Research on the New Power of Car Making Ideal Car

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Abstract: In response to the escalating depletion of fossil fuel reserves and the detrimental environmental impacts of conventional internal combustion engine vehicles, the global automotive industry is undergoing a transformative shift towards clean, sustainable, and energy-efficient new energy vehicles (NEVs). This article scrutinizes the remarkable ascent of Ideal Cars, a prominent player in the burgeoning Chinese NEV market. In light of these developments, this scholarly examination explores the multifaceted determinants underpinning Ideal Cars' remarkable trajectory, encompassing its foundational evolution, distinctive technological orientation, nuanced user-centric approach, financial performance, scene-based marketing strategies, and innovative organizational structure. This comprehensive analysis underscores the imperative nature of consumer-oriented product design, the psychological aspects of consumer satisfaction, and the paramount influence of market dynamics in shaping the success of high-end automotive ventures. Ideal Cars' unprecedented journey serves as an instructive case study for the prospective evolution of the NEV industry in China and globally.

Keywords: new energy automobile, market positioning, scene marketing

1. Introduction

Due to the increasing shortage of oil reserves and the harmful emissions of fuel vehicles becoming the main source of urban air pollution, the development of clean, efficient and sustainable new energy vehicle technology, the development of clean alternative fuels for automobiles and the realization of industrialization have become the biggest focus of the development of new energy vehicles in the world by virtue of its excellent technology and the improvement of mechanization. The development of new energy vehicles in China is particularly rapid. According to the data released by the Ministry of Industry and Information Technology on September 12, in August, the production and sales of new energy vehicles in China completed 843,000 and 846,000 respectively, with year-on-year growth of 22 % and 27 % respectively [2]. In the first eight months of this year, China 's automobile exports were 442.7 billion yuan, an increase of 104.4 %. This is another good result after China 's automobile exports (3]. This is inseparable from the rapid development of China 's new energy vehicle brands. Therefore, it is very important to study the development and innovation of China 's new energy vehicle brands.

known as the new forces of automobile manufacturing, rising rapidly, and occupying an important position in the market. However, recently, 'Wei Lai, ideal and Xiaopeng', which was once ' integrated ', began to show obvious sales differentiation in April this year. In April 's new energy sales list, Ideal ranked 6th, while Xiao Peng and Wei Lai failed to enter the top ten [4]. Nowadays, the sales volume and market popularity of ideal cars are unique. Therefore, this paper studies the reasons for the rapid rise of ideal automobiles to help the further development of China 's new energy automobile industry. The article will be divided into three parts, the first part is the case analysis of the development, and the third part will make a summary.

2. Case Analysis of the Development of Ideal Automobile Brand

2.1. The Establishment and Development of Ideal Automobile

The origin of the Ideal Intelligent Car and Home can be traced back to its founder, Li Xiang. Drawing inspiration from the evolution of the mobile phone market, the company believed that future automobile users would prioritize product utility over price considerations. Consequently, it advocated a practice where just two types of vehicles could fulfill over 90% of urban consumer needs. These two categories comprised a lightweight electric vehicle (SEV) for short-distance urban travel and an SUV tailored for long-distance family use [4]. The concept underpinning Ideal Intelligent Car and Home was always centered on catering to family-oriented usage, a characteristic that would significantly contribute to its subsequent popularity. Before the pivotal year of 2018, the company underwent a process of brand establishment and fundraising. However, the trajectory changed significantly in early 2018 when the SEV project was suspended due to policy-related reasons in China, about a year and a half after its initial proposal. Following the announcement of the SEV project's abandonment, Ideal Intelligent Car and Home wholeheartedly shifted its focus towards promoting the SUV project. In October 2018, the company launched Ideal Intelligent Manufacturing, its intelligent electric vehicle brand, and unveiled its inaugural product, the Ideal Intelligent Manufacturing ONE. In March 2019, the company rebranded itself as Ideal. A month later, pre-orders for the Ideal ONE officially commenced, with deliveries commencing in December. Leveraging unique extended-range technology, advanced intelligent features, and precise market positioning, Ideal quickly gained traction, achieving record-breaking sales figures for its large SUV in the debut year. By the fourth quarter of 2021 (Q4 2021), Ideal's revenue exceeded 10 billion yuan, far surpassing other emerging electric vehicle manufacturers in terms of profitability. Subsequent product launches, such as the Ideal L9, L8, and L7, coupled with technological advancements and explosive word-of-mouth growth, led to further surges in sales. In August 2023, monthly sales of Ideal cars reached 33,900, consistently surpassing 30,000 units per month [5]. The company secured the title of the top-selling SUV brand with over 300,000 units sold for five consecutive months in the Chinese market, significantly outperforming its competitors. Figure 1 illustrates the comprehensive developmental trajectory and financing milestones of Ideal Cars. Through its distinctive Zengcheng technology and exceptional user experience, Ideal Cars successfully captured the favor of consumers and secured multiple rounds of financing. In the subsequent sections, we will delve into an analysis of Ideal's technical advantages and user experience.

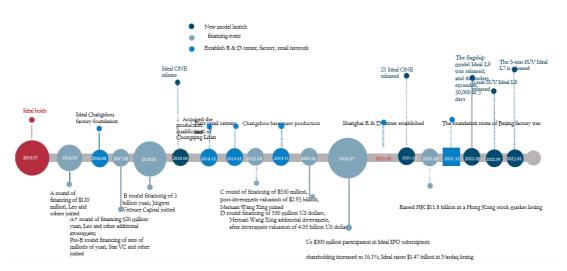


Figure 1: The developmental of Ideal Cars.

2.2. Technological Superiority

In terms of technology, the technology of the ideal car is not very advanced. However, due to its unique technical route, it has great advantages in China 's market. Compared with other new energy vehicles, the ideal vehicle adopts a unique extended-range hybrid mode. Compared with conventional pure electric vehicles, plug-in hybrid vehicles, and fuel cell vehicles, the biggest difference of the extended-range vehicle is that it has a fuel engine, but the engine does not directly participate in driving the vehicle, but drives the engine to charge the power battery, and then the power battery drives the motor. In addition, in addition to generating electricity through the engine, the range extender can also be externally charged [6]. In simple terms, the extended-range electric vehicle is a series plug-in hybrid, with an engine, but driven by pure electric vehicles. The biggest advantage it brings is that optional range is better, and the driving experience is no less than pure level station. It is also the best technical route to eliminate the impact of subsidy decline. It can be described as a tool to alleviate the mileage anxiety of potential users and meet the needs of building a strong automobile country.

2.3. User Experience

One of the primary factors contributing to the impressive sales performance of Ideal automobiles is their keen understanding and thorough exploration of customer needs. The technical choices made by Ideal Cars align effectively with the needs of users. Their distinctive extended-range hybrid technology provides users with the advantages of new energy vehicles while circumventing the limitations associated with nascent tram technologies, particularly the issue of range anxiety. This meticulous exploration of customer demands, and precise product positioning have established Ideal automobile products as the most sought-after offerings in the market.

In the realm of user requirements, two categories of latent needs emerge: the first category consists of users who possess vague requirements but struggle to articulate them, while the second category encompasses those users who are entirely unaware of their own needs. Building upon the understanding of the first category of demands, the company boldly defines the second category of needs. This approach not only instills a sense of respect for passengers

outside the driver's seat but also imbues the company's products with a distinctive sense of "home," a defining characteristic that pervades the entire product line [7].

Concerning market positioning, Ideal Cars has chosen a bold stance by targeting a market segment with prices exceeding 200,000 yuan. This strategic decision is underpinned by several considerations. Firstly, achieving cost control in the realm of intelligent and electric vehicles below the 200,000-yuan threshold poses significant challenges. Additionally, generating reasonable profits within this price range necessitates substantial economies of scale, which the company, unlike traditional automotive giants, does not possess.

Moreover, China's automotive market has undergone a transformation, with a growing shift from new car purchases to both new car acquisitions and replacements. This trend, evidenced by the 60% purchase rate in 2020 and an anticipated rise to 80% by 2026, has stimulated demand for higher-priced vehicles. Furthermore, targeting home users represents an incrementally expanding market. Data illustrates that household users constitute the largest user segment in China's 200,000-plus automobile market, with household cars representing an essential component of the country's automotive consumption. Significantly, women wield considerable decision-making authority in family vehicle purchases, comprising 72.22% of decision-makers in 2021. By accurately identifying the needs of women within the family carbuying context, the company has tapped into incremental market potential.

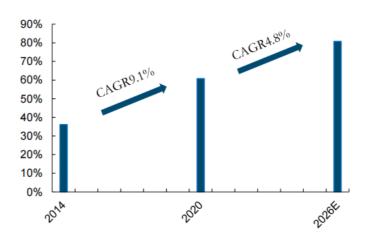


Figure 2: 2014-2026 China passenger car acquisition, increase and replacement of the proportion trend.

2.4. Financial Analysis

2.4.1. Revenue Situation

On the overall revenue situation, due to the improvement of consumers ' acceptance of extended-range SUVs for home positioning, the company 's single-quarter revenue increased from 3.46 billion yuan of 21Q1 to 18.79 billion yuan of 23Q1, achieving a high-speed growth of revenue doubling. In addition, compared with comparable companies, the absolute value and growth rate of the company's revenue are at the top of the new domestic forces, except that there is still a significant gap between the absolute value of revenue and Tesla.

2.4.2. Profitability

In terms of profitability, the company has consistently maintained a gross profit margin of approximately 20% over an extended period. However, during the third quarter of 2022 (22Q3), the company experienced a notable decline in its overall gross profit, which decreased by 12.7%. This decline was primarily attributable to factors such as inventory provisions and procurement commitments resulting from supply chain disruptions caused by L8's impact on Ideal ONE orders. Nonetheless, there was a significant rebound in the gross profit margin during the first quarter of 2023 (23Q1), reaching a level of 20.4% [8].

2.4.3. Cost Control

The data analysis reveals that the Ideal Company exhibits exemplary cost control practices, second only to Tesla. Excluding accrued procurement losses in 22Q3, the company has consistently maintained a cost rate within the range of 20% to 30% over an extended period. Notably, the cost rate for 22Q4 plummeted to 21.0%, a marked contrast to Xiaopeng's 33.2% and Weilai's 46.7%. In 23Q1, the company's cost rate further decreased to 18.6%, establishing a substantial lead over emerging domestic competitors. Moreover, the Ideal Company's approach to cost control transcends mere thriftiness; it is driven by a strategic allocation of resources where they matter most. Unlike a fixation on extensive marketing endeavors, Ideal's approach is characterized by a judicious allocation of financial resources. In 2022, Ideal Cars' annual marketing expenditure amounted to 5.665 billion yuan, representing 12.5% of its total revenue. In stark contrast, Weilai's marketing expenses reached a staggering 10.537-billionyuan, accounting for 21.4% of its revenue, while Xiaopeng's marketing costs totaled 6.688billion-yuan, equivalent to 24.9% of its revenue. However, Ideal does not compromise on research and development (R&D) investments, which surged to 6.78 billion yuan in 2022, doubling year-on-year. Notably, it is the only one among the three companies where R&D expenses surpass marketing expenditures. This strategic orientation underscores the company's commitment to technological advancement and innovation. In terms of sales performance, recent trends underscore the diminishing efficacy of extravagant marketing and excessive charging practices in the era of intelligent electric vehicles. It is the rigorous and prudent management of costs that has propelled Ideal to a position of leadership, enabling it to transition from losses to profits while consolidating its dominance in the burgeoning domestic new energy vehicle market.

2.5. Scene Marketing

The strategy employed by Ideal Cars primarily revolves around the effective communication of the on-ground experience and scene propagation to drive user expansion. This approach prioritizes usage scenarios over intricate technical parameters. Throughout their communication efforts, the company consistently emphasizes the notion of "no mileage anxiety," highlighting scenarios involving long-distance travel and family outings. Instead of dwelling on complex technical principles and product specifications, which can be challenging for the average consumer to grasp, Ideal Cars engages in scene-based communication that resonates with a broader audience on pan-social media platforms. For many ordinary consumers, while they may not possess an in-depth understanding of intricate technical details and specifications, they readily remember and are impressed by the compelling selling point of "no mileage anxiety. "Ideal Cars adeptly ventures into pan-social media communication, effectively distancing itself from traditional automotive media channels. The company leverages digital influencers and bloggers extensively in its promotional and dissemination efforts, presenting its products through the lens of digital Key Opinion Leaders (KOLs). These digital influencers align their personal use scenarios with the portrayal of the car's standout features, such as expansive screens, comfortable seating, and spacious interiors. Coupled with the slogan "create a mobile home," this strategy fosters a perception among consumers that the product is not merely an automobile but an integral component of a smart home. This strategic maneuver, aimed at diminishing the conventional perception of automotive products, largely encourages consumers to forego parameter-based comparisons with traditional automakers, instead defaulting to the company's emphasis on intelligent user experiences. Ultimately, the expansion of the user base is achieved through a combination of scene-aware design and effective propagation [9]. Several factors underpin this approach. Firstly, traditional automakers conventionally view passenger cars as industrial products and design them primarily as vehicles. However, as automotive performance approaches its zenith, consumer attention naturally shifts from performance to comfort. In response, Ideal Cars redefines the car as a consumer electronics product, positioning it as an integral part of the smart home ecosystem. This shift extends beyond technology to encompass scene-based considerations, catering not only to the driver's experience but also extending respect and comfort to passengers beyond the driver's seat. Secondly, scene-based communication offers a more direct and concise means of engaging and leaving an impression on consumers. This approach is particularly effective in captivating female consumers who play a significant role in decision-making within the family car-buying context. In essence, Ideal Cars' strategic shift moves its products from the confines of the traditional automotive market to the realm of consumer electronics. This not only leaves a lasting impression on consumers through thoughtful design but also introduces distinct selling points in language that resonates with the average consumer's understanding, effectively redefining the narrative surrounding their products.

2.6. Advanced Organizational Structure

The sustained progress of the Ideal Company is intimately intertwined with its ongoing commitment to optimizing its organizational structure. The Ideal Automobile matrix organization, which underpins its strategy execution, has undergone a significant evolution. The company's matrix organization has been thoughtfully structured using a quadrant diagram, delineating different organizational forms tailored to specific business domains. Industrial organizations are responsible for managing the supply chain and manufacturing processes, while enabling organizations encompass Internet and service functions. System organizations focus on vehicle and software platform research and development, while co-creation organizations center around autonomous driving and ecological initiatives. Building upon this foundation, the company has been extending its reach into both system and co-creation organizations, thereby diversifying its strategic capabilities. A pivotal aspect of this transformation has been the adoption of the OKR (Objective and Key Results) framework. This strategic shift marked a move away from traditional industrial processes characterized by limited cross-departmental collaboration. The company recognized the need to align its organizational structure with its business objectives to improve agility and responsiveness. Under the OKR framework, the company introduced "flying books" as a management tool, fostering transparency and accountability in work progress. Key principles included online engineering to ensure transparency, a "hand project" approach for cross-functional decisionmaking, and continuous iteration with weekly reviews. Further evolution occurred with the implementation of IPD (Integrated Product Development) in 2021. This transformation aimed to establish a more system-centric organizational structure. An "IPD Operations" department

was formed within the Strategic Department, with the Product Department playing a central role in IPD. Each vehicle's development was entrusted to a Product Development Team (PDT) responsible for the entire product lifecycle, from concept definition to sales. These PDTs were collectively referred to as the Strategic Product Development Team (SPDT), overseeing intelligent driving, intelligent space, and vehicle projects. The transformation into a matrix organization further accelerated the realization of IPD's goals [10]. Beginning in December 2022, the company transitioned from a "vertical functional organization" to a "matrix organization." This shift represented a transition from localized focus to simultaneous multipoint coordination. With an expanded product portfolio designed to meet diverse market needs and capture a larger market share, the revised organizational structure, characterized by fluid information flows and enhanced collaboration, became a critical stabilizing force in the fiercely competitive market environment. In essence, the evolution of the Ideal Company's organizational structure, combined with the strategic adoption of frameworks like OKR and IPD, has played a pivotal role in facilitating its ongoing success and market dominance.

3. Conclusion

In the realm of high-end automotive manufacturing, a comprehensive analysis of the factors contributing to the success of the ideal car reveals the critical significance of concurrently observing and scrutinizing market dynamics alongside the refinement of automobile technology. While technological innovation undoubtedly confers convenience upon consumers, it is imperative to recognize that product design, tailored to align with user preferences, also plays an instrumental role in enhancing convenience. A pertinent illustration of this principle can be discerned when examining the competition among luxury automobile brands, namely BMW, Mercedes-Benz, and Audi, within the Chinese market. The ascendancy of Mercedes-Benz in this context can be attributed to its astute grasp of Chinese consumer preferences. Mercedes-Benz took a pioneering step by lengthening the vehicle chassis and augmenting interior opulence, aligning their products more closely with the preferences of Chinese consumers.

Similarly, the adoption of extended-range technology, while not representing a technological breakthrough in the strictest sense, effectively addresses the pervasive issue of range anxiety that often plagues users of new energy vehicles. Beyond the realm of environmental considerations, this technology, by mitigating range anxiety, delves deeply into consumer psychology. Moreover, it strategically introduced SUV models, a favored category among Chinese consumers, characterized by spacious interiors and adorned with luxurious configurations. Positioned at a competitive price point, this product offering swiftly garnered the admiration and preference of the Chinese consumer base upon its market debut.

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