks to sign agreements with some of the outstanding local service providers to outsource its' services to decrease its' internal risk and cost of running. Through these multidimensional strategic alliances, NIO has reaped several benefits. For instance, partnering with the JAC GROUP for car assembly has enabled mass production and increased car output. Collaborations with research institutes in Europe and the United States have fostered technological innovation, offering new users enhanced functionality and a sense of creativity (Newsroom, 2019).

10 Corporate Social Responsibility initiatives

CSR is an essential metric of good corporate governance. Furthermore, CSR and CG interact and are interrelated (Jamali et al., 2008). It is clear that active participation in public affairs plays an important role in creating an excellent social reputation and sustainable development for the company. Based on the interview, there are numerous public activities in which NIO is actively involved, both nationally and internationally. NIO established its' first marine environmental community in China in June 2019, taking into account the geographical advantages and characteristics of Qingdao (Wang, 2019). In the community activities, they organise regular litter picks and parties at the beach for NIO's partners of car owners and internal staff.

On the one hand, this has contributed to improving the ocean environment and Qingdao's sea water quality. On the other hand, the participation of adults with children in charity activities also increases the harmony within the families of NIO users and the recognition of the organisation's values among the employees within NIO to strengthen the internal and external relations of the company. In addition, they are using the surplus funds raised through the organisation of tie-dye events to support the transmission and development of traditional culture. As the manager indicates, "*just NIO Chengdu has organised over 370 charity events during the epidemic period (2020-2022)*".

11 Managerial Implications

11.1 Using the promotional / marketing mix to motivate consumers to purchases

Faced with various promotion methods from competitors, NIO can use incentives to stimulate customers to choose NIO's products rather than its competitors' products, based on the NIO's advantage of its sales force. For example, by giving users more benefits through 'cashback', it is possible to capture consumers' 'loss aversion' and make them feel as if they are missing out on benefits by not purchasing (Higgins & Liberman, 2018). In addition, advertising can be used wisely to promote the product by inserting promotional advertisements into magazines subscribed for specific medium to high-income groups, which strengthens the impression of the product in the minds of consumers and thus continuously entices sellers to make purchases. Furthermore, research has shown that consumers' visual perception of a brand increases the intensity of consumer recognition of the brand (Chan et al., 2018), so neuromarketing can be used wisely to create an in-depth scenario consumption scene for consumers, for example, a large LED screen can also be placed in the shop to broadcast an advertisement for electric cars off-road, which can give consumers more imagination and a sense of engagement.

11.2 Properly using relationship marketing to increase market share

The relationship has two aspects. On the one hand, it can better help the company to advertise their products and create a good buzz marketing. On the other hand, poorly managed relationships can accelerate the loss of a company's market (Thaichon et al., 2020). NIO is an internet-based automotive company that has made good use of relationship marketing to expand its market share. However, currently NIO does not have a systematic customer management tool. Therefore, it is urgent to establish a comprehensive and systematic customer relationship system (CRM). The system is based on a number of dimensions, such as the number of visits to the shop, the number of community activities and customer feedback to improve NIO's service experience and further enhance loyalty to the company, which makes the relationship better towards the positive direction.

11.3 Increasing R&D support to promote continuous innovation

Innovation is a kind of value creation that helps enterprises to create more value and maintain their competitive advantage (Battisti et al., 2019). NIO is a new energy automotive firm where continuous innovation is particularly important for a technology-based company. NIO can strengthen its support for product innovation in terms of employees, funding, design and functional structure, so as to enhance the value of use for consumers and bring them a greater sense of experience. At present, NIO is more likely to take an incremental approach to innovation in order to steadily increase its market share, by increasing research personnel funding and opportunities for collaboration with research institutions to optimise product design, increase product functionality and thereby extend the value chain (porter, 1990) to improve consumer satisfaction, thus further strengthening NIO's dominant market position. In addition to product innovation, innovations in the consumption environment, sales channels and types of after-sales service can also be introduced to increase the perceived value to consumers, bringing more surprises and expectations to them as well as bringing more energy to the market.

11.4 Building multilateral strategic alliances

Enterprises can effectively integrate their limited resources to maintain competitiveness and create new opportunities through the establishment of business alliances, and through the construction of multi-relationship alliances can enable them to exceed their competitors and eventually become market leaders (Orlov et al., 2019). NIO has some disadvantages in terms of product manufacturing efficiency and competing with other similar competitors. While building strategic alliances with multivariate relationships is a solution to be tried. On the product supply side, NIO could reduce the cost of battery purchases by sharing investments that could increase the bargaining power of the purchaser (J.-

B. Wang & Huang, 2021). Specifically, NIO can establish an EV alliance with several other brands that produce EVs in the market and negotiate prices with suppliers as an alliance, thus achieving effective control of procurement costs. In the competition of similar competitors, NIO can take advantage of the new entrant advantage and join hands with other pure EV brands to challenge the traditional car brands. In addition NIO can co-operate with them in product promotion, such as publicising the advantages of pure electric vehicles, reducing certain advertising costs while at the same time increasing product exposure.

12 Conclusion

The article introduces the basic context of the EV market and the external environment of the new energy industry. And then it focuses on NIO's basic performance in the industry as a representative company of EVs, exploring its internal resources and the adopted market strategies. For the issues identified during the implementation of NIO's strategy, we provide practical recommendations to facilitate service optimisation and to promote further market expansion and to achieve sustainable profit growth in the EV industry, as well as providing insights for other EV companies. In addition, the research focuses on individual case studies, providing a deeper insight of EV-related companies, new case supplements and new ideas for EV market strategies. The limitations of the article are that, on the one hand, the EV industry is quite young and the related market practices still lack some time to be tested. On the other hand, although the article has explored the key market elements, it lacks some of the causal research, which may fail to elaborate on some micro issues. Therefore, extension study can do more causal research on the aspects mentioned in this case, such as the mismatch between sales volume and total sales, the centralisation of the OEMs and the lack of production supply, the user conversion rate and the user promotion, and other related issues.

Acknowledgements

National Natural Science Fund of China (72202186).

Conflict of interest

The authors declare no conflict of interest.

Author contributions

Yun Zeng was responsible for drafting and subsequent revisions of the manuscript and co-taken the data collection and analysis. Xun Yao was in charge of structuring the framework and finalizing the manuscript. Simin Yang handled data collection, transcode, and analysis. WeiHsiang Hsu undertook literature gathering and organization. All authors contributed to the article and approved the submitted version.

References

1. Agatie, C. (2022). NIO is copying Tesla and starts developing its own self-driving and LiDAR chips. Autoevolution. <https://www.autoevolution.com/news/nio-is-copying-tesla-and-starts-developing-its-own-self-driving-and-lidar-chips-200837.html>
2. Aguilar, F. J. (1967). Scanning the business environment. Collier-MacMillan.
3. Balcilar, M., Roubaud, D., & Shahbaz, M. (2019). The impact of energy market uncertainty shocks on energy transition in Europe. *Energy Journal*, 40(01). <https://doi.org/10.5547/01956574.40.si1.mbal>
4. Battisti, E., Miglietta, N., Nirino, N., & Villasalero Diaz, M. (2019). Value creation, innovation practice, and competitive advantage: Evidence from the FTSE MIB index. *European Journal of Innovation Management*, 23(2), 273–290. <https://doi.org/10.1108/ejim-09-2018-0211>
5. Breetz, H. L., & Salon, D. (2018). Do electric vehicles need subsidies? Ownership costs for conventional, hybrid, and electric vehicles in 14 U.S. cities. *Energy Policy*, 120, 238–249. <https://doi.org/10.1016/j.enpol.2018.05.038>
6. Casey, D., & Murphy, K. (2009). Issues in using methodological triangulation in research: Dympna Casey and Kathy Murphy explore the advantages and disadvantages of using triangulation. *Nurse Researcher*, 16(4), 40–55. <https://doi.org/10.7748/nr2009.07.16.4.40.c7160>
7. Chan, H.-Y., Boksem, M., & Smidts, A. (2018). Neural profiling of brands: Mapping brand image in consumers' brains with visual templates. *JMR, Journal of Marketing Research*, 55(4), 600–615. <https://doi.org/10.1509/jmr.17.0019>
8. Corby, S. (2021, October 29). The top 9 electric vehicle manufacturers. CarsGuide. <https://www.carsguide.com.au/ev/advice/the-top-9-electric-vehicle-manufacturers-84995>
9. Dacko, S. G. (2008). The advanced dictionary of marketing: Putting theory to use. Oxford University Press.
10. Das, T. K., & Rahman, N. (2010). Determinants of partner opportunism in strategic alliances: A conceptual framework. *Journal of Business and Psychology*, 25(1), 55–74. <https://doi.org/10.1007/s10869-009-9132-2>
11. DePamphilis, D. M. (2022). Planning: developing business and acquisition plans. In D. M. DePamphilis (Ed.), *Mergers, Acquisitions, and Other Restructuring Activities* (pp. 99–121). Elsevier.
12. Dibb, S. (1998). Market segmentation: strategies for success. *Marketing Intelligence & Planning*, 16(7), 394–406. <https://doi.org/10.1108/02634509810244390>
13. Diefenbach, T. (2009). Are case studies more than sophisticated storytelling?: Methodological problems of qualitative empirical research mainly based on semi-structured interviews. *Quality & Quantity*, 43(6), 875–894. <https://doi.org/10.1007/s11135-008-9164-0>
14. Fusheng, L. (2023). Nio goes the extra mile for customer satisfaction. *China Daily*. <https://www.chinadaily.com.cn/a/202302/13/WS63e99169a31057c47ebae5f8.html>
15. Gibson, C. B. (2017). Elaboration, generalization, triangulation, and interpretation: On enhancing the value of mixed method research. *Organizational Research Methods*, 20(2), 193–223. <https://doi.org/10.1177/1094428116639133>
16. Given, L. M. (2008). The Sage encyclopedia of qualitative research methods. SAGE.
17. Goyat, S. (2011). The basis of market segmentation: a critical review of literature. *European Journal of Business and Management*, 3, 45–54.
18. Higgins, E. T., & Liberman, N. (2018). The loss of loss aversion: Paying attention to reference points. *Journal of Consumer Psychology: The Official Journal of the Society for Consumer Psychology*, 28(3), 523–532. <https://doi.org/10.1002/jcpy.1045>
19. iiMedia. (2022). China New Energy Vehicle Industry Research and Consumer Behavior Survey Report in 2022. IiMedia.Cn. <https://www.iimedia.cn/c400/84019.html>
20. Jamali, D., Safieddine, A. M., & Rabbath, M. (2008). Corporate governance and corporate social responsibility synergies and interrelationships. *Corporate Governance An International Review*, 16(5), 443–459. <https://doi.org/10.1111/j.1467-8683.2008.00702.x>
21. Kane, M. (2020). NIO introduces navigation on pilot and revamped parking assist. InsideEVs. <https://insideevs.com/news/407877/nio-navigation-on-pilot-parking-assist/>
22. Kasabov, E. (2015). Strategic Group (Analysis). In *Wiley Encyclopedia of Management* (pp. 1–2). John Wiley & Sons, Ltd. <https://doi.org/10.1002/9781118785317.wcom090255>
23. Kvale, S., & Brinkmann, S. (2015). *InterViews : learning the craft of qualitative research interviewing* (Third edition.). Sage Publications.
24. Lemercier, C., Zalc, C., & Goldhammer, A. (2019). *Quantitative methods in the humanities : an introduction*. University of Virginia Press.
25. Mangram, M. E. (2012). The globalization of Tesla Motors: a strategic marketing plan analysis. *Journal of Strategic Marketing*, 20(4), 289–312. <https://doi.org/10.1080/0965254x.2012.657224>
26. Masterson, R., & Pickton, D. (2014). *Marketing: An Introduction*. SAGE Publications.
27. McCarthy, E. J. (1964). *Basic marketing : a managerial approach* (Rev. ed). Richard D. Irwin Homewood, Ill.
28. McKinsey. (2022). NIO unlocks its potential through standout user operations. Mckinsey.com.

- <https://www.mckinsey.com/industries/automotive-and-assembly/our-insights/nio-unlocks-its-potential-through-standout-user-operations>
29. Morris, T. P., White, I. R., & Crowther, M. J. (2019). Using simulation studies to evaluate statistical methods. *Statistics in Medicine*, 38(11), 2074–2102. <https://doi.org/10.1002/sim.8086>
 30. Narayanan, A. (2022, September 29). Nio, BYD, China EV makers make historic push into Europe. *Investor's Business Daily*.
 31. NIO. (2019). NIO and Central Saint Martins Announce Partnership to launch New Design initiative. Nio.com. <https://www.nio.com/news/nio-and-central-saint-martins-announce-partnership-launch-new-design-initiative>
 32. NIO. (2020a). Managing director of NIO-US, Ganesh V. iyer, NIO's focus on our user experience above everything. Nio.com. <https://www.nio.com/blog/managing-director-nio-us-ganesh-v-iyer-nios-focus-our-user-experience-above-everything>
 33. NIO. (2020b). NIO launches battery as a service. Nio.com. <https://www.nio.com/news/nio-launches-battery-service>
 34. NIO. (2021). The History of NIO and Formula E. Nio.com. <https://www.nio.com/blog/history-nio-and-formula-e>.
 35. NIO. (2023a). Company Profile | NIO Inc. Nio.com. <https://ir.nio.com/governance/company-profile>
 36. NIO. (2023b). NIO Inc. Reports Unaudited Fourth Quarter and Full Year 2022 Financial Results. Nio.com. <https://ir.nio.com/news-events/news-releases/news-release-details/nio-inc-reports-unaudited-fourth-quarter-and-full-3>
 37. Orlov, V. M., Odesa National Academy of Telecommunications named after A. S. Popov, Petrashevskaya, A. D., Drahan, K. Y., Statirova, K. V., Odesa National Academy of Telecommunications named after A. S. Popov, Odesa National Academy of Telecommunications named after A. S. Popov, & Odesa National Academy of Telecommunications named after A. S. Popov. (2019). Factors of the formation of strategic alliances. *Biznes Inform*, 12(503), 76–81. <https://doi.org/10.32983/2222-4459-2019-12-76-81>
 38. Pang, J., Ye, J., & Zhang, X. (2023). Factors influencing users' willingness to use new energy vehicles. *PloS One*, 18(5), e0285815. <https://doi.org/10.1371/journal.pone.0285815>
 39. Petzer, D. J., & van Tonder, E. (2019). Loyalty intentions and selected relationship quality constructs: The mediating effect of customer engagement. *International Journal of Quality & Reliability Management*, 36(4), 601–619. <https://doi.org/10.1108/ijqrm-06-2018-0146>
 40. Porter, M. (1990). Competitive advantage of nations. *Harvard Business Review*, 1(1), 14–14. <https://doi.org/10.1002/cir.3880010112>
 41. Porter, M. E. (1979). How Competitive Forces Shape Strategy. *Harvard Business Review*, 57(2), 137.
 42. Reis, J., Amorim, M., & Melão, N. (2019). Multichannel service failure and recovery in a O2O era: A qualitative multi-method research in the banking services industry. *International Journal of Production Economics*, 215, 24–33. <https://doi.org/10.1016/j.ijpe.2018.07.001>
 43. Roberts, J. M. (2014). Critical realism, dialectics, and qualitative research methods: Critical realism, dialectics, and qualitative research methods. *Journal for the Theory of Social Behaviour*, 44(1), 1–23. <https://doi.org/10.1111/jtsb.12056>
 44. Schrauf, R. W. (2016). Mixed methods : interviews, surveys, and cross-cultural comparisons. Cambridge University Press.
 45. Taibi, E., Fernández del Valle, C., & Howells, M. (2018). Strategies for solar and wind integration by leveraging flexibility from electric vehicles: The Barbados case study. *Energy (Oxford, England)*, 164, 65–78. <https://doi.org/10.1016/j.energy.2018.08.196>
 46. Tettey, L. N., Aggrey, O. K., & Acheampong, G. (2023). Relationship marketing and customer loyalty in Ghana's informal economy: Does customer perceived value matter? *Journal of African Business*, 24(3), 427–443. <https://doi.org/10.1080/15228916.2022.2107317>
 47. Thaichon, P., Liyanaarachchi, G., Quach, S., Weaven, S., & Bu, Y. (2020). Online relationship marketing: evolution and theoretical insights into online relationship marketing. *Marketing Intelligence & Planning*, 38(6), 676–698. <https://doi.org/10.1108/mip-04-2019-0232>
 48. The State Council. (2020). New development plan for NEVs unveiled. Gov.Cn. https://english.www.gov.cn/policies/latestreleases/202011/02/content_WS5f9ff225c6d0f7257693ece2.html
 49. Tripathy, J. P. (2013). Secondary data analysis: Ethical issues and challenges. *Iranian Journal of Public Health*, 42(12), 1478–1479.
 50. Wang, J.-B., & Huang, L. (2021). A game-theoretic analytical approach for fostering energy-saving innovation in the electric vehicle supply chain. *SAGE Open*, 11(2), 215824402110215. <https://doi.org/10.1177/21582440211021581>
 51. Wang, L., Wang, X., & Yang, W. (2020). Optimal design of electric vehicle battery recycling network – From the perspective of electric vehicle manufacturers. *Applied Energy*, 275(115328), 115328. <https://doi.org/10.1016/j.apenergy.2020.115328>
 52. Wang, M. (2019). NIO Ocean Environmental Protection Community Screening. Nio.com. https://app.nio.com/activity/2/detail?_viewBeginTop=true&activity_id=16768&load_js_bridge=true&show_navigator=false

53. Zarazua de Rubens, G., Noel, L., Kester, J., & Sovacool, B. K. (2020). The market case for electric mobility: Investigating electric vehicle business models for mass adoption. *Energy* (Oxford, England), 194(116841), 116841. <https://doi.org/10.1016/j.energy.2019.116841>
54. Zhang, J. (2018). Research on the economic connotation of new energy and traditional energy. *IOP Conference Series. Earth and Environmental Science*, 170, 042063. <https://doi.org/10.1088/1755-1315/170/4/042063>
55. Zhang, L., & Qin, Q. (2018). China's new energy vehicle policies: Evolution, comparison and recommendation. *Transportation Research. Part A, Policy and Practice*, 110, 57–72. <https://doi.org/10.1016/j.tra.2018.02.012>