# **EDUTUS UNIVERSITY**

**TDK THESIS** 

BA in Administration and Management Rike Schauermann, Quang Duy Bui, Torben Marques da Silva 2023.11.05

## **EDUTUS UNIVERSITY**

The Tesla Phenomenon: Dominating the Electric Vehicle Market A Tesla-jelenség: Az elektromos járművek piacának uralása

Authors: Rike Schauermann, Quang Duy Bui, Torben Marques da Silva

Tutor: Dr. Zoltan Peredy

Manuscript closing: November 5<sup>th</sup>, 2023.

Approved by tutor:

Derecty

# Abstract

•

In this TDK thesis, we research how and why Tesla is dominating the EV market. We do so by analyzing Tesla's technology and innovations that shaped the EV market. We look at their branding and marketing as well as the strategic decisions that positioned them at the forefront of the industry. We also give insight into Tesla's charging Infrastructure and Sustainable Practices. Lastly, we also compare them to their competitors and delve into what sets them apart from others.

The research started by reading papers and delving into the topic deeper and gaining information. After that we sat down and build a structure that seemed logical for us before each writing down our findings and answering our Thesis Question.

The main conclusion is that a multifaceted approach helped the company to transcend boundaries and set a new standard for the industry. The pivotal role of innovation, brand recognition, sustainability, strategic decision-making, and the ability to overcome challenges are the key points of the multifaceted approach.

# **Table of Contents**

Intro	oduction	1
1.	Innovation and Technology	2
1.1.	Brand Recognition and Marketing	3
1.2.	Marketing Strategies	4
2.	Sustainable Practices	6
3.	Charging Infrastructure	8
4.	Global Expansion	9
4.1.	Strategic Business Decisions1	D
4.2.	Competition and Challenges1	1
5.	Consumer Trust and Loyalty14	4
Sun	mary and Conclusions1	6
Refe	erences	8
Ann	exes	2

### Introduction

In the 21st century there is a shift in the society from the traditional internal combustion engine to electric motors. When talking about electric vehicles there is one name that stands out, Tesla. Tesla is a renowned American electric vehicle and clean energy company that was founded by Elon Musk in 2003. Since then, it evolved into a global leader in sustainable transportation and energy solution. Tesla spearheaded the electronic vehicle market and emerged as a leader. This essay delves deeper into the intricacies of how and why Tesla is dominating the electronic vehicle market, we will analyze the technological innovations, global expansion and strategic decisions that helped gain the traction that Tesla has today.

First, it is important to understand the general rise of electric vehicles. Electric vehicles are seen as the future of transportation and in the last two decades the full potential of electric vehicles was realized. The early 2000s marks the beginning of trying to reduce greenhouse gases, combat climate change and start the transition to sustainable transportation. Through government incentives, strict emission regulations and growing environmental awareness there was monumental shift in consumer preferences when it came to the way of transportation. There was a increasing number of individuals looking for eco-friendly transportation. The development and deployment of electric vehicles is a combined effort of automakers, government incentives and start-ups that try to gain traction by working on socially important topics like reducing greenhouse gas emissions.

During this time a lot of different electric vehicles were introduced but Tesla stood out. The sleek design, cutting-edge technology and unwavering commitment to sustainability gave Tesla an advantage. Tesla redefined the perception that electric vehicles where slow and impractical to them being high performance, luxurious and attainable.

Tesla can be dominant in the electric vehicle market due to strategic foresight, technological advancements, and visionary leadership. Factors that helped Tesla achieve this are the company's innovative approach, relentless pursuit of energy, efficiency, and the charismatic leadership of Elon Musk.

In this TDK thesis we will explore the statement that Tesla's dominance in the electric vehicle market can be attributed to a combination of innovation, brand recognition, sustainable practices, and strategic business decisions.

### 1. Innovation and Technology

Tesla is known for consistently pushing the boundaries of innovation and technology. Their commitment to cutting-edge technology sets them apart from their competitors. For example, their newest innovations include the Tesla Bot, FSD Chip, Dojo Chip. The relentless pursuit of innovation is reflected in their continuous improvements. In their electric vehicles they have also deployed cutting-edge technology for example the electric powertrain, the battery technology, or the self-driving abilities.

#### Electric Powertrain

The electric powertrain is compromised of high efficiency electric motor and power electronics. Together they efficiently convert electric energy in kinetic energy. The electric powertrain is renowned for remarkable efficiency and instantaneous torque. Through that it can provide exhilarating acceleration and a in general smoother and quitter ride. Because Tesla has an inhouse development and production, they have full control over the quality and performance of their key components which sets them further apart from their competition.

### Battery Technology

Tesla's domination in the electric vehicle market can also be attributed to the groundbreaking advances in battery technology. Their expertise in lithium-ion battery development led to significant improvements in the energy density, charge time and overall battery life. It even led to Tesla building a Gigafactory network dedicated solely to the battery production. This further accelerated the battery innovation and manufacturing scale. It also drove down costs and made the electronic vehicles more affordable. Tesla's state-of-the-art batteries enabled their vehicles to achieve impressive ranges making "range anxiety" something of the past. The company could even extend the application of the batteries to other sectors for example renewable energy storage.

### Self -Driving Capabilities

Tesla's commitment to autonomous driving is a testament to their dedication to technological advancements. Because of this Tesla is also the leader in the industry when it comes to autopilot systems. Their vehicles come with adaptive cruise control, lane centering and automatic lane changes. Their Full Self-Driving (FSD) suite aims to achieve fully autonomous driving. All their vehicles are equipped with cameras that continuously collect data to make autonomous driving possible. Safety regulations are holding Tesla back from deploying the Full Self-

Driving suite. The road regulations do not allow for autonomous driving cars to drive on the streets yet.

### Continuous Innovation in Design and Performance

Tesla's commitment to innovation goes beyond just technology. It is also deeply embedded in their vehicle design and performance. The design philosophy of the company combines form and function resulting in sleek and aerodynamic vehicles that maximize energy efficiency. Every single Model Tesla puts out has feature improvements. For example, the range, performance, or design. In doing so Tesla has set a new standard for other automakers of the industry. The Tesla Model S Plaid had a record-breaking acceleration and impressive range showcasing the company's dedication to pushing the envelope in electric vehicle performances.

In general, the relentless pursuit of innovation and cutting-edge technology of Tesla enabled a new benchmark for automakers to achieve. Tesla remains unrivaled in their quest to redefine the future of transportation. Tesla is able to influence the entire automotive industry with their commitment to innovation. It propels their dominance even further.

### 1.1. Brand Recognition and Marketing

Tesla's success extends beyond just innovative technology. Their success also hinges on remarkably strong brand recognition and marketing strategy. They were able to build a brand that is heavily associated with sustainability and future. The brand identity is closely intertwined with their charismatic leader Elon Musk which plays a pivotal role in promoting Tesla's vision.

### Sustainability and Future

Tesla is built on the foundation of sustainability and the vision of a more environmentally friendly future. Their electronic vehicles are seen as a symbol of environmental responsibility. Furthermore, the company's energy products align with the broader goal of reducing carbon emissions. This sustainability-focused branding resonates well with their consumers environmental awareness. It positions Tesla as a leader in the transition ton a more sustainable future.

### The Role of Elon Musk

The founder and CEO of Tesla Elon Musk is an indispensable element of branding for Tesla. He shows a charismatic presence online and actively engages with customers on social media. This all concludes to an almost cult-like following around the brand. He participates in product launches, updates and candid discussion of technology and future contributes to the public perception of Tesla as a innovation forward thinking company. Elon Musk tries to close the gap between customer and business by being a reachable person on social media. His influence extends to millions of followers.

### **1.2.** Marketing Strategies

### Social Media

The company leverages platforms like X and Instagram and provides for example real-time updates, engages with customers, and showcases new products and achievements. Through maintaining a strong online presence Tesla fosters community engagement and generates excitement for new products and launches.

### Customer Engagement

Tesla prioritizes customer engagement and community building. Tesla lets their customers that own vehicles become their brand advocates. Customers can share their experienceonline in forums or social media. Tesla solely encourages user-generated content. This amplifies the brands reach.

### Innovation and Product Unveils

Tesla's product unveils events generate a significant media and public attention. These events are more than just product launches, they turn into a moment of celebration for the whole community.

### Referral Programs

Furthermore, Tesla encourages word-of-mouth marketing. The company offers incentives to existing customers that bring in new customers. By that Tesla is harnessing the power of a satisfied customer base which drives scales and promotes the brand.

### Environmental and Safety Messaging

Through marketing materials Tesla highlights the environmental and safety benefits of their products. This aligns with the concerns of the growing number of customers which all have developed a conscious of environmental footprint and safety on road.

Tesla's brand recognition and marketing strategies are instrumental in establishing their dominance in the electric vehicle market. Their success partially comes from Elon Musk's role,

their presence online and their active engagement with customers. Their combined commitment to innovative technology and compelling brand narrative reshaped the automotive industry tremendously. It paved the way for a sustainable and electric future.

### 2. Sustainable Practices

Tesla's commitment to a sustainable future extends beyond just electronic vehicles. The company embraced the holistic approach to eco-friendly practices and renewable energy solutions. It not only resonates with their consumers conscious but also sets Tesla apart as a leader in the sustainability movement.

### Energy Storage Solutions

Tesla's energy storage solutions such as Powerwall and Powerpack enable homes, business and entire utilities to store and manage their energies from renewable sources themselves. Powerwall for example allowes the user to storage excess solar energy that was generated during the day. That way the stored energy can be used during peak demand or a power outage. With this approach Tesla promotes energy independence and reduces the reliance on nonrenewable sources. Another positive for the users is the lower electricity bill which is why it attracts a lot of new costumers.

### Solar Energy Initiatives

In 2016 Tesla acquired SolarCity which was a pivotal move that allowed Tesla to expand into the solar energy sector. Their products in this sector include solar panels and solar roof tiles. Those enable individuals and business to generate their own renewable energy. By including solar energy in their products Tesla was able to commit even further to reducing carbon emissions. It also allowed their costumers to harness power for energy needs. Furthermore, it allowed the customers to potentially reduce their energy costs, increase their energy independence and decrease their environmental footprint.

#### Commitment to Reducing Carbon Emissions

Tesla is committed to reducing carbon emissions in their products and operation. Their ambitious goal is to achieve carbon neutrality. At the moment Tesla actively works on reducing their emissions in the manufacturing process. This resonates once again with their broader goal of combating climate change and with individuals who work on having a positive environmental impact.

### Innovation and Recycling

The company is known for their focus on innovation this includes the development of an efficient and sustainable manufacturing process. Tesla emphasizes recycling, striving to recycle

or reuse 90% of their materials in their battery packs. Their commitment to sustainability extends to the entire lifecycle of their products.

All these sustainable practices are rooted in Tesla's commitment to a greener sustainable future. The practices appeal to environmentally conscious consumers by providing a comprehensive ecosystem of their products and services. By doing so Tesla becomes a symbol of the transition to a sustainable future and builds a deep connection with same willed individuals which in return helps them dominating in the electric vehicle market as well.

### 3. Charging Infrastructure

Despite their environmental benefits, the widespread adoption of EVs has been hindered by the lack of a robust charging infrastructure. Tesla, a trailblazer in the electric automotive industry, has addressed this challenge by establishing a pioneering network of Superchargers, thereby redefining the boundaries of electric mobility and accelerating the transition to a sustainable transportation future.

Tesla's Supercharger network, consisting of high-speed charging stations strategically located along major highways and popular travel routes, represents a critical component in the wider ecosystem required for the widespread adoption of electric vehicles. As of 2022, the company had deployed over 25,000 Superchargers globally, solidifying its commitment to expanding the charging infrastructure to support the growing fleet of Tesla vehicles. This extensive network has significantly alleviated the range anxiety that has long deterred potential EV buyers, enabling them to travel long distances with confidence.

Data from Tesla's reports indicate that their Superchargers have delivered over 2.5 billion miles of charge to date, underscoring the network's indispensable role in facilitating the transition to sustainable transportation. Moreover, the Superchargers' ability to rapidly replenish a vehicle's battery allows for an average charging time of approximately 30 minutes, providing drivers with the opportunity to quickly resume their journey. This feature has been instrumental in dispelling the misconception that EVs are impractical for long-distance travel, thereby bolstering consumer confidence and stimulating greater interest in electric vehicles.

Tesla's Superchargers have revolutionized the way drivers perceive long-distance travel in electric vehicles. Unlike conventional charging stations, Tesla's Superchargers deliver a high-powered charging experience, enabling drivers to cover considerable distances without experiencing prolonged charging delays. This convenience has not only transformed the perception of EVs but has also facilitated a culture of seamless and hassle-free long-distance travel.

Data analysis further reveals that the strategic placement of Superchargers has significantly contributed to promoting electric vehicle adoption. For instance, in the United States alone, Tesla has established an extensive network of Superchargers covering more than 95% of the country's population, thus encouraging drivers to embrace the convenience of electric mobility without the limitations imposed by conventional fueling stations.

### 4. Global Expansion

In the realm of global business, expanding across international borders has become a crucial strategic imperative for sustained growth and market dominance. Tesla has carved a unique path in global expansion, demonstrating a combination of innovative strategies and adaptive approaches to entering new markets.

Since its inception, Tesla has displayed a clear commitment to reshaping the automotive industry worldwide. As the company set its sights on international markets, it meticulously devised a multi-faceted approach that encompassed both localized infrastructure development and strategic market penetration. One of Tesla's primary tactics in expanding globally has been the establishment of a robust network of charging stations and service centers in various regions. By the end of 2021, Tesla boasted over 25,000 Superchargers across 2,966 stations globally, facilitating convenient and reliable charging options for its customers in different corners of the world.

Tesla's foray into the European market, one of the world's largest automotive markets, posed both opportunities and challenges. In 2020, Tesla's European sales accounted for approximately 16% of its total revenue, making it a crucial region for the company's global expansion strategy. However, the highly competitive landscape and stringent emissions regulations demanded a meticulous adaptation of Tesla's approach. To tackle these challenges, Tesla not only diversified its product offerings, catering to the diverse preferences of European consumers, but also focused on sustainable production practices to adhere to the region's stringent environmental standards. By the end of 2020, Tesla had started the construction of Gigafactory Berlin-Brandenburg, a significant step toward localized production and enhanced market penetration in Europe.

In China, Tesla faced a fiercely competitive electric vehicle market dominated by local players, along with intricate regulatory procedures. However, Tesla's ability to swiftly adapt its strategies in this complex market is evident. By investing in the construction of Gigafactory Shanghai and forging strategic partnerships with local companies, Tesla succeeded in boosting its market share significantly. In 2020, Tesla's revenues from China surged to \$6.66 billion, representing a staggering 124% year-on-year increase, demonstrating the success of their localized production strategy and collaborative approach.

The Middle East, known for its dependence on traditional oil-based economies, presented unique challenges for Tesla's expansion. Tesla encountered skepticism regarding the feasibility of electric vehicles in the region. However, through strategic collaborations and a focused emphasis on highlighting the long-term economic and environmental benefits of electric mobility, Tesla has managed to carve a niche for itself. By the end of 2021, Tesla's market share in the Middle East had grown considerably, marking a promising shift in the region's attitude towards sustainable energy solutions.

Moreover, Tesla's expansion efforts in other key markets, including Australia and Japan, have showcased the company's adaptability and resilience in diverse global landscapes. In Australia, Tesla capitalized on the country's growing interest in renewable energy, launching initiatives such as virtual power plants and residential solar installations. Similarly, in Japan, Tesla's focus on innovative technology and sustainable energy solutions has enabled the company to secure a notable position in a market dominated by traditional automotive giants.

Despite its remarkable success, Tesla has encountered a series of obstacles in various regions, including supply chain disruptions, regulatory complexities, and cultural differences. However, Tesla's ability to overcome these challenges through strategic partnerships, localized production, and tailored marketing strategies highlights the company's agility and resilience in the face of adversity.

You can see the Global EV Market Share in Q3 2021 - Q2 2023 in the Annex 1. and the German Passenger Car Market situation in the Annex 2.

### 4.1. Strategic Business Decisions

In the fast-evolving landscape of the automotive and energy sectors, strategic decisions have become the cornerstone of success and longevity. Within this context, Tesla has continually demonstrated a pioneering approach to strategic business choices. A comprehensive analysis of three pivotal moves that have fundamentally shaped Tesla's trajectory are following now: the momentous decision to open-source its electric vehicle patents, the groundbreaking entry into the mass market through the affordable Model 3, and the strategic diversification into energy products and services.

In a surprising move that challenged traditional industry norms, Tesla's CEO, Elon Musk, declared in 2014 that the company would open-source its electric vehicle patents, with the aim of accelerating the global adoption of electric vehicles. This strategic decision was intended to

foster innovation and collaboration within the industry. An analysis of industry data reveals a notable impact following this move. Within two years of the announcement, the number of electric vehicle patents filed globally surged by 14%, underscoring the significant influence of Tesla's open-source strategy on encouraging technological advancements within the electric vehicle sphere. This move not only promoted sustainable innovation but also solidified Tesla's position as a pioneering force committed to driving the transition to electric mobility.

The introduction of the more affordable Model 3 in 2017 marked Tesla's strategic entry into the mass market. By providing a cost-effective option for consumers interested in electric vehicles, Tesla sought to revolutionize the automotive market and accelerate the adoption of sustainable transportation on a global scale. Sales data further affirm the success of this strategic move. Tesla's quarterly financial statements indicate that global deliveries of the Model 3 reached a record 241,300 units in the second quarter of 2023, highlighting the significant market penetration achieved by the Model 3. This move not only expanded Tesla's consumer base but also redefined the perception of electric vehicles as a viable and desirable option for the masses.

Recognizing the interconnected nature of sustainable energy solutions, Tesla strategically diversified its product portfolio to include energy products and services. The company's foray into solar panels, home batteries, and energy storage solutions underscored its commitment to providing comprehensive sustainable energy solutions for both residential and commercial use. Tesla's annual report highlights the remarkable success of this strategic diversification, with revenue from energy generation and storage products reaching \$1.3 billion in 2022, indicating a substantial 71% increase from the previous year. This expansion not only minimized Tesla's reliance on the automotive sector but also solidified its position as a prominent player in the renewable energy market, facilitating the widespread adoption of clean energy solutions.

### **4.2.** Competition and Challenges

### Increasing Competition from traditional Automakers

One of the major challenges Tesla has faced in recent years is the increasing competition from traditional automakers. As Tesla's success in the electric vehicle (EV) market became more evident, many established car manufacturers recognized the potential of electric mobility and entered the market. Companies like Volkswagen, BMW, Ford, and General Motors have launched their electric vehicles own to compete with Tesla's offerings. This heightened competition has put pressure on Tesla to maintain its market dominance. Traditional automakers have decades of experience in car manufacturing, established supply

chains, and extensive dealer networks. They can leverage these advantages to rapidly develop and market EVs, posing a formidable challenge to Tesla's market share. In response, Tesla has had to continuously innovate and stay ahead of the competition in terms of technology, design, and production efficiency. The company's ability to do so has been a crucial factor in its ongoing success.

### Regulations

Tesla's global expansion and success have also been hindered by regulatory hurdles in various regions. Governments and regulatory bodies around the world have implemented strict emissions standards and safety regulations, which can vary significantly from one country to another. These regulations have posed challenges for Tesla as it seeks to sell its vehicles in different markets.

For instance, in some countries, Tesla has had to adapt its vehicles to meet specific safety and emissions requirements. Additionally, the availability of government incentives and subsidies for electric vehicles varies, impacting Tesla's pricing and market accessibility. Navigating this complex regulatory landscape requires significant resources, legal expertise, and compliance efforts, which have added complexity to Tesla's business operations.

### Potential Supply Chain Issues

Tesla's supply chain is a critical element of its success and a potential source of challenges. As the company has scaled up production to meet increasing demand, it has faced issues related to the availability and cost of raw materials, as well as manufacturing and distribution logistics. For example, Tesla relies heavily on lithium-ion batteries for its EVs, and fluctuations in the prices of materials like lithium, cobalt, and nickel can impact production costs. Moreover, securing a consistent supply of these materials has been a concern, as they are sourced from different parts of the world, potentially leading to supply chain disruptions. In addition, Tesla's production facilities and the global distribution of its vehicles require efficient coordination to meet customer demand. Ensuring the smooth flow of parts and components from suppliers to assembly lines, and from factories to customers, can be challenging, particularly production volumes increase. as To overcome these potential supply chain issues, Tesla has invested in vertical integration, building its own Gigafactories and battery production facilities to have more control over its supply chain and reduce dependency on external suppliers. This strategy has helped the company mitigate some of the challenges associated with sourcing materials and managing logistics.

### 5. Consumer Trust and Loyalty

#### **Customer Reviews**

Customer reviews play a significant role in shaping consumer trust and loyalty towards Tesla. In today's digital age, potential buyers often turn to online platforms and social media to gauge the quality and performance of products, and Tesla is no exception. Positive reviews from satisfied customers can enhance Tesla's reputation and build trust among potential buyers. Moreover, customer reviews provide valuable feedback to the company, helping Tesla understand what customers appreciate about its products and where improvements are needed. However, it's worth noting that the transparency of online reviews means that negative feedback can also have a considerable impact. Tesla's willingness to engage with both praise and criticism, addressing concerns and continually improving its products and services, has contributed to maintaining and even strengthening consumer trust over time.

### Trust in Tesla's Products

Trust in Tesla's products is a fundamental factor in the company's success. Tesla has established itself as a pioneer in the electric vehicle industry, introducing innovative technologies and highquality vehicles that have resonated with consumers. The company's commitment to sustainability and its dedication to reducing carbon emissions have also bolstered trust in its products, especially among environmentally conscious consumers. Tesla's vehicles have consistently received high safety ratings and accolades for their performance, further solidifying trust in the brand. The successful deployment of features like Autopilot and Full Self-Driving capabilities, although not without controversy and regulatory scrutiny, has demonstrated Tesla's commitment to pushing the boundaries of technology. The combination of cutting-edge features, vehicle safety, and environmental consciousness has led consumers to place significant trust in Tesla's products.

#### **Owner** Loyalty

Tesla has fostered a strong sense of owner loyalty, which is a testament to its ability to maintain a devoted customer base. Many Tesla owners become enthusiastic brand ambassadors, frequently recommending the company's products to friends and family. The company's commitment to continually enhancing its vehicles through over-the-air software updates has played a crucial role in maintaining owner loyalty. These updates often introduce new features, improve performance, and enhance safety, providing a sense of ongoing value for existing customers. Additionally, the sense of community among Tesla owners, fostered through various forums, events, and social media groups, has contributed to the loyalty of its customer base. Tesla's referral program, which rewards owners for referring new customers, further incentivizes loyalty and advocacy.

#### Tesla's direct-to-customer Sales Model

Tesla's direct-to-customer sales model has been a key element in establishing and maintaining consumer trust and loyalty. By selling vehicles directly to consumers without the need for traditional dealerships, Tesla can provide a more personalized and transparent purchasing experience. Customers appreciate the ability to interact directly with the manufacturer, allowing them to obtain detailed information about the products, options, and pricing. This approach has also streamlined the sales process, often resulting in faster delivery times. Tesla's direct sales model eliminates the traditional middlemen, which can lead to cost savings and greater consumer satisfaction. Furthermore, Tesla's commitment to price consistency across all its stores and online platforms has built trust in the brand, as customers know they are receiving a fair deal regardless of where they make their purchase.

### **Customer Service**

Customer service is another cornerstone of Tesla's success in building and maintaining trust and loyalty among consumers. Tesla's approach to customer service extends beyond the traditional concept of repairs and maintenance. The company's focus on responsive and efficient customer support, coupled with its commitment to resolving issues and addressing customer concerns promptly, has been a significant contributor to its positive reputation. Tesla's dedication to service extends to its mobile service fleet, which can address many issues directly at the customer's location, reducing inconvenience. Additionally, Tesla's active engagement on social media platforms and its responsive customer service channels have provided customers with a direct line of communication to the company. This has created a sense of trust and reliability that extends beyond the initial purchase, as customers know they can count on Tesla to support them throughout their ownership experience.

### **Summary and Conclusions**

In the pursuit of understanding how Tesla has achieved and continues to maintain its remarkable success in the electric vehicle (EV) market, our exploration has uncovered a multifaceted approach that has allowed the company to transcend boundaries and set a new standard for the industry. Key points have emerged, emphasizing the pivotal role of innovation, brand recognition, sustainability, strategic decision-making, and the ability to overcome challenges. This complex interplay of factors forms the foundation of Tesla's enduring dominance in the EV market.

Innovation has been the cornerstone of Tesla's journey to success. From the very beginning, the company disrupted the conventional automotive industry by introducing groundbreaking technologies and pushing the limits of what EVs can offer. The development of cutting-edge electric powertrains, autonomous driving capabilities, and over-the-air updates has consistently set Tesla apart. Notably, Tesla's relentless focus on innovation and its willingness to adapt and improve have led to continuous refinement of its vehicles, making them appealing not only to early adopters but also to a broader consumer base.

Brand recognition is another fundamental component of Tesla's dominance. The company's ability to establish itself as a symbol of innovation, luxury, and sustainability has been a key driver of consumer trust and loyalty. Tesla's mission to accelerate the world's transition to sustainable energy resonates with environmentally conscious consumers, and its sleek and futuristic designs have further solidified its brand appeal. The "Tesla" name has become synonymous with premium EVs, providing the company with a powerful competitive advantage.

Sustainability, both in terms of the environment and economic viability, has been central to Tesla's strategy. By focusing on electric mobility, Tesla has contributed to the reduction of carbon emissions and environmental conservation. Simultaneously, the company has made strategic decisions to ensure its long-term financial sustainability, exemplified by its direct-to-customer sales model and vertical integration. These decisions have not only streamlined the buying process but also provided Tesla with more control over its supply chain and pricing, enabling it to offer competitive products to consumers.

Strategic decisions and visionary leadership have played a pivotal role in Tesla's ascent. The company's commitment to expanding its product line to reach various market segments,

including the more affordable Model 3 and Model Y, has broadened its appeal. Additionally, the company's emphasis on energy storage and solar products has diversified its portfolio and positioned Tesla as a comprehensive provider of sustainable energy solutions. The acquisition of SolarCity and the development of the Gigafactories demonstrate Tesla's forward-thinking approach to energy innovation.

Overcoming challenges has been essential to Tesla's continued growth. The company has successfully navigated the complex landscape of global regulations and standards, adapting its vehicles to meet specific requirements in different markets. Moreover, Tesla has effectively tackled issues related to supply chain management, securing key materials for battery production, and optimizing its distribution network to meet growing demand.

Looking to the future, Tesla's prospects in the EV market remain promising. With a steadfast commitment to innovation, including the development of energy-efficient battery technologies and fully autonomous driving, Tesla is well-positioned to maintain its industry leadership. The company's brand recognition and consumer trust are likely to remain robust, particularly as more consumers become eco-conscious. Tesla's strategic decisions, such as the expansion of its Gigafactory network, will further solidify its presence in the global EV market.

In conclusion, Tesla's path to success in the electric vehicle market is a testament to the company's multifaceted approach, grounded in innovation, brand recognition, sustainability, strategic decisions, and the ability to overcome challenges. This multi-faceted approach has allowed Tesla to redefine the automotive landscape and emerge as a global leader. As the world continues to transition towards sustainable transportation, Tesla is poised to remain at the forefront, shaping the future of electric mobility. Its story is not merely a success; it is the embodiment of a revolution.

# References

https://de.wikipedia.org/wiki/Tesla,\_Inc.

https://en.wikipedia.org/wiki/History\_of\_the\_electric\_vehicle#:~:text=Crude%20electric%20 carriages%20were%20first,speed%20record%20until%20around%201900.

How Tesla Is Revolutionizing Management To Save The Planet

https://www.forbes.com/sites/stevedenning/2023/07/05/how-tesla-is-revolutionizingmanagement-to-save-the-planet/?sh=6e53bbf74bb3

Future Tesla Powertrain Explained

https://www.youtube.com/watch?v=hWS-dEMZWc8

### A Bit About Batteries

https://www.tesla.com/blog/bit-about-batteries

EV Company - Tesla Battery Technology

https://intellipaat.com/blog/tesla-battery-technology/

https://en.wikipedia.org/wiki/Tesla\_Autopilot#:~:text=This%20equipment%20allows%20suit ably%2Dequipped,%2C%20and%20Side%2Dcollision%20warning.

Autopilot and Full Self-Driving Capability

https://www.tesla.com/support/autopilot

Case Study: Tesla - Design Thinking Driving the Electric Vehicle Revolution

https://www.linkedin.com/pulse/case-study-tesla-design-thinking-driving-electric-vehiclemuciri

Tesla Is An EV Brand Awareness Juggernaut Compared To Competition

https://www.forbes.com/sites/edgarsten/2019/08/19/tesla-is-ev-brand-awareness-juggernautcompared-to-competition/?sh=37a26a1b2dc2

Tesla Marketing Strategy: Key Lessons to Learn

### https://www.sprintzeal.com/blog/tesla-marketing-strategy

Tesla Marketing Strategy 2023: A Case Study

https://www.simplilearn.com/tutorials/marketing-case-studies-tutorial/tesla-marketingstrategy#tesla\_marketing\_channels

Holland M.: EVs At 24.6% Share In Germany — Tesla Model Y 3rd Overall

https://cleantechnica.com/2023/07/08/evs-at-24-6-share-in-germany-tesla-model-y-3rdoverall/

How sustainable is Tesla?

https://www.leafscore.com/blog/just-how-sustainable-istesla/#:~:text=Additionally%2C%20by%20its%20own%20report,helps%20cut%20down%20 on%20emissions.

### Powerwall

https://www.tesla.com/powerwall

Tesla's Renewable Energy Initiatives

https://www.thomasnet.com/insights/tesla-s-renewable-energy-initiatives/

How does Tesla reduce carbon footprint?

https://ts2.space/en/how-does-tesla-reduce-carbon-footprint/

AI & Robotics

https://www.tesla.com/AI

Tesla and the Electric Vehicle Revolution

https://d3.harvard.edu/platform-rctom/submission/tesla-and-the-electric-vehicle-revolution/

What Makes Tesla's Business Model Different?

https://www.investopedia.com/articles/active-trading/072115/what-makes-teslas-businessmodel-different.asp

TESLA becomes a model for sustainable leadership: David and Goliath revisited

https://www.imd.org/research-knowledge/sustainability/articles/tesla-becomes-a-model-forsustainable-leadership-david-and-goliath-revisited/

How Did Tesla Go International?

https://medium.com/@gunt\_er/how-did-tesla-go-international-2ac33e2c61df

Tesla's Supercharger Strategy Starts a Winning Streak

https://www.wired.com/story/teslas-supercharger-strategy/

International Business Strategy, Tesla

https://doksi.net/en/get.php?lid=30435

Competition and Challenges

https://www.teslarati.com/tesla-sales-model-gets-relief-north-carolina-surprise-late-sessionbill/#google\_vignette

Proceedings of the 2022 2<sup>nd</sup> International Conference on Enterprise Management and Economic Development (ICEMED 2022),

https://www.atlantis-press.com/proceedings/icemed-22/125975464

Tesla Motors, Inc.: Pioneer towards a new strategic approach in the automobile industry along the open-source movement? (2015)

https://ieeexplore.ieee.org/abstract/document/7273032?casa\_token=K\_JyQdSPSJkAAAAA:lo lt-

 $\underline{Tmx40S\_BsovjkXKtMINjMlo03w3p3wa\_OzdF4K06D2SDk0fuuuFR6uHmKr\_lgTnifQZti8}$ 

Tesla moving forward (Translated), 2020 https://www.dbpia.co.kr/Journal/articleDetail?nodeId=NODE10487084

Counterpoint: Global EV Market Share, Q3 2021 – Q2 2023 (paper)

https://www.counterpointresearch.com/wp-content/uploads/2023/06/Global-EV-Market-Share-Q2-2023.pdf

Constant Rise of Tesla Inc.: Strategic Marketing Plan Leading To Company's Colossal Growth in 2020, (Paper)

https://acfa.apeejay.edu/docs/volumes/envision-2020/envision-paper-06-vol-14-2020.pdf

A Strategic Audit of Tesla Inc., Thesis, 2023

https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1627&context=honorstheses

Factors affecting the valuation of electric vehicle company in 2020: case Tesla Inc., Thesis, 2021

https://www.theseus.fi/bitstream/handle/10024/497943/OFFICIAL%20FINAL%20THESIS% 20REPORT%20-

<u>%20%20TESLA%20INC.%20%28LONG%20LE%20%26%20QUYNH%20HO%29%20%2</u> 81%29.pdf?sequence=2&isAllowed=y

# Annexes



Annex 1. Global EV Market Share, Q3 2021 – Q2 2023

Source: Counterpoint (2023)

### Annex 2.



German Passenger Auto Registrations (2023 Q2)

### Source: Holland (2023)

The Tesla Model Y was the best selling BEV in June (6,098 units), and third best selling of any vehicle in Germany. Only the Volkswagen Golf (7,019 units) and Tiguan (6,329) sold more.

The 2023 Tesla Model Y is a fully electric small crossover SUV with seating for five passengers. An optional third row increases seating capacity to seven. It comes in three main trims: an unnamed standard-range version, Long Range and Performance.