



# Research on the Tesla's Business Model Analysis

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**Abstract.** In the context of carbon neutrality, electric vehicles have received more attention and recognition. As the world's electric vehicle giant, Tesla cars are an inescapable study subject. This article will study Tesla's business model in entrepreneurship aspect and in sales model aspect. This article will study Tesla's business model in the entrepreneurship aspect and sales model aspect. This article will use Business Model Canvas, SWOT analysis, Peter's five forces, and other methods to study the reasons for Tesla's success in business model and explore the reasons for becoming an industry giant through analysis. Finally, the research conclusions and outlook are put forward, hoping to provide some improvement suggestions for Tesla, and at the same time provide some reference for other electric vehicle companies to help the electric vehicle industry develop sustainably.

**Keywords:** Tesla's Business model, Porter's five forces, Innovation, Company Management, Tesla's strategy analysis

## 1 Introduction

Tesla is an electric vehicle and energy company in the United States, headquartered in Palo Alto, produces and sells electric vehicles, solar panels, and energy storage equipment, it is also a pioneer in the field of electric vehicles in the world. As the world pays more and more attention to environmental protection and the change the customers need, the world's electric vehicle companies are going through a stage of rapid development. However, they cannot find suitable self-positioning, which leads to the failure of business startups. The gap in the field of hardware technology can be narrowed through large-scale investment, talent recruitment, and mergers and acquisitions, but differences in corporate business models and corporate culture may be more difficult to catch up or replicate. There is not much analysis in academia about Tesla's business model in various periods, so new technology companies can't learn in detail how to succeed.

This article will analyze Tesla's business model to analyze the reasons for its success and provide a reference for other companies. The Business Model Canvas, SWOT analysis, Porter's five forces, and other methods would be used to analyze Tesla's successful business model during its entrepreneurship period and to investigate the reasons for becoming an industry giant via business model analysis in both the entrepreneurship and sales model aspects. The significance of this article is to provide ideas for new

enterprises to start a business in an innovative way and make them more competitive in the marketplace. In addition, this would also provide ideas for the transformation of traditional companies.

## 2 Business Model – In entrepreneurship aspect

### 2.1 Business Model Canvas

When Tesla was first established, their goal was to offer some top-notch electric vehicle models that are high-performance, energy-efficient, long-range (with convenient charging stations), and sleek designs. Starting a business in the field of electric vehicles is a "dimension reduction attack" at the technical level. They had a unique value proposition, such as using a direct sales model, which subverted the previous business model of traditional car companies. In addition, they were the only high-performance EV car in the market at that time, which attracted millions of tech-loving environmentalists initially.

In terms of key segments, Tesla pays great attention to technological driving experience and environmental protection, which was Tesla's biggest selling point. For the revenue stream, Tesla didn't just rely on selling vehicles to make money, in addition to that, they also make money mainly through the subscription model of additional car features and the super charging network, diversified income greatly increases the company's revenue, prompting them to get company profit more rapidly.

For the key resources, Musk owns 8 technology companies [1] and Tesla could achieve technology sharing between these companies. The research and development teams in Tesla would keep updating the best technology such as the algorithms for autonomous driving. Their factory around the world would reduce car manufacturing costs.

<p><b>Key Partners</b></p> <p>Battery Suppliers, Parts Suppliers, Chip Suppliers, Advertisers,</p>	<p><b>Key Activities</b></p> <p>produce and sales electric vehicles, solar panels, energy storage equipment</p>	<p><b>Value Proposition</b></p> <p>Intelligent driving assistance system, Product direct sales, Battery advantage, Super charge system, technology OTA upgrade</p>	<p><b>Customer Relationships</b></p> <p>Tesla Car Club, After-sales customer service</p>	<p><b>Customer Segments</b></p> <p>young people, tech-loving environmentalists</p>
	<p><b>Key Resources</b></p> <p>Independent research and development team and technical patents</p>		<p><b>Channels</b></p> <p>Instagram, Twitter, Tesla official website</p>	
<p><b>Cost Structure</b></p> <p>Marketing cost, labor cost, operation cost, promotion cost, platform cost, fixed cost</p>		<p><b>Revenue Steams</b></p> <p>Subscription sales model, car sales profit, insurance, supercharged network, etc</p>		

Fig. 1. The business model canvas of Tesla, shows the business model of Tesla is unique.

## 2.2 SWOT analysis of Tesla’s business model

One of Tesla's biggest selling points is self-driving technology, this subverts the traditional car-making concept and attracts a large number of people who pursue technological innovation. Additionally, Tesla electric cars have no greenhouse gas emissions during driving, and this is praised and respected by many people.

In 2019, Musk publicly stated that in the past 10 years, Tesla has spent about 22.5 billion US dollars on research and development, which is an investment that other traditional car companies do not have [2]. This means that the demand for capital and investment at the very beginning is very large. The new company that wants to imitate Tesla’s business model would be difficult in this part as few companies have access to such large capital support. Also, the capacity of the factory is not enough to support a large number of orders to complete the on-time delivery.

In 2002, the U.S. Department of Energy specifically approved \$15 million for research to improve battery efficiency and power supply quality. In March 2009, President Obama invested \$2.4 billion in the development of vehicles and advanced battery technology for home power charging. In addition, the government spends a huge sum of 14 billion US dollars to provide car purchase subsidies and vigorously support the construction of electric vehicle charging infrastructure [3]. Tesla has seized the above opportunities, and now companies should also take advantage of today's policy subsidies. The policy of the times is a good opportunity for emerging companies to obtain subsidies from the national government.

General Motors, Ford Motor Co., Volkswagen, Mercedes-Benz, Porsche, etc., are the main competitors in America and Europe countries, and BYD, NIO, Xiaopeng and other car companies are Tesla's main competitors in China. On the other hand, people's acceptance of electric vehicles is not as fast as imagined, and the transformation of electric vehicles in the market is relatively slow. At the same time, the government's subsidy support for electric vehicles will also decrease in the future.

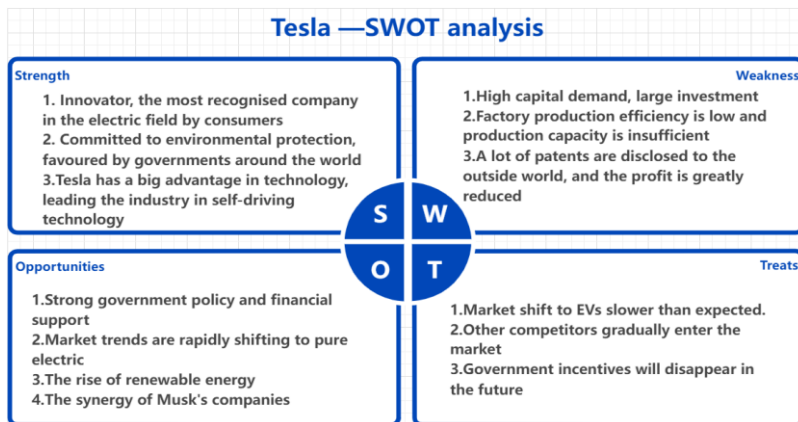


Fig. 2. The SWOT analysis shows the Pros and Cons of Tesla's Business Model

### **2.3 Porter's five forces analysis of Tesla's business model**

When Tesla was first founded, the electric car market was in a situation full of potential and unknown. Thus, Porter's Five Forces can be used to give contextualized analysis in this market and understand how Tesla can fare in this environment.

**2.3.1 Rivalry Among Existing Competitors - Relatively Low.** When Tesla was first founded, it created a precedent for the electric vehicle industry, and there was no comparable product on the market. Competitors at the time only had gasoline vehicles, but due to their excellent performance and environmental friendliness, he gradually gained a firm foothold in the market and attracted a large number of buyers.

**2.3.2 Threat of New Entrants-High.** Electric and hybrid vehicles are more popular than ever due to the increasing importance of sustainability [4]. This change is also being driven by governments around the world. Governments have begun to put pressure on automakers to shift a portion of their sales to electric vehicles.

**2.3.3 Threat of substitute product-Relatively Low.** Natural gas vehicles, hydrogen-powered vehicles may pose a threat to electric vehicles [5]. However, this threat is not very high for Tesla, as governments around the world are focusing on electric vehicles as the main development direction of the future and investing a lot of money in EV vehicles.

**2.3.4 Determinants of buyer power - From low to High by the time.** Low switching costs lower barriers for Tesla customers to buy cars from other brands. In many cases, however, alternatives have limited functionality and product power, which limits customers' bargaining power with Tesla [6]. In addition, the low purchase volume (each customer only buys and keeps one or a few cars) reduces the influence of customers on Tesla, and most people will prefer Tesla because of product strength and brand power.

**2.3.5 Determinants of supplier power- From low to High by the time.** Tesla is not only the world's pioneer of electric vehicles, but also the world's largest electric vehicle group by sales. As long as the scale of sales increases, Tesla will have greater bargaining power when negotiating with suppliers to lower supplier prices and cut its own costs.

## **3 Analysis of Tesla's Business Model - In sales model aspect**

Tesla is not only a company with a very successful entrepreneurial concept, but its sales model has also subverted the industry's traditions, and there are many advantages that other companies can learn and emulate.

As a leader in pure electric vehicles, Tesla has always adhered to the mid-to-high-end market positioning in the international market, strengthened its high-tech sense, and advocated autonomous driving and excellent electric drive systems.

### **3.1 Word of Mouth Sales Model**

Tesla did not set aside a large budget for marketing but used widely circulated online self-portrait videos for low-cost marketing. For example, Tesla was tested and compared with luxury cars such as Aston Martin and BMW. The user has a good brand impression that is intuitive and credible. Tesla's marketing relies on word-of-mouth publicity voluntarily and free of charge by car owners. There are many famous Tesla owners, such as entertainment star Brad Pitt, and Google founders Larry Page and Sergey Brin, who are excellent corporate image spokespersons [7]. First, these celebrities themselves have a very high degree of attention, which can increase the popularity and attention of Tesla electric vehicles; second, the imitation effect of celebrity fans is conducive to the sales of Tesla vehicles.

### **3.2 Direct to Customers Sales Model & Experience Sales Model**

Traditional automobile marketing channels usually adopt the 4S shop or traditional dealer model, that is, the B-4S-C model. But this kind of consumption experience has left a very bad psychological impression on people.

Musk ended up adopting a B2C direct sales model. Open direct-sale experience stores in prime locations. B2C model could gain Higher Customer satisfaction, the prices could be fixed without dealer markups, the service standards and brand image and value could be maintained [8]. Tesla's sales staff don't have sales commissions, they are more like experience guides, because Tesla does not encourage sales staff to sell cars, so that customers don't have to worry about bargaining when purchasing and worry about being deceived by salespeople who are dishonest. Buy with confidence. In conjunction with the on-site experience store, Tesla combined with online direct sales. This model eliminated the distributor link, maximized the flow of profits to Tesla, and made prices more transparent.

### **3.3 Subscription Sales Model**

Tesla uses a subscription model to meet more needs of some car owners. For the users who are willing to try the autopilot system (which is an advanced driver assistance system that assists cars with steering, accelerating, and braking for other vehicles and pedestrians within its lane [9]). According to Musk, new customers account for only 15% to 25% of its revenue, meaning repeat customers generate most of the revenue. This helps Tesla to build brand loyalty. Also, it delivers regular cash flow for the business [10]. The great thing about the subscription model is that business would get the same income every month. This makes cash flow and business planning easier. Additionally, due to regular customer transactions, it is easier for businesses to collect data

that can help make informed business decisions, thereby facilitating customer relationships.

### 3.4 "From high positioning to mass" Sales Strategy

The model launch strategy is steadily implemented, the price is gradually lowered, and the audience is gradually expanded. Tesla's strategy is to first develop a high-performance electric sports car to establish a brand effect, then launch a mid-to-high-end model and use the platform to achieve mass production, and finally launch an economical model for the mass market to maximize.

The first stage is for a small group of rich people, to launch high-priced, small-batch electric supercars to establish a strong brand effect. Tesla's first model, the electric supercar Roadster, began deliveries in 2008 and ceased production in 2012.

The second stage is for high-income groups, which launch products with medium and high prices. Due to the moderate price reduction, there is a large increase in market demand. Model S and Model X were delivered in 2012 and 2015 respectively, and the sales market has gradually expanded from the United States to other regions such as Europe and Asia.

The third stage is for the masses, to launch low-priced, large-scale civilian products.

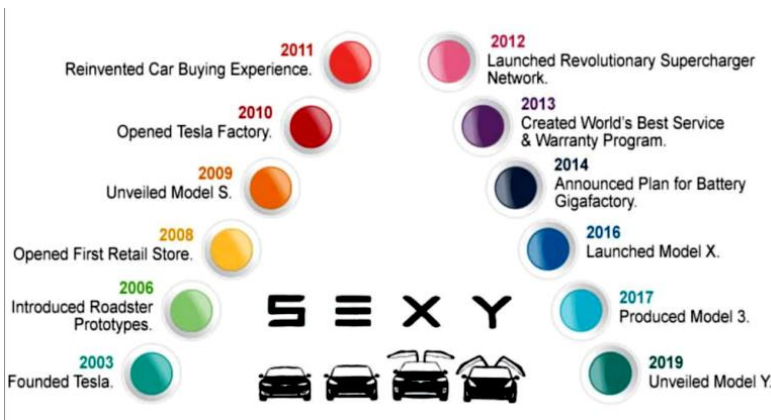


Fig. 3. Timeline of Tesla's major milestones shows their strategy is to launch high-end models first and then mass-market models.

## 4 Conclusion

Tesla's competitiveness comes from product innovation, customer development strategy innovation and more importantly, the business model innovation. Tesla fully understands customer needs, strives for excellence, and continues to innovate in subtleties to solve user pain points. Tesla adopts differentiated market strategies to meet different consumer needs and attract different buyers, and makes full use of new media word-of-mouth sales model, B2C direct sales and other methods.

Tesla is conducive to the positioning of the brand name and leading market technology advantages, and taking the high-end route is conducive to opening the market and shaping the brand value. At the same time, it avoids the high-cost problems in the early stage of development, the cognitive problems of ordinary users, and the environmental protection awareness problems of ordinary users, Tesla's various decisions are very reasonable.

The world electric vehicle industry still has great potential for development. In terms of resource potential, the core materials of key parts of new energy vehicles such as lithium-ion batteries have good resource conditions. In terms of industrial scale, a complete production system can greatly reduce the cost of batteries and vehicles, thereby gaining an advantage in the market. In terms of market demand, the world is currently in a stage of rapid economic development, and a diversified market will facilitate the entry of hybrid vehicles and low-cost electric vehicles.

For some emerging technology companies and traditional companies that want to carry out corporate innovations, Tesla is a company that worthy of learning and imitating, this business model is very advantageous in today's Internet era. But it should be learned reasonably based on their own situation and situation.

The article may not mention all about Tesla's business model, the author will continue to conduct related research in the future and strive to provide more valuable business model references for more readers.

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