Tesla Business Model, Digital Strategy, and Market Environment

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Business Description

Tesla Inc. is an American-based public limited company that was founded in 2003. The company's founding engineers desire to produce efficient electric vehicles. However, its portfolio today has expanded from electric vehicles to clean energy production and storage products. Tesla operates with the vision of becoming the most compelling electric car company and has translated this into its mission to provide sustainable transport and energy. The company understands that humans of the 21st century can no longer rely on fossil fuels and thus need affordable, accessible, and clean options for both transportation and energy production (*About Tesla | Tesla*, n.d.).

For its automobile segment, Tesla is involved in designing and developing electric cars. Unlike other automobile companies that operate through distribution networks comprising display centres and authorized dealerships, Tesla owns its sale, lease and service operations. It is also one of the automobile companies that also sell automotive regulatory credit. For its energy segment, the company designs and manufactures energy generation and storage products. It also handles the sale, lease, and installation of energy-generating and storing products (Editorial, n.d.). With its headquarters in California, it has manufacturing facilities in China and the USA. Tesla's current product portfolio has four products that it manufactures and sells. These include Model 3, Model X, Model Y, and Model S. Its first automobile was the Roadster, which is no longer manufactured. The power generation and storage products offered by Tesla include Powerpack, Powerwall, and Megapack.

Business Model

Various aspects of the business model are taken into consideration when defining a business model. One way of describing a business model is to look at how a business is streamlining its operations to create and deliver value for customers. Another key element of the business model is the financial architecture of the business, which enables value creation by outlining the revenues that benefit shareholders, costs, and profits. The business model influences and defines multiple functions and divisions of a company (Wirtz, 2019). The two main aspects of the customers and finance are closely related, as financial processes generate value for the customers. How a business uses digital technology to develop, streamline, and enhance its business functions helps in outlining the digital business model for it. A digital business model has three important facets: the product, the

distribution, and lastly, the value intention (Cuofano, 2021).

Tesla offers three core values to its customers. It provides its customers with high-performing electric automobiles without compromising on design, functionality, or efficiency. It also offers long-range and flexible charging options. Whether electric automobiles or clean energy generation products offered by Tesla, the company promises value to its customers, from the efficiency of its products to the cost of ownership (Cuofano, 2022). To make these values accessible to its customers, Tesla Motors operates using a direct business-to-customer model. Tesla operates through both an online platform and physical stores, galleries, and service centres. Product distribution and after-sale service are two key business operations that create value for customers. Realizing the fact, Elon Musk shared the rationale behind the business-to-customer model in his blogs. He explained that all existing franchise dealers have automobiles that run on fossil fuel, which means that they cannot sell an electric car without undermining their other products. As a salesperson at the point of purchase can be a key influencer, Musk believes that people dealing in the existing traditional model cannot do justice to the benefits and features of his cars. Another key difference that was highlighted in his distribution strategy was the fact that none of the sales staff employed at the Tesla stores was offered commissions on sales. This is the opposite of traditional automobile sales models, where franchises receive a commission on the number of cars they sell. Musk has redefined the role of sales staff in adding value, as Tesla's staff would not force purchases as their goal is to make the potential customer enjoy their experience of visiting the store and returning (Musk, 2012). Tesla also differentiates its cars based on the lowest maintenance costs, as there are no moving parts that need replacement or repair. The technology of the Tesla automobiles is state of the art, providing remote diagnostics and over-the-air software updates. Customers can use the Tesla application to schedule and track any services available from the Tesla service centres. Tesla has integrated seamless digital technology to improve customer experience, enhancing customer value with hassle-free service (*Service*, n.d.).

As Tesla CEO Elon Musk stated, Tesla, with its electric cars, entered a high-end market with people who would be willing to spend on a premium quality product. This approach was taken considering that the technology involved in the production of electric cars, just like any other new technology, will be expensive until it is optimized, leading to a high volume of units produced to pave the way for reduced pricing. He also elaborated that a company that has technological development at the core of how its products deliver value will use its unutilized cash for R&D (Musk, 2006). The four key activities that Tesla is involved in are R&D, design, innovation, and software development. All these activities are directed towards creating value for the customers.

Considering Tesla's business model and digital integration, it can be concluded that the business relies heavily on technology. Many aspects of the customer-end services are provided through a digital medium. Furthermore, the business operates on a website, and people who have purchased a Tesla car can access multiple services and updates through the mobile application. The products themselves are highly digitalized, with smooth design and display options.

Disruptive Forces

The markets of today have become highly volatile, largely because of technological development, emerging sustainability concerns, and changing customer demands. Digitalization has paved the way for increased automation, subsequently redefining business models and how value is transferred to customers. The technology-driven disruptive trends that have emerged in the automobile industry are changing customer trends in car ownership and flexible mobility, autonomous driving, and connectivity. Other than these technology-related disruptions, the automobile sector also faces many other challenges. This includes new policies and business entrants, regulations, markets, value chains, and customers. The pandemic has exerted unprecedented pressure on multiple business functions. These disruptive factors had neither been predicted nor had been experienced by modern-day businesses and markets (Gao et al., 2016).

As the internal combustion engine is a saturated technology and cheaply available, traditional businesses do not find much incentive in R&D and changing their product, as they have captured a large market with their existing product. While technology is a major disruptive factor for traditional car manufacturing businesses, Tesla, on the other hand, has capitalized through its digital focus. When Tesla introduced its 'Cybertruck', it was able to get pre-orders for 200,000 units in a month, which was much higher than the yearly sales of the popular Ford-150 in 2018, which totalled about a million. However, electric cars do not require refuelling infrastructure, and in Tesla's case, they require a distribution network as well. Both these sectors are highly profitable, giving the large giants political and social influence. For Tesla, a major disruptive factor is its reliance on the fact that traditional automobiles are profitable and generate business for other sectors. It is because of the same fact that electric cars are considered a threat to corporate and economic powers, and the electric car program in California was stopped from its tracks (Lobo, 2020).

Micro-Environment

Michael Porter describes five microenvironment factors that impact a business. These are business competitors or rivals, the threat of new business entrants, threats posed by substitute products/ services, and the power that suppliers and buyers have (OpenStax, 2019). For the automobile industry as a whole, the threat of new entrants is minimal as the sector is capital intensive, requires economies of scale to turn profitable, and also has unrecoverable R&D costs. Most of the industry's existing giants, such as Ford, General Motors, Honda, Toyota, and Nissan, achieved economies of scale since automation was introduced in post-World War 2. These companies have large market shares based on their traditional models, and with the existing high success, they don't see much motivation in R&D, digitalization, or electrification of their products. Not only this, these companies also make it difficult for new entrants to join the sector. Tesla, on the other hand, had enough capital to enter the market, and what it had more than these existing giants was the technology-focused R&D to provide a better electric car. Tesla's goal has been to drive the world's transition towards electric

vehicles by offering affordable cars. Tesla has allied with many firms in Silicon Valley to benefit from their infrastructure and research expertise (Lobo, 2020).

Suppliers in a business sector are considered an element of the microenvironment that influences the business, as any disruption in the supply of materials, parts, or services can disrupt the production of value delivery to customers. The pandemic has been attributed to creating an unprecedented supply shortage and closing of seaports, hampering trade and delivery. Companies such as General Motors, Honda, and Nissan reported a decline in sales as manufacturing was suffering from supply shortages. Automobile manufacturers such as Jaguar Land Rover, Ford, and Volkswagen all had to halt production due to the extreme global shortages of the microprocessor. Tesla also suffered severe shortages during 2020 and the spring quarter of 2021, and it had to halt its production of Model 3. Tesla also faced similar problems with the availability of microchip processors. However, it recovered from this slow period with an 87% increase in its sales during the fourth quarter of 2021 (Kay, 2021).

Macro Environment

Macro environment factors can be identified using the PESTEL analysis, which refers to political, economic, social, technological, environmental, and legal factors and how these macro-environment elements play and change does not impact a single company but the whole sector. The macro factors also impact the micro factors, as Micheal Porter mentions. These macro and micro factors affect the profitability of the firm and the sector and also affect the competitive advantage a firm has in the market (*Tesla, Inc. PESTEL / PEST & Environment Analysis[Strategy]*, n.d.).

Political factors have a huge impact on the industrial sector, as the policies and laws they implement can greatly impact multiple business processes. The sectors that the government deems highly profitable for the economy are protected through laws and policies, creating favourable conditions for business. For Tesla, many political aspects are affecting the business both positively and negatively. Considering that governments around the world are pressurized to make clear and strict policies that help limit the consumption of fossil fuel, in mid-2021, Joe Biden announced that by 2030, half of the new public transport vehicles will be electric. Policies such as these negatively impact Tesla, an electric car producer that targets individual end-customers; this means new competitors that can make public transport with similar technology, and all the people have to pay is a minimum fare. Before Biden's government, Tesla enjoyed a period of ease in business as the company was bolstered in federal taxes. The previous government also allowed Tesla to gain much emission credit, from which it has profited. Another policy by Joe Biden is to severely impact Tesla as he announced a $4500 customer incentive on electric cars produced by companies that have labour unions. This move is focused on benefitting Ford, General Motors, and Stellantis. On the other hand, this means that people who want to buy a Tesla car cannot avail of this benefit as Tesla does not have any labour unions (Siddiqui, 2021).

Important economic factors that have affected many businesses around the world are the pandemic-

fueled inflation, unemployment, and instability in foreign markets, as well as dollar conversion rates. With supply shortages, prices have gone up, and limited availability has created problems. Musk identified environmental issues as the biggest macro-level problem that all businesses in the world face. He also stated that without innovation, we cannot find a solution to develop sustainable ways of producing energy and consuming it (Lobo, 2020). Having said this, Tesla is facing criticism for not declaring its carbon emission data. It was also under fire when it proposed buying a Tesla car through Bitcoin, which the company declined later (Bansal, 2021). It has also been under scrutiny and fined by the German government for not disposing of its car batteries as per the law of the country (Kolodny, 2021).

With the younger generations becoming highly aware of the environmental crisis, social changes are a macro factor that would have a positive impact on Tesla. With the company not only providing electric vehicles but also lifestyle products in the form of clean energy generation and storage products, more people are considering a shift to clean energy sources.

Digital Ecosystem

The digital ecosystem of a company brings together and connects its stakeholders digitally. For Tesla, this is very much in place as the customers are connected to company product-related services through a mobile application. Additionally, the Tesla automobile is the only vehicle that stays efficient with regular software updates. The company is increasingly investing in research, development, and engineering to correct and improve any shortcomings or safety issues of its products. Their customers have ease of access to the latest software updates and features through digital mediums. Tesla has managed to revolutionize performance, uniqueness, and value through the digital revolution. Tesla excels in instantly connecting with its customers through the technology present in the car that provisions remote support, the Twitter handle of Elon Musk and Tesla, the mobile application, and the website. Tesla is creating a customized experience for its customers by analyzing customer data to identify capabilities in designing a user-friendly experience, engaging and integrating the channel's user experience, and aligning its marketing strategies (Bruijl, 2017).

With a strong inclination towards research, design, and engineering solutions that lead to product design and manufacture, Tesla has not left much in the digital ecosystem unattended or unexplored. However, with various legal engagements, whether it is on workplace harassment compliance to environmental laws or the safety issues of the car, there are still some areas of its processes that need improvement.

Benefits and Recommendations

Since its inception in 2003, Tesla has envisioned the world's transition to clean energy. As a business offering products that support features of remote assistance and over-the-air software updates, it can

be said that it delivers value to its customers through digital mediums. As a business in the automobile sector, Tesla was a new entrant with a different product from the traditional combustion engine. It was focused on innovating technology and manufacturing only electric cars. Although research and development are of crucial importance to the business, however, there are still some safety issues with the product. In such cases where the electric car is marketed based on the feature of auto-drive, if the same leads to accidents, this would only negatively impact the company. Although Elon Musk has always taken flaws in its products as opportunities for improvement, it does not bode well for a high-priced automobile to be prone to accidents, no matter the reason. Therefore, it can be recommended that Tesla use the data collected from these incidents to identify the problem and develop better and safer cars. Elon Musk actively uses his Twitter handle to put his products through various tests; this does add credibility as it shows that the CEO is not alien to the vehicle's processes; however, the recent recall of half a million cars in 2021 over safety issues can lead to challenges, as the existing political factors are not much supportive for Tesla. Macro and micro factors combined with any existing product problem could aggravate the situation for the company. The pandemic has left many markets and economies in uncertainty; even though Tesla has shown a steady recovery in 2021 from the 2020 sales decrease, it still has to work more for a full recovery.

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