

# Comparative Analysis of New Energy Vehicle Marketing between China and America

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**Abstract:** From the perspective of energy, traditional fuel vehicles mainly rely on oil as energy, and the limited and non-renewable nature of oil resources make their price rising, and the problem of energy security is increasingly prominent. In order to promote the development of new energy vehicles, many countries have formulated a series of preferential policies and supporting measures, such as car purchase subsidies, free parking, unlimited travel and so on. The implementation of these policies has provided a strong guarantee for the promotion of new energy vehicles. At present, the sales of new energy vehicles in China show a competitive pattern of increasingly concentrated market share towards the top enterprises, and the sales of a large number of independent brands have achieved strong growth. For example, this paper mainly focuses on the marketing perspective of new energy vehicles and the comparison of new energy vehicles in China and the United States, aiming to reveal the development of new energy vehicle enterprises and discuss the commonalities and differences in the new energy vehicle industry in China and the United States.

**Keywords:** New energy vehicles, Marketing, New energy vehicle enterprises, Development of new energy vehicle.

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## 1. Introduction

With the accelerated development of global industrialization, the mass use of traditional fuel vehicles has led to increasingly serious environmental problems and energy crisis. At the same time, greenhouse gases such as carbon dioxide produced by burning oil have had a huge impact on global climate change. Therefore, the search for alternative energy sources and reducing carbon emissions have become an urgent demand. As a clean, efficient and sustainable mode of transportation, new energy vehicles have gradually attracted global attention and attention. New energy vehicles, especially electric vehicles and new energy vehicles, with their characteristics of zero emissions or low emissions, have become an effective way to solve this problem. Byd Automotive (BYD Auto), a Chinese auto manufacturer, was founded in 1995 and belongs to the BYD Group (BYD Company Ltd.). As a battery manufacturing company, BYD Auto has gradually developed into one of the most influential new energy vehicle manufacturers in China and even the world with its leading battery technology. The company covers business areas such as electric vehicles, hybrid vehicles, batteries and new energy solutions. Byd has independently developed a number of electric vehicle products, and has achieved significant sales results in the Chinese market. By actively participating in government policies and market competition, BYD has gradually improved its competitiveness in the new energy vehicle market. According to the Securities Times, in 2023, BYD new energy vehicle sales totaled 3,024,400, up 62.3% year on year, among which the cumulative sales of pure electric passenger vehicles were 1.5748 million, up 72.8% year on year. As the world's giant manufacturer of new energy vehicles, the leader in the new energy vehicle industry has unique characteristics in terms of development process, market positioning and strategic innovation, which has important reference value for the development of the field of new energy vehicles. First, Tesla's development process demonstrates its ability to

continuously explore and adapt to the market. Founded in 2003, the company was founded by Martin Eberhard and Mark Tapering and later joined by Elon Musk and led Series A funding. The company launched high-end Roadster models in its initial stage, although facing high research and development costs and pricing problems, but successfully overcame the difficulties through strategic investments from Daimler and Toyota and loans from the U. S. Department of Energy. Subsequently, Tesla launched models such as Model S, Model X and Model 3, achieving mass production and growing revenue. This journey demonstrates Tesla's outstanding performance in technological innovation and market expansion. Secondly, Tesla's market positioning and product strategy have successfully created it a unique brand image for it. The company positions itself as a high-end electric vehicle manufacturer, focusing on environmental protection and technological innovation, and attracting consumers with environmental awareness and social responsibility. At the same time, Tesla continues to launch different types of models, such as Roadster, Model S, Model X and Model 3, to meet the needs of different consumers, showing a diversified and personalized market strategy. Tesla's strategic innovation is also the key to its success. Through the open patent policy, the company has attracted more automobile enterprises to join the field of electric vehicle technology, and improved the quality and competitiveness of the whole industrial chain. In addition, Tesla's new media marketing strategy, especially its active participation in social media, helps to build brand awareness, build closer ties with consumers, and spread brand values. In general, Tesla has set an example for the new energy vehicle industry with its unique development process, market positioning and strategic innovation, which not only affects the development direction of the whole industry, but also provides useful experience and lessons for other new energy vehicle manufacturers. Tesla's successful experience emphasizes the importance of product quality and marketing strategy, and points out the direction for the future

development of new energy vehicles. Tesla delivered 1.81 million pure electric vehicles in the United States in 2023, up 38% year on year. Is worthy of the world's new energy vehicle leading enterprises.

According to the data of terminal registration statistics, the sales volume of passenger vehicles in 2023 was 21.87 million, and the sales volume of new energy passenger vehicles was 7.322 million, up 39% year on year. Although new energy passenger vehicles still maintain a high growth, the growth rate has slowed down significantly (the sales volume of new energy passenger vehicles in 2022 is 56.26 million, a year-on-year growth of 79%)

In terms of the sales volume of vehicles of different power types, the sales volume of pure electric vehicles was 4.95 million, accounting for 67.6%, down 8 percentage points compared with 2022; the sales volume of plug-in hybrid vehicles was 1.74 million, accounting for 23.8%; the sales volume of extended-range hybrid vehicles was 630,000, accounting for 8.6%; the growth rate of plug-in hybrid and extended-range hybrid was higher than that of pure electric vehicles in 2023, and the market share increased by about 4% each.

In terms of sales volume of different brands, BYD ranked first with 2.389 million units, with a year-on-year growth of 50.9%; Tesla ranked second with 611,000 units, an increase of 38.4%.

Both Tesla and BYD entered the auto market around 2003. Reviewing the development of the two, there are both similarities and differences. Similarities: 1) At present, both have become the global leader of new energy vehicles; 2) From the beginning of their establishment, both take electric as the main research direction and main model, deep cultivation for nearly 20 years, after hard work, accumulation and bear fruit. Differences: 1) Throughout the development process of both, the economic development of China and the United States is closely related to their products and development strategies: Tesla leads the industry change through high-end pure electric sports cars; BYD complies with China's economic development, starts with low-end models, and continuously upgrades its products with China's economic boom. 2) Tesla Vision is to accelerate the transformation of the world to sustainable energy. Its products include pure electric vehicles, solar panels, clean energy storage, etc. BYD starts with technology manufacturing, and its products include BYD electronics (throughout the consumer, automotive and military fields), automobiles, cloud rail, etc.

Next, we will introduce the differences between the two brands

## 2. Marketing Strategy

From the point of product sales channels, byd using traditional sales channels, different from tesla, wei to new energy brands, consumers can directly after order online real-time logistics information, byd's traditional sales in the present era of information communication quickly and no advantage, and affect the consumer experience. The sales of Tesla cars adopt a combination of offline experience and online direct sales. Therefore, Tesla's stores in China only have experience centers and service centers. The experience center presents customers with different car shapes and supports the test drive, so that customers can better understand the appearance and performance of each Tesla car; the service center is responsible for the battery maintenance

and technical service after the purchase. Customers who want to buy a car can go to Tesla's website to order it online. Through the online direct selling model, the customers can freely choose the models they need, and then the automobile factory can produce according to the customers' orders. This marketing mode has quickly gained the recognition and loyalty of the customers. At the same time, this customized vehicle model enables Tesla to produce in real time completely according to customer needs, avoiding inventory overstocking and raw material waste, and reducing storage costs, raw materials and labor costs

From the perspective of product promotion channels, BYD focuses on advertising and promotion, BYD new energy vehicles advertise in CCTV and other important TV media, enhance brand awareness and product awareness; BYD new energy vehicles advertise on major social media platforms, automobile websites and other online media, present precise positioning and big data analysis to potential customers; BYD new energy vehicles hold activities in major auto shows and dealer stores to attract consumers to participate and provide preferential policies; BYD new energy vehicles invite celebrities to increase brand influence and reputation. In addition, BYD new energy vehicles also cooperate with other brands, to jointly launch co-branded models or gift sets, to attract more consumer attention. Tesla claims it have no advertising budget and doesn't spend its money on advertising marketing, but it still gains a wide range of spread and influence. The reason is that Tesla uses the celebrity effect to advertise for itself, and uses the vast spread of celebrities to attract the attention of consumers, so as to expand its brand awareness. On the one hand, Tesla makes the use and recommendation of Tesla cars through entertainment stars and influential entrepreneurs. Hollywood star Leonardo, Google founder Sergeblin and Xiaomi founder Lei Jun are all users of Tesla. These celebrities have high social attention. Their recommendation of Tesla cars will not only expand the brand awareness and awareness of Tesla cars, but also increase car sales through the imitation effect of fans. On the other hand, Tesla uses the new media communication channels to expand the popularity of Tesla cars. To raise the attention of Tesla cars in China, Tesla CEO Elon Musk has opened a Weibo blog. He sent the latest news from Tesla Motors Co., Ltd. in real time on Weibo, and also released introductions and reviews of various Tesla car models by attracting fans and improving their brand reputation.

## 3. Strategic Comparison: Define Vertically Integrated Supply Chain, Technological Innovation Leading Industry Change

Different factory capacity layout, independent master of the core technology. Tesla factories are all over the world, and BYD factories are concentrated in China, serving the two companies' main consumer markets. Tesla has four major vehicle plants in the United States, Germany and China, Thanks to the industrial advantages of the three major automobile industry powers and the company's own high-end intelligence capabilities, Tesla is a global leader in single plant capacity, In 2022, the annual production capacity will rise to 65 / 75 0,000 units respectively, Is currently the main source of supply of Tesla products, The Berlin and Austin plants went into production in March and April 2022, The current production capacity reaches 5000 Model Y / week and

3000 Model Y / week respectively, Capacity is climbing quickly. Byd factory is mainly concentrated in the major automobile town in southeast China. At present, there are nine major factories. Due to its early construction time, the land area and production level of a single factory is relatively backward than that of Tesla, and the production capacity is less than the latter, but the total production capacity has reached about 3 million vehicles. Tesla and byd factory layout are fit in the two companies the current main market, tesla in China, us, the three main market have super factory layout, its product delivery is smooth, high degree, byd factory is mainly concentrated in the southeast China auto parts industry closely linked, contribute to the smooth operation of the supply chain.

Independent master of the core technology, vertical integration of key supply. Tesla and BYD are disruptors of the traditional automotive supply chain, breaking the Tier-2-Tier-1-OEM automotive supply chain. New energy vehicles electric, intelligent characteristics of the powertrain system, electrical system since the research importance increased significantly, on the one hand, the research core parts can reduce costs, improve, production efficiency, on the other hand, the core parts for customized development plays an important role, so the two companies in the process of development key layout of the upstream and downstream integration of supply chain, but the supply chain integration system is different. Relying on its excellent innovation and research and development ability, Tesla has realized the independent control of autonomous driving chip. The core competitiveness of intelligent system is leading in the world. BYD's technology in intelligent system is relatively backward, but it can develop and produce the core components of the powertrain, which is of great significance to ensure the production of the company. In addition, BYD's company, BYD Electronics, BYD Semiconductor and other companies also helped the company to achieve independent control in some other components, and the independent breadth of the overall industrial chain is ahead of Tesla. Tesla's lag in battery cells and BYD in self-developed chips drives the difference between the two companies' priorities in their future technology layout.

In other aspects, BYD basically covers the entire industrial chain of electric vehicles. BYD is currently the only automobile manufacturer that vertically integrates the whole industrial chain. Thanks to BYD's integration of the vertical industry chain and its comprehensive layout in the new energy vehicle industry, some key components of BYD models, thermal management, electronic appliances, chassis system are self-developed and self-produced. Comprehensive layout of the industrial chain, a significant synergistic effect. Byd has a comprehensive industrial chain layout in the new energy vehicle industry, running through the upper, middle, downstream and post-markets of the industry. The company's industrial chain layout ranges from battery raw materials to three-power systems to vehicle design and manufacturing to battery recycling and automobile service, forming a complete closed loop of the industrial chain. Through the comprehensive industrial chain layout, the formation of a significant synergistic effect. However, Tesla is in the industry-leading level in terms of global visibility, service network, quantity, supercharging network, intelligent driving and other aspects. In terms of supercharging network alone, up to now, Tesla has opened more than 1,500 supercharging stations and 10,000 supercharging piles in China, which is

almost difficult for most local car companies to reach. For continued price cuts, Tesla said, The company's insistence on cost pricing — Behind Tesla's price adjustment, Covers numerous engineering innovations, In essence, it is a unique cost control rule: including but not limited to vehicle integrated design, production, line design, supply chain management and even optimizing the robotic arm synergy route in milliseconds... Tesla models can ignore the high and low distribution when leaving the factory, Standardized production, Lock-in some hardware functions through dedicated software, Such as seat heating, battery life, Then divide the high and low matches on the software, With multiple gears (times): as long as you are willing to pay, Cars, bought at a low price, By unlocking the hardware already configured from the factory, The upgrade can be completed quickly. To a large extent, this has blocked the opportunity for Chinese enterprises to grab the market share of multinational companies by increasing the brand cost performance through low price and high distribution. The hardware price is very low, and this model is more lethal than the traditional model of Chinese enterprises focusing on the cost performance of their products themselves. Moreover, considering the systematic cost reduction ability of China's new energy supply chain and Tesla's ultimate cost management ability, there is still a lot of room for price reduction. Second, super production capacity forced price reduction. This is the basic model on which made in Chinese or Chinese marketing depends for success. Tesla's Shanghai plant will have a production capacity of 2 million vehicles in 2023. The auto industry is a typical economy of scale, and greater production means lower costs. In theory, when infinite capacity is converted into infinite sales, the cost will tend to be infinitesimally small and the profit will naturally be infinite. With a theoretical super capacity, Tesla is urgently pursuing, of course, super sales. Winning China, the world's largest car market to achieve super sales, price reduction is undoubtedly the most economic means. Finally, to realize the "mobile phone" of hardware manufacturing. This is not only the most dazzling innovation after the production capacity layout of Chinese manufacturing or multinational companies in China, but also the most thorough localization of multinational companies in China. Different from traditional fuel car, gearbox, chassis and engine the big brand the exclusive technology, and as a selling point, new energy vehicles have been connected, near smartphones, the battery, motor and electricity, pool management system is more and more tend to the professional, company procurement, brands began to assume the assembly plant, the role, this and apple, millet is very similar. Looking at the tesla's repeated domestic price cuts, in addition to the significant increase of its own production capacity, the use of Chinese manufacturing is also a key factor. For example, with the use of the Ningde era lithium iron phosphate battery, the price of the standard endurance version of the Tesla Model3 has dropped to about 240,000 yuan. The groundbreaking of Tesla lies not only in the popularization of new energy vehicles, but also in the manufacturing system of new energy vehicles with electronics and product manufacturing thinking. What deserves special attention from local car companies is that the price reduction does not mean an absolute decline in Tesla's profitability. Different from many domestic new energy vehicle companies, Tesla is not only an electric vehicle company, but also has more ways and fulcrum to obtain profits.

## 4. Swot Analyse

### SWOT OF BYD

	<b>Strength</b>	<b>Weakness</b>
Internal factors	<p>λ Strong technical strength: BYD has independent research and development of power battery, motor, control system and other technologies, and can independently design, develop and produce electric vehicles.</p> <p>λ Wide customer base: BYD has a wide range of customer groups in the domestic and foreign markets, including the government, enterprises, individuals, etc., and has cooperated with a number of international well-known brands.</p> <p>λ Large market share: BYD has been at the forefront of China's new energy vehicle market share, and its sales have been growing year by year.</p>	<p>Lack of brand awareness: Although BYD has become a leading enterprise in the domestic new energy vehicle market, its brand awareness and reputation are relatively low, and it still needs to increase its brand marketing efforts.</p> <p>Depely on the domestic market: At present, BYD's sales revenue is still dominated by the domestic market, and its international market expansion space is relatively small. If the domestic market shrinks, it will pose a threat to the development of the enterprise.</p> <p>The industrial chain is not complete: although BYD has its own technology in battery, automobile and other fields, the upstream and downstream of the whole industrial chain are not closely connected, which also limits the production efficiency and market competitiveness of the enterprise.</p>
External factors	<b>Chance</b>	<b>Threaten</b>
	<p>1、 λ Development of the new energy vehicle market: With the global attention to environmental protection and energy conservation, the demand for the new energy vehicle market continues to increase, BYD will have more opportunities to expand its market share.</p> <p>2、 λ National policy support: The Chinese government has been strongly supporting the development of new energy vehicles, and BYD can benefit by actively responding to the policy and improving the level of technology.</p> <p>3、 λ International market expansion: As the domestic market gradually becomes saturated, BYD needs to actively explore the international market to gain more opportunities and profits.</p>	<p>1、 λ Rising competition: The growing number of competitors in the new energy vehicle market could put pressure on BYD's market share.</p> <p>λ Policy risks: Government policies that could affect BYD's business. For example, the government may restrict the production and sale of certain types of new energy vehicles.</p> <p>λ The price fluctuation of raw materials: The new energy vehicles produced by BYD need a large amount of raw materials such as batteries and rare earths. If the price of these raw materials fluctuates, it may affect the company's cost and profitability.</p> <p>λ Lack of human resources: BYD needs to recruit and train a large number of technical personnel to develop and manufacture new energy vehicles. If the company fails to recruit enough high-quality employees, it will affect the company's innovation and development ability.</p>

Figure 1. Swot of Byd

# SWOT Analysis of Tesla

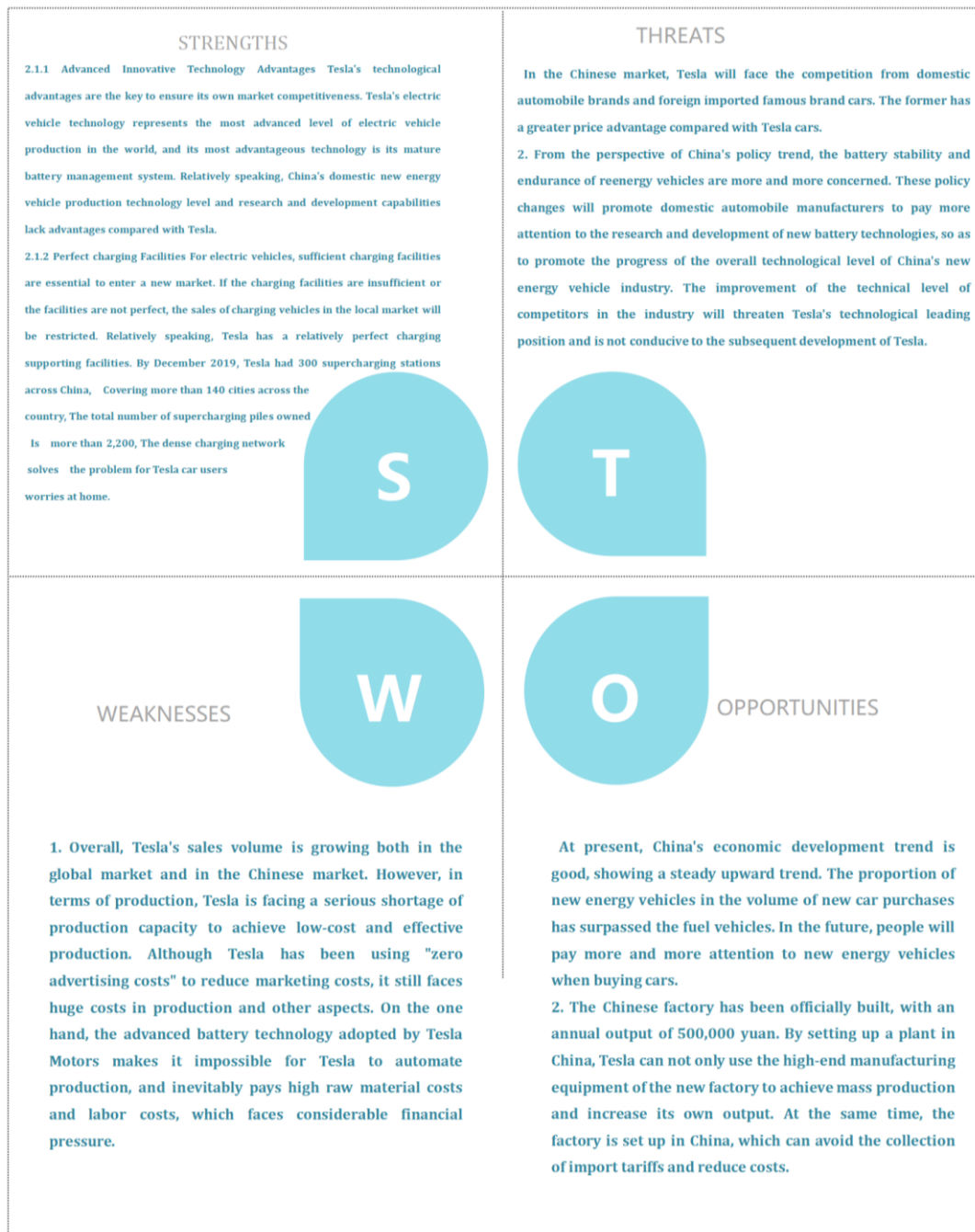


Figure 2. SWOT Of Tesla

## 5. Conclusion

If Tesla has other distinctive features in marketing besides technological advantages, it must be low cost and continuous price cuts. It is not only the only multinational company with a lower price in the Chinese market than the developed market, but also a multinational company that has made all customers "affordable and happy" in the initial stage. This appeal is similar to that of Chinese style marketing.

Popularizing, new energy vehicles in the global market will eventually fully face this market with great potential. Tesla's goal is to achieve sales of 20 million vehicles by 2030. Its competitors include all the traditional giants of the world's auto industry, ambitious and potential

A necessary Chinese competitor. At present, the world economy is in a stage of deep adjustment, and the overall growth rate of the global automobile market is slowing down. The global automobile market is shifting from traditional powered vehicles to new energy vehicles. Energy consumption, environmental protection and other industries are facing increasingly severe challenges. Many governments give different support to new energy vehicles, and the new energy vehicle market will also grow. In general, the internal advantages of BYD's automobile internationalization guarantee its foothold in the international market, but at the same time, its internal disadvantages also restrict its further development. Compared with Tesla, BYD's current priority is to address its internal weaknesses as soon as possible and

make the weaknesses continue to translate into strengths. Give full play to competitive advantages, carefully layout Chinese domestic and foreign markets, at the same time use technology and price to open up overseas markets.

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