Innovation Model by China's New-Energy-Vehicles Companies: In the Case of NIO

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Abstract: - Interned-based automobile manufacturers and their marketing models of new energy vehicles are different from conventional companies, and need innovation paths and models to overcome challenges like a gap between consumers' expectations and high-tech applications and new internet-related conceptions. Through the study and consideration of NIO's marketing model, standing from the perspective of industry practitioners, this work aims to provide insights and ideas for practitioners by having a reference role in researching marketing model innovations in the automotive industry in the new environment. We aim to analyze NIO's innovation model through AISAS and challenges it faces and the problems hidden behind its marketing and positioning strategies. Also, based on 4C rules, we propose ideas and steps to handle these problems.

1 Introduction

The rapid development of internet technology has enabled companies with strong digital backgrounds to enter the automobile manufacturing sector, specifically focusing on New Energy Vehicles (NEVs), [1], [2]. These companies prioritize technological advancements to capture market share and emphasize how innovations and digitization enhance efficiency, distinguishing them from traditional automobile manufacturers. This shift has disrupted the century-old business model of the traditional automotive industry, giving rise to a new and dynamic NEV sector, [3], [4].

In the past, the consumption philosophy for automobiles focused on the individual ownership of private vehicles, with decisions about purchasing large commodities like cars being made over a long period, [5], [6], [7]. In particular, individual consumers made decisions about car purchases based on information from or about professional media, exhibitions, industry disclosures, and technical parameter disclosures required by the government for vehicle sales. This decision-making process often required the assistance of sales consultants, making car sales heavily reliant on sales consultants at 4S stores, on-site experiences at car showrooms, and the comparison process after experiencing the cars, [8]. After the purchase, as consumers and car service providers enter the usage phase, consumers develop a fixed perception of the product, which they then communicate to others interested in purchasing cars. This pattern leads car manufacturers to produce products that better suit their users. However, with the rapid advancement of technology, the actual products produced may differ significantly from what consumers need. Controlling this difference and guiding consumers' early consumption perceptions through the technical parameters of the vehicles have become the core factor in the product promotion of major car manufacturers, [9], [10], [11].

China's domestic car manufacturers face significant challenges in reducing the gap between consumers' expectations based on technical parameters and their actual experiences with the cars. To address this challenge, domestic car manufacturers borrow design concepts and technological applications from major international car manufacturers, e.g., Tesla [12], leveraging advantages in pricing, tariffs, and production costs to compete.

Since the beginning of the 21st century, internet technology has been increasingly integrated into the automotive industry in China, [13]. On one hand, internet technology is being applied to cars, especially with the internet-oriented concept led by Tesla, which uses the internet, new energy, artificial intelligence, and big data services to assist

consumers in using cars, changing the car usage experience from being centered around the car itself to being centered around the driving experience. This shift aims to better serve people's lives by making cars more integrated into their daily internet-enabled lives, [14]. On the other hand, influenced by the sharing economy, particularly by companies like Uber abroad, new transportation formats such as Didi Chuxing in China are gradually transforming the traditional taxi industry into one centered around ride-hailing, shared leasing, time-sharing leasing, ride-sharing, and carpooling, all based on the impact on car ownership, [15].

However, these new environments, products, and formats cannot change people's ultimate goal of long-term ownership and the construction of a private personal space. This ultimate goal is driving NEV companies to explore how to create better products, and even better car experiences through the marketing model with innovation paths, [16].

A model, technically, refers to a widely accepted standard that has developed over the long term in economic life. The development of the automotive industry's model has gone through changes from driving technology and riding technology to meeting the total mileage needs of individuals for vehicles, [17]. This change is no longer simply about studying the number of vehicles owned but has become the total mileage data of the process of how users use vehicles. This change in data has affected the past fixed and specific model definition, transforming it into the consumer perception process of user interaction with vehicles or vehicle brands in different situations, [18]. In other words, it has shifted from owning a vehicle to the consumption perception process of shared time-sharing rentals, carpooling, ride-hailing taxis, and personal vehicle usage mileage.

The marketing model is the core model for developing a business model for a company, and it is the standard way chosen based on a specific business environment that fits the company's development. The innovation of the marketing model is to, under the current background, change the industry's verified standard ways by the new 4C rule "scene, content, community, connection," forming its own marketing model, and achieving the goal of promoting the healthy development of the company and driving industry progress, [19], [20].

Based on the current situation of China's automobile manufacturing industry, through the study of NIO's business model, combined with the current work of NIO, Didi Chuxing, and new forces in the industry, this new industry impact reshapes the definition of cars for users. This work aims to

study NIO's marketing model innovation points through the environment and risk analysis, combined with Dentsu's AISAS marketing model, [21], [22] to pinpoint important business innovations and find out whether the innovation has improved marketing efficiency and reduced marketing costs.

This work aims to explore NIO's marketing model innovations and their impact on reshaping consumer perceptions of automobiles. By analyzing these strategies, the study provides valuable insights for industry practitioners, offering a reference point for future research on marketing model innovations within the evolving NEV landscape.

2 Methods

2.1 AISAS Model

The AISAS model is a marketing model developed by Dentsu, a prominent advertising and public relations company in Japan. The model is designed to help businesses understand and implement effective marketing strategies by focusing on five key stages: Awareness, Interest, Search, Action, and Share. These stages represent the typical progression of a consumer's journey from initial awareness of a product or service to taking action and sharing their experience with others. Here's a brief overview of each stage. In the AISAS model, the use of electronic word-of-mouth occurs during the Search phase, extends to the Action phase, and culminates in the Sharing phase, as shown in Figure 1.
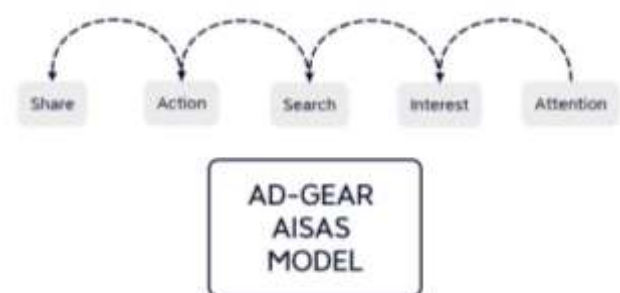

Fig. 1: AD-GEAR AISAS model

2.2 New 4-C rules

The so-called new 4C rule refers to the strategy where operators, in a suitable context, target a specific community. They utilize influential content or topics to leverage the network structure within the community to connect individuals and rapidly achieve the dissemination and transmission of information. This ultimately leads to effective commercial communication and value generation.

3 NIO's Marketing Positioning Strategies

3.1 Positioning Away from Traditional Models

On the path to practicing the model of internet-based car manufacturing, NIO has consistently avoided being categorized solely as a traditional automotive company and instead seeks to position itself as a "user brand" within the context of the car-living scene. According to NIO's definition, being a "user brand" entails catering to various aspects of the car-living experience.

Through NIO's brand built on internet sharing, NIO Centers aim to interpret this new definition by providing the so-called sharing space centered around the NIO brand. These centers showcase NIO cars and their core technologies while also serving as venues for user gatherings, brainstorming sessions, music events, children's activities, and coffee shops, among other multifunctional spaces. The primary focus of these centers is not the cars themselves, which occupy less than 40 percent of the total area, but rather on creating a pleasant lifestyle experience for users.

By breaking away from the traditional demands and constraints of 4S dealerships (Sales, Spare parts, Service, Survey) that most users habitually associate with car experiences, NIO is taking the first step towards offline car living. When users want to learn about a car, they typically visit the brand's offline 4S dealership for the experience. Upon entering these dealerships, users hope to freely explore the models they are interested in while also enjoying a comfortable space. In contrast to conventional 4S dealerships, NIO's showrooms feature fewer display cars but offer more living space and a wider array of lifestyle experiences, facilitating a seamless transition from cars to overall lifestyle.

3.2 Building a Single Application Bridging Car to Life

Apps, especially those on mobile devices, have become increasingly important as marketing channels and communities. For example, BMW has a variety of mobile applications in China, including 14 different apps such as BMW ConnectedDrive, BMW Club, and BMW Car Guide, each serving different needs such as vehicle operation manuals, vehicle networking, and solutions for the BMW owner's club. In contrast, the NIO app offers a comprehensive range of features starting from the NIO brand. Users can use the app to stay updated on NIO's latest technologies, driving experiences, self-driving routes, overall user experiences, social interactions, and even manage their vehicles. This includes features like checking vehicle maintenance, locating charging stations, and requesting mobile charging services. Users who do not yet own an NIO vehicle can also use the app to place custom vehicle orders and become NIO car owners.

The NIO app not only focuses on the car itself but also aims to build a "Beyond the Car" business model and brand experience. Through the app, users can access the NIO Store to purchase a variety of NIO-branded products and NIO-selected items. These products include high-end hotels, daily necessities, travel services, technology products like headphones, speakers, and cameras, as well as toy cars and building blocks. These products not only reflect the brand but also contribute to an upgraded consumer experience through a new retail model based on consumer choices.

3.3 Building a Website Selling Products Related to NIO's Brand

On New Year's Day 2019, NIO introduced its cheerful mascot, "Meng Meng Zhu" (OinOin), during its annual meeting. This pig mascot became a central feature at the NIO Life concept store, which opened at Xintiandi Taikoo Hui in Shanghai. The store prominently showcased the NIO pig mascot, creating a lively and unique atmosphere for visitors. In addition to the mascot, the concept store highlighted NIO's venture into fashion and lifestyle branding. It featured a collaborative fashion clothing series designed in partnership with internationally acclaimed designer Chalayan. The collection included not only Chalayan's line but also the Daniel Palillo series and the Bluesky series. Alongside these fashion pieces, the store offered a variety of lifestyle products, further cementing NIO's innovative approach to connecting with its audience through diverse and engaging branding efforts.

4 NIO's Key Competitive Advantages

NIO's key advantage, as it promotes, is undeniably the high digitization and integration of internet technologies, ranging from AI voice assistant to intelligent driving. NIO's advantages stem from the User-Centric New Car Business Model the company develops, promotes, and focuses on.

In NIO's cars, there are at least four screens to display driving functions. First is the main screen, like most internet-connected cars, it has a large screen of over 10 inches. What sets this large screen

apart from others is that the main interface is the map navigation function, and the secondary interface is for selecting various functions. This design prioritizes the user's need to understand the journey. Only after that comes the ability to set other less commonly used functions like lights, temperature, sound, etc.

NIO's second screen is a simple driving data dashboard, abandoning the flashy designs of other manufacturers and instead displaying data and tips related to driving, returning to the main purpose of driving. Additionally, NIO has optimized the content displayed on the HUB windshield projection screen to be so simple that it only shows driving guidance-type data without any other information. In addition to displays, NIO provides interaction through its NOMI little black robot. A NOMI device with facial expressions can be installed in the center console, allowing real-time interaction and conversation with people in the driving space. It can also control the console's functions through a connected controller.

These designs that integrate car and technology interactions based on driving and riding as the primary goal are how NIO puts its understanding of cars into practice. It's also how they aim to become the epitome of user-centric car experiences. In terms of service, NIO offers a different power supply experience from other electric cars. Users can opt for a monthly subscription of 990 RMB, where NIO will swap the car's battery with a fully charged one whenever needed. Users only need to use the one-click charging function on the app or the car, and the service vehicle will autonomously locate the car to deliver the power. On the other hand, NIO has deployed numerous battery swap stations across the country. Users can conveniently drop off their cars at these locations, usually located in commercial centers and office buildings, and NIO will return them fully charged for their next journey. NIO not only services cars but also collaborates with the well-known domestic express delivery company, SF Express. Users can set their cars as delivery collection points. After obtaining authorization from NIO and under the surveillance of the car's internal cameras, SF Express couriers can deliver packages into the car, solving the user's occasional need to receive packages.

It's not hard to imagine that NIO's user thinking revolves around integrating the car into users' lives, making it an application that facilitates various aspects of users' lives. And these applications and services are something other vehicles do not have. It is precisely these user-centric product and service

models that other manufacturers lack, which constitute NIO's core competitive advantage.

5 Marketing Model Analysis

5.1 AISAS Online Model

The essence of the internet in the automotive industry in the past has been to provide internet services from cars to life communities, such as providing word-of-mouth for car companies, making appointments to view cars, and user car interest socializing, as shown in Figure 2 and Table 1.
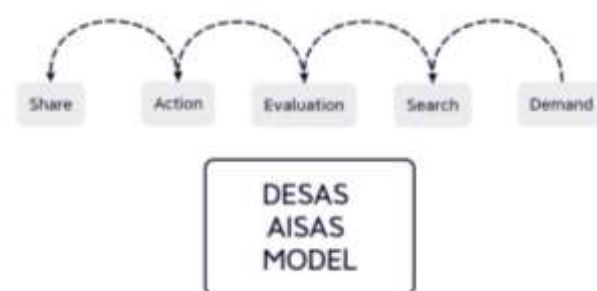

Fig. 2: BAIDU DESAS model

Table 1. NIO's AISAS model analysis

Attention	Interest	Search	Action	Share
Blue Sky Coming High-Performance Capital Positive Image	Open Discussion of Car Up-to-date Technology Image-related products Children Care	Baidu	Meeting NIO Centers Live Exhibitions Swapping Stations	Community Wechat Sharing Socialized Media

This kind of internet service actually forms the user experience behavior of car consumption decisions, relying on Baidu's Data Research Center's DSEAS model proposed in 2010 and based on the AISAS model. This model relies on a search to produce professional comparative decisions, and the comparative decision-making process is a "search + evaluation" process formed by search fission, which leads to a longer decision-making time for purchasing products. Therefore, NIO broke through this path of the internet by surpassing the AISAS model of exceeding user expectations for car experiences, as shown in Figure 3.
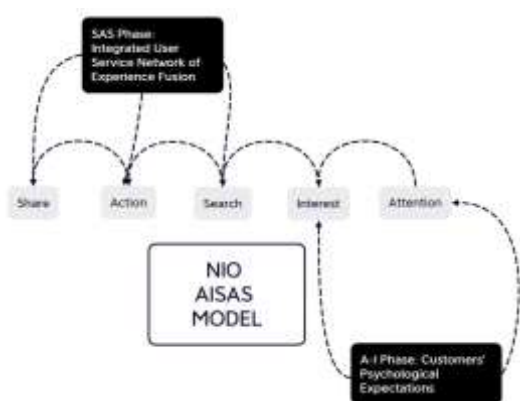
Fig. 3: NIO DESAS model

A-I Phase: Brand Influences User Consumer Psychological Expectations. The concept of mass communication cannot actually influence how people think, but it can influence what people think. This important characteristic makes it unclear to consumers what values companies propose in the A-I phase, thus limiting consumers' understanding of the company. Therefore, companies need to take the initiative to attract consumers' attention. In this phase, consumer psychological processes are influenced by the brand, indicating that NIO faces the need to establish a sound consumer contact scene to influence consumers' perceptions of its brand and what users want to understand, pay attention to, and be interested in. In attracting consumers' attention to NIO, NIO has always been committed to "providing high-performance intelligent electric vehicles and ultimate user experience." High-performance intelligent electric vehicles and an imaginative brand name, NIO, have essentially formed a brand with its own traffic.

NIO entered the competition with a high-performance brand image the beginning of 2015. NIO's first model was the EP9, although it was not a mass-produced model. However, this model, which is exclusively for its highly influential investors on the Internet, has attracted widespread attention from users. In fully arousing users' interest, NIO, through the ultimate user experience, chose to set up NIO Center showrooms in commercial centers with high foot traffic, promoting the high-performance concept of NIO vehicles to high-end people who have not been in contact with NIO vehicles. This direct contact with users offline makes it easy for users not only to understand the concept of NIO but also to experience NIO's products. With the mass-produced NIO ES8 model launched in the market, thousands of NIO vehicles are driven on the roads every day. Compared with many low-end electric vehicles, the exquisite design and widely accepted large 6-seater SUV model form

a strong contrast. The number of people who want to know about NIO is also increasing. In the driving experience process, NIO has deployed more than 50 electric vehicles nationwide. The novel appearance of these electric vehicles has attracted the attention of other drivers on the road. In early 2019, NIO began to provide external users with a charging service of 380 yuan per charge. Users who choose the charging service and users around them have also increased their interest in NIO through this new energy supply method, as shown in Table 2.

Table 2. NIO's Car model

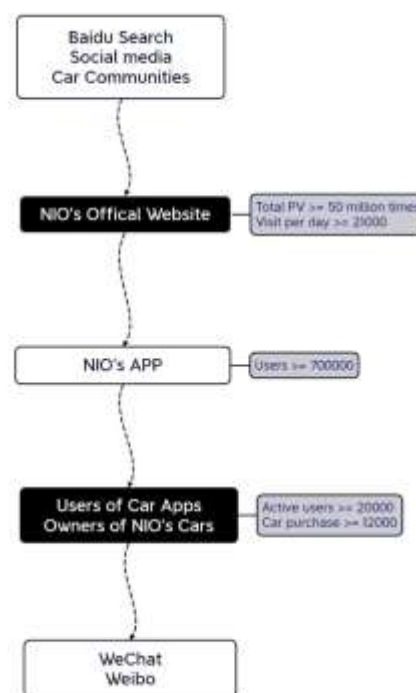| Time to Market	Model	Level	Recharge Mileage (KW)	Price (RMB)
2016.11	EP9	Sports Car	427	More than ten million
2017.12	ES8	Full-size SUV	355	44.5 54.8
2018.12	ES6	Mid-size SUV	450	39.8 49.8
2019.12	ET7	Sedan	550	36.8 40.8

Fig. 4: NIO internet marketing channel user conversion path data

SAS Phase: Integrated User Service Network of Experience Fusion. The SAS phase is the stage where consumers actively complete self-consumption behaviors. The key difference in the traditional automotive brand's establishment of the consumer experience process lies in the stage where consumers decide whether to go to the 4S store after understanding the product's performance and other

user word-of-mouth through third-party platform communities in the past internet environment, as shown in Figure 4.

Innovative forms and means of the value proposition are particularly important for NIO in the SAS phase. As a company with internet technology genes, NIO received investment from Baidu Capital during the entrepreneurship of Yiche.com and established a strategic partnership with Baidu, importing extensive traffic to Yiche.com through Baidu's search traffic Aladdin platform. Similarly, NIO's growth is linked to Yiche.com, inheriting the user behavior habits of the search platform, and providing NIO with more traffic resources through Yiche.com, greatly improving the utilization efficiency of search traffic.

From the import of search traffic to the official NIO website, and then from the official website to the unique brand exchange mobile application NIO APP, this has also brought 200,000 daily active users and nearly 700,000 registered users to NIO APP. Regardless of whether they are NIO car owners, users can exchange these points for home furnishings, clothing, toys, and technology products in the NIO APP, and they can also go to the NIO Center and NIO Life Pavilion to consume. If they are NIO car owners, they can also exchange them for charging services and maintenance services through the NIO APP. This closely links NIO APP with user experience and allows many NIO APP users to become NIO car owners, as shown in Figure 5.

On the other hand, NIO car owners can customize their cars through official online channels, and can also share their car life, contact NIO service specialists, understand NIO's latest policies, and change NIO service experience packages online, all of which can be achieved on NIO APP, allowing non-NIO car owners to participate in NIO's car life and achieve the effect of building user word-of-mouth.

The official online service channel quickly conveys transparent information to consumers, increases consumers' decision-making confidence, reduces unfavorable factors affecting product evaluation, and provides efficient positive decision-making for consumers. In the SAS phase, NIO maximizes the integration of online efficiency with internet resources, builds NIO into an internet company through information technology, and improves organizational efficiency by having employees online, products online, customers online, and management online, achieving the remarkable characteristics of internalization.

5.2 Innovation Path

Since its establishment, NIO has focused on the development of high-performance smart electric vehicles. The company has deployed the following strategies around this central focus: Capital: Besides seeking support from financially strong investors like Hillhouse Capital, NIO has attracted significant capital from Tencent, Baidu, Lenovo Group, JD.com, Xiaomi, and Li Xiang, the founder of Autohome, who collectively control nearly a billion users. This diverse capital structure not only provides stable financial support but also opens up more business opportunities.

Industry partnerships: NIO has established joint ventures with Guangzhou Automobile Group, JAC Motors, and Changan Automobile, located in South China, East China, and Southwest China, respectively. These partnerships strategically position NIO's manufacturing facilities for efficient supply chain and product distribution. Leveraging the manufacturing expertise of these partners, NIO aims to accumulate experience while meeting production capacity.

Talent acquisition: NIO has recruited top-tier talent, including automotive industry veterans and experts in software and user experience design. By participating in the FE (Formula E) racing series, NIO has gained valuable experience in manufacturing high-performance smart electric vehicles, complementing its background in internet companies and understanding of user needs.

Global presence: NIO has established international research and design centers in Silicon Valley, Munich, and London, as well as production and business facilities in several cities in China. The company has built a diverse team of industry experts from over 40 countries, emphasizing a global perspective in its operations.

Product innovation: NIO has developed NOMI, an artificial intelligence product with humanlike emotions and features, integrated with advanced voice interaction systems and semantic recognition engines. NOMI aims to transform the driving experience into a more human-friendly and enjoyable one.

Future initiatives: In addition to its current vehicle lineup, NIO unveiled EVE, a concept car with autonomous driving features, demonstrating the company's vision for the future of mobility. EVE is designed to provide users with a luxurious and intelligent mobile living space, showcasing NIO's commitment to creating a unique user experience beyond traditional cars.

Business model: NIO's business model extends beyond vehicle sales to include membership

services, battery sales, and leasing. The company's focus on providing a comprehensive range of services throughout the vehicle's lifecycle aims to capture a larger share of the automotive value chain beyond just manufacturing.

Vision for the future: NIO's founder, chairman, and CEO, Li Bin, envisions NIO as a 3.0 automotive enterprise that leverages the power of the internet to redefine the relationship between users and the company. He believes that the key to success lies in understanding the changing needs of users in the era of mobile internet and providing them with a seamless and enjoyable experience throughout their journey with NIO.

6 Problems and Challenges

6.1 A heavy Dependence on Policy

In 2018, NIO's ES8 model surpassed Tesla's Model X in sales in China, which contributed to NIO's successful listing. However, the 2018 international trade instability led to both China and the US imposing tariffs on automobiles. This resulted in the Model X being priced at nearly a million RMB, while NIO, known as the "Chinese Tesla," employed a high-performance strategy to achieve a performance level similar to Tesla's at half the price.

On the other hand, NIO chose to establish its headquarters in Shanghai, one of the cities in China with the most limited license plate resources. Acquiring a license plate in Shanghai makes it easier for a car to hit the road and also qualifies the car for various policies such as subsidies and tax benefits, providing NIO with policy convenience.

However, these strategies can be influenced by the international environment. In March 2019, Tesla began construction of its Shanghai Gigafactory in the Pudong New Area. In the coming years, Tesla will continue to increase its local production in China, leading to significantly reduced costs, increased production efficiency, and lower import taxes, resulting in lower prices in the Chinese market. The continuously decreasing price of Tesla cars, which are approaching the performance of NIO's similar models, has made NIO's high-tech positioning somewhat less competitive.

6.2 Drawbacks in Producing and Manufacturing Mode

Since its establishment, NIO has been willing to learn from Tesla's mature model. While most new car companies prefer to build their own factories,

NIO has chosen to cooperate with existing car manufacturers to build its factories. NIO's partnership with JAC Motors aims to address the production capacity issues of the ES8 through a "contract manufacturing" model.

In April 2017, JAC Motors and NIO signed a strategic cooperation framework agreement, which includes cooperation in the production of new energy vehicles and the construction of the intelligent connected vehicle industry chain. This collaboration brought together a well-established independent automotive brand with a 50-year history and an internet carmaker that had been in existence for just over two years. While some industry insiders and outsiders view the cooperation between JAC and NIO as an "OEM" model, NIO's co-founder and CEO, Li Bin, does not see it this way, stating that there is no such thing as "OEM" in the automotive industry.

However, while this collaborative production model has solved many of NIO's supply and production capacity problems in the short term, in the long run, it has left JAC with advanced production experience in aluminum body production technology. This means that NIO, as a company focused on independent design and technological innovation, is unable to gain core advanced production experience.

6.3 Challenges Facing Mobile Community and Its Information Transmission

In contrast to traditional word-of-mouth marketing, which relies mainly on face-to-face communication among consumers, forming a chain of recommendations, today, in the era of highly developed internet information technology, online reputation holds more significance. First, there is interactivity. Traditional word-of-mouth is a one-way transmission of information from the sender about the manufacturer's product. The spread of word-of-mouth relies on the mediation of channels to reach the recipients, who only receive the information without providing feedback. Second, there is anonymity. Unlike physical stores, the Internet is a virtual platform where both genuine and false information can be disseminated. Some businesses resort to unethical practices to boost their products' reputation and visibility. Moreover, consumers' subjective evaluations can also be misleading. Third, there is higher efficiency in dissemination. Unlike traditional word-of-mouth, which is limited by time and space, online word-of-mouth spreads rapidly through various internet channels, reaching a wider audience quickly.

Although NIO's mobile strategy has attracted over 200,000 daily active users to its app, proving the effectiveness of a single online marketing channel in concentrating consumers, industry users, car enthusiasts, and technology researchers, it has abandoned the open traffic policies seen in the Xiaomi model, such as leveraging platforms like WeChat, Weibo, and Taobao. While this approach reduces traffic costs, it also requires users of these platforms to download the NIO app, leading some users to forgo further engagement with NIO.

From another perspective, the mobile application strategy integrates multiple functions such as branding, ordering, experience, community, and media. For example, to use NIO's mobile charging service, users must download the NIO app to place orders with the service provider, resulting in a longer matching process between users and service providers. This integration also raises the technical barriers for service providers partnering with NIO.

While the singular service portal approach may not maximize the utilization of shared resources and collaboration in society, it does ensure a more centralized system for NIO.

6.4 High Cost

In NIO's public prospectus and performance reports, a significant portion of the costs comes from market channel construction and network expansion.

Firstly, the high costs of NIO Centers are notable. NIO chooses to establish flagship NIO Centers in prominent urban locations, with individual costs exceeding 100 million RMB. There are a total of 11 such NIO Centers nationwide, with a combined investment of no less than 1 billion RMB. The actual value of orders generated by visits to NIO Centers does not necessarily correspond to the cost of providing the NIO Center experience.

Secondly, NIO's charging network exhibits low efficiency. As NIO's battery swap stations and mobile charging vehicles are continually deployed in the market, take NIO's mobile charging vehicles as an example: they charge third-party vehicles 380 RMB per session, even though they can fully charge a vehicle within 3 hours, whereas other charging stations charge less than 150 RMB for a full charge. This pricing disadvantage positions NIO's mobile charging service for use in emergency situations rather than as a routine choice. Consequently, the limited application of the charging scenario and the inability of the swap stations to meet the needs of third-party vehicles present further challenges to

NIO's business model due to the disadvantages in its charging network construction phase.

7 Risk Responses

Regarding the deficiencies and challenges faced by NIO's business model, which impact its development and the delivery of the brand value of "exceeding expectations in car ownership experience," this is also a crucial step in determining whether NIO can better meet consumer expectations and address the challenges faced by the entire automotive industry and even the industrialization of the internet.

We aim to address NIO's supply chain and establish a wide range of user experience layers by combining the "New 4C Rule," attempting to identify the challenges and deficiencies faced by NIO.

7.1 Scene

The scene is not simply equivalent to the sales channel we see; it is actually a small world constructed from multiple dimensions such as people, places, time, needs, and emotions. For NIO, it is committed to creating a pleasant lifestyle for users, where social environments overlap with car usage in daily activities. Whether it's NIO House or activities on the mobile app, they represent a comfortable and vibrant living environment.

7.2 Content

Businesses should provide value to users, and what keeps consumers' attention is not advertising but valuable content. In terms of content, NIO's most prominent features are relevance, timeliness, and strong appeal. NIO aims to build its brand image, from participating in top international car races to launching top-tier configuration new energy vehicles, making NIO synonymous with high-end new energy vehicles in consumers' minds. In daily promotions, NIO updates content promptly based on vehicle research and test drive experiences, greatly attracting customer groups.

7.3 Community

Web 2.0 and the current era are the age of communities, at the core of which is bringing offline relationships and socialization into internet products and marketing. Users who purchase NIO cars have the right to enjoy NIO House, which, with its rich functions and various activities, connects people and builds highly interactive user communities. At the same time, NIO continuously strengthens its online

presence, with the NIO app attracting more potential customers. The combination of offline scene construction and the user community formed by the online app enables NIO's "community" to spread rapidly and effectively.

7.4 Connection

NIO emphasizes a mobile internet mindset and ecological construction around user experience. By conducting a series of online and offline activities around scenes, NIO brings users closer to the product end, creating a closed-loop ecosystem, increasing user stickiness, and generating a fan effect, achieving effective word-of-mouth marketing. Travel is the biggest requirement for users regarding cars. NIO has only built an NIO Center offline system, and an NIO app experience cannot fully meet the user or consumer's need to understand NIO maximally. Breaking the travel scene is an inevitable choice for NIO.

7.5 Follow the Case of Telsa

In Tesla's popularization process in China, the president of the No.1 Store, as one of the first owners, promoted Tesla through marketing activities at the No.1 Store, where lucky customers could experience Tesla's package delivery and even ride in a Tesla. This activity allowed Tesla to penetrate a portion of No.1 Store's users. Similarly, Honor, a sub-brand of Huawei, included experiencing Tesla in multiple events in Hangzhou. Shenma Special Car, in its market entry marketing activities, used several new Tesla vehicles as a selling point. NIO's service model lacks this kind of scene that goes beyond offline and online concepts.

NIO can encourage its car owners to use their NIO cars to participate in practical marketing activities and daily carpooling, allowing cars to be maximally involved in social life. By breaking the car scene, NIO can significantly supplement and help improve its marketing strategies, reducing its costs. NIO conveys more about its brand and technology construction through its own brand and technology construction, a communication strategy that depends on consumers' interest in NIO.

NIO is a consumer brand. Compared to the consumer platform Taobao, which has chosen to create a "versatile Taobao," Taobao not only offers daily consumer goods but also services like wake-up calls, selling air, and even dream services. These marketing strategies can provide greater expansiveness for NIO.

NIO can try to satisfy more people and, under the condition of carrying the stipulated number of people, carry more books, and more pets, and

provide more convenient services. This meets users' demand for cars in daily life.

Community is a critical definition for NIO, but NIO still has a lot of room for improvement in understanding and positioning communities and connections. NIO's understanding and positioning of communities are based on users, but in practice, consumers need more understanding and participation. Tesla's understanding of communities is through providing Tesla and an open Tesla configuration to consumers, allowing more home chargers to become charging or social tools. Some of NIO's home chargers are already providing this value, but NIO can further involve more car owners in car owner services. Most of the moderators of Yiche.com in the past came from users, and NIO's life services can also be opened to more car owners and participants, allowing car owners to serve car owners. This can not only improve user satisfaction but also help NIO solve the differences and deficiencies in human resources. On one hand, NIO's connection is intensifying the strong connection between users and NIO. The more users connect with NIO, the easier NIO's closed-loop ecosystem is accepted by car service providers.

8 Conclusion

8.1 Conclusion

This study has explored NIO's innovation model, emphasizing how it deviates from traditional automotive practices by integrating internet technology and user-centered experiences. By leveraging marketing models such as AISAS and applying the new 4C rule, NIO has established a unique position in the NEV market. Despite the promising advancements, challenges like policy dependency, high costs, and reliance on partnerships remain significant.

8.2 Future Direction

Future research should delve into the long-term impact of NIO's strategies, particularly as competition intensifies with global brands. Additionally, exploring sustainable solutions to reduce costs and enhance production capabilities could provide insights for broader industry applications.

Declaration of Generative AI and AI-assisted Technologies in the Writing Process

During the preparation of this work the author used Grammarly for language editing. After using this service, the author reviewed and edited the content as needed and take full responsibility for the content of the publication.

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Contribution of Individual Authors to the Creation of a Scientific Article (Ghostwriting Policy)

The author contributed in the present research, at all stages from the formulation of the problem to the final findings and solution.

Conflict of Interest

The author has no conflicts of interest to declare.