****

***Student Name - Kumar Gaurav***

***Student ID - 22026384***

***Name of the Course - Master in Bussiness Analytics and Data Science***

***Name of***

***Professor Name - Hildegard Haas***

BUSINESS MANAGEMENT

**Executive Summary**

A study performed ensures determining products and services provided by Tesla in the US economy. Further study ensures carrying out discussion on the internal and external environment. The study additionally ensures analysis of strengths, weaknesses, opportunities, and threats of Tesla. The evaluation impact of the competitive advantage of Tesla over other brands is also emphasised during the study. The study further provides insight into market conditions of Tesla during the pandemic tenure in the USA.

Table of Contents

[Introduction 4](#_Toc118123656)

[Part A Discussion of Tesco’s business functions and geography 4](#_Toc118123657)

[A.1. Products and service functions of Tesla in the USA 4](#_Toc118123658)

[A.2. Internal and external environment analysis of Tesla 4](#_Toc118123659)

[A.3. Competitor analysis of Tesla in terms of development 8](#_Toc118123660)

[A.4. Strength, opportunities, weakness, and threat analysis of Tesla 9](#_Toc118123661)

[A.5. Structural analysis of Tesla in the US economy 10](#_Toc118123662)

[Part B Analysis of Tesla's business capabilities in terms of problem mitigation 11](#_Toc118123663)

[B.1 Impact of Covid-19 on Tesla’s business efficiency 11](#_Toc118123664)

[B.2 Mitigation of Covid-19 challenges by Tesla in the USA 11](#_Toc118123665)

[B.3 Effectiveness of Covid-19 measures of Tesla on business functions 11](#_Toc118123666)

[B.4 Recommendation for the strategic alliance by Tesla 12](#_Toc118123667)

[Conclusion 13](#_Toc118123668)

[References 14](#_Toc118123669)

[Bibliography 17](#_Toc118123670)

# Introduction

A study performed is related to strategic planning for ensuring the sustenance of Tesla in the long run in the USA. A study performed ensures determining products and services provided by Tesla in the US economy. Further study ensures carrying out discussion on the internal and external environment. The study additionally ensures analysis of strengths, weaknesses, opportunities, threats, and competitors of Tesla.

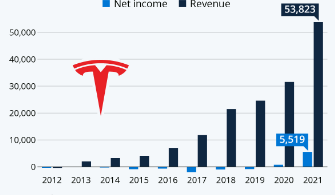
# Part A Discussion of Tesco’s business functions and geography

## A.1. Products and service functions of Tesla in the USA

Tesla is a brand that primarily functions in the automotive car industry segments in the base of the USA. Tesla is a brand which functions with one major motive that provides customers with cars of best quality at optimal costs compared to other competitors (Albers *et al.* 2020). This is the main driving force resulting in the emergence of Model Y., Model XZ, Cybertruck, Tesla Roadster Vehicles, Tesla Semi, and Model 3 vehicles at optimal prices. Among these models Model Y, Model X, and Model 3 are made for personal driving purposes. Contradictorily, Tesla Roadsters, Cyber Trucks, and Tesla SEmi are made for streamlining logistic experience of brands in the supply chain industry.

## A.2. Internal and external environment analysis of Tesla

***Internal environment analysis of Tesla in USA***



**Figure 1: Tesla's annual revenue growth adhering to innovations**

(Source: Benzidia *et al.* 2021)

Internal environment of Tesla ensures the identification of the core level of competencies of Tesla in comparison to other brands in the USA. The internal environment of Tesla ensures identity innovation patterns adopted by Tesla in becoming a competitive advantage over other brands in the USA (Benzidia *et al.* 2021). This help derives the way Tesla implements the concept of AI-neural networks and deep learning in car models to incur total annual revenue of 5883 million.

***External environment analysis of Tesla***

| **Political factors** | **Pre-covid-19 situation**   * Industry Revolution 4.0 adaptations * Investment rate increase by 6% (Tesla.com, 2022)   **Post-covid-19 situation**   * Investment of foreign nations by 11.3% * Increase automation practices by 12% (Tomzcak *et al.* 2019) |
| --- | --- |
| **Economic factor** | **Pre-covid-19 situation**   * Inflation rate 1.6% in year 201 * GDP growth by 1.3% in year 2018   **Post-covid-19 situation**   * Inflation rate growth by 0.3% * GDP growth by 1.6 % in year 2022 (Thomas and Maine, 2019) |
| **Social Factors** | **Pre-covid-19 situation**   * Increased number of graduates * Income level growth by 3% in 2022 * Increased awareness about systems   **Post-covid-19 situation**   * Decreased pass out percentages by 4% * Decrease in income level to 3% (Tesla. com, 2022) |
| **Technological Factors** | **Pre-covid-19 situation**   * Reluctancy to automation by 46% of population * Increase demand for automotive vehicles by 23% (Tesla. com, 2022) * **Post-covid-19 situation** * Adaption by 11.39% to intelligent robotics * Increased demands of electric vehicles by 47% |
| **Legal Factors** | **Pre-covid-19 situation**   * Lack of emphasis on pollution norms by 53% firms * Green practices by 12.73% logistics brands (Tesla. com, 2022)   **Post-covid-19 situation**   * Green practices in 78.25% of business operations * Taxation rises by 2.3% in year 2022 |
| **Environmental Factors** | **Pre-covid-19 situation**   * Liquid investments in 26.47% firms (Tesla. com, 2022) * Disposable wates by rate 43% in USA   **Post-covid-19 situation**   * Liquid investments increased by 15.11% in year 2021 * Lower carbon emission vehicles by 67% citizens |

#### **Table 1: PESTLE analysis of Tesla**

#### (Source: Created by author)

Political factors are a competitive advantage for Tesla after Covid-19 resulting in increased investment by the rate of 12% Economic factor analysis states Tesla expected to gain more customers as a result of increased GDP in spite of increased inflation of 13% almost (Chen and Perez, 2018). Social factors analysis of Tesla states regarding issues related to decreased spending potentials as a result of degrade of job opportunities. Technological factor analysis of Tesla is effective in making Tesla increase its production as a result of increased automation practices by 11.39%. Legal factor states Tesla has increased opportunity in Eco-friendly vehicles elements with awareness about environmental norms by 78.72% of public transportation.

## A.3. Competitor analysis of Tesla in terms of development

| **Porter’s five forces** | **Impact** |
| --- | --- |
| **Supplier power** | * Supplies automotive to 73% firms * Largest supplier in solar energy (Cheng and Gryphon, 2022) |
| **Buyer power** | * Bought 16 firms in second quarter of 2022 * Bought 17 solar energy stations in 2022 |
| **Competitive rivalry** | * Ford incurring $340 million investment in electric by 2023 * Vokswagens concept of deep learning in cars |
| **Threat of substitutes** | * Increased competition by 34% * Integrated manufacturing facilities by Renaults (de Rubens *et al.* 2020) |
| **Threat of new entry** | * Decreased sustainability by 13% with shift to electric cars manufacturing |

**Table 2: Porter Five Force analysis of Tesla**

#### (Source: Created by author)

## A.4. Strength, opportunities, weakness, and threat analysis of Tesla

| ***Strengths*** | ***Weaknesses*** |
| --- | --- |
| * Major supplier in automotive segments (Gov.uk, 2022) * Only organisation dealing with electric vehicles (Producer of 258,690 electric vehicles) (Tesla. com, 2022) * Bigger stakeholder chain * Fastest supercars in the world (412 KMPH) (Tesla.com, 2022) | * Complexity during manufacturing process * Inventory issue related to raw materials sourcing * Autopilot issue by 25% of customers |
| ***Opportunities*** | ***Threats*** |
| * Expansion of the market on an international scale. * Cheaper than other vehicles. * Coming up with automated pickup trucks * Implement a separate supply chain. * Investment increase by 6% based on brand value * Increased production of electric public transportation | * Increased liability claims * Challenge in the design of products * Bigger level of competition in future years * Strong objection regarding lithium battery usage (Kim, 2020) |

**Table 3: SWOT analysis of Tesla**

(Source: Self-created)

***Strength*** analysis of Tesla provides an idea that it has a competitive advantage over other brands as a result of proper inventory management in all its stores. This has only made Tesla incur revenue growth of 125% in 2022 which is higher than other brands in the automotive industry (Hinterhuber *et al.* 2022). ***A weakness*** analysis of Tesla provides an idea that it has major defects in vehicle parts despite becoming a top brand in the automotive segment. This only makes it rejected by 34% of customers as per reviews of customers who have a keen interest in automotive innovations (Lang *et al.* 2021). ***Opportunity*** analysis of Tesla provides an idea that Tesla has a higher chance of expansion in international markets. Further, it seems to enter military vehicle production segments in the upcoming three years as per the business analysis. ***Threat*** analysis of Tesla states Tesla is a brand with increased claims of liability and facing serious issues in system designs. However, it is a brand aiming to change its strategies continually adhering to comprehensive risk mitigation theory (Model, 2022). This is the reason it is expected to grow by 3.8% in spite of these challenges.

## A.5. Structural analysis of Tesla in the US economy

Tesla's brand adheres to a Divisional and flexible structure while carrying out its business operations in the USA. These structures ensure Tesla. Further structural analysis of Tesla provides an idea regarding the implementation of a system approach in its manufacturing process in its industrial units. This Tesla only ensures the way it adheres to a Compliance audit risk management approach to ensure production is performed aligned with company culture in its industries.

# Part B Analysis of Tesla's business capabilities in terms of problem mitigation

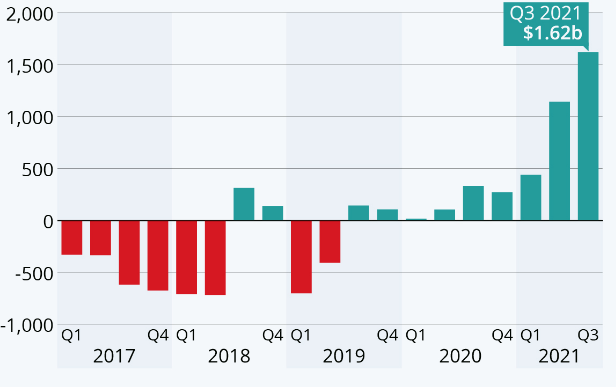
## B.1 Impact of Covid-19 on Tesla’s business efficiency

Tesla is a brand that most times faces issues relating to shortages of stocks in its stores most times as a result of Covid-19. However, as per an analysis of Nie *et al.* (2018), Tesla ensures the preparation of separate management units for engineering, researchers, and design segments aligns with a disruptive business model. This only helps incur revenue expenditure of US $ 2000 million on strategic management in its research work.

## B.2 Mitigation of Covid-19 challenges by Tesla in the USA

Tesla ensures adaptation to hybrid work culture in which employees work 4 days at home and 2 days at the office. Tesla's approach to only make it come out with Adaptive Air Suspension during Covid-19 is an important initiative. This is done primarily by the applicability of the system approach which ensures the use of lower carbon emission suspensions (Nieuwenhuis, 2018). These ensure superior ride quality and release a lower quantity of greenhouse gas during travel.

## B.3 Effectiveness of Covid-19 measures of Tesla on business functions



**Figure 2: Tesla’s profit shares shifting to system approaches in company functions**

(Source: Statista.com, 2022)

Applicability of the system approach ensures wage payments and increments through automations based on the performance of employees. This approach only makes Tesla incurs 13% more profit in Covid-19 times in spite of incurring loss like other automotive companies (Pierzgalski *et al.* 2018). Hence, resulting in total annual revenue of $1.62billion at the end of quarter 3 in 2021.

## B.4 Recommendation for the strategic alliance by Tesla

***Go alone after learning from partners during partnership business***

Tesla is a brand which ensures more business partnership and sharing proprietary rights to increase its reach in the international market. However, it needs to work alone after reaching the objective of becoming a preferred brand in all locations of the globe by people (Qian and Zhang, 2022). This is effective in increasing its revenue by 43% which can be spent by Tesla in penetration of new markets.

***Emphasise more on reduction of defects in comparison to increase in production***

Tesla is a brand following an Omni-channel branding strategy to make customers aware of the benefits of Tesla over other vehicles. However, a wide number of defects like suspension ineffectiveness, defects in steering, and wineglass are prevalent in Tesla models (Sieklucki, 2018). This needs resolution for sustenance in future business days by Tesla.

# Conclusion

A study performed ensures analysis of Tesla's strengths, weaknesses, opportunities, and threats. The evaluation impact of the competitive advantage of Tesla over other brands is also emphasised during the study. The study further provides insight into market conditions of Tesla during the pandemic tenure in the USA.

# References

**Journals**

Albers, A., Basedow, G.N., Heimicke, J., Marthaler, F., Spadinger, M. and Rapp, S., 2020. Developing a common understanding of business models from the product development perspective. *Procedia CIRP*, *91*, pp.875-882.

Benzidia, S., Luca, R.M. and Boiko, S., 2021. Disruptive innovation, business models, and encroachment strategies: Buyer's perspective on electric and hybrid vehicle technology. *Technological Forecasting and Social Change*, *165*, p.120520.

Chen, Y. and Perez, Y., 2018. Business model design: lessons learned from Tesla Motors. In *Towards a Sustainable Economy* (pp. 53-69). Springer, Cham.

Cheng, Y. and Griffin, C.H., 2022. Tesla vs. its Stock Price:“Herd Theory” at work?. *Unpublished paper]. Southern University and A&M College. https://www. subr. edu/assets/subr/COBJournal/Tesla--Cheng-and-Griffin--E-Journal. pdf*.

de Rubens, G.Z., Noel, L., Kester, J. and Sovacool, B.K., 2020. The market case for electric mobility: Investigating electric vehicle business models for mass adoption. *Energy*, *194*, p.116841.

Hinterhuber, A., 2022. Digital transformation, the Holy Grail, and the disruption of business models: An interview with Michael Nilles. *Business Horizons*, *65*(3), pp.261-265.

Kim, H., 2020. Analysis of How Tesla Creates Core Innovation Capability. *International Journal of Business and Management*, *15*(6), pp.42-61.

Lang, J.W., Reber, B. and Aldori, H., 2021. How Tesla created advantages in the ev automotive paradigm, through an integrated business model of value capture and value creation. *Business & Management Studies: An International Journal*, *9*(1), pp.385-404.

Model, T., Ford vs. Tesla: What Does a Transformational Automobile Scale-up Look Like?.

Nie, S., Liu, L., Du, Y. and Zhang, W., 2018. Over-the-air: How we remotely compromised the gateway, BCM, and autopilot ECUs of Tesla cars. *Briefing, Black Hat USA*.

Nieuwenhuis, P., 2018. Alternative business models and entrepreneurship: The case of electric vehicles. *The International Journal of Entrepreneurship and Innovation*, *19*(1), pp.33-45.

Thomas, V.J. and Maine, E., 2019. Market entry strategies for electric vehicle start-ups in the automotive industry–Lessons from Tesla Motors. *Journal of Cleaner Production*, *235*, pp.653-663.

Tomzcak, K., Pelter, A., Gutierrez, C., Stretch, T., Hilf, D., Donadio, B., Tenhundfeld, N.L., de Visser, E.J. and Tossell, C.C., 2019, April. Let Tesla park your Tesla: driver trust in a semi-automated car. In *2019 Systems and Information Engineering Design Symposium (SIEDS)* (pp. 1-6). IEEE.

Zarifis, A. and Cheng, X., 2021. Evaluating the New AI and Data Driven Insurance Business Models for Incumbents and Disruptors: Is there Convergence?. *Zarifis A. & Cheng X.(2021)'Evaluating the New AI and Data Driven Insurance Business Models for Incumbents and Disruptors: Is there Convergence*, pp.199-208.

Zhao, D. and Jiang, Z., 2021, March. The Summary of NEV Business Model Based on Four-Elements Model. In *Journal of Physics: Conference Series* (Vol. 1802, No. 3, p. 032089). IOP Publishing.

Zhong, X., Cao, R., Shakeri, S., Scalzo, F., Lee, Y., Enzmann, D.R., Wu, H.H., Raman, S.S. and Sung, K., 2019. Deep transfer learning-based prostate cancer classification using 3 Tesla multi-parametric MRI. *Abdominal Radiology*, *44*(6), pp.2030-2039.

**Websites**

Gov.uk, 2022. *Tesla’s strength and weakness*. Available at: <https://www.gov.uk/> [Accessed on: 30th October]

Statista.com. 2022. *Tesla's Profit Soars.*

Available at: https://www.statista.com/chart/23535/quarterly-profit-of-tesla/&sa=D&source=docs&ust=1667208201507302&usg=AOvVaw3\_dZtNJ32VSHmNX0S5LtgL [Accessed on: 30th October]

Tesla.com, 2022. *About us*. Available at: https://www.tesla.com/ [Accessed on: 30th October]

# Bibliography

Pierzgalski, M., 16. VISION AND MISSION IN MODERN TECHNOLOGIES OF TESLA CAR BRAND EXAMPLE. *POSZERZAMY HORYZONTY TOM XXXIII*, p.167.

Qian, L. and Zhang, C., 2022. Complementary or Congruent? The Effect of Hosting Tesla Charging Stations on Hotels’ Revenue. *Journal of Travel Research*, p.00472875221093017.

Sieklucki, G., 2018, June. An investigation into the induction motor of tesla model S vehicle. In *2018 International Symposium on Electrical Machines (SME)* (pp. 1-6). IEEE.

Thomas, V.J. and Maine, E., 2019. Market entry strategies for electric vehicle start-ups in the automotive industry–Lessons from Tesla Motors. *Journal of Cleaner Production*, *235*, pp.653-663.