

Revolutionizing The Automotive Industry: Tesla's Innovative Marketing Strategies in The Face of Changes

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Abstract. In the current era that prioritizes low carbon emissions, Tesla has emerged as a dominant player in the electric vehicle market, defying challenges and odds through its unwavering commitment to sustainability. This study delves into the intricate web of marketing strategies deployed by Tesla, a pioneering force in the rapidly expanding electric vehicle sector. Against the backdrop of varying circumstances, including shifts in national policies, market dynamics, supply and demand, and technical advancements, Tesla has adeptly navigated its course. The focal points of these strategies encompass pricing adjustments, strategic advertising campaigns, continuous technological innovation, and strategic partnerships recalibrations. Tesla's discerning choices in these diverse scenarios have been instrumental in sustaining and augmenting its market performance. By adroitly adapting its approach, the company has managed to maintain a formidable competitive edge. This paper intricately examines the ramifications of Tesla's multifaceted marketing strategies on its performance, elucidating how these decisions have influenced its growth trajectory. The study also ventures to forecast Tesla's future growth trajectory. Given the company's successful track record in maneuvering within the dynamic electric vehicle landscape, informed insights are gleaned into the avenues that may drive Tesla's continued expansion and influence. By fusing comprehensive analyses of the strategies undertaken, this research aims to offer valuable insights into the symbiotic relationship between strategic marketing decisions and Tesla's remarkable success in the current market.

Keywords: Automotive industry; innovation; marketing strategies.

1. Introduction

Today's world has ushered in a huge change in the energy industry, with low-carbon emission energy sources being favored worldwide, and the application of various new energy sources being constantly upgraded in recent years. Similarly, the changes have also affected the automobile industry. Since the first electric car was built in the 19th century, the automotive industry has opened up a whole new path. But it wasn't until Tesla developed the Roadster in 2006 that electric cars really entered the market as a competitive product. Nowadays, electric cars account for a large proportion of the automobile market, and many countries and regions are vigorously promoting trams, which have become a major trend for future development. Various brands of trams have come together to form a brand with great diversity and potential in terms of momentum. Tesla, one of the giants in the industry and one of the pioneers in the development of modern trams, has made a lot of efforts in terms of carbon emissions, such as the use of superchargers and the construction of sustainable factories. Meanwhile, Tesla has been developing new technologies in recent years and working with different manufacturer brands to try to have a stronger competitiveness in the market. Tesla has faced many opportunities and challenges in the development process, such as the decrease or increase of market demand, and the challenges posed by the rise of other brands such as BYD. Accordingly, Tesla has adopted a variety of marketing strategies, such as price adjustment and advertising campaigns, a specific example is "floating price", which means that the cost of vehicle manufacturing is different at different times of the year, and it will change according to the market situation. Tesla

has also been supported in its development by policies such as the Advanced Technology Vehicle Manufacturing (ATVM) program. This essay will discuss the impact of various strategies on the performance of the company and discuss which strategy has caused the most impact. Through this paper, the reader will be able to gain a clearer understanding of the development of the trolley industry, as well as learn about the different choices Tesla has made when faced with different scenarios and the reasons for them. This paper will analyze Tesla's adjustments when facing different situations, such as the choice of batteries, innovation in navigation technology, and response to inflation, in terms of price, market demand, product development, manufacturer cooperation, and national policy support, etc., and determine the correctness and magnitude of the impact of its adjustments on the fluctuation of performance.

2. Price Strategy

Earlier this year, Model 3 prices began to deviate significantly from those of comparable electric vehicles (EVS). In a move that may have come as a surprise to some, the Y-type SUV underwent a drastic change. Once \$19,000 is above the average transaction price, it now starts below the industry average. Instead of following the traditional auto industry practice of setting prices at the beginning of each model year, Tesla has adopted a "variable pricing" strategy, which means the cost of its vehicles changes throughout the year. [1] In January 2023, Tesla reduced the price of some of its models by as much as 20 percent, which led to an increase in demand for its products and a preemptive strike against its competitors. While this price change resulted in a temporary drop in profit margins, Tesla's profit margins are expected to grow by as much as 40 percent over the next five years. Tesla has developed and mastered its core technology in-house, with little need for outside help in sourcing batteries, assembling them, or producing the driver chip. This highly efficient production process can drastically reduce Tesla's production costs and increase its profits. [2] Facing a large output of cars, Tesla can effectively attract more consumers by lowering the price of its products in order to further open up the market. Value-based pricing is one of the most common and effective pricing strategies in the automotive industry. With the exception of China's BYD Co. no other automaker can match Tesla's electric car production. This production capacity, coupled with manufacturing innovations such as single-piece car construction and simpler batteries, has allowed Tesla to steadily reduce costs. [3] Value-based pricing recognizes that customers are willing to pay for an experience when purchasing a specific service or product. A value-based strategy will allow manufacturers to extend the life cycle of existing products and build strong relationships with their valued suppliers. This low-price policy can also be profitable for companies that have customers who are less sensitive to price fluctuations and can consistently deliver high-quality products that satisfy their buyers. By having a low-price policy Tesla can increase its profits through dynamic pricing, resulting in greater revenues. [4] Tesla's last few years have been marked by a yearly increase in profits. Tesla produced tens of thousands more units than it delivered in the final months of last year, leading to an increase in inventory. And with various industries facing some economic problems in the wake of the New Crown epidemic, people's spending power has declined. Tesla's price cut also encourages people to spend some money. Tesla's low-price policy is also trying to follow the big picture change based on Tesla's strong ability. Despite the price reduction, Tesla has maintained high-quality production.

3. Market Demand

3.1. Vehicle Type

Tesla offers a range of electric vehicles, prominently including the Model S, Model 3, Model X, and Model Y, each catering to distinct preferences and needs. [4] The Model S and Model X, introduced earlier to establish Tesla's market presence, epitomize luxury class offerings. Featuring air suspension for optimal driving comfort, these models excel in driving experience. The Model X, with

an option for 7 seats, addresses space and capacity demands, while the Model S, boasting astonishing acceleration to 100 kilometers in just 2.1 seconds, appeals to enthusiasts seeking both speed and range. Positioned as an entry-level electric sedan, the Model 3 is cost-effective and the most affordably priced among the quartet. However, it offers limited space in the back and a lower roof. The Model Y, regarded as a more spacious and budget-friendly option, is akin to an extended Model 3. It boasts enhanced rear-row comfort and additional space, contributing to its popularity. The Model Y's affordability, spaciousness, and advanced features collectively render it a compelling choice. In terms of sales, the Model Y and Model 3 have emerged as dominant contenders. In Q2 2023, combined sales of these two models reached an impressive 446,915 units, significantly overshadowing the Model S and Model X sales, which accounted for 19,225 units. By July 2023, the Tesla Model Y triumphed as the world's best-selling vehicle. At Tesla's 2023 annual shareholders meeting, CEO Elon Musk expressed unwavering confidence that the Model Y would maintain its global lead throughout the year, solidifying Tesla's strong market position.

4. Sales in Different Regions

4.1. The United States

The United States serves as Tesla's foremost market, a testament to the company's commanding presence in the electric vehicle (EV) landscape. As of 2022, Tesla's dominance in the U.S. EV market was unequivocal, boasting an impressive 50.58 percent market share, eclipsing its closest contender, Kia, which held a comparatively modest 7.81 percent [5]. Notably, Tesla's formidable grip on the market is underscored by its best-selling models in the U.S., the Model Y and Model S. These vehicles have resonated deeply with American consumers, propelling Tesla's prominence to new heights. In the fourth quarter of 2022, the synergy between the Model Y and Model S accounted for an astonishing 88% of the sales share among the four Tesla models [5]. This overwhelming popularity speaks volumes about the two models' resonance with the U.S. consumer base. The Model Y, an embodiment of versatility and efficiency, has become a compelling option for families and individuals alike, capturing hearts with its spaciousness and advanced features. On the other hand, the Model S, renowned for its exhilarating acceleration and exceptional range, has solidified its reputation among performance enthusiasts and tech-savvy drivers. Tesla's ascendancy in the U.S. EV market is a culmination of factors ranging from innovation and design to a robust charging infrastructure. Additionally, the allure of owning an electric vehicle that aligns with environmentally conscious ideals has significantly contributed to Tesla's popularity. This surge in demand for Tesla's electric offerings has prompted not only a revolution in personal transportation but also a reshaping of the automobile industry as a whole. As the global automotive landscape continues to shift toward sustainability, Tesla's stronghold on the U.S. market illustrates a paradigm shift in consumer preferences. With a commitment to pushing the boundaries of electric mobility and a steadfast dedication to customer satisfaction, Tesla remains poised to further reshape the trajectory of the automotive industry, ushering in an era of emission-free transportation powered by innovation and conviction.

4.2. China

China stands as Tesla's second-largest market, a testament to the company's global reach and influence. However, the landscape of electric vehicle (EV) competition in China is undeniably challenging. In this dynamic market, Tesla has encountered formidable rivals, with Chinese automakers, primarily BYD, exerting intense pressure. To maintain its competitive edge, Tesla had to navigate the intricacies of the Chinese market by implementing price cuts, a strategic move aimed at responding to the aggressive pricing strategies employed by local competitors. Particularly, BYD, a prominent player in the Chinese EV landscape, undertook substantial price reductions to safeguard its market share amidst a backdrop of softened demand. BYD's price-slashing approach underscores the rigorous competition within China's EV market. For context, BYD, a market leader, commands a

significant 41% share of car sales in China, a testament to the company's entrenched position in the world's largest automotive market. Tesla's engagement with this competitive environment serves as a microcosm of the broader EV landscape in China. As the country embraces the transition to sustainable transportation, a plethora of domestic automakers are vying to secure their place in this burgeoning sector. Amidst this backdrop, Tesla's prowess and popularity have propelled it to a significant market share. The Chinese market's complexity goes beyond mere price dynamics. Factors such as government policies, infrastructure development, and consumer preferences have woven a nuanced tapestry that automakers must navigate. Tesla's journey in China also highlights the significance of establishing localized operations, understanding cultural nuances, and building relationships with key stakeholders, all of which contribute to sustained success in this pivotal market. Despite the challenges, Tesla's resolve to penetrate and thrive in the Chinese market remains resolute. The company's focus on innovation, technological advancements, and commitment to sustainability align well with China's aspirations for a greener future. As the Chinese EV market continues to evolve, the competition will likely intensify, driving all players, including Tesla, to continually innovate and adapt to meet the diverse needs of Chinese consumers. In conclusion, China's position as Tesla's second-largest market accentuates both the opportunities and challenges that this dynamic landscape presents. As EV adoption gains momentum in the country, Tesla's ability to navigate the intricacies of competition, align with local preferences, and contribute positively to China's clean mobility aspirations will undoubtedly influence its trajectory in this influential market.

4.3. Europe

Model 3 has taken the all-electric brand to new heights, with over 100,000 cars sold in Europe, making the Model 3 the best-selling EV on the continent, ahead of the much cheaper Renault Zoe and Nissan Leaf. [6] With Norway and the Netherlands leading the way in promoting green transportation, Tesla sales in Europe took off first in these two countries. In the first few years of sales, these two countries accounted for over 80% of Model S sales, and while Tesla's success has spread across the continent, the Scandinavian and Dutch markets still lead the charts in absolute numbers. [6] Today in Europe, the Model Y is also the top-selling model, with sales of 86,869 of the Model Y, the top-selling European tram model in 2022, well ahead of the second-place Model 3's 58,583 [7].

5. Tesla Technical Support

Tesla has made a lot of efforts to reduce carbon emissions and utilized a lot of technical support. In terms of factory construction, Tesla has started to build sustainable factories, such as recycling energy or gas that is not fully used. According to the statistics, only 7% of the waste generated by the Shanghai Super Factory in 2022 will not be recycled. The new sustainable factory will consume 19% less energy than traditional factories. The factories that have already been built are the Texas Gigafactory and the Shanghai Gigafactory. Solar cells have been added to the roofs of these factories. By the end of 2022, there will be about 32,400 kilowatts of solar panels. Meanwhile, Tesla is responding to the times and developing artificial intelligence. The use of artificial intelligence improves the efficiency of energy utilization, such as in 2022, the Texas Gigafactory began to apply AI control, and in the Nevada Gigafactory, 34% of the heating, ventilation and air conditioning facilities have been controlled by it [8].

5.1. Use of Superchargers

For product creation, Tesla uses V3 and V4 Superchargers to charge its vehicles. Tesla explains that the Superchargers can replenish up to 200 miles of range with just 15 minutes of charging. In order to improve the safety of driving, Tesla goes through Integrated Front Crash Testing (IDF) to continually improve vehicle safety systems. The models that have accomplished this best so far are the model Y and model S [8].

5.2. Improvements in Vehicle Quality

Also, improving the stability of the grid is an important task. Tesla has opted for the most affordable way to reduce product costs by combining renewable energy with battery storage while maintaining stability. Renewable energy is now competitive. A Megapack XL, for example, has a battery storage capacity of up to 4 megawatt-hours, which can power more than a gigawatt-hours of projects at a much lower price [8].

5.3. Tesla Patent

The current output of the model 3 is about equal in price to a fuel car. The first ever electric car that is equal in price to a fuel car in its class. For example, the BMW 3-series costs \$43,800 and the Audi A4 costs \$40,300, but the Tesla model3 only costs \$39,900. In order to nearly reduce carbon emissions, Tesla in "2020 Tesla Battery Day", demonstrated a new dry electrode manufacturing process. According to the latest analysis, the energy consumption of the entire battery manufacturing phase can thus be reduced by more than 70% [8].

6. The Impact of National Policies' Support on Tesla

The United States government's support for Tesla has been multifaceted, these include incentives and measures to promote the adoption of electric vehicles and funding for technological development research. Tesla has benefited from the federal government's tax incentives, which offer tax breaks to buyers of electric vehicles. Biden signed into law the Inflation Reduction Act, which provides tax credits for new electric vehicles made in the United States - fuel electric vehicles.[9] Government policies to reduce greenhouse gas emissions and promote clean energy have also indirectly supported Tesla's mission, increasing Tesla's sales and public attention. Stricter fuel efficiency standards and emissions regulations have incentivized investors and automakers to invest in electric and hybrid technologies, giving Tesla a big competitive advantage as a leader in electric vehicles. In addition, Tesla has received loans and grants from government programs, such as the Advanced Technology Vehicle Manufacturing (ATVM) program, which has provided financial assistance for Tesla's manufacturing expansion and the development of electric vehicle technology. These funds have played some important roles in Tesla's growth and innovation. Some automakers have announced investments of more than \$36 billion in electric vehicles and \$48 billion in battery manufacturing in the United States. As part of the Infrastructure Law, the U.S. government will invest \$7.5 billion to build electric vehicle charging stations across the country. [9] So, in all, the Biden administration is investing more than \$135 billion to advance the future of electric vehicles in the United States, which has greatly helped the development of electric vehicle industry leader Tesla. [9] In China, as one of the major carbon dioxide emitters, facing severe environmental problems and energy problems, in the automotive industry, there is an urgent need to develop new energy vehicles. The introduction of Tesla new energy vehicles can be a start to reduce the use and emissions of fuel vehicles and increase the proportion of new energy vehicles, so as to improve environmental quality and deal with environmental pollution caused by vehicle emissions. The Chinese government has implemented many preferential policies for Tesla to help it enter the Chinese market faster. Tesla set up a factory in Shanghai, and the Shanghai government not only helped Tesla quickly settle in Shanghai in terms of policy, but also supported Tesla financially, so that Tesla quickly entered the Chinese market and gained huge benefits. [10] The Shanghai factory is Tesla's first overseas base outside the United States, and its excellent productivity has also enabled Tesla to develop rapidly in overseas markets. For the Chinese market, the introduction of Tesla has driven the development and upgrading of related industries, further mastered the production technology of new energy vehicle parts, and improved China's competitiveness and creativity in new energy vehicles. Promote the development of related industries, create jobs and enhance economic growth. The China policy of promoting development has enabled Tesla to achieve mutual benefit and win-win results with the Chinese market.

7. Conclusion

Tesla has strong self-sufficiency, develops and masters core technology independently, and has less need for external technology. This high-efficiency production can greatly reduce Tesla's production costs and increase profits. In order to further open up the market, Tesla can effectively attract more consumers by lowering the price of its products in case of large output of cars. Reasonable price adjustment from its own ability is Tesla's choice to deal with the big picture. Among them is the Model Y, a model with excellent performance and excellent cost performance, which has topped sales globally and in some major sales regions. While maintaining its dominant position in the U.S. auto market, Tesla can also seek to strengthen its competitiveness in the Chinese and European auto markets, and even enter other new markets in developing countries through its low-price strategy and national policy support. While pursuing the sales market Tesla is also contributing to environmental protection. Tesla is currently focusing on reducing carbon emissions, building new energy factories and improving the quality of its cars. Tesla is currently focusing on reducing carbon emissions, building new energy factories and improving the quality of its cars, especially in terms of charging and safety. It is also attracting customers with cheaper prices. There will be unlimited prospects for Tesla in the future, and Tesla will increase the construction of sustainable factories, continue to develop trams and improve quality. Whether it is the Chinese government or the U.S. government, the national government has provided Tesla with a lot of financial support and implemented preferential policies, which have helped Tesla gain rapid development and growth.

Authors Contribution

All the authors contributed equally, and their names were listed in alphabetical order.

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