



Li Auto New Energy Vehicle Competitive Strategy Research

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Abstract

In recent years, with the implementation and promotion of the "double-carbon" policy, the new energy vehicle industry has developed rapidly, and the market share is constantly improving. The development of the new energy vehicle industry has been driven by the policy to the market and stepped into the fast lane of the industry. However, the huge number of potential industry competitors, the decline of subsidies, and the relatively backward development of high-precision fields such as automotive chips. Therefore, the new energy vehicle industry is facing huge opportunities and challenges. Li Auto is technology-oriented, persists in independent innovation, and has achieved technological achievements in many core areas. By analyzing the external development environment of Li Auto, including the macro environment, industry environment, and competitors. This paper elaborates on the position of Li Auto Company in the industry using the framework of the five-force model. Then, the TWOS matrix is applied to analyze the potential opportunities and threats faced by the Li Auto new energy vehicles, and combine their own advantages and disadvantages to formulate the company's competitive development strategy.

Keywords

"Double-carbon", New Energy Vehicles, Five-force Model, TOWS Matrix, Development Strategy

In 2021, the NPC and CPPCC will be "carbon peak, carbon neutral" written into the government work report for the first time, mentioning that the future will continue to "optimize the industrial structure and energy structure, and vigorously develop new energy". Among them, the new energy vehicle industry has excellent characteristics such as wide application and strong operability, and has good market feedback, and will become a hot emerging sunrise industry in 2021 (Yang Yanfeng & Ge Xinqi, 2022). In 2022, the party's 20th report clearly proposed that actively yet prudently promote carbon peak and carbon neutrality. Therefore, actively promoting the development of the new energy vehicle industry can not only effectively reduce China's overall carbon emissions, and promote energy conservation and environmental protection, but also be an important measure to promote China's sustainable development strategy of a green economy, foreseeable for a long time. The new energy vehicle industry will develop rapidly and continue to operate steadily on the fast track, but the new energy automobile enterprises in the face of the "double carbon" policy of opportunities, also faces many challenges, so the new energy automobile enterprise development strategy change and thinking is particularly important.

1. Development status of new energy vehicles in China

New energy vehicles refer to the use of unconventional vehicle fuel as a power source (or the use of conventional

vehicle fuel, the use of advanced technology, advanced technology, with new technology, new structure of vehicles (Ma Jian, et al., 2018). New energy vehicles include pure new energy vehicles, extended-range new energy vehicles, hybrid electric vehicles, fuel cell new energy vehicles, etc.

Since around 2010, the industrialization of new energy vehicles has entered the preliminary development period, national subsidies for the industry to guide the new energy automobile industry on the basis of the market building and the underlying layout, for the subsequent new energy vehicles can break through the market laid a solid technical foundation (Lin Boqiang, 2018). Since 2016, China's new energy automobile market gradually improved, after the import period, growth period, and a series of stages, gradually into a real sense of rapid development, in 2021 due to the "double carbon" target further refinement, the overall production of new energy vehicles and sales of explosive growth, production reached 3.545 million vehicles, sales reached 3.521 million, to some extent close to the supply, grew 1.6 times from 2020. In terms of the most critical auto market share, it reached an astonishing 13.4%, which increased by nearly 2.6 times compared with the 5.1% market share in 2020, which shows the strong effect brought by the "double-carbon" policy (Yuan Bo, 2022). As the world's largest new energy vehicle market, in 2023, the production and sales of new energy completed 9.587 million and 9.495 million units respectively, with year-on-year growth of 35.8% and 37.9% respectively, and the market share reached 31.6%.

As a new force of new energy vehicles, Li Auto was founded in 2015 and is committed to creating safer, more convenient, and more comfortable intelligent new energy vehicles for families. Li Auto is technology-oriented, persists in independent innovation, and has achieved technological achievements in many core areas. Li Auto also persists in a self-sufficient production model and actively builds intelligent manufacturing bases and supply chain systems to ensure the supply of key components (Liu Yi, 2022). Li Auto Company launched its first product, Li Auto ONE, in 2018. The new energy vehicle can be driven over long distances with a range extension design and no range anxiety. The interior of the car adopts a six-seat layout and a high utilization rate of space and is equipped with advanced intelligent assisted driving, providing an excellent ride experience for home users. From 2022 to 23 years, the Li Auto car has released a new generation models family six flagship SUV Li Auto L9, family six luxury SUV Li Auto L8, family five flagship SUV Li Auto L7, have achieved very good sales, and will be launched in 2024 first MPV model Li Auto MEGA, greatly enriched the product line, covering multiple market segments, meet the needs of different families.

2. Five-force model analysis of the new energy vehicle industry

2.1 Analysis of the existing competitors

Although the development prospects of the new energy vehicle industry are broad, there are still many competitors. From the perspective of participation methods, they can be divided into the following three types: one type is independent automobile enterprises that have transformed from traditional gasoline car manufacturers, such as SAIC, GAC, and BYD. They research and produce new energy vehicles based on the traditional gasoline car manufacturing technology; The second category is foreign (joint) automobile enterprises, such as Tesla, BMW, Volkswagen, and Toyota; The third category is new forces in the automotive industry, such as Ideal, NIO, Xiaopeng, Nezha, and other emerging companies that have entered the field of new energy vehicles in recent years. Due to the different technological advantages and business plans of different enterprises in car manufacturing, there are also significant differences in the development direction of new energy vehicles. Toyota, based on its own characteristics, focuses on the research and promotion of hybrid vehicles in operation and has obtained various technical patents in the field of hydrogen-powered vehicles. BYD is focusing on developing cars powered by lithium iron phosphate batteries and has eliminated the original oil-based vehicle production business. Today, Tesla, which enjoys popular in the world, focuses on high-end pure new energy vehicles. Li Auto mainly produces high-end range-extended new energy vehicles.

2.2 Bargaining power of the buyer

The current user group of Ideal Automobile is mainly individual consumers, most car owners who already own the top three brand cars purchase their ideal cars as additional purchases, while those in the bottom three are mostly replacement purchases. In the other customer groups, most are high-end brand owners, and there are also many top brand owners such as Ferrari who purchase Ideal cars. More than 90% of these customers have the conditions for installing charging stations and have strong purchasing power. With the decline of national subsidies for new energy

vehicles, and the entry of various new forces into the market, consumers have more choices. Therefore, although the overall bargaining power of consumers is weak at present, it will continue to strengthen in the future.

2.3 Bargaining power of the suppliers

New energy vehicle suppliers include raw material suppliers, component suppliers, vehicle manufacturers, distributors, and after-sales service providers. Due to the fact that all components except for new energy batteries can be provided by traditional fuel vehicle suppliers, traditional fuel vehicle production lines are already very mature, with a large number and volume of suppliers, high substitutability, and weak bargaining power. However, battery manufacturing technology and its related core technologies will deeply change the automotive supply chain. In addition, there are also a few options for core components and substitutes. In addition, the development time of new energy vehicle battery technology is relatively short. Therefore, such suppliers have strong bargaining power.

2.4 Potential entry into the threat

Potential entrants may be newly established companies within the same industry, such as new car manufacturing forces, or other industry enterprises that adopt diversified business strategies, such as Huawei, Xiaomi, and others. Potential entrants will bring new productivity and competitiveness to the new energy vehicle industry, and divide up the original market share. Although the cake in the new energy vehicle market is getting bigger and bigger, the shutdown of Gaohe Automobile, a new force in the automotive industry, also indicates that there are still certain competitive risks as the number of entrants increases. Potential entrants not only need to consider their technology and investment capital, but also need to rely on traditional car companies to obtain R&D and production qualifications issued by government agencies. Although the entry threshold is high and the state subsidies continue to decline, but due to the growing market share of new energy vehicles, there will still be new enterprises to join, mainly including the transformation of new entrants and traditional car companies.

2.5 Substitute threats

In the context of mature traditional automobile manufacturing, based on environmental requirements, new energy vehicles are a new product that replaces traditional fuel vehicles. However, with the slowing pace of electrification in Europe and America, coupled with the high manufacturing and battery maintenance costs of new energy vehicles, fuel vehicles will still occupy a large market share, squeezing the new energy vehicle market. Meanwhile, the continuous development of fuel cell vehicles will also put pressure on existing new energy vehicles. In addition, the diversified development of transportation is also a substitute threat for new energy vehicles. At the same time, in terms of trial costs, new energy vehicles have natural advantages, especially in China, where the cost of electricity is much lower than that of fuel vehicles. For fuel cell vehicles, although Japanese car companies already have a relatively mature set of technologies, they have not yet mass-produced them in the field of household cars. So based on the current situation analysis, the threat of replacing traditional cars will gradually weaken, while fuel cell vehicles currently do not have the threat of replacement.

3. Internal environment analysis of Li Auto's new energy vehicles

3.1 Advantage analysis of Li Auto's new energy vehicles

Li Auto has established its own production base, production equipment and raw materials. In addition, in December 2018, the Li Auto car company with 650 million capital acquisition lifan cars, won the automobile production qualification, it has sufficient capital investment, in intelligent auxiliary driving, intelligent chassis, intelligent space, charging and discharging technology research, and development, has a very strong strength.

Li Auto Company adheres to three corporate values. One is to always prioritize customer interests. The second is to do the right thing instead of the easy one. The third is to solve problems in a transparent and collaborative manner. Li Xiang, the founder of Ideal Auto, has rich experience in Internet operation and supply chain management. Li Xiang, as the CEO, has successively founded Bubble Net and Autohome, and has rich experience in operating IT vertical evaluation websites and automotive vertical websites.

3.2 Problems existing in the development of Li Auto's new energy vehicles

The Li Auto car mainly relies on outsourcing, and the core parts need to be purchased. Although the cost of extended-range new energy vehicles is generally not high, it is difficult to continue to reduce the cost under the current circumstances. At the same time, the technology in automobile manufacturing is not mature enough, and many chassis parts fragmentation, air suspension fractures, and other quality problems. At the same time, in high-speed driving, the vehicle driving texture is poor, the body shake, noise, and high energy consumption problems seriously affect the original comfortable, family orientation car positioning.

In addition, in terms of product production, only one model Li Auto ONE was launched from 2018 to 2021. Although three new cars including L9, L8 and L7 have been successively launched from 2022 to 2023, the overall model tends to be medium and large SUVs, with high model similarity, and there is little room for choice for each model configuration. Due to the characteristics of the program itself, from the technical level is still a transition product, how to develop pure electric new energy vehicles in the future, and build a new car production platform, there is still a long way to go.

4. Li Auto's new energy vehicle competitive strategy formulation

4.1 The TOWS matrix analysis

4.1.1 Advantage analysis

First of all, Li Auto company has its own manufacturing base, and its own resources enable it to achieve mass production and produce economies of scale. At the same time, the company's own funds are abundant, and the capital reserves also have a certain advantage.

Second, due to the positioning of Li Auto Company, no range anxiety, reduces the positive competition with pure new energy vehicles, and at the same time, the cost of making cars is lower than that of pure new energy vehicles, so the company's current price has a cost-effective advantage.

Third, the company has invested a lot of funds in research and development and focused on intelligent technology, and achieved self-research results in key technology fields such as intelligent driving and intelligent space. The company updates its smart vehicle solutions by continuously improving computing power and bandwidth.

Fourth, the company has a management team with rich experience and qualifications in the automobile industry. It adopts the direct marketing mode, online and offline dual channel sales, and continuously deepens customer service. Through the basic service + value-added services, it not only meets the basic needs of customers but also meets the personalized needs of users. In the third-party platforms such as TikTok, and Weibo, are also active and won several fans.

4.1.2 Disadvantage analysis

First of all, the technology is not perfect, and the core battery technology is lacking. At the same time, the technology in automobile manufacturing is not mature enough, including repeated chassis parts fragmentation, air suspension fracture, and other problems.

Second, as an extended-range car, Li Auto has advantages in short-distance driving in the urban area. It can drive on pure electricity, but in order to maintain operation at high speed, the energy consumption is greatly increased at this time. Therefore, an improvement direction of Li Auto Company is to optimize the energy use of high-speed driving.

Third, Li Auto Company initially caused internal resource competition for multiple products, so it concentrated resources to build a product. However, it is also easy to cause the risk of product simplification. Since there is only one model on sale, it largely depends on the sales and success of Li Auto ONE. Although three new cars, including L9, L8, and L7, were successively launched from 2022 to 2023, there is not much room for the overall model selection and the configuration of each model.

4.1.3 Opportunity analysis

First of all, according to the national "dual-carbon" policy guidance, Li Auto car company can get the preferential treatment of new energy vehicles, and consumers can enjoy the purchase tax reduction when buying a car. According to the current license index policy, Li Auto car can use new energy vehicle indicators in most cities, directly registered driving, and unlimited number restrictions.

Second, the rapid development of the new energy vehicle industry, the continuous expansion of the market share, and broad prospects for development.

Third, consumers' recognition of new energy vehicles is constantly improving, and the brand influence of Li Auto is constantly expanding.

Fourth, the liberalization of the national two-child and three-child policies increases the car demand of family members, which is highly compatible with the design of the 6-seat SUV in the Li Auto car large space and the positioning of comfortable family passenger cars.

4.1.4 Threat analysis

First, Li Auto is affected by the decline of state subsidies, which could impact its sales. Second, the company's extended-range new energy vehicle is the transition vehicle from China's development to the era of pure new energy vehicles, and the automobile model is relatively single. Third, the company's power battery is purchased abroad, and the key components are controlled by the midstream suppliers. The bargaining power is weak, and the cost is difficult to continue to reduce. Fourth, at the same time, the company should also fight against the traditional car companies with rich product lines, business covering the whole automobile industry chain, changeable business models, new forces with Internet thinking, and joint venture car companies with advanced technology, product design attention to details and novel promotion strategies.

4.2 Competitive strategy

4.2.1 SO Strategy

Strengthen cooperation with local governments, and continue to strive for funds and policy support, in order to reduce operating costs, and expand sales. Relying on online and offline sales models increases publicity, provides quality customer service, and further enhances the influence of the brand. Making use of the existing intelligent assisted driving, intelligent chassis, intelligent space, and other technology and space design advantages, as well as the attributes of the comfortable family car, further expand the competitiveness in the "dad car", "nanny car", and constantly expand the family car market.

4.2.2 ST strategy

Make use of the existing advantages, give full play to the product characteristics, and constantly enhance the product power. Make use of the financial advantages, strengthen the self-research of core technologies, master the core technologies of new energy vehicles, and select more cost-effective suppliers in the global scope to reduce costs. Do a good job in the long-term planning of the enterprise, grasp the development node, find out the market context, and deal with the transformation from extended range to pure electricity with strong technology and financial strength.

4.2.3 The WO Strategy

Strengthen the research and development of core technologies, constantly improve the traditional car manufacturing technology, improve the driving texture, strengthen the quality control of each production link, improve quality control, and establish a quality reputation. Further launch of diversified products, and models with a variety of configurations, to meet different consumers, to adapt to the diversified market demand.

4.2.4 The WT strategy

Seek cooperation, make up for their own disadvantages, jointly deal with risks, and achieve win-win results. At the same time, actively research, and enter the overseas market, to seek more development opportunities.

5. Summary outlook

In the national "carbon peak, carbon neutral" policy, the Li Auto car should further grasp the development of new energy vehicles blowout opportunities, increase investment, improve product quality, continuously strengthen independent research and development level of related technology, meet the diversified customer demand, further expand the market share, launched more comfortable, intelligent, cost-effective family car solutions.

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