

# Tesla Pricing Strategy Analysis: Take Model 3 as an Example

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## ABSTRACT

With the aggravation of climate warming and air pollution, the development of new energy vehicles has become an inevitable choice for every country. As the leader of new energy pure electric vehicles, Tesla has opened up a new automotive market segment. Tesla's success can be a reference for domestic companies that are about to enter the new energy vehicle market. This article takes Tesla as the research object and analyzes the transition from skimming pricing to penetration pricing and possible factors affecting its pricing based on Model 3. The research results show that Tesla adopts skimming pricing to transform into penetration pricing, and finally puts forward that Tesla may adopt prisoner pricing combined with digital transformation in the future, which has important reference value for domestic new energy vehicle enterprises.

**Keywords:** Tesla; Model3; Pricing of strategy; New energy vehicle.

## 1. INTRODUCTION

### 1.1. Research Background

The development of new energy vehicles is an important strategic measure to cope with climate change and promote green development. In recent years, due to the pressure of energy strategy, energy conservation and emission reduction, various countries have introduced new energy vehicle subsidy policies, driving the significant growth of new energy vehicle sales. The global new energy vehicle industry has entered a new stage of accelerated development, and the market has ushered in a blowout. According to statistics, China imported 191 million tons of oil in 2019, and its dependence on foreign oil was as high as 72% [1]. As an important organic chemical raw material and fuel oil raw material, the demand of crude oil is highly correlated with vehicle ownership and average fuel consumption. In terms of fuel oil consumption, more than 65% of the annual increase in oil consumption is consumed by newly added vehicles, and the proportion of automobile fuel consumption continues to rise. New energy vehicles are mainly driven by electric energy, which can greatly reduce the consumption of automobile fuel. After years

of continuous efforts, the development of China's new energy vehicle industry has a certain foundation.

### 1.2. Research Significance

By reason of global warming, in recent years, countries because of stress, such as energy saving and emission reduction are introduced new energy car subsidy policy, led to new energy car sales growth, China's new energy car companies are at the start-up stage, and tesla has gradually gain a foothold in the Chinese market, its pricing strategy to keep falling domestic new energy enterprises in China have greater impact. Therefore, this study takes Tesla Motors as the research object and tries to explore its pricing model through case study and analysis, which can provide some decision-making suggestions for Chinese local new energy enterprises and provide some help for China to get rid of the traditional automobile development model.

Simon Huang (2016) pointed out that tesla on pricing strategies, used the global unified pricing strategy, on the same models of China and the United States, just add artificial transportation costs, tariffs and other standard in other traditional luxury cars, in different parts of the price difference is big, the low price transparency, fair to each region of the consumers [1]. Zhang Boshun (2013)

described Tesla's pricing strategy with "three steps"[2]. The first step is to target high-income groups and price luxury sports cars with high gross profits; the second step is to develop family electric cars of luxury brands with sub-level pricing and standard pricing, such as Mercedes Benz and BMW. The third step is to create civilian models with the most cost-effective models in order to meet the needs of most people.

Taking Model 3 as an example, according to Jiemian News data, as of October 2020, the price has been reduced 9 times, and the current price on the official website is 249,900 yuan. The cumulative price reduction is up to 290,000 yuan, and the price has been reduced by 54%. In fact, Tesla's sales innovation is not only the sales channel, but also the very special pricing method. Tesla has officially told the public that Tesla's profit model is relatively fixed. Once the upstream price changes or changes in other links, price adjustment mechanism may be triggered. Qi Fangming (2020) Tesla's product strategy adopts a sequence of starting from low-end products to enter the high-end market, contrary to that of traditional car companies. Instead, Tesla starts from luxury sports cars and SUVs to create high-end luxury, fashionable technology image for itself, and then enters the low-end market. Gain customer recognition [3]. Simon Huang (2016) Tesla on pricing strategies, used the global unified pricing strategy, on the same models of China and the United States, just add artificial transportation costs, tariffs and other standard in other traditional luxury cars, in different parts of the price difference is big, the low price transparency, fair to each region of the consumers. Set up a good image. At the same time, he also pointed out that in terms of promotion strategy, although Tesla did not invite spokespersons, a series of famous people such as Silicon Valley bigshots and Hollywood movie stars use their products and name them after Tesla, the first great Physicist in The United States, to increase popularity and increase attention [4]. At the same time, Liu Jing (2016) Tesla adopts a multi-product portfolio strategy, from the first edition of the luxury Roadster to the current model S and Model X, whose prices range from 200,000 to 300,000 yuan, meeting the consumer needs of different consumers, but there are still few models at present. In addition, in terms of channel strategy, Tesla adopts a direct selling model different from that of traditional car companies. After setting up minimalist experience stores in high-end blocks to offer customers practical experience, it adopts online ordering to purchase, saving the price difference for DEALERS™ in 4S stores, reducing sales costs and benefiting customers [5].

### **1.3. Research Contents**

This paper will take Model 3 as an example to analyze Tesla's pricing strategy. The first is skimming pricing, and then the transition to penetration pricing. We also study

the causes and results of the transition. This is followed by an analysis of the reasons for Tesla's continuous price reduction. Finally, the conclusion and prospect are given. The main method used in this paper is case analysis.

## **2. ANALYSIS OF TESLA'S PRICING STRATEGY**

When Tesla set up its first factory in Shanghai, investors focused more on investment opportunities in Tesla's supply chain. Unfortunately, Tesla's supply chain is dominated by Japanese and Taiwanese companies and supported by American companies. The four major components of a battery are the positive electrode, the negative electrode, the isolation film and the electrolyte. In terms of material cost BOM, positive electrode accounts for about 46%, isolation membrane about 25%, electrolyte about 13%, and negative electrode about 10%. Tesla's batteries are exclusively supplied by Panasonic, and LG Chem has been rumored to be a secondary supplier, but it is only an emergency backup and will not change suppliers unless Panasonic makes a major mistake. Many people believe that Tesla Model 3 will use permanent magnet motor, but the motor power of Tesla Model 3 is 300kw, which is very small compared with the 310kw of Model S. The motor is the most obvious advantage of Tesla, and Tesla does not control the motor. And the motor is controlled by Taiwan. If we follow the mass route of permanent magnet, Tesla is unlikely to have a performance advantage. Tesla will not be able to make an outstanding place in the field of permanent magnet motor in the short term. Of course, Tesla's Model 3 will have a dual motor version in the future, and it is possible to use permanent magnet motors as secondary motors. Secondly, permanent magnet materials are widely used. For example, magnets are widely used in speakers. Tesla does not have the ability to manufacture motors, so it will not directly purchase permanent magnet materials. Tesla uses Infineon's IGBT and uses it in large quantities. Tesla uses the unconventional TO 247 packages, which is very rare. Among all the electric vehicle manufacturers in the world, only Tesla adopts the IGBT with TO 247 package in the 1980s. The mainstream is the IGBT with module package. The main reason for doing so is cost. Tesla motor power is too high, so there is no suitable choice for general IGBT module. We can only customize it. With Tesla's shipment quantity, the customized price will be very high. An estimated savings of \$500- \$800 can be achieved with the TO 247 package. The disadvantages of TO 247 are also obvious, such as low reliability and poor heat dissipation, which leads to a short life and fire hazard [6].

### **2.1. Tesla's Skimming Pricing Strategy**

Tesla entered the Chinese market as a high-end luxury sports car, so the price is relatively high. As can

be seen from the market positioning analysis, Tesla's target customer groups are mainly the rich, influential people and car fans who are obsessed with high-tech cars. Tesla takes advantage of consumers' enthusiasm for its high-end electric sports car to price its products. When traditional luxury automobile brands are sold in The Chinese market, their prices are much higher than those of other countries except for tariff and other influencing factors, and the price transparency is low. Tesla has formulated the same price strategy according to different markets in different countries, aiming to fairly treat consumers in different countries and regions. After entering the Chinese market in 2014, Tesla changed the pricing strategy of other auto brands in the Chinese market and chose to make the pre-tax price of its cars consistent with that of other countries. In 2016, Tesla Motors introduced the Model 3, an economical car, at a much lower price than its previous series. The pricing strategy adopted by Tesla is similar to the skimming pricing method. It first uses a higher price to obtain a higher profit margin from high-end customers, and then launches low-price electric cars to seize market share and finally maximize profits.

## 2.2. Penetration Pricing Strategy

Skimming pricing means that a product entering a certain market at the first, adopts a high fixed price to obtain thick returns. Many enterprises have applied skimming price, some succeeded and some failed. Therefore if an enterprise wants to adopt skimming pricing, it should do various investigations, on the basis of macro-economic environment and its own to make correct decisions. Conditions of use of skimming pricing: firstly, there are some people that have strong purchasing power and insensitive to price in the market; secondly, the products of this enterprise are stronger competitive with the counterparts; thirdly, the brand of the enterprise has deep influence for consumers in the market. Skimming pricing is a pricing method that entering market initially at a deserved price compared to other products. Every product has its own life cycle, and skimming pricing enters the market at a low price, which accelerates the market's maturity, and shortens products' life cycle to attain high sales and market share. However skimming pricing is relatively cheap rather than absolutely cheap compared with the same type of products. In the production process, it continuously compresses the cost to reduce the sales price. Applicable conditions of skimming pricing: firstly, large market capacity; secondly, consumers' price demand elasticity is large; thirdly, the unit manufacturing cost decreases with large-scale production.

Tesla entered the Chinese market as a high-luxury sports car, so that price is also high. From the market positioning analysis, Tesla's target customer groups are mainly the rich, influential people and fans who are

fascinated by high-tech cars. Because the high price limits Tesla's consumer group, Tesla decided to change its pricing strategy, seize market share and expand the mass market. Taking the pricing of Model 3 in China as an example, Tesla announced the estimated price in August 2019. The price of Model 3 standard endurance upgraded version was increased from 366,900 yuan to 363,900 yuan, and the price of high-performance version was increased from 499,900 yuan to 509,900 yuan [7]. On November 6 of the same year, Tesla officially announced that the Model 3 standard endurance model with basic driving assistance function was officially opened for reservation, and the price before subsidy was reduced to 355,800 yuan. In late April 2020, Tesla responded to the call, and the price of Model 3 was reduced again to 291,800 yuan, and the price after subsidy was 271,550 yuan. In the same year, on October 1, it was lowered from 269,700 yuan, and 249,900 yuan after subsidy. On July 30, 2021, Tesla's official microblog announced that the price of Model 3 standard endurance version was reduced by 15,000 yuan and the subsidized price was 235,900 yuan. In 2020, Tesla adjusted the price of domestic Model 3 to less than 250,000 yuan after two price cuts. Due to the limited affordability of consumers, price reduction could stimulate consumers' demand for Tesla cars [7]. Different from skimming pricing, penetration pricing allowed Tesla to quickly open the mass market and expand it. The pricing method combined with consumers' demand and affordability promotes sales. By virtue of Tesla automobile's excellent performance and unique new energy positioning, Tesla better promote the expansion of Tesla automobile market. Tesla has voluntarily lowered prices several times, which may be more aimed at grabbing market share in its home market. Mr. Musk, CEO of Tesla, has repeatedly expressed his opinion that the most important issue at this stage is to bring down the price of Tesla. "Our cars are still too expensive." For Tesla, they need to keep lowering prices to make it affordable for white-collar workers. If we can make an electric car that everyone can afford, everyone will want to buy it." On October 17, 2018, Tesla's Shanghai Gigafactory was practically launched in The Port area. It is expected that the price in China will be further reduced with the decrease of vehicle cost in the future.

Through the analysis of Tesla's supply chain, this paper finds that Tesla adopts direct sales mode in sales mode, but adopts a large number of outsourcing mode in production. A large number of outsourcing businesses enable Tesla to focus more on the development of core parts. Battery technology is the core technology for the development of electric vehicles. However, due to the insufficient development of Tesla's battery technology, the production and development of electric planning is limited to superior suppliers, and the battery purchase is expensive and the profit is low, so Tesla needs to adhere to the development of core technology. Tesla adopts different pricing strategies for different target markets. In

the market with high-income consumers, as these consumers are not sensitive to price, Tesla chooses to use skimming pricing to gain profits. In the market with low and middle income consumers, they are highly sensitive to price, so Tesla adopts penetration pricing to gain profits and open the mass market.

### **3. ANALYSIS OF TESLA'S PRICE REDUCTION FACTORS**

In the past, Tesla was imported as a foreign car, which was relatively expensive in terms of transportation, handling, and customs duties. [6]The expensive price hindered the purchase enthusiasm of Chinese consumers. After Tesla entered China for mass production, which saved the intermediate import link. Tesla could enjoy the same conditions with Chinese cars. The price of Tesla was also reduced. The guidance of national policies forced Tesla to reduce prices. A good example is that in April 2020, after the Ministry of Finance announced the new energy subsidy policy, the price of Model 3 increased. The reason is that Tesla can get less subsidies. In 2020, under the impact of the epidemic, the new energy policy sets the red line of 300000yuan or with a price less than 300000 yuan or supporting the power exchange mode can enjoy subsidies. Tesla didn't meet these two provisions, and then decided to increase the price. In contrast, the prices of subsidies were more competitive, which forces Tesla to announce a price reduction to within 300000 yuan in that year. The guidance of national policies forced Tesla to reduce prices. The reduction of Tesla's manufacturing cost is also a main reason a main reason for the price reduction, which can be divided into two aspects: localization of parts and technological progress. It can be seen that in July this year, the price of Tesla's cars also decreased greatly. The reduction of price is mainly due to the decline of battery cost. The battery used by Tesla has been supplied by Panasonic alone until 2020. After Nindeshidai announced that it had signed an order agreement with it on June 28, Panasonic's share decreased to 70% [8]. It can be predicted that with the increasingly close cooperation between other parts of Tesla and domestic parts manufactures, domestic procurement and transportation costs will be reduced, which will further reduce Tesla's manufacturing costs. Strong competitors are also a big reason for Tesla's price reduction. All kinds of new energy vehicles in China are rising one after another, and new forces such as Xiaopeng and NIO are threatening. BYD, an old car manufacturer, surpassed Tesla in sales in China in July this year. Xiaomi and Apple also announced to build cars one after another, Whether Tesla can occupy the market first in the future new energy vehicle market remains to be discussed [9].

### **4. RESULTS AND DISCUSSION**

There is no doubt that Tesla has occupied the leading

position in the market by continuously adjusting its pricing strategy and harvesting fans level by level, but it also faces many hidden dangers and challenges. In the domestic market, in the face of Xiaopeng, Weilai and ideal, it remains to be seen whether these strong competitors supported by strong funds from Internet giants, as well as the traditional automobile manufacturers gradually catching up with them, with huge dealers and perfect supply chain, It remains to be seen whether Tesla can build business barriers first and maintain competitive. New energy vehicles are the inevitable choice of low carbon and the development trend of automobile industry. The direct impetus for the industrialization of new energy vehicles is the relevant national support policies. The United States, Japan, Europe and other developed countries attach great importance to new energy vehicle technology, and have enacted preferential policies and measures from the perspective of automotive technology change and industrial upgrading strategy. China's new energy vehicle industry has also started to flourish in a healthy direction with the support of the government.

### **5. CONCLUSION**

Through the above research, we find that Tesla's pricing is first at a relatively high level. After officially entering China, it adopts skimming pricing, and then changes to penetration pricing to occupy the market. It starts from the middle level, harvests step by step, and actively makes pricing strategies that are more suitable for development in different periods. It has enlightening significance for the development of new energy vehicles in our country. At the same time, Tesla should also pay attention to the current risks. With more and more enterprises announcing to join in car manufacturing, it still needs to think about how to build their own moat and maintain their position in new energy vehicles. Tesla's future pricing can adopt the prisoner pricing strategy, combined with digital transformation, adopt a data-based approach to the company's management, further reduce the management cost, understand the personalized needs of customers in various regions in advance, and make corresponding products and services. Although the price trend of new energy electric vehicles in the future is inevitable and shows a downward trend, using prisoner pricing, making more advanced system supporting software settings, or using solar powered charging accessories to implement bundle sales may make up for the continued low price of electric vehicles.

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