ISSN 2959-6130

# Analysis of SWOT Model Analysis BYD Automobile Marketing Strategy

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#### **Abstract:**

Environmental pollution is a hot issue that the world cares about, and fuel vehicles are one of the main reasons for the greenhouse effect. All countries in the world have also realized this and proposed corresponding policies to stop the further deterioration of this impact. China actively responded to accelerate the development of the new energy vehicle industry through policy support. Among them, BYD, as a pioneer, showed industry leadership. This article will analyze the market of China's new energy vehicles based on the status of the development of new energy vehicles, and use the SWOT model to analyze BYD's advantages, opportunities, and risks. Through research on this article, driven by strong policies in the Chinese new energy vehicle market, it has achieved significant growth. As a market leader, BYD comprehensively covers consumer groups, showing a strong market penetration. However, despite the outstanding results, BYD still faces threats and challenges from various aspects such as market competition and technological innovation. Looking forward to the future, BYD needs to continue to optimize the layout of the product and strengthen its core competitiveness to cope with potential risks. Its development direction is expected to maintain a steady rise and continue to lead the vigorous development of China's new energy vehicle industry.

**Keywords:** New energy; BYD; SWOT.

#### 1. Introduction

With the continuous development of the economy, more and more families have their fuel vehicles. Fuel vehicles have also become the main product of the automotive industry, which has caused many people to think that only fuel can become the only source of motivation for the car. However, the increase in fuel vehicles also brings certain problems. The biggest problem is the pollution of the environment [1]. The fuel vehicle has harmful gases such as carbon monoxide and sulfur dioxide, and these toxic gas experiences will have a bad impact on human tissues such as the human respiratory tract. Essence More importantly, there will also be a lot of pollution when producing fuel vehicles. When manufacturing, the car will not only produce toxic gases such as ammonia gas and carbon monoxide, but also produce industrial wastewater such as large amounts of oil and mineral oil. This also made global countries aware of the importance of environmental protection [1]. Traditional cars are divided into fuel-driven and diesel-driven. The corresponding vehicles are household cars trucks and heavy cars. This model often holds transportation between the country and the country, region and region. In 2016, in Europe, 29% of nitrogen oxides were generated in road transportation, PM (PM10) with 8% diameter less than 10 microns and PM (PM2.5) (EEA, 2018) with a diameter of 10% less than 2.5 microns (EEA, 2018) of 10% diameter [2], so the European Union also launched a series of policies to restrict pollution. For example, in 1999, policy restrictions on harmful gases were launched. Not only that, as one of the countries with the largest car trading volume, China has launched a series of policies for environmental protection to promote the development and development of new energy vehicles, such as subsidies for buying new energy vehicles, dual points, and new energy vehicle tax reduction and exemption policies. And new energy vehicle-free policies such as facilitation of consumers [3]. Therefore, more consumers pay attention to new energy vehicles and try new energy vehicles, which has also led to the development of the new energy vehicle market and brought more and more entrepreneurs to create new energy vehicle brands, such as Weilai, ideal, Xiaopeng, BYD, etc., even companies in different markets want to join the array of new energy vehicles, such as Xiaomi, a mobile phone brand manufacturer launched its first new energy vehicle -Xiaomi SU7 in 2024. The development of Chinese new energy vehicles can be traced back to the late 1990s, and China's first new

energy vehicle was produced in 1995 [1]. Of course, in the automotive industry, there must be no traditional fuel vehicle companies. They have also seen the rapid development of new energy vehicles in the Chinese market, and they have also launched their own new energy vehicles, such as Volkswagen's ID.3, Mercedes-Benz EQS, BMW's i5, Porsche's Tycan, etc. This article will use the SWOT model in China to analyze BYD's advantages, opportunities, and risks in combination with the development of new energy vehicles in China.

## 2. Development Status of New Energy Vehicles

#### 2.1 Policy Support and Market Environment

Various countries and enterprises have begun to find new fuels to drive transportation. As early as 2009, Mercedes-Benz launched a concept car for hydrogen energy versions. Compared with the gasoline version of the car, hydrogen energy will replenish the power more quickly. There is no significant difference between battery life and gasoline, and the emissions will be more environmentally friendly. However, the output of hydrogen energy will generate a lot of pollution and cost higher costs, so hydrogen energy has not been recognized by many countries. Earlier, electric vehicles had entered people's vision. Compared with hydrogen energy, electrical energy is easier to obtain, electric energy is quieter than fuel, and the efficiency is more efficient. It will speed up faster and does not generate harmful gases during the driving of electric vehicles. As early as the end of the 1990s, China began to try to use electricity as a driving force for automobiles: In 1995, China launched the first new energy vehicle "far away" [4]. Since then, China has launched more policies to promote the development of new energy vehicles. 2012 is the watershed of China's new energy vehicle development. Before 2012, China mainly increased the consumer demand for cars and began to try to make electric vehicles. In 2009, China launched relevant policies to pilot in some cities. However, due to the limitations of technology and other factors, new energy vehicles are only used in the public transportation field of core cities [5]. BYD also started researching and producing electric buses at this stage and achieved preliminary results. In 2012, China launched the "Energy Conservation and New Energy Vehicle Development Plan (2012-2020)", which accelerated the development of China's new energy vehicles [5]. Not only that, in 2017, the "dual points" policy was launched and implemented the following year. This policy acts on energy saving and emission reduction and this great help for the promotion and sales of new energy vehicles [6]. The deep binding of the new energy is the charging facility. After more than 10 years of China for the construction of the charging facility system, China already has the most widely, largest, ,and most convenient charging services in the world and provides development of new energy vehicles in China [7].

#### 2.2 Sales Volume

With the emergence and mass production of new energy vehicles, many new energy manufacturers promote the advantages of new energy on major social platforms, making many consumers willing to try new energy, which has also led to the sales of new energy vehicles. After the "Energy Conservation and New Energy Vehicle Development Plan (2012-2020)" was launched in 2012, Beijing, Shanghai, and other cities began to use lotteries to purchase fuel vehicles to reduce the sales of fuel vehicles, thereby increasing the sales of electric vehicles [4]. As of 2022, my country's new energy vehicle sales were 6.49 million, a year-on-year increase of 96%. The sales of new energy vehicles accounted for 31.4% of all passenger cars[5]. With China's implementation of the promotion policy of new energy vehicles, in November 2022, the sales volume of fuel vehicles decreased by 18% month -on -month and a year-on-year decrease of 27%. In the first 11 months of 2022 [8]. However, after 2022, China stopped policy support for new energy vehicles, so the sales volume of new energy in 2023 decreased compared with previously. New energy passenger vehicles have a total retail sale of 7.736 million units, an increase of 36.2% year -on -year. New energy passenger cars exported a total of 10.48 million vehicles, an increase of 72% year-on-year [9]. In January 2023, new energy vehicle companies launched a price war in Tesla in China, and fuel car companies had to enter the price war. However Because consumers often wait and wait for the minimum price to buy in the price reduction [10]. Therefore, in July 2024, BMW took the lead in launching the competition for the price war, not only because of consumers, but also the double-rolled rolls of technical and prices to damage the gross profit margin of each car company, and the profit of the automotive industry has been greatly reduced [11]. New energy vehicles of independent brands are eating the market of fuel cars and car companies. Luxury brands such as BMW and Mercedes-Benz will reduce their brand efficiency due to the reduction of prices, and the high-end brand image of niche brands is also valued by these luxury brands.

#### 2.3 Industrial Chain Development

Take BYD as an example, BYD became the world's second-largest rechargeable battery manufacturer in 2003 [12]. The rechargeable battery is one of the important components of electric vehicles, which also lays the foun-

dation for the later development of BYD electric vehicles. Thanks to the increase in sales of new energy vehicles, the industrial chain related to new energy vehicles has also developed. In 2023, the revenue of the car fluid pipelines and assemblies of Pengling Stock, the revenue of automobile seal components and assemblies accounted for 99% of the company's total revenue ratio; the sales volume of 35kV and above voltage levels of Shengbang Stock increased significantly; Huabao Xinneng, Yangdian Technology, and other companies have also enjoyed the dividend of new energy vehicles. Huabao Xinneng's net profit in the first half of 2024 increased by 217.54% to 256.73% compared with the previous year. Energy vehicles have achieved a profit of turning losses, and the main businesses of these two companies are the sales of lithium batteries, chargers, and accessories, and the original electronic manufacturing, motor manufacturing, and control technology [13].

#### 2.4 Technical Innovation

Both fuel vehicles and new energy vehicles need technical support and constant update iteration. The battery technology and intelligent technology of new energy vehicles must continue to innovate to meet the needs of consumers. The fastest development in recent years is digital technology. It can build a good interactive platform and opportunities for consumers and new energy vehicle companies to achieve APP control vehicles, virtual reality (VR), and augmented reality (AR) technology, Intelligent driving technology allows consumers to easily experience the convenience and intelligence of new energy vehicles [14]. Of course, the technology of new energy vehicles is not only software but also hardware. For example, the chassis of cars also needs to be continuously innovative. As we all know, the battery of new energy vehicles is often placed in the chassis to pursue the maximum riding space, so the power transmission of the car chassis must always be balanced, and the power distribution of power distribution to ensure stable power transmission according to different situations, so that the operating system becomes more Flexible; since the car chassis can transport power, the chassis can also help reduce energy consumption and improve energy utilization.

## 3. Analyze BYD Marketing Strategy based on the SWOT Model

#### 3.1 Strength

BYD became the world's second-largest rechargeable battery manufacturer in 2003. It also studied and manufactured electric buses in 2009 and was recognized. The core technology of BYD batteries has been innovating, and it is

also the most patented car brand in China. Among them, the original two-way inverter charging technology can be charged as a charging pile for other vehicles, which can solve the urgent need to ignite the eyebrows [15]. Therefore, BYD has always been far ahead of battery technology, which also reduces the cost of battery, so that the price of the product is low, and it can maintain an advantageous position in the price war [12]. BYD has also created a unique industrial chain -IGBT (Insulation Gallery Bi -pole Crystal) Industrial Chain, which can intuitively control the changes in DC and AC power. BYD Holdings Co., Ltd. introduced international advanced products design and introducing international advanced products for clean fuel vehicles development and introducing international advanced product design and introduction Test ideas, complete process research and development system [12], which also represents BYD's technical self-sufficiency. BYD, China's first domestic automobile brand, and the product represented by Chinese historical dynasties as the name of Chinese consumers, has a strong sense of national pride and support for the brand [15]. BYD's product pricing from about 70,000 to 1 million, can get the recognition and willingness of buying by different consumer groups [15].

#### 3.2 Weakness

Due to the late start of Chinese car brands, the incomplete and insufficient funds of early manufacturing facilities in the early days have led to frequent problems with domestic brand products and poor quality, so Chinese consumers have certain discrimination against domestic brands. Therefore, the recognition of domestic brands has been in a state of downturn. BYD is also affected by this phenomenon, and many people do not recognize BYD's brand benefits. And in the early days of BYD, low-end products caused consumers to put BYD in the low-end ranks. Although BYD now has high-end products, it is still difficult to eliminate consumers' deep-rooted views [12]. Although China has carried out a series of development policies for charging facilities, it is still not enough for BYD's development, and the problem of battery life has become the biggest problem, so consumers have never been high in recognition of new energy [15]. Then the start of new energy vehicles is too late, and the lack of talent resources has led to China's new energy vehicles being more focused on interior and configuration, and technological innovation is relatively slow. And with the increase of 4S stores, the scarce after-sales service talents cannot keep up with the development of new energy vehicles [12].

#### 3.3 Opportunity

For new energy vehicle and car companies like BYD,

response to the country's policies will make the brand's development less than less. China announced in 2019 that it plans to suspend the sales of fuel vehicles from 2030, and BYD also responded quickly to announce the suspension of its brand of fuel vehicle [15]. This is also a great opportunity to develop new energy vehicles in the future. China is also implementing policies to greatly increase the deployment of charging facilities, build charging areas in public parking lots and residential communities, and expand and renovate existing car supply stations [12], which will also make up for the shortage of BYD's imperfect charging facilities. China's policy also includes new energy vehicles that export Chinese brands, which has become an opportunity for BYD to export to other countries. This is also an important opportunity to expand its own brand influence and brand size. This article mentioned in the second part that digital technology has brought a lot of technical support to new energy vehicles, including social media continuously promoting new energy vehicles, so that many Chinese consumers are willing to try and accept new energy vehicles. According to statistics on Chinese people's travel willingness, more than half of people choose to travel by private cars, and as many as 86% of people accept trams, far higher than in other countries [15].

#### 3.4 Threaten

In the context of China's high-speed development of new energy vehicles, many manufacturers have seen the development prospects of this field and have invested in, such as Ideal, Weilai, Xiaopeng, etc., and even mobile phone manufacturers Xiaomi has also participated in and created Xiaomi SU7. Those auto companies become threats to BYD. In addition, Tesla also enjoyed the support of China policy, and Tesla's technical capabilities are above BYD and Tesla's brand image is higher than BYD. Since 2022, China has gradually stopped policy support and consumer's willingness to buy will also cool down. With the test of time, many shortcomings of new energy vehicles have been exposed. To replace the battery, the price is expensive, and the current charging facilities are incomplete. There is also the impact of economics, culture, and politics when enterprises enter the market, and enterprises will face various financial crises when operating market operations, such as capital pressure, inflation pressure, etc [15].

#### 4. Conclusion

This article analyzes the status quo of new energy vehicles and BYD's corporate advantages, disadvantages, opportunities, and threats from China's national conditions and SWOT. In summary, China has been deploying the development of new energy vehicles since a long time

ago, but China's automotive industry started late and its slow development has led to new energy vehicle and car companies that have not entered the public's vision. As China plans to ban fuel vehicles in 2030 and the spread of social media, new energy vehicles have entered the vision of Chinese consumers and actively understand and study new energy vehicles. New energy vehicles have also turned their losses for many companies that study battery technology and motor technology. As the first batch of Chinese new energy vehicle companies, BYD enjoyed many policies, and it continued to innovate battery technology and develop new technologies to produce a unique industrial chain. With the development of the times, many companies have also joined the ranks of new energy vehicles. There is also the impact of foreign brands like Tesla, coupled the general direction is worth looking forward to. BYD will continue to strengthen battery technology and enhance battery life. Other brands are common in social media. BYD's video content is relatively small, so BYD should strengthen publicity and enhance people's recognition of the BYD brand. Charging facilities are also important supplements for trams. BYD should increase charging facilities to keep up with the development of their tram and provide consumers with a complete after-sales experience. Regarding BYD's future focus on exports, foreign new energy vehicle brands are relatively small, and the environmental protection of new energy has been recognized by the world. Therefore, the new energy market abroad needs to be supplemented by diversified brands.

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