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# *Research on Tesla's Business Model on Obtaining Competitive Advantages*

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***Abstract:*** Organizations, governments, and communities have widely discussed the concept of digital and technological innovation when the world penetrated to a new era of technological modernization. People focus on developing advanced technologies to increase production efficiency and business profitability. As a result, many organizations discover new ways to promote their market positions and gain competitive advantages over their rivals. Tesla Inc. is a typical innovative firm that disrupts conventional vehicles' business model to create a more sustainable vehicle market. The analysis of the business model, SWOT, and Porter's five forces are used to understand how Tesla engages with the development of the electric vehicles market to win market shares and customer loyalty. The essay concludes that the ways of disrupting conventional vehicle value propositions, transforming to renewable energy fuels, and the efforts put into the research process make Tesla a successful and favorable organization in the innovative realm and vehicle market.

***Keywords:*** Tesla, competitive advantages, technological innovation, electric vehicle, vehicle market

## 1. Introduction

Technological innovation has been deeply embedded in people's lives through the process of developing human society. Economic values are created by allowing people and companies to distribute and utilize resources more efficiently [1]. The importance of technological innovation is massive, especially for firms which rely primarily on the process of inventing new products. Firms' market strategies are influenced by the innovating, manufacturing, and operating processes, so technological advancement is treated as an evolutionary pattern of development and a fundamental part of an operational focus by many innovative industries to find methods for making tactical decisions. The significance of the research on technological innovation indicates the understanding of how companies obtain innovative advantages to compete over their powerful rivals and how the innovative disruption of traditional business models can improve productive efficiency and make remarkable changes in the market.

This essay investigates how Tesla Inc., a classic innovative company in the motor market, utilizes technological improvement and innovation to obtain competitive advantages through the use of SWOT and Porter's five forces analysis in its business model. In addition, as a way of helping Tesla gain more market shares, the concepts of digital transformations and corporate social responsibility are applied to evaluate how the invention of a new energy vehicle changes Tesla's market position

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and increases its customer loyalty. Finally, the challenges of Tesla's innovative process are analyzed while providing some feasible suggestions for Tesla and other vehicle companies to improve the market more sustainably.

## 2. Overview of the Electric Vehicle Market

A part of the vehicle market has transformed into a low-carbon and pollution car industry as a contribution to environmental protection and sustainability; these transformed companies concentrate on manufacturing new energy cars, which include electric vehicles (EVs), the world's most popular alternative of traditional vehicle nowadays. For example, Tesla, an American multinational automotive and clean energy company with worldwide battery and plug-in electric vehicle sales, focuses on finding the closest and most environmental-friendly substitution for customers' transport needs.

The reasons for Tesla's success in EV and energy market can be partially analyzed through its value proposition, customer segments, and critical resources. These are the three main points in Tesla's business model that demonstrate its future vision, purpose, and ability to manufacture new energy vehicles.

Tesla has a unique value proposition in comparison with other vehicle firms, in which it uses a direct sales model to make the transaction more accessible and efficient[2]. Tesla applies for intelligent driving assistant systems and battery advantages, such as supercharge systems, to compete over the traditional vehicle rivals and provide value for customers to make driving more convenient and durable.

For Tesla's customer segments, millions of tech-loving environmentalists are attracted by its value propositions, as the efforts, capital, and labor forces put into the invention of low-pollution cars are its unique selling point. In addition, the fashions and subversion of the previous business model of traditional car companies drive more young people to purchase them.

The reasons for Tesla having the capability to innovate and become the pioneer of the new energy market are its eight technology companies, which enables technology sharing among these companies. Moreover, Tesla has an independent development and research team and technical patents that enable the prompt update and utilization of the world's best technology, including algorithms for automotive driving systems. All these benefits conceivably make Tesla push out new products faster than other companies.

## 3. SWOT Analysis of Tesla

The SWOT analysis is often used in strategic business planning to make a comprehensive, systematic, and accurate study of the situation, enabling firms to make more appropriate decisions by analyzing internal and external organization environments [3]. For example, the SWOT analysis helps analyze Tesla from various angles to understand how Tesla operates and gains its competitive advantages through the world's innovative motor vehicle market.

### 3.1. Strength of Tesla

Tesla's main advantage is that sustainable alternatives are used as power and solar energy as renewable energy. As a result, Tesla can gain more trusts and attractions from its internal and external stakeholders, because the alteration of energy used for environmental programs brings light to the fact that automobiles can also be used for zero environmental damage. In addition, the supercharge system also helps Tesla have an advantage in cruise time with only 20 minutes to charge for 85 kW/h, whereas most other vehicles require 40 minutes [4]. Therefore, Tesla has been many customers' choice due to its convenience and the concept of environmental protection.

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### 3.2. Weakness of Tesla

The imbalance of demand and supply chain for Tesla is a big challenge as an innovative technological company; the operation and manufacturing process experience a substantial amount of costs, which Tesla requires to inject more capital for investment than other vehicle firms if the intention is to gain more competitive advantages. According to Must, Tesla has spent approximately 22.5 billion dollars in research and development. Moreover, many technical patents owned by Tesla are very close to the outside world, and these disclosed patents lower the profitability [5].

### 3.3. Opportunity

The tremendous number of capital investments provides more opportunities for Tesla to gain market share in the vehicle industry. Because capital injection enables Tesla to penetrate various markets worldwide, providing more revenue streams and brand influences on different regions [6]. Excepted, Tesla gains the American government policy and financial support; American president Obama invested 2.4 billion US dollars in the development of vehicles and research of battery technology in 2009, and the American government provides 14 billion US dollars of car purchasing subsidies. All the policies and financial supports give Tesla more chances to innovate and gain profits from the vehicle markets.

### 3.4. Potential Threats in the Market

With the ignition of sustainable energy use and innovation made by Tesla in the vehicle markets, on the one hand, more and more firms tend to penetrate the market to improve organizational profitability; this denotes the fact that the competitiveness of the market would presumably increase, so the strategies used by Tesla to compete with its rivals will increase its costs. Nevertheless, on the other hand, people's acceptance of EVs is not as fast as imagined, transforming traditional vehicle products relatively slowly.

## 4. Tesla's Competitiveness in Electric Vehicle Market

The substantial reduction of greenhouse gas emissions and pollution benefits the invention of EVs, pushing it to the peak of the vehicle markets. Through their advantages beyond conventional vehicle sales and manufacturers, EVs gain more people's attentions, which encourage more firms entering the markets to take advantage of innovative power. With the increment of technological development, it is assumed that contestability of EVs will continuously increase in the future market [6]. However, it is widely disputed that the costs of research and technological utilization form very high barriers for companies to enter the market, which may reduce the competitive forces for Tesla. According to the analysis of the automobile market future, the barriers to the electric vehicle market are coming down, as new entrants can take advantage of contract manufacturing to reduce their upfront capital costs [7]. Porter's five forces analysis is used to analyze the influences exerted on Tesla's business strategies by its existing and potential market forces.

The primary perception of Porter's five forces demonstrates that the organization should encounter opportunities and threats in its external setting. This action enables firms to understand the industry structure broadly to make competitive strategies [5]. Porter argues that businesses need to focus on recognizing and handling a competitive environment by directly looking at their competitors. As a relatively new market, Tesla must contemplate a broader perspective on the forces competing against the organization to shape its market position.

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### 4.1. Contestability Among Existed Competitors

Regarding the high production and research costs for EV invention, the product's competitiveness is relatively low among existing vehicle companies. This market environment makes Tesla a precedent for the EVs market. Moreover, Tesla's remarkable performance and environmental friendliness make it an attractive vehicle company for many buyers.

### 4.2. Threats of New Entries

The dissemination of information about EVs is treated as an essential stage for building a more sustainable transport system, and the exploration of the invention of EVs is becoming more attentive and famous worldwide [8]. Moreover, governments put pressures on automakers to move their portion of sales to the EVs market. Therefore, the threats of new entries to Tesla will presumably increase with the development of vehicle technologies.

### 4.3. Forces of Substitute Products

Gasoline cars, hybrid cars, and hydrogen fuel-cell cars are the primary substitutes for EVs, which may potentially threaten Tesla’s market position [9]. However, people may feel more confident about inventing EVs due to the upcoming obsolescence of classic cars and the complexity of hydrogen fuel-cell transformation. Moreover, governments around the world regard EVs as the main development direction of the future. Technical and fiscal supports make Tesla unblocked on the path of EV innovation.

### 4.4. Determinants of Buyer Power

The switching costs for Tesla customers to move and purchase another brand vehicle are relatively low; this low barrier for switching brands forms a strong force against Tesla in the vehicle industry environment. However, the availability of substitutes in the EVs market is insufficient to increase customers’ bargaining power. In addition, the small purchasing volume of vehicles restricts many customers from buying alternatives [10]. The buyer power is assumed to increase with the increased competitiveness of the EVs market.

### 4.5. Bargaining Power with Suppliers

Tesla, as an innovator and initiative in the place of EVs invention, invests a substantial amount of capital in purchasing materials, so Tesla can have more bargaining power to negotiate with the suppliers to lower the prices and thereby reduce manufacturing costs through the benefit from purchasing economies of scale.

## 5. Discussion

The change in the vehicle market by applying new energy fuels is novel and needs to be well-developed. As an innovative process in the whole vehicle market, Tesla’s attention to using electricity conceivably helps it obtain more benefits than other companies concentrating on conventional vehicle markets, such as competitive advantages, customer loyalties, and expansion of corporate social responsibility (CSR). However, some potential threats and problems need to be discussed and solved further for this market transformation.

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### 5.1. The Application of Digital Transformations

Digital transformations produce incomparable advantages for value creation and business model revolution. Companies in the modern world are more inclined to use the concept of digital transformation to not only exploit new technologies to improve business processes, but also identify and generate new value propositions [11]. For Tesla, digital transformation and innovation are the key and essential elements for gaining competitive advantages in the enormous vehicle market, in which these help the company to improve its performance and reach [12]. As an EVs market power owner, Tesla concentrates on promoting the sales and operation process by taking advantage of massive data availability; the birth of the digital world creates this data. In terms of Tesla's main selling methods, it can be indicated that Tesla transformed through a digital platform where customers can view and transact. In addition, Tesla is effective in using a various range of social media platforms to disseminate and spread digital seeds into people's brains, which drives people to have a better understanding of the benefits of EVs. Based on the truth that the EVs market is a new potential vehicle world, Tesla continues integrating, developing, and releasing market knowledge to catch up with more opportunities for building a high-velocity market [1]. All these actions taken by Tesla enable it to have a big pie in the vehicle market. The application of digital transformation provides weapons for Tesla to compete with these vehicle elites in the market.

### 5.2. A Critical View on Tesla's Business Model

Tesla's contribution to the invention and development of EVs makes itself a leader in the new energy market. Therefore, it helps Tesla to have more opportunities to find ways to compete against its market rivals. However, the monotonous research on electricity development may limit its market position and be challenging to persuade stakeholders to follow Tesla's strategies [13]. This phenomenon is because the single exploration of electricity may increase Tesla's threats as others may realize they need to find other renewable sources to gain competitive advantages against Tesla. In addition, the data provided by data analysis system may lower the barriers for entrance, more firms will attempt to enter the market and renovate what Tesla does [14]. Therefore, there will be more challenges for Tesla to deal with if they focus little on discovering other new energies. Moreover, the productivities of EV manufacturing are not sufficient to convince petrol vehicle enthusiasts to change their minds. Thus, it is recommended that Tesla focus more on alternative strategies and energy discoveries, such as a combination of battery electric vehicles and fuel-cell vehicles, to shape a stabler and higher market position.

## 6. Conclusion

Innovation and technologies make the world more competitive; companies are diligently endeavoring to discover more innovative approaches to accomplish their achievements and promote success. A technological company like Tesla put much of its efforts into finding ways of disrupting the operations of the traditional vehicle market and moving to a more sustainable and flawless place for gaining competitive advantages. Indeed, EV inventions expand Tesla's market shares by providing more space for sales and operations. Hence, as a pioneer in the innovative realm, Tesla spends much more capital, time, effort, and labor forces in the manufacturing process of EV creations, in which Tesla gains advantages from applying the concept of sustainability and environmental friendliness. Moreover, exploring new energy vehicle inventions is attached to promoting its CSR, attracting more stakeholders' willingness to corporate while enabling the soar of customer loyalty. However, it is critically saying that Tesla's business model still needs to be improved to lower its production costs and then the market price, as the reduction in price would obtain more consumer acceptance of the

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transformation to the EVs market. And it is recommended that Tesla concentrates on discovering alternative energy applications to build deterrence for existing and potential rivals.

The limitations of the essay would be the lack of data provided for Tesla's marketing and operational process, which may not portray a complete picture of Tesla's present and future marketing tactics. In addition, the analysis tools used in the article are inadequate to cover all of Tesla's business model and strategies, this insufficiency causes fails to demonstrate Tesla's overall success, because more business activities are covered by Tesla than analyzed. For further research direction, Tesla's business model will be analyzed deeper to understand its core value provided, and more investigations will be covered to explore other alternative energies which are available to solve Tesla's market and operational problems.

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