A STUDY OF THE COMPETITIVE STRATEGY OF BYD'S NEW ENERGY VEHICLE BUSINESS

NING JUNYU
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This Independent Study has been Approved as a Partial Fulfillment of the Requirement & for the Degree of Master of Business Administration

Advisor:....廖志高....
(Dr. Liao Zhigao)

Date: ....21..../....4..../....2025

....
(Associate Professor Dr. Jomphong Mongkhonvanit)
Dean, Graduate School of Business

Date.......5../..July../....2025....
Siam University, Bangkok, Thailand

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By: Ning Junyu

Degree: Master of Business Administration

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Advisor: .....廖志高.....

(Dr. Liao Zhigao)

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ABSTRACT

Although BYD Company holds the largest market share in China's new energy vehicle industry, the overall low selling price of BYD's new energy vehicles at this stage has led to a low overall profit margin for the company. With the decrease in subsidies and support policies for the new energy vehicle industry by the Chinese government, the policy dividend has decreased, and the profitability of BYD's new energy vehicle business has gradually weakened. The research objectives of this study ware: 1) To examine the current competitive strategy of BYD's new energy vehicles and 2) To propose a basic competitive strategy suitable for BYD new energy vehicles based on Porter's Five Forces model and the SWOT analysis.

Based on Porter's basic competitive strategy theory, this study took BYD's new energy vehicles as the research subject. This study adopted the documentary research method to study the current competitive strategy of BYD's new energy vehicles.

Through documentary research, this study found that: 1) Through the analysis of Porter's Five Forces model of BYD new energy vehicles, BYD company faces a more significant source of competition from industry competitors and potential entrants. 2) Based on BYD Company's current advantages in the industry and future development directions that need to be strengthened, BYD's current competitive strategy is insufficient to face the fierce competition environment in the new energy vehicle industry. BYD's basic competitive strategy recommendation is to choose cost leadership strategy and differentiation strategy.

Keywords: BYD's new energy vehicles, competitive strategy, Porter's Five Forces Model

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(Ning Junyu)
Dec 13, 2023

DECLARATION

I, Ning Junyu, hereby certify that the work embodied in this independent study, is a entitled A Study of the Competitive Strategy of BYD's New Energy Vehicle Business result of original research and has not been submitted for a higher degree to any other university or institution.

(Ning Junyu)
Dec 13, 2023

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Chapter 1 Introduction

1.1 Research Background

In 2007, the Intergovernmental Panel on Climate Change (IPCC) of the United Nations held a meeting in Paris and published a report assessing global climate change. It was mentioned that 90% of the climate change phenomena in the past 50 years were likely caused by human activities. In the same year, the term "Carboneutral" was included in the New Oxford English Dictionary. On September 22, 2020, the Chinese government proposed at the 75th United Nations General Assembly that China will increase its national independent contribution, adopt more robust policies and measures, strive to achieve peak carbon dioxide emissions by 2030 and achieve carbon neutrality by 2060. Energy conservation and emission reduction are irreversible internationally and domestically, and the development of new energy industries, especially new energy vehicles, is a significant trend (Huang, 2022).

In the 21st century, with the continuous improvement of people's living standards, private cars have become an essential tool of daily life for ordinary Chinese families. In 2022, China's car ownership reached 302 million units, making it the world's largest automotive consumer market. At the same time, China is also the world's most extensive automotive manufacturing base. In 2022, China's automobile production and sales reached 27.021 million and 26.864 million units, respectively, with year-on-year growth of 3.4% and 2.1%, respectively. The annual production and sales volume ranked first worldwide for 12 years. Among them, the penetration rate of new energy passenger vehicles in China reached 27.6% in 2022, an increase of 12.6% compared to 2021. Some new energy vehicle companies' automobile sales even surpassed well-known automobile companies in old developed countries such as Germany, Japan, and the United States, standing at the forefront of industry development. BYD Automobile Company entered the industry early and developed rapidly. It is a leading enterprise in China's new energy vehicle industry, producing over 3 million new energy vehicles in 14 years. Among them, the production reached 1 million in the second half of 2022, reflecting the exponential trend of the rise of the new energy vehicle industry and the public recognition of BYD Automobile in the market (Wang & Liao, 2023).

For automobile-related enterprises in various countries in the world market, how to seize historical opportunities in global competition and open up a development path that is both innovative and sustainable has become the most critical issue for company development. BYD Automobile Company entered the industry early and developed rapidly. It is a leading enterprise in the domestic new energy vehicle industry, producing over 3 million new energy vehicles in 14 years. Among them, the production reached 1 million in the second half of 2022, reflecting the exponential trend of the rise of the new

energy vehicle industry and the public recognition of BYD Automobile in the market. The success of BYD Automobile is naturally related to the government's subsidies and support for new energy vehicle enterprises, as well as its early technological accumulation in the battery industry. However, enterprise leaders' accurate grasp of strategic goals and the effective implementation of their development strategy measures are also critical factors (Qudrat-Ullah, 2022).

1.2 Research Problems

Although BYD Company holds the largest market share in China's new energy vehicle industry, the overall low selling price of BYD's new energy vehicles at this stage has led to a low overall profit margin for the company. Looking back at the development history of BYD's new energy vehicles, it is not difficult to find that BYD's new energy vehicles can become a leading enterprise in China's new energy vehicle industry without the support policies of the Chinese government for the new energy vehicle industry. With the decrease in subsidies and support policies for the new energy vehicle industry by the Chinese government, the policy dividend has decreased, and the profitability of BYD's new energy vehicle business has gradually weakened. When facing Tesla and other Chinese "new forces" car companies, BYD is in a passive position, mainly due to the lack of high-end models, and can only be forced to accept price wars and further reduce profits. To maintain good profitability, BYD urgently needs to adjust its competitive strategy (Liu, 2022). This study intends to examine the key factors that affect the development of the new energy vehicle business from the perspective of BYD Company, examine the external macro environment of the enterprise, the competitive environment of the new energy vehicle industry, comprehensively consider the enterprise's conditions, clarify the advantages and disadvantages of the enterprise, apply relevant theories of competitive strategy, and combine the actual problems of the company to formulate a plan suitable for enterprise competition ultimately.

1.3 Research Objective

Some scholars have already analyzed the development of the new energy vehicle industry and the relationship between environmental protection policies and the rapid growth of the new energy vehicle industry. However, few researchers have conducted in-depth research on the core technology competition and cost competition of a particular automotive brand to enhance the effectiveness of competitive strategies. To fill the research gap in this area, the researcher conducted in-depth research on the

competitive strategy issues that BYD company may face in the current industry development (Kang & Chen, 2023). This study has two research objectives:

1. To examine the current competitive strategy of BYD's new energy vehicles.

2. To propose a basic competitive strategy suitable for BYD new energy vehicles based on Porter's Five Forces model and the SWOT analysis.

1.4 Research Scope

With the rapid rise of the new energy vehicle industry as an emerging industry, its development prospects are inevitably highly valued by countries worldwide. The new energy vehicle industry is an emerging strategic industry that has developed rapidly in recent years and has a bright future. However, with market share expansion, emerging car brands are constantly entering the market. The Chinese new energy vehicle industry has also exposed some areas for improvement in its rapid development process. By reading 100 academic articles related to the competitive strategy of new energy vehicles, it is determined that this study is based on Michael Porter's three basic competitive strategy theories and the Five Forces model, this study used documentary research to focus on the competitive status of BYD's new energy vehicles.(Xu, 2023).

1.5 Research Significance

To ensure the long-term stable development of the Chinese automotive industry, all Chinese car manufacturers must fully cooperate and resolutely implement the national new energy vehicle plan. At present, BYD Company is a leader in new energy vehicles in China and has always been at the forefront of new energy vehicle technology and research and development. Theoretical significance: The development problems faced by BYD Company's new energy vehicle business are representative of similar domestic enterprises. Therefore, this study focuses on BYD Company's competitive strategy, especially the exploration of its strategic analysis module, providing corresponding reference value for the formulation and strategic development of other similar new energy vehicle enterprises in China. Practical significance: This article analyze the competitive strategy of BYD Company's new energy vehicle business, providing a valuable reference for formulating and implementing this strategy. It is hoped that BYD Company can better adapt to the unique market situation in the new energy vehicle market (Ying, 2023).

Chapter 2 Literature Review

2.1 Introduction

This chapter elaborates on the perspective of the new energy vehicle industry, the competitive strategy and the main components of Porter's Five Forces model and the SWOT analysis used in the theoretical framework.

2.2 Literature Review

Choi (2020) proposed to examine the development of core manufacturing technologies for new energy vehicles in China from a new perspective, and there is still significant room for growth. However, in the future development of electric cars solely supported by technology, there will inevitably be practical problems such as high investment costs and relatively significant market price changes. Therefore, if this method is combined with the future development trend of pure electric cars, hybrid electric vehicles are not as good as hybrid electric vehicles, and its limitations in future development are also relatively large (Shang & Choi, 2020).

Wen (2023) believed that from the perspective of technological innovation, there will be corresponding innovation requirements in various stages of the development of new energy vehicles, and government departments also need to demonstrate guidance, protection, and promotion functions in this process. After a comprehensive investigation, it was found that very few people are currently studying the business operation models of the new energy vehicle industry, and many researchers have proposed that business models are a comprehensive extension of enterprise management, decision-making, and operation (Wen, 2023).

An (2021) conducted in-depth research on the market situation of the development of China's rail electric vehicle industry from a macro and bystander perspective. It summarized the overall market trend of China's new energy industry. Five characteristics of excellent representative companies in China's automotive industry were analyzed from the viewpoint of advantageous capital chain, strategic diversification, and differentiated management. In 2019 and 2020, with the launch of many foreign mid to high-end product competitors, the competition will significantly increase. However, the current penetration rate of electric vehicles is still 2.2%, accounting for only a tiny portion of the entire light vehicle market. With the introduction of competitive models by many overseas mid to high-end brands, the competition will become even more fierce. Indeed, tram manufacturers have gained more significant advantages in developing more extensive scale, higher power, and better appearance electric vehicle technologies (An, 2021).

Antony(2018) stated that with the development of the digital economy, enterprise competition has entered a new round of intense competition. Coupled with the epidemic's impact, the situation has become even more severe. New energy vehicles are no longer traditional fuel vehicles but a product of the digital economy. Enterprises must find suitable development strategies, build core competitiveness, and avoid drifting with the flow (Cao & Antony, 2018).

Meng(2017) believes that the current new energy industry's new forces in car manufacturing have suffered significant losses, affecting corporate strategy implementation. NIO, Xiaopeng, and Weima lack hematopoietic capacity, resulting in tight cash flow. The main reason is that the product line layout needs to be better to obtain positive cash flow. When formulating competitive strategies, enterprises need to fully consider their financial and financing capabilities and consider cost control (Liu & Meng, 2017).

Mu(2023) stated that energy conservation is the direction for developing new energy vehicle technology. Among domestic new energy vehicle companies, represented by BYD, they have invested heavily in the research and development of power batteries and successfully introduced blade batteries, improving energy consumption and making them safer. Representatives of new forces led by NIO Motors have joined industry giants to develop new battery technologies, attempting to consolidate their advantages with power batteries as barriers (Mu, 2023).

2.3 Basic Competitive Strategy

Michael Porter, a renowned strategic management expert at Harvard Business School in the United States, proposed the basic competitive strategy, which includes Overall Cost Leadership, Differentiation, and Focus. Enterprises must choose one of these three strategies as their dominant strategy. Either control the cost to a lower level than competitors; Either create unique features in the company's products and services, making customers feel that you provide more value than other competitors; Either the enterprise is committed to serving a specific market segment, a specific product category, or a specific geographical range (Porter, 1980).

The overall cost leadership strategy, also known as low-cost strategy, is a strategy in which enterprises compress costs by simplifying packaging, reducing product functionality, and reducing manual expenses, enabling them to enter the market at low prices, increase market share, and gain competitive advantages. The main approaches include simplifying products, improving design, saving materials, reducing labor costs, and automation (Kay, 2014).

Differentiation strategy refers to the products or services provided by a company that can meet a specific consumer demand, and no other companies in the market can

provide such products or services. There are four basic ways for businesses to highlight their differences: providing more humane products or services, exceeding consumer expectations, and having a unique image that differs from other companies and employees. Customizing differentiation strategies requires analyzing many customers, clarifying their needs, and creating differences that customers recognize (Semuel & Octavia, 2017).

Focus strategy refers to a company's business activities focusing on specific customer groups, regional markets, or a particular product line. Enterprises may adopt a centralized system by reducing costs or providing customized services. Such a centralized strategy is complex to achieve economies of scale and cannot reach the expected results (Wu & Brown, 2012).

2.4 Porter's Five Forces Model

The five forces analysis model was proposed by Michael Porter in the early 1980s, also known as Porter's competitiveness model. Porter believes every enterprise faces pressure from five directions, inside and outside the industry. It may be competitors, upstream and downstream enterprises, or suitable substitutes. This model is mainly used to analyze the competitive environment of customers, which has a profound impact on global enterprise formulation (Grundy, 2006).

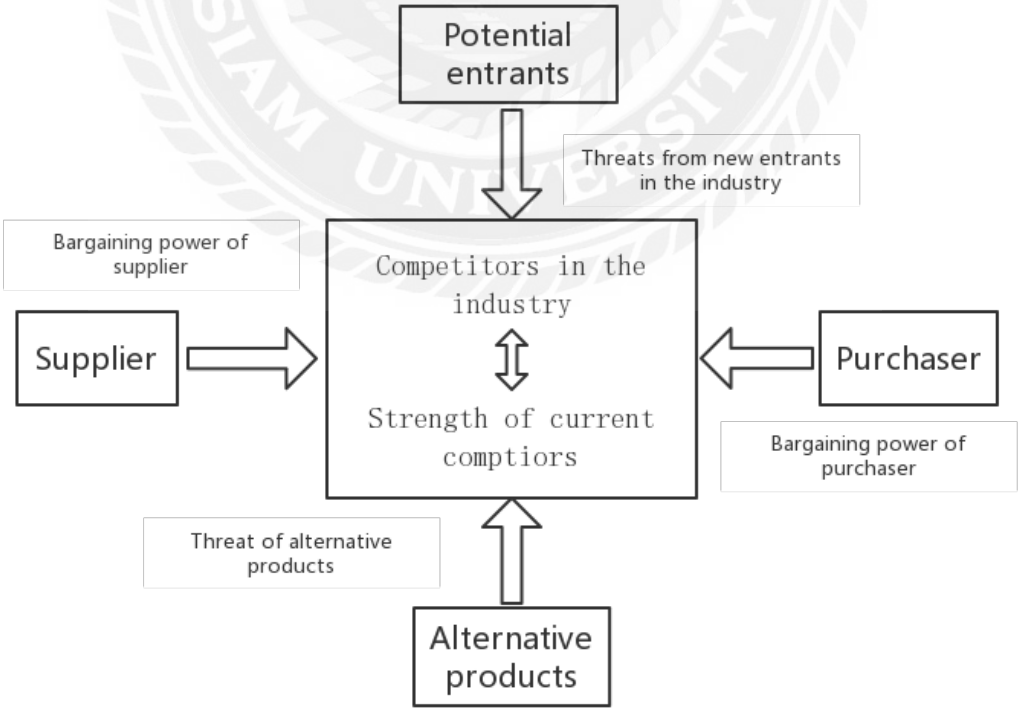

Figure 2. 1 Porter's Five Forces Model

Supplier: Suppliers provide products or services for enterprises, and their bargaining power is reflected in two aspects: on the one hand, by increasing the price of the products or services they provide, and on the other hand, by changing the quality of the products or services. The bargaining power between enterprises and suppliers mainly depends on the extent to which enterprises need products or services provided by suppliers for their production, that is, whether the products and services required by enterprises are in the buyer's market or the seller's market. If it is in the buyer's market, the supplier's bargaining power is weak; otherwise, the supplier's bargaining power is strong (Chesula & Kiriinya, 2018).

Purchaser: Buyers want to use less price to promote higher quality products or services. Buyers choose enterprises according to their actual needs and product preferences, which can be achieved by asking enterprises to reduce prices or improve the quality of products or services. The bargaining power of buyers is mainly affected by the implementation of products or services provided by enterprises to buyers, the dependence of buyers on products, and the price of products or services (Rice, 2010).

Potential entrants: The threat of potential entrants is that they will seize limited market resources after entering the market. Whether it is supplier or demander resources, it will eventually lead to a decline in the profitability of existing enterprises in the market. It may even crush existing enterprises in the market. The threat degree of potential entrants to existing enterprises in the market is closely related to the current scale economy, capital level and popularity of existing enterprises in the industry. The more significant the scale economy, the more capital, and the higher the popularity of existing enterprises, the stronger their ability to deal with the threat of potential entrants will be (Moreno-Izquierdo & Perles-Ribes, 2016).

Competitors in the same industry: Competitiveness of competitors in the same sector refers to that existing enterprise using various strategies or means to compete for market share. The stronger their competitiveness, the more conducive to expanding market share. On the one hand, the competitiveness of competitors can from the business growth rate of enterprises. The business growth rate reflects the future development trend of enterprises. Enterprises with high business growth rates are more likely to have more excellent decision-making and control power in production and operation in the future (Dobrivojević, 2013).

Alternative products: The threat of substitutes by the fact that the products produced by industry have similar functions to those produced by the industry. Because the market demand for similar products has a specific stability, when the sales volume of substitutes increases, the sales volume of products in the industry will inevitably decrease, resulting in mutual competition. The competition caused by substitutes affects the existing enterprises in the industry in various situations (Rice, 2022).

2.5 SWOT Analysis

The SWOT analysis theory is based on analyzing internal and external environments and competitive conditions, systematically analyzing the advantages and disadvantages of the enterprise itself, as well as the opportunities and threats outside the company, and obtaining corresponding conclusions from it. The SWOT analysis theory is based on the internal and external environment and competitive conditions to conduct a comprehensive, systematic, and accurate study of a company's strengths, weaknesses, external opportunities, and threats. Based on the research results, corresponding development strategies, plans, and countermeasures can be formulated. This method can fully utilize the company's existing advantages, avoid disadvantages, and use existing opportunities to avoid external market threats (Helms & Nixon, 2010).

The SWOT matrix can form four combinations, namely SO, WO, ST, and WT. The SO strategy is to combine its internal advantages with market opportunities, and the two are thoroughly linked to work together to achieve effectiveness. The ST strategy is to fully utilize the internal benefits of the enterprise and overcome external threats. The wo strategy is to cater to external opportunities and transform the company's weaknesses into strengths as much as possible. The WT strategy aims to achieve defensive goals by reducing internal defects while striving to overcome external threats (Valentin, 2001).

Strength refers to the internal factors of an organizational structure, which refers to the ability of a company to surpass its competitors or the unique things that can enhance its competitiveness. The competitive advantage can be in the following aspects: 1) Technical skill advantage: unique production technology, low-cost production methods, leading innovation ability, muscular technical strength, perfect quality control system, rich marketing experience, excellent customer service, and excellent large-scale procurement skills. 2) Tangible asset advantages: advanced production lines, modern workshops and equipment, abundant natural resource storage, attractive real estate locations, sufficient funds, and complete information. 3) Intangible asset advantages: excellent brand image, good commercial credit, and a proactive corporate culture. 4) Human resource advantages: Key areas with expertise, proactive employees, strong organizational learning abilities, and rich experience. 5) Organizational system advantages: high-quality control system, comprehensive information management system, loyal customer base, and strong financing ability. 6) Competitive advantage: Short product development cycle, strong dealer network, good partnership with suppliers, sensitive response to market environment changes, and leadership position in market share (Wang, 2007).

Weakness, also an internal factor in an organization, refers to something that a company lacks or does poorly or a condition that puts the company at a disadvantage.

Factors that may lead to internal weaknesses include: 1) a lack of competitive skills and technologies. 2) Lack of competitive tangible assets, intangible assets, human resources, and organizational assets. 3) The competitiveness in critical areas needs to improve (Sabbaghi & Vaidyanathan, 2004).

Opportunity is an external factor in an organization, while market opportunities are a significant factor that affects a company's strategy. Company managers should identify every opportunity, evaluate its growth and profit prospects, and select the best opportunities that match the company's financial and organizational resources and have the most significant potential to gain a competitive advantage. Potential development opportunities may be: 1) the expansion trend of customer base or product segmentation market. 2) Transfer skills and technology to new products and businesses, serving a more extensive customer base. 3) Forward or backward integration. 4) Lower barriers to market entry. 5) Gain the ability to acquire and merge competitors. 6) The market demand is growing strongly and can expand rapidly. 7) There is an opportunity to expand to other geographical regions and expand market share (Leigh, 2009).

Threats are also external factors to an organization. In the external environment of a company, there are always certain factors that pose a threat to the company's profitability and market position. Company managers should promptly identify threats that threaten the future interests of the company, make evaluations, and take corresponding strategic actions to offset or mitigate their impact. The external threat to the company may be: 1) the emergence of powerful new competitors who will enter the market. 2) Substitutes seize the company's sales revenue. 3) The growth rate of the primary product market has decreased. 4) Adverse changes in exchange rates and foreign trade policies. 5) Adverse changes in demographic characteristics and social consumption patterns. 6) Improved negotiation ability of customers or suppliers. 7) Market demand has decreased. 8) Vulnerable to economic downturns and business cycles (Benzaghta, Elwalda, Mousa, Erkan, & Rahman, 2021).

External Factors Internal factors	Strengths	Weakness
Opportunity	SO Growth Strategy	WO Twisting Strategy
Threat	ST diversified business strategies	WT defensive strategy

Table 2. 1 SWOT Matrix

2.6 Introduction to BYD Company

BYD is a high-tech enterprise established in February 1995. It is a listed company in Hong Kong and Shenzhen, with a turnover and total market value exceeding 100 billion yuan. After more than 20 years of rapid development, BYD has established over 30 industrial parks worldwide, covering six continents. BYD initially produced rechargeable batteries and became the world's second-largest rechargeable battery manufacturer in 2003. In the same year, BYD acquired Xi'an Qinchuan Automobile Co., Ltd. and established BYD Automobile Co., Ltd., starting its automobile manufacturing and sales business. In 2008, we acquired semiconductor manufacturing company Ningbo Zhongwei and integrated the upstream industry chain of electric vehicles, completing the first vertical integration strategy. In 2009, BYD acquired American new energy vehicle company Maxwell Automotive Inc and Changsha based Midea Sanxiang Bus, completing its first horizontal integration strategy and fully entering the new energy vehicle industry. In 2010, BYD and Daimler AG jointly established Shenzhen BYD Daimler New Technology Co., Ltd. to develop electric vehicles and continue implementing a horizontal integration strategy. From 2013 to 2018, we independently developed blade batteries, automotive intelligent development platforms, and e-platforms, and began to lay out automotive electronic control systems, implementing a full industry chain strategy. BYD is a high-tech enterprise established in February 1995. It is a listed company in Hong Kong and Shenzhen, with a turnover and total market value exceeding 100 billion yuan. After more than 20 years of rapid development, BYD has established over 30 industrial parks worldwide, covering six continents. BYD initially produced rechargeable batteries and became the world's second-largest rechargeable battery manufacturer in 2003. In the same year, BYD acquired Xi'an Qinchuan Automobile Co., Ltd. and established BYD Automobile Co., Ltd., starting its automobile manufacturing and sales business. In 2008, we acquired semiconductor manufacturing company Ningbo Zhongwei and integrated the upstream industry chain of electric vehicles, completing the first vertical integration strategy. In 2009, BYD acquired American new energy vehicle company Maxwell Automotive Inc and Changsha based Midea Sanxiang Bus, completing its first horizontal integration strategy and fully entering the new energy vehicle industry. In 2010, BYD and Daimler AG jointly established Shenzhen BYD Daimler New Technology Co., Ltd. to develop electric vehicles and continue implementing a horizontal integration strategy. From 2013 to 2018, we independently developed blade batteries, automotive intelligent development platforms, and e-platforms, and began to lay out automotive electronic control systems, implementing a full industry chain strategy (Daas, & Arends-Tóth, 2012).

BYD Company mainly operates in the battery and automotive fields, among which BYD Company has industry-leading technological advantages in the battery field. In the field of batteries, BYD has independent research and development, design, and

production capabilities. Its products cover consumer batteries, power batteries (lithium iron phosphate batteries and ternary batteries), solar cells, and energy storage batteries, forming a complete battery industry chain. It is the world's largest producer of lithium iron phosphate batteries and exports its products to many countries and regions around the world. In the automotive industry, BYD implements a product diversification strategy, with product lines including private cars, taxis, urban buses, road passenger transport, urban commodity logistics, urban construction logistics, sanitation vehicles, warehousing, ports, airports, and mining vehicles, achieving full coverage in all fields (Ying, 2023).

By the end of 2022, BYD has over 400000 employees and its business covers four major industries: new energy, electronics, automobiles, and rail transit. Its technology and scale have made it a leading enterprise in China's new energy vehicle industry, and it has won the title of the most valuable Chinese brand in the automotive industry for six consecutive years.

2.7 Theoretical Framework

The Porter's Five Forces analysis model is commonly used in analyzing competitors to analyze the market competition situation while formulating strategies for enterprises. The Porter Five Forces Model analysis method can clarify the critical factors that affect the development of enterprises in the industry by analyzing the competitive environment of the industry. The five forces in Porter's Five Forces model refer to the bargaining power of suppliers, the bargaining power of buyers, the entry ability of potential competitors, the substitution ability of substitutes, and the current competitiveness of competitors in the industry. By analyzing these five factors, BYD's competitiveness in the new energy vehicle industry can be determined. Using the SWOT analysis combined with BYD's competitiveness in the new energy vehicle industry, this study a theoretical framework on thrown in Figure 2.2.

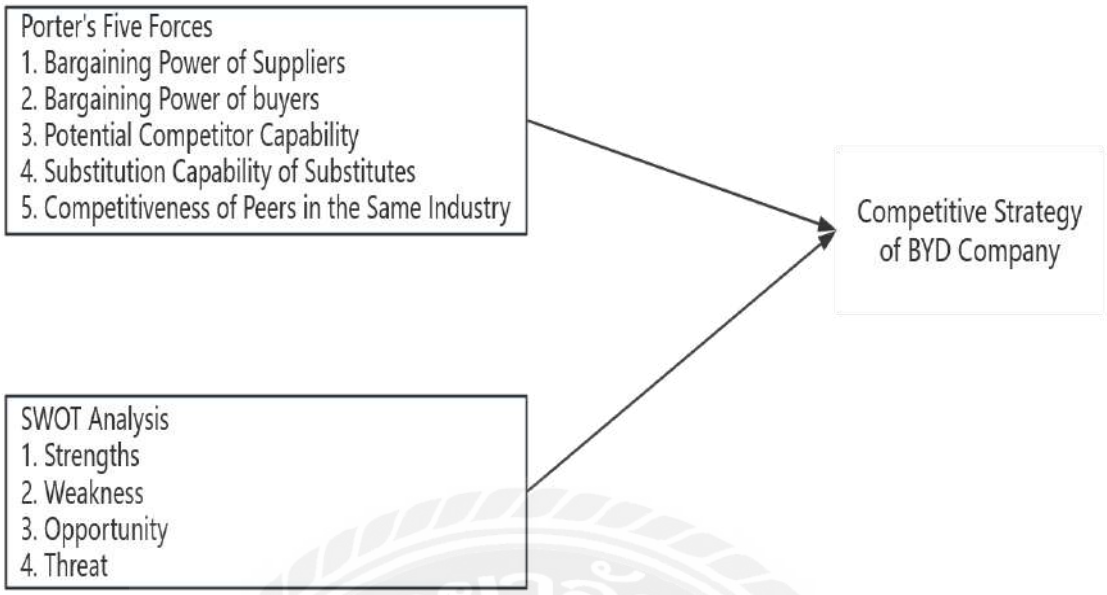

Figure 2. 2 Theoretical Frameworks

Chapter 3 Research Methodology

3.1 Research Design

This study used the documentary research method based on Porter's competitive strategy theory. Through extensive documentary analysis, including CNKI journal papers, CCTV news, current events, local government policy interpretations, and corporate self-announcement promotion, this study analyzed and summarized previous research and elaborated on the five factors in the Porter's Five Forces model, including supplier bargaining power, buyer bargaining power, potential entrant threats, substitute power, and competitive power of competitors in the same industry. By studying relevant literature on Porter's competitive strategy theory, systematically analyzing the latest research results of Porter's competitive strategy, and analyzing existing research results, BYD's competitive strategy in the new energy vehicle industry want analyzed.

3.2 Documentary Analysis

Firstly, the Porter's Five Forces model was used to analyze BYD Company and gain a certain understanding of its competitive strategy. The bargaining power of suppliers was mainly analyzed from three aspects: BYD's procurement proportion, product uniqueness, and the market concentration of suppliers. The bargaining power of buyers was analyzed from two aspects: the market share of BYD products and the price comparison between their products and competitors. The threat of potential entrants and the difficulty of new entrants entering the market were examined from two aspects: technological barriers and funding requirements. The substitutability of substitutes was analyzed from the possibility of replacing BYD products with traditional fuel vehicles and other types of new energy vehicles. The competitiveness of competitors in the same industry, the competitive landscape of the new energy vehicle market, and the main competitors and their advantages were identified.

Secondly，the SWOT analysis was used to analyze BYD's strengths, weaknesses, opportunities, and threats, and BYD's SWOT matrix was drown. Based on Porter's Five Forces model and the SWOT analysis, basic competitive strategy recommendations suitable for BYD were proposed. These suggestions aim to help BYD maintain its leading position in the fierce market competition and achieve sustainable development.

Chapter 4 Findings

4.1 Analysis of Bargaining Power of Suppliers

The core components of new energy vehicles include batteries, motors, and electronic control systems. BYD Company adheres to a self-developed and self-supplied vertical supply chain system for its three electric systems. It has established five companies under its umbrella, including Fodie Battery, Fodie Vision, Fodie Technology, Fodie Power, and Fodie Precision, known as Fodie series companies, responsible for the research and development and manufacturing of power batteries, automotive lighting, automotive electronics, powertrain, and automotive molds. At the same time, BYD Electronics is responsible for the on-board intelligent system, while BYD Semiconductor is responsible for automotive semiconductors, etc. It has completed self-research on core technologies such as the pure electric e3.0 platform, EHS hybrid technology, blade batteries, DiPilot, DiLink, etc. BYD's core three electric technologies have been self-supplied and synchronized with the supply of components to other car companies.

Corporate name	Establishment time	Main business	Main products and production lines
Fudi Battery	2020.12	Battery	The product covers fields such as 3C batteries, power batteries, energy storage batteries, and cascade utilization
Fudi Technology	2019.12	Automotive electronics	Whole vehicle wiring harness level distribution, intelligent cabin, passive safety, ADAS steering system, etc
Fudi Electronics	2019.12	Automotive powertrain	Production and manufacturing of fuel vehicles and new energy vehicle powertrain, providing overall solutions for new

Fudi Vision	2019.12	Automotive lighting	Vehicle lighting and signal system related products
Fudi Seiko	2019.12	Automobile mold	Welding production line for car white body and components, etc
BYD Electronics	2007.06	Automotive Intelligent Systems	Dilink Automotive Intelligent System Solution
BYD Semiconductor	2002.05	Automotive semiconductor, intelligent vehicle	Automotive power semiconductors, sensors, in vehicle night vision systems, DMS anti fatigue systems, etc

Table 4. 1 BYD and FUDI Main Businesses and Products

The conventional components of new energy vehicles, including sound systems, chassis, and tire pressure monitoring, have established long-term and stable cooperative relationships with BYD, such as companies such as Shangsheng Electronics, which produces sound systems, chassis manufacturer Bertelli, and Baolong Technology, which specializes in tire pressure monitoring. On the one hand, BYD has a large sales volume and a natural advantage in dialogue with suppliers; On the other hand, most of the conventional components of new energy vehicles are common to fuel vehicles, and there are many suppliers to choose from. Currently, suppliers have not established a technology or cost leadership advantage that is essential in the industry. Therefore, changing suppliers when the cooperation is not pleasant will not have a significant impact on BYD's automotive business. In summary, BYD's new energy vehicle business has obvious advantages in terms of supplier bargaining power.

4.2 Analysis of Buyer Bargaining Power

	production			sales volume		
Vehicle category	This reporting period	Same period last year	Increase/decrease compared to the previous year	This reporting period	Same period last year	Increase/decrease compared to the previous year
Passenger cars	1,875,554	737,502	154.31%	1,796,625	713,437	151.83%
sedan	979,870	416,467	135.28%	950,515	388,821	144.46%
SUV	869,473	298,652	191.13%	826,101	298,328	176.91%
MPV	26,211	22,383	17.10%	20,009	26,288	-23.89%
Commercial vehicles	6,115	10,038	-39.08%	5,839	7,891	-26.00%
bus	4870	5,772	-15.63%	4,742	4,017	18.05%
other	1,245	4,266	-70.82%	1,097	3,874	-71.68%
total	1,881,669	747,540	151.71%	1,802,464	721,328	149.88%

Table 4. 2 BYD Company's Passenger and Commercial Vehicle Sales Data

In the commercial vehicle market, the production of BYD new energy buses and other commercial vehicles in 2022 shows a significant downward trend compared to 221. BYD commercial vehicles decreased from 10038 units in 2021 to 6115 units in 2022, with an overall decrease of 39.08%. However, passenger car sales have increased from 4017 units in 2021 to 4742 units in 2022. In the passenger car market, BYD Automobile currently has a good market share in the new energy vehicle market. Still, with the increasing number of industry competitors, a group of new energy vehicle companies represented by Tesla Motors have started a price war. On October 24, 2022, Tesla announced a price adjustment for its Mode13 ModelY on its official social media platform, with a price reduction of 1400-18000 yuan for Model 3 and 2800-3700 yuan for Model Y. Subsequently, other domestic new energy vehicle companies were forced to follow the price reduction to retain market share. When consumers choose new energy vehicles, the price advantage of different brands and models of the same level and grade will be undeniable, so the bargaining power of buyers in the passenger car market has significantly improved.

4.3 Analysis of Potential Competitor Capability

The transformation of traditional automobile manufacturers into the new energy vehicle industry is already unstoppable. The trend of the times is the development of the new energy vehicle industry. Old fuel vehicle companies, especially foreign ones such as Mercedes Benz, BMW, Audi, etc., although they lag behind China in the initial stage of new energy vehicles, are also actively transforming and promoting their respective new energy vehicle product series. They have a common characteristic: they have accumulated decades or even hundreds of years of experience in car manufacturing; the mechanical quality of automobiles is excellent. Once the gap in the "three electric" technology field narrows, they will quickly seize a significant market share by utilizing their car manufacturing experience and brand advantages.

Excellent companies in other industries are also actively expanding into the new energy vehicle market. They often adopt a method of not directly starting from scratch but using their original advantages to cooperate with car manufacturers and form strong alliances. For example, Huawei Technology has utilized its technological advantages in chips and intelligence to collaborate with Celes Automobile to launch the extended range new energy vehicle "Wenjie M5". BYD company needs to attach strategic importance to the entry ability of potential competitors. On the one hand, it needs to improve its product quality and service capabilities. On the other hand, it can actively cooperate with other technology enterprises in fields such as intelligence and autonomous driving to fill the gaps and achieve a win-win situation.

4.4 Analysis of Substitution Capability of Substitutes

According to the Five Forces Model theory, the strength of the threat of substitutes depends on the price of the reserve and the opportunity cost for consumers to purchase the replacement. The threat of substitutes for new energy vehicles mainly comes from traditional public transportation methods such as cars, subways, and buses. Classic cars are still the mainstream products in the automotive market, and their most significant advantages when facing new energy vehicles include convenient refueling and diverse product choices. But with the popularization of the concept of carbon neutrality, government policy support for the new energy vehicle industry, and the gradual maturity of various aspects of new energy vehicle technology, new energy vehicles also have the advantage of fuel vehicles becoming increasingly difficult to catch up with, such as the low daily cost of charging, the policy of no single or double number limit,

and subsidies for car purchase tax. The substitutability of fuel-powered vehicles is gradually weakening.

The substitution capacity of public transportation could be more robust. Public transportation, including rail transit and public buses, is convenient for people's travel. However, although public transit has a relatively low price, its operating routes are relatively fixed, time could be more flexible, and comfort could be better, making it difficult to impact new energy passenger vehicles. Therefore, public transportation needs more ability to replace new energy vehicles.

4.5 Analysis of Competitiveness of Peers in the Same Industry

BYD Automobile does not have an absolute competitive advantage among peers in the industry, with SAIC GM Wuling and Tesla both selling over 400000 vehicles in 2022. In 2022, SAIC GM Wuling sold 442118 Tesla cars and 439770 Tesla cars. For SAIC GM Wuling, its business focus is not entirely focused on the new energy vehicle business, and its fuel vehicle production and sales have also achieved good results. Tesla is clearly more inclined to trade price for quantity, and it is the largest new energy vehicle company in the world in terms of vehicle profits. This means that if Tesla wants to gain a greater market share, there is still a lot of room for price reduction. At the same time, Tesla Motors also has its own unique advantages in battery and electronic control technology. In addition, BYD's sales volume is largely related to its product gap in the high-end automotive market, with its product price range mainly concentrated in the 100000 to 200000 yuan range. In the high-end automotive market, BYD's competitiveness is not obvious. In summary, BYD new energy vehicles have certain advantages in the same industry competitiveness, but the advantages are not stable and have certain limitations. When formulating development strategies, it is necessary to fully consider the construction of the competitiveness of new energy vehicles in the high price range.

ranking	Manufacturer	Sales in 2022	Sales during the same period	Year-on-year growth
1	BYD	1,799,947	584,020	208.2%
2	WULING	442,118	431,130	2.5%
3	Tesla Motors	439,770	320,743	37.1%
4	GEELY	304,911	80,694	277.9%
5	AION	273,757	126,962	115.6%
6	CHERY	221,157	97,625	126.5%
7	CHANGAN	212,277	76,466	177.6%
8	NETA	148,661	69,674	113.4%
9	Li Auto	133,246	90,491	47.2%
10	Great Wall Motors	123,920	133,997	-7.5%

Table 4. 3 Sales Ranking of New Energy Vehicles in China in 2022

4.6 SWOT Analysis of BYD's New Energy Vehicle Business

The development of new energy vehicle enterprises has been concentrated in the past decade. New energy vehicles are gradually able to compete with traditional fuel vehicles and rely on the maturity of battery technology in recent years. Therefore, developing strategies for new energy vehicle enterprises is in the exploratory stage. For enterprises to embark on a path suitable for their own high-quality development, they must fully recognize their strengths and weaknesses, consider the macro environment and internal conditions comprehensively, and clarify their development positioning. Therefore, this article uses the SWOT matrix comprehensive analysis method to analyze the strengths, weaknesses, opportunities, and challenges of BYD Company. Combined with the current development foundation of BYD Company, different combinations are considered to select appropriate development strategies.

4.6.1 The strengths of BYD's new energy vehicle business

BYD has the most patented technology among Chinese new energy vehicle brands. With 9426 patents, BYD ranks first among Chinese new energy vehicle companies. BYD Holdings has more than 20000 patents, including three core technologies: blade battery, e-platform 3.0, and DM super hybrid technology, which are far ahead in the industry and stand out. BYD is the world's first enterprise to simultaneously possess the three core technologies of batteries, motors, and electronic control for new energy vehicles. BYD has developed highly safe iron phosphate and high-energy density ternary batteries in power batteries, solving the technical challenges of new energy vehicle batteries regarding cycle life, range, and safety. BYD has established a leading

technological advantage in power batteries globally. BYD's DM-p+DM-i (dual-mode DM technology dual platform) technology has five leading advantages: dual-mode multi-alarm, convenient charging, environmental protection and energy conservation, extraordinary power, and ultimate fuel efficiency.

In a survey conducted by China Youth Daily, 41.42% of contemporary youth prioritize domestic products when choosing products, 53.16% of people will consider the situation, and 97.69% of respondents said they would recommend good domestic products to others. BYD's new energy vehicles, like Huawei smartphones, are labeled "domestic products" and are technologically leading in the industry, recognized by the world. This makes it highly likely that consumers will lean towards BYD brand products. Compared to Tesla, a foreign new energy vehicle power, many people choose domestic BYD cars for the same technology, quality, and price. Even when the appearance and price are not advantageous, many people are still willing to choose domestic car brands to support domestic products with sentiment. This is BYD's unique advantage in terms of national view compared to joint ventures and foreign car companies.

BYD has a variety of financing channels, and the flow of funds is relatively smooth. From 2002 to 2016, BYD obtained significant investments from Samsung Electronics, Guolian Securities, and Jiuyi Capital and raised 1.4 billion yuan and 1.6 billion Hong Kong dollars through public offerings in Chinese Mainland and Hong Kong, respectively. According to its latest financial report data, BYD has sufficient cash flow, excellent capital composition, and a low asset-liability ratio. Adequate funding means that BYD can consider more strategic models when implementing strategies without being limited by funding for research and development, marketing, and employee benefits. These financial advantages will gradually translate into more technological, market, and talent advantages in actual enterprise operations, forming a virtuous cycle for BYD company.

To reduce costs, BYD's long-term vertical integration strategy of "automotive+IT" has made the entire automotive industry more transparent in its understanding of the industry chain. With BYD's independent spirit, the authority issues that have plagued the underlying structure of car manufacturers such as Chery and Wuling no longer exist. On January 13, 2022, BYD Company won the bid for intelligent mining. BYD obtained an 80000-ton carp production quota for $61 million. BYD has established a global leading cost advantage in power batteries and a maximum scale advantage through the rapid expansion of power battery production capacity.

4.6.2 The weaknesses of BYD's new energy vehicle business

In today's society, cars are not only a necessary means of transportation in people's lives but also an essential reflection of business contacts and the quality of family life.

People's attention is not limited to the vehicle itself, but also more or less considers its level as a commodity. Many times, the brand of a car is also a symbol of the face. When BYD Company was first named, its founder Wang Chuanfu, found it challenging to pass a two-character name due to the large number of companies in Shenzhen. However, "BYD" was quite peculiar, and a strange name was easy to pass. At the time of establishment, the goal of everything was survival, and I only considered brand planning and design a little, so I casually chose a name to register. In the early stages of brand development, BYD's name was also criticized by some people as not very upscale. At that time, the market of BYD cars in the early stages of production was sinking towards a low-cost route, with an incomplete after-sales system and relatively rough product quality, which made people increasingly disappointed with the BYD car brand. "BYD" gradually became labeled as low-end and even became synonymous with shoddy production in the eyes of young people.

To this day, some deep-rooted biases still plague the BYD automotive brand. Although BYD's overall strength has ranked among the leaders of new energy vehicles in China and even in a leading position internationally, some are still unfamiliar with the need to become more. People who do not want to know about the new energy vehicle industry believe that the BYD automotive brand has no face and the quality could be better than imported cars. At present, BYD's product logo has been packaged as Build Your Dream, which has made disruptive progress in product quality and after-sales service. However, to change people's previous impression of a slightly backward brand image, it is necessary to maintain upward momentum and increase publicity efforts while actively developing high-end and high-end products in product line deployment. Becoming a national pride brand requires time to settle.

There are other brands of new energy vehicles and traditional fuel vehicles on the track of the new energy vehicle market. Although BYD currently holds a crucial position in the new energy vehicle industry, the market share of new energy vehicles compared to traditional fuel vehicles still needs to catch up. It is not realistic to completely replace fuel vehicles in the household vehicle field in the short term, mainly due to the following technical difficulties that need to be solved: charging speed significantly affects whether new energy vehicles can travel long distances. The inconvenience of server charging makes new energy vehicles far inferior to gasoline vehicles that start after refueling. With only one car in a family, many prospective car owners may reluctantly give up new energy vehicles for the convenience of long-distance travel. Although some mature charging technologies on the market can fully charge 80% of the battery in half an hour, The range has reached over 300 kilometers. However, many areas still need to be improved in the construction of charging stations in urban areas and high-speed service areas. For example, setting queues and the inability to find charging stations are still common problems. Compared with the

convenience of refueling gasoline vehicles, the research and development of faster charging batteries and the construction of fast charging stations are urgent technical challenges that must be overcome.

Low-temperature battery life issue. Low-temperature battery life is the fundamental reason that affects the entry of new energy vehicles into the three northeastern provinces, Xinjiang, Xizang, and other regions where the environment is cold. In cold and severe weather, the reliability of new energy vehicles is significantly reduced, and even the car cannot be started. The reason is that the life of new energy vehicles will be reduced considerably in low-temperature environments regardless of phosphate battery or hammer battery technology. The technical challenge of low-temperature battery endurance is the decisive factor for whether new energy vehicles can open up the northern market.

4.6.3 The opportunities of BYD's new energy vehicle business

China has a large population base and strong consumption ability, making it the second largest economy in the world after the United States, with a vast automobile consumption market. As an essential tool in the daily lives of more and more ordinary people, cars are no longer just about their application properties. Comfort, luxury, and the wealth value attached to high-end vehicles are also important factors that some consumers with purchasing power are concerned about. The market mainly occupied by new energy vehicles in China is still concentrated below 500000 yuan, including Ideal Automobile, a new energy vehicle enterprise specializing in high-end extended-range models. Its product positioning has stayed within 500000 yuan, and only Tesla's Model X model, mass-produced for household use, has a price range exceeding one million yuan. Compared to traditional luxury car models that often cost millions or even tens of millions of yuan, the domestic high-end new energy vehicle market is in its early stages. This blank market is a rare opportunity for BYD, with technological and financial advantages.

With the popularization of green development concepts and the increasing maturity of new energy vehicle technology, more and more car users, whether private or public vehicles are inclined to consider new energy vehicles when choosing vehicle types. On the one hand, new energy vehicle technology and market matching are gradually maturing, and the previous problems of complex range, difficulty finding charging stations, and difficulty maintaining have been improved to a certain extent. On the other hand, this is due to the relatively low fuel or electricity consumption of new energy vehicles in daily applications and the practical subsidies provided by the national government in the purchase policy of new energy vehicles.

The lagging transformation of traditional car companies such as Volkswagen and Toyota, which still dominate the market, creates opportunities for BYD. China's new

energy vehicle industry started earlier than other traditional automobile industry powerhouses, thanks to the Chinese government's visionary layout and the high sense of global responsibility and environmental awareness of leaders advocating green, energy-saving, environmental protection, and sustainable development. When the story of traditional fuel vehicles lagged behind other developed countries, China laid out the new energy vehicle industry ahead of schedule, providing vital support and subsidies to car companies and consumers in both directions, achieving a curve overtaking foreign car companies in the new energy vehicle race. When foreign car companies realized their layout and transformation, China's new energy vehicles had already experienced years of vigorous development and established patent technology barriers for new energy vehicles.

4.6.4 The threats of BYD's new energy vehicle business

With the rise of the new energy vehicle industry, while the cake is getting bigger, more and more strong competitors are entering the industry. Apart from the already robust Ideal Automobile, NIO Automobile, and Xiaopeng Automobile, as well as Changan Automobile, Chery Automobile, Geely Automobile, and Great Wall Motors, which have transitioned from traditional fuel vehicles to new energy vehicles, Huawei has a world-leading position in the fields of autonomous driving and artificial intelligence, With the intensification of US sanctions on its chips, the possibility of Huawei personally producing cars to survive is increasing. All new energy vehicle companies will have strong competitors.

Old established fuel vehicle companies, including Mercedes Benz, BMW, Audi, etc., are actively transitioning into the new energy field. Mercedes Benz has established the Tengshi new energy vehicle brand in Guangzhou through a joint venture with BYD company, entering the pure electric MPV model market. BMW, Audi, and others have also started to develop their own new energy technologies and launched a considerable number of new energy models. Although they are currently slightly inferior in technology and cost compared to BYD cars, the strength of old luxury car companies in car manufacturing cannot be underestimated. They have a hundred years of experience in automotive mechanical quality, handling, luxury, and other aspects. Once the transformation is successful, it will immediately bring significant threats. Toyota, the former world's best-selling fuel vehicle company, abandoned battery systems and chose hydrogen energy due to industrial layout reasons. Currently, Toyota has a unique technological advantage in the field of hydrogen energy vehicles. Although there is a significant deviation from the world's mainstream new energy development direction, Toyota Group has replaced its CEO and reorganized its strategic layout, Once it enters the field of battery vehicles or makes significant breakthroughs in hydrogen energy

vehicle technology, the impact on the global situation of new energy vehicles is also unpredictable.

China has provided strong support and subsidies to new energy vehicle enterprises for nearly a decade. As the market matures, future policies cannot be permanently continued. Currently, policies have entered the final stage of support. After the complete cessation of policies, new energy vehicles still need to develop, and enterprises still need to survive and grow. The later development model of national subsidy policies must be innovated for further energy industry car companies.

4.6.5 SWOT Matrix

External Factors Internal factors	Strengths	Weaknesses
	1. Patents for battery, electronic control and other technologies are in a leading position in the industry 2. National sentiment makes Chinese consumers more fond of Chinese brands 3. Strong funds, healthy financial condition, and strong profitability 4. Advance layout of core mineral resources such as lithium mines, with excellent cost control capabilities	1. The historical image of the brand needs to be continuously transformed 2. Numerous technical challenges still need to be addressed
Opportunities	SO	WO
1. China's automobile consumption market has a huge base 2. New energy vehicles gradually replace fuel vehicles 3. Lagged product transformation of fuel vehicle companies	1. Increase investment in product research and development, consolidate technological advantages 2. Enrich product line and expand product price range 3. Horizontal and vertical mergers and acquisitions to expand production capacity 4. Enrich marketing methods and leverage cost advantages	1. Increase brand building efforts and develop sub brands 2. Accelerate public relations in key technology areas and seize the market of gasoline vehicles
Threats	ST	WT

1. Rapid increase in new entrants 2. Fuel powered vehicle companies actively transform 3. The national subsidy policy has entered its final stage	1. Strengthen cooperation with other companies in the field of technology and strengthening alliances 2. Invest in innovative business model enterprises 3. Seek cooperation with established fuel vehicle companies to complement each other's advantages	1. Strengthen brand design concepts and update trademark design 2. Strictly control product quality and drive consumer reputation 3. Reduce operating costs and ensure profits 4. Launch low-cost products to seize the low-priced market

Table 4. 4 SWOT Matrix

Compared to its competitors in the automotive industry, BYD Company has a more significant overall advantage and more opportunities for its new energy vehicle counterparts. BYD Company has advantages and disadvantages compared to its traditional fuel vehicle competitors. Although there are some disadvantages, they do not endanger the long-term development and survival of the enterprise. More importantly, BYD Company is in a golden development period in the new energy vehicle industry, with good financial conditions, abundant talent reserves, industry-leading technological innovation capabilities, and a critical period of brand growth. If multiple business strategies are chosen, it is easy to weaken advantageous resources, waste funds and technology on short-term benefits, and send opportunities for development and growth to competitors, thereby losing the leading position. If BYD company choose WO's transformation, it tend to focus too much on it’s brand foundation and overlook that reputation is something that customers accumulate gradually while using our products. BYD company also focus too much on the short-term gains and losses of competing with fuel-powered vehicles. The development and growth of the new energy vehicle industry is the trend, and BYD only needs to grasp the current industry trends, focus on research and development, and naturally stand invincible in the competition. Therefore, The turnaround strategy is not suitable for BYD company either. If BYD company choose the WT defense strategy, reducing costs, sinking into low-priced markets, redesigning brands, etc., it is outside the current development of BYD Company. It is not suitable for its development at this time.

In summary, BYD Company should focus on the SO growth strategy in the current external situation and its conditions, expand industry advantages, formulate various measures to compensate for its disadvantages, and seize development opportunities.

Chapter 5 Conclusion and Recommendation

5.1 Conclusion

5.1.1 Current Situation of Competitive Environment of BYD New Energy Vehicles

By analyzing the current situation of BYD's new energy vehicles tasted on Porter's Five Forces model shown that the suppliers' bargaining power could be more substantial due to the successful development strategy of BYD company's entire industry chain. Core components and raw materials are produced and supplied independently, and core technologies are self-developed. Other non-core parts are standard to gasoline vehicles, so there are more suppliers, and their prices have achieved long-term stability in the market. The substitutability of substitutes is also constantly being weakened due to the booming development of the new energy vehicle industry, the gradual maturity of industry products, and the obvious convenience and cost advantages in competition with conventional fuel vehicles and other public transportation. Potential entrants and industry competitors are increasing daily, each with solid capabilities and unique strengths. Tesla has low manufacturing costs and a stylish exterior design. Ideal Automobile stands out in the high-end range extender vehicle field, with sales far ahead. Technology companies such as Huawei are also eager to try to make cars by leveraging their excellent chip research and development capabilities. This is the main reason for the increasingly fierce industry competition and the main factor for increasing consumer choice opportunities and improving bargaining power.

In summary, the development prospects of the new energy vehicle industry are extensive, and it is a sunrise industry with great potential, but the industry competition is particularly fierce. The primary source of competition faced by BYD company is competition from industry competitors and potential entrants. Fortunately, BYD company has accumulated a specific technological advantage and has pre-arranged vital resources, which is the main reason why BYD company is currently in a competitive advantage in the industry. However, due to the continuous development and competition of domestic and foreign peers, this advantage has become increasingly small. To remain invincible in future industry competition, BYD must adhere to its consistently implemented technology leadership strategy and simultaneously plan in future potential areas, increase research and development investment, enrich product lines, and ensure its own healthy and sustainable development.

5.1.2 Competitive Strategy Selection for BYD New Energy Vehicles

Competitive strategy, also known as business-level strategy, is a strategy that a company must rely on to achieve and develop. Any company's business development will involve competition or cooperation with other companies. Therefore, the characteristic of business-level strategy is competition. It belongs to the second level of strategy and is related to the position of the enterprise in the industry relative to its competitors. It includes three basic types: cost leadership strategy, differentiation strategy, and centralization strategy. Based on BYD Company's current advantages in the industry and future development directions that need to be strengthened, its business strategy should choose cost leadership and differentiation strategies.

1. Overall cost leadership

The overall cost leadership strategy, also known as the low-cost strategy, refers to enterprises reducing costs through various means, lowering their costs than their competitors, or even all of their peers, to gain a competitive advantage. The control of core materials is the first vital link in implementing a overall cost leadership strategy. The cost of new energy vehicles largely depends on the battery, which is the price of raw materials such as metal minerals such as carp ore. BYD Company currently ensures the stability of battery raw material prices by controlling core resources such as carp ore. At the same time, the entire industry chain strategy ensures the safety of the supply chain. Currently, self-production and supply have been achieved in the electronic control system, body manufacturing, lighting, and other links, as well as in interior manufacturing and speaker manufacturing. Select preferred suppliers for comfort configurations such as air conditioning seats, conduct vertical mergers and acquisitions at appropriate times, implement cost leadership strategies, and establish advantages in product prices.

Practical management innovation is also a critical factor in reducing costs. BYD's implementation of a overall cost leadership strategy can reduce expenses from essential materials, innovate and create management efficiency, and establish a sound and efficient management model to save costs. BYD's biggest competitor, Tesla, represents its peers in implementing a overall cost leadership strategy. Its innovation in integrated assembly allows Tesla to save 17% of labor and time costs for every car produced compared to other competitors in the industry. At the same time, it adopts a minimalist design concept, saving many body interiors and luxury configurations while maintaining its style. These methods are management methods that BYD can emulate and learn from.

The cost of funds is also a type of cost, and the fees paid by enterprises in the financing process, including the interest paid and the equity transferred, ultimately have to be evenly distributed among the products sold, increasing the cost of automotive products. BYD's financial advantages can be achieved through capital operations to create efficiency, strengthen financial management, reduce financing costs, and

optimize the utilization of funds to achieve a cost leadership strategy at the business level.

2. Differentiation

Differentiation strategy refers to creating unique features for a company's products to differentiate them significantly from competitors and enhance their competitive advantage. The core of this strategy is to grasp the details of consumer demand. BYD Company's current brand is not considered high-end, and there is no apparent advantage in after-sales service. In the fierce market competition, these issues can be improved from different perspectives through a differentiation strategy.

Differentiation of services. Service is the most intuitive way to shape a brand image, and good service can enhance consumers' liking and recognition of the brand. When implementing the service differentiation strategy, BYD Company can first establish a service system around the product, focusing on the service awareness of service personnel in different positions such as sales, after-sales, and customer service, enriching communication channels with customers, timely obtaining market demand, and providing feedback on market reactions. While providing product training, BYD Company can also offer excellent service training. Replacing marketing with services to create a brand-new image.

5.2 Recommendation

Supply chain optimization: Strengthen strategic cooperation with suppliers, establish long-term stable cooperative relationships, and achieve scale and intensification of raw material procurement and component supply. Reduce supply chain costs through joint research and development, optimization of production processes, and other means. At the same time, strengthen risk management of the supply chain to ensure stable supply of raw materials and components.

Production efficiency improvement: Continuously optimize production processes and techniques to improve production efficiency and quality stability. Introduce advanced production equipment and manufacturing technology, promote the application of intelligent manufacturing and industrial Internet, realize the automation, informatization and intelligence of production process, and reduce production costs.

Implementation of platformization strategy: Increase the implementation of platformization strategy, develop multiple new energy vehicles of different levels and types based on the same platform, achieve the universality and modularization of components, improve research and development efficiency and production scale benefits, and reduce research and development costs and manufacturing costs.

Enrich product line: Further expand the product matrix and launch more models for segmented markets. For example, increasing the research and production of high-

performance and luxury new energy vehicles to enhance brand image and market competitiveness; At the same time, focus on the small and micro new energy vehicle market to meet the needs of urban commuting and young consumers.

Personalized customization service: providing personalized customization services, allowing consumers to customize the exterior color, interior material, configuration, etc. of vehicles according to their preferences and needs. Satisfy consumers' pursuit of personalization, improve product added value and user satisfaction.

Strengthening product performance and quality: Continuously improving the performance indicators of new energy vehicles, such as acceleration performance, range, handling stability, etc. Strengthen quality control and management to ensure the reliability and durability of products, and establish a good brand reputation.

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