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The Tesla Model 3

Management and Entrepreneurship

December, 2023

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1. Introduction

The Tesla Model 3, is an electric car, with an innovative blend of technological capability, sustainability, performance and driving experience.

This paper highlights, the Model 3's unique characteristics, like its, dual-motor with amazing speeds and range, auto-pilot system, minimalist and innovative design, over-the-air update capability, entertainment system features and large network of charging stations.

We'll also look into its target market and costumer needs. The Tesla Model 3 strategically targets consumers who seek luxury, performance, driving experience, cost efficiency, safety and a conscientious choice for the environment.

However, it faces competitive challenges as more affordable electric vehicles enter the market, and the landscape shifts. Still, Tesla's established brand and more advanced technology keep the Model 3 at the top of the consumer choices. There are other types of obstacles, that are important to overcome, like mineral supply fluctuation and the necessity for an expansive charging infrastructure.

The business model canvas, unveils Tesla's strategic aspects, including partnerships, activities, resources, value propositions, relationships, channels, customer segments, revenue streams, and cost structures that contribute to the success of the vehicle. The elevator pitch, summarizes the Model 3's essence, highlighting key features, customer value and market position in a concise and compelling manner.

When examining our product, it's import to acknowledge its innovation, performance, sustainability and technology. This evaluation extends to the market, where understanding our consumer base's needs and desires reveals both opportunities and challenges in an evolving landscape. In the commercial realm, Tesla's infrastructure and direct to consumer strategy, highlights its competitive advantage, although ongoing adaption is required due to material sourcing and competitors. By carefully examining these factors, we create a deep understanding of the Model 3's characteristics and strategic decisions, to steer its trajectory into the market.

2. Product Analysis

The Tesla Model 3 Standard is an innovative electric vehicle designed and produced by Testa that redefines the driving experience to its finest using a combination of unique features that move around performance, sustainability, and revolutionary technology. The Tesla Model 3 was drawn to be a viable choice to traditional combustion engine vehicles that produce large quantities of carbon dioxide and emit these particles to the air.

[2.1] Tesla Model 3 can reach 60 mph (96.56 Km/h) in only 3.3 seconds placing it among the quickest electric vehicles. The reason for the exceptional acceleration and speed resides on its dual-motor architecture. Despite its speed, the battery autonomy of this model is also exceptional since it gives an incredible an electric range of 460 km on a single charge that is enough to drive long trips without charging.

The most well-known feature of Tesla's vehicles their Autopilot system that allows the driver letting of the steering wheel and let the vehicle drive itself. Although the system isn't accurate as it could be, it is constantly being improved by the company.

[2.2] The most visible and unique feature is the minimalist interior design of the Tesla Model 3 as the clean lines and the simplicity of the vehicle improve its appearance. The massive 15.4-inch central touchscreen allows the driver to control every aspect of the vehicle: navigation, lights, seats, air conditioning, … The main reason for this touchscreen is to remove any physical buttons or knobs, and this way give the vehicle a mora futuristic design.

The over-the-Air update feature stands out as an important development that allows the vehicle software system being constantly updated and improved anywhere it goes. Even though that it can be used to improve the software, it can be critical to solve bugs and deploy security patches ensuring that the Model 3 stays resilient to cyber threats.

[2.3] Although not very important for its performance but for the driver, the info-entertainment system of the Tesla Model 3 enables to drivers enjoy even when the car is stopped. The vehicle info-entertainment system includes Theater, Arcade, Toybox,

and Browser, which puts the central touchscreen in a new level of enjoyment. Drivers can even play games using the steering wheel while in the Arcade mode.

[2.4] Despite not being a direct feature of the vehicle, the large network of Tesla charging station is very significant and crucial as it increases the density of charging stations all over the world. The enhanced chargers known as Superchargers, can add up to 320 km of range in just 15 minutes. Drivers may spend even more time on the road thanks to the remarkable range of every Tesla vehicle and the extensive network of rapid charging stations.

3. Market

3.1. Targeted Market

Tesla's Model 3 target market consists primarily of males aged 25-60 with good jobs, a comfortable life stage, and an annual household income of $100,000 or more [3.1], they usually live in urban or urban fringe areas, some facing up to a 2-hour commute to work, desiring a luxury vehicle to make their long rides enjoyable, that's why Tesla's targets parents seeking a high-performance vehicle that also provides room and safety for their families.

These consumers exhibit a "West Coast" mentality, emphasizing environmental responsibility and staying on top of trends, making this market so attractive due to its willingness to invest in a luxury electric vehicle, the Model 3 was designed with this in mind, offering a combination of style, performance, luxury, comfort, and safety. Tesla's consumers are described as innovators and early adopters, comprising 2.5% and 13.5% of consumers, respectively, according to the product diffusion curve [3.2].

Tesla's Model 3 fills its consumer needs, offering features such as the ability to travel over 300 miles on a single charge, rapid acceleration (0-60 mph in 5.6 seconds), a top speed of 125 mph and the convenience of plugging into a 120-volt or 240-volt wall outlet. Despite the high price point and limited market access, the Model 3 has captured a significant market share, accounting for 23% of the market in 2019 [3.3], nearly 1 out of every 4 small or midsize luxury cars sold was a Tesla Model 3, however, Tesla's dominance is predicted to face challenges as more affordable electric vehicle models enter the market.

3.2. Costumer Needs

There's several costumer needs that the Tesla Model 3 targets to fulfill. The main one being the increasing focus on sustainability and environmental concerns by today's society, something that completely impacted the automotive industry. [3.2.1] In the United States, cars and trucks account for nearly one fifth of all emissions, emitting around 24 pounds of carbon dioxide for every gallon of gas. People are starting to realize how their activities impact the environment, and electric vehicles, like the Tesla Model 3 offer a compelling solution. The rise and need for electric vehicles is not merely a trend, it's literally the future. [3.2.2] In the United Kingdom, electric car sales increased by 40% in 2022 and electrical cars had a record breaking year where more than one in ten new vehicles is electric. There's also governmental policies aimed at reducing emissions and promoting sustainable practices. Incentives such as tax credits, rebates, and initiatives have encouraged consumers to consider electric cars as viable options. [3.2.3] In the United Kingdom, there are incentives that can get up towards £4,500, to help the customers, when buying an electric vehicle. [3.2.4] The english government predicts that by 2035, all vehicles will have zero emissions.

Another customer need is better cost efficiency. Electricity is significantly less expensive than gasoline or fuel. Since charging an electric car at home or at a public station is significantly less expensive than filling it up with gas, owners of electric cars save a lot of money on fuel. [3.2.5] A 2018 study by the University of Michigan's Transportation Research Institute, found that the average cost to fuel an electric car was $485 a year, compared to $1,117 for a gas powered car. According to the U.S. Department of Energy, these savings are largely based on the fact that current electric cars are 2.6 to 4.8 times more efficient than one with a gas engine. [3.2.6] The cost per mile for the Model 3, is $0.04, [3.2.7] in comparison the average cost per mile, for a gas car is $0.15. This substantial difference in cost per mile between the Tesla Model 3 and gas cars serves as a compelling incentive for consumers looking to make an economically prudent choice. And also electric cars, have lower maintenance costs, since they have fewer moving parts compared to gas cars. They do not require regular maintenance associated with traditional cars, such as oil changes, spark plug replacements and transmission repairs. Electric cars, also show higher resale value. And well maintained electrical cars, like the Model 3, tend to hold their value much better than gas powered vehicles, which could result in long term savings as the market for electrical cars grows and demand rises.

Good performance and driving experience is also, a very important customer need. [3.2.8] The standard model for the Tesla Model 3 reaches 60 miles in about 5.6 seconds, and costs $35,000, when compared with other vehicles (gas or electric), the results are overwhelming. Very few beat the 5.6 seconds mark, and when they beat it, usually, it is at a much higher cost. The driving is smooth and quiet, due to the electrical motor. It has a low center of gravity, since it incorporates the battery pack in the floor, improving the car's stability and handling, making it agile and responsive when navigating corners. It also uses regenerative braking, that improves the vehicle's efficiency while simultaneously enabling smoother braking. The vehicle also includes an auto pilot mode, to assist the driver in various aspects of driving. It helps to maintain a safe distance from other vehicles, keeps the car centered in its lane, and assists with steering, accelerating, and braking. It also reduces the driver's workload and potential fatigue, lessening the amount of labor that drivers have to do when traveling long distances on highways or through dense traffic, making driving more enjoyable and stress free, while improving safety. This Tesla model, also provides fast charging through Tesla's Supercharger Network stations, all over the world, and [3.2.9] 394 miles of range, being on the top 5 of longest range in electric cars in 2023.

The Tesla Model 3 appeals to the costumers needs, in very different ways, like: environmental concerns, governmental incentives, cost efficiency in fuel usage, maintenance and resell value, and also, because of its good performance and driving experience, since it has top: speed, smoothness, quietness, stability, handling, regenerative braking, auto pilot mode, fast charging and miles range. These factors collectively influence the customer's perception of the vehicle's worth and their willingness to invest on it, making the $35,000 initial price tag fair and reasonable.

4. Competition and Industry

4.1. Competitors

Four of the top ten most popular electric vehicles for 2023, including the Model 3, are Teslas, as per [4.1.1]. We'll compare the remaining six by looking at them:

- Ford Mustang Mach-E: Providing a balance between performance and SUV usefulness, the Ford Mustang Mach-E is a noteworthy rival to the Tesla Model 3. With its iconic Mustang identity and array of amenities, the Mustang Mach-E is positioned as an electric SUV with the goal of drawing in buyers.

- Chevy Bolt: In terms of price and utility, the Chevy Bolt is a small electric vehicle that directly competes with the Tesla Model 3. The Bolt offers a competitive range and features in the electric vehicle industry, with an emphasis on providing an affordable electric choice.

- Hyundai Ioniq 5: The Tesla Model 3 and Hyundai's Ioniq 5, a midsize electric crossover, are competitors in the same market. With its unique design and cutting-edge technological capabilities, the Ioniq 5 seeks to attract customers who want performance, style, and electric range all in one package.

- VW ID.4: In the SUV/crossover segment, the VW ID.4 is an electric vehicle that rivals the Tesla Model 3. Volkswagen hopes to appeal to a wide spectrum of buyers with the ID.4's usefulness, competitive electric range, and support from a reputable automaker.

- Kia EV6: Positioned to take on the Tesla Model 3, the Kia EV6 is an electric crossover that combines cutting-edge technology, performance, and style. Focused on design and available in multiple variants, the EV6 is aimed at customers seeking an electric car with a distinct style.

- Rivian R1T: The Rivian R1T is an electric pickup truck, presenting a unique offering in the electric vehicle landscape and distinguishing itself from the Tesla Model 3 by targeting consumers in the pickup truck market. With its rugged design, off-road capabilities, and a focus on adventure, the R1T appeals to those seeking an electric vehicle with the versatility and performance traditionally associated with pickup trucks.

In terms of who is currently able to provide customers solutions, Tesla has been a market leader for electric vehicles, and the Model 3 has been effective in providing a blend of advanced autopilot capabilities, performance, and range at a price point that is competitive.

There will likely be more competition in the electric car market in the future as more automakers and tech firms enter the market. Conventional automakers with substantial investments in electric vehicles, such as Ford, General Motors, and Volkswagen, may present a serious obstacle.

Advantages of the Tesla Model 3:

- Extended electric range in comparison to other rivals.
- Supercharger network, offering infrastructure for rapid charging.
- Sophisticated self-driving and autopilot features.
- A devoted consumer base and great brand awareness.

Weaknesses of Tesla Model 3

- While the cost of the Model 3 is relatively affordable, it may still be considered high for some consumers compared to traditional gasoline cars.
- Reliance on the infrastructure for electric charging, which varies per area.
- Early in the production process, a few consumers complained about problems with quality control.

Strengths of Competitors:

- Some conventional automakers have established dealer networks and production capabilities.
- Wide range of products, including plug-in and hybrid versions.
- Government subsidies and competitive pricing in some areas.

Weaknesses of Competitors:

- Limited range on some electric vehicles.
- Infrastructure for charging that is less advanced than that of Tesla.
- Deployment of cutting-edge autonomous driving technologies may be delayed.

4.2. Obstacles

The increasing demand for minerals like nickel and lithium is giving mineral providers more negotiating leverage. As [4.2.1, 4.2.2] have shown, disruptions or price changes in these materials could have a substantial impact on the Model 3's production costs, thereby affecting the model's cost-effectiveness.

There is fierce competition in the electric vehicle industry, with many manufacturers providing Model 3 substitutes, including as the Polestar 2, Kia EV6, and Chevrolet Equinox EV [4.2.3]. This puts the Model 3 under pressure to stand out in a crowded market and gives customers more bargaining power because they have access to a wider selection of similar options.

The lower entry point for purchasing a gas-powered vehicle poses a valid threat of a substitute for electric vehicles like the Model 3. However, the growing emphasis on sustainability and regulatory trends plays in favor of the Model 3.

The appeal of the Model 3 is contingent on the availability of a robust electric car charging infrastructure. As highlighted in [4.2.4], not every location offers such infrastructure, potentially diminishing the appeal of the Model 3 for potential customers residing in areas with inadequate charging support.

4.3. Product Delivery

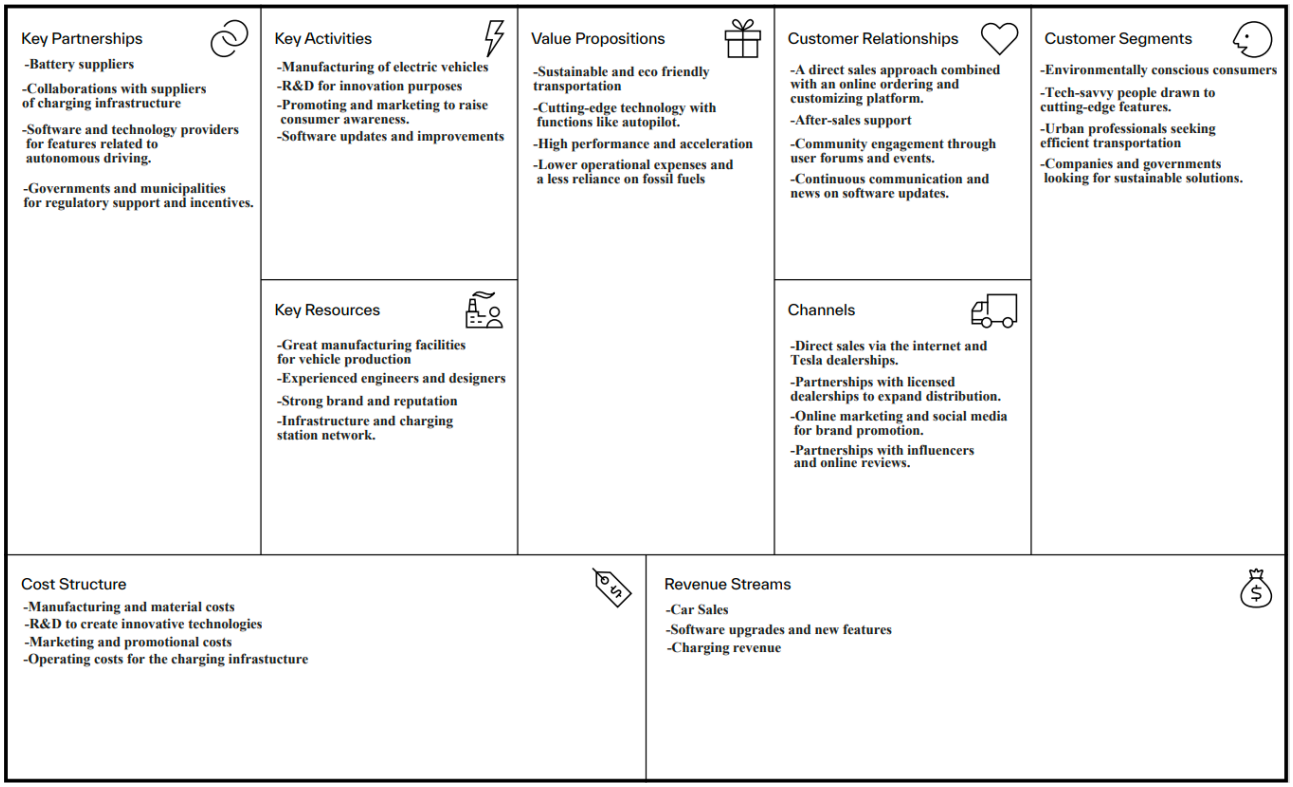
Tesla's distribution strategy for the Model 3 is a direct-to-consumer (DTC) approach, moving away from the traditional dealership model and allowing the company to sell vehicles directly to customers, allowing better control over the customer experience and pricing, this increase in operational efficiency provides a reduce overhead costs. Customers have the ability and access to Tesla through its website and mobile app, where they can order their Model 3 while also managing payments and service scheduling.

Tesla Delivery Centers are strategically located across the United States and select international markets, forming a distribution network where customers can receive their newly acquired vehicles, Tesla also provides a mobile delivery service, where customer's can chose a location for home deliver (bypassing delivery centers), assisting

with setup and paperwork, this is called Tesla Direct, this is very convenient especially for customers in proximity to Tesla manufacturing facilities.

This multifaceted distribution approach translates to Tesla's dominance in the electric vehicle market, contributing significantly to its rapid growth and success.

5. Business Model Canvas



6. Elevator Pitch

Presenting the Tesla Model 3, a game-changing solution for individuals who value sustainability above all else and are looking for something different from a car that runs on gas or one of the few available electric models. With its high-performance, yet reasonably priced, electric vehicle, it completely changes the market for environmentally concerned transportation.

The Model 3 distinguishes itself from conventional electric vehicles with its smooth appearance, remarkable 300+ mile range on a single charge, autopilot features, and easy over-the-air software updates. With the Tesla Model 3, you can experience a driving revolution where state-of-the-art technology and outstanding design come together to provide an environmentally sustainable and thrilling driving experience.

7. Conclusion

At last, the Tesla Model 3 is an electric car industry pioneer, offering a compelling combination of performance, sustainability, and cutting-edge technology. The dual-motor architecture, minimalist interior, over-the-air update capabilities, and entertainment features all contribute to its allure.

The Model 3 has been favorably accepted by its target market of affluent, environmentally conscious customers, propelling it to the forefront of the luxury electric vehicle sector.

The Model 3 meets customer demands by focusing on sustainability, economic efficiency, and a greater feeling of driving. Tesla has built a market for itself with its extended electric range, Supercharger network, advanced autopilot features, and devoted customer base. However, constraints such as mineral supply issues, competitive concurrence, and the necessity for a robust charging infrastructure could all be obstacles.

Tesla's market dominance may be challenged as new competitors enter the market, but the Model 3's properties, including as brand awareness and innovative features, keep positioning it as a viable opponent. The electric vehicle market will certainly see increasing rivalry in the future, with traditional automakers joining the race.

Essentially, the Tesla Model 3 represents a change toward high-performance, environmentally friendly mobility rather than merely being

an electric car. Its core is encapsulated in the elevator pitch: it offers a revolutionary solution for individuals who prioritize sustainability, utilizing cutting-edge technology to drive a revolution and a dedication to an environmentally conscious future.

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