

Assignment Title: Assessment Component 1: Marketing Environment Analysis

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Follower Company: Toyota Motor Corporation

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1. Introduction

The automotive industry of the world is experiencing one of the most radical changes in history, due in part to technological inventions and environmental needs. The emergence of electric vehicles (EVs) has destabilised the conventional market systems, shifting the positions of the firms in the marketplace in terms of competition, innovation, and communication with customers (Oluwadayomi, Ogunnowo and Chukwuemeka, 2025). In this ever-changing environment, the innovator companies, such as Tesla, Inc., have become the agents of change, and the follower companies, such as the Toyota Motor Corporation, are changing their strategies to stay afloat (Li, Lin and Xu, 2021). This report critically evaluates the technological and environmental macro-environmental elements that define the EV industry and how the external variables pose opportunities as well as threats to the pioneer and follower firms.

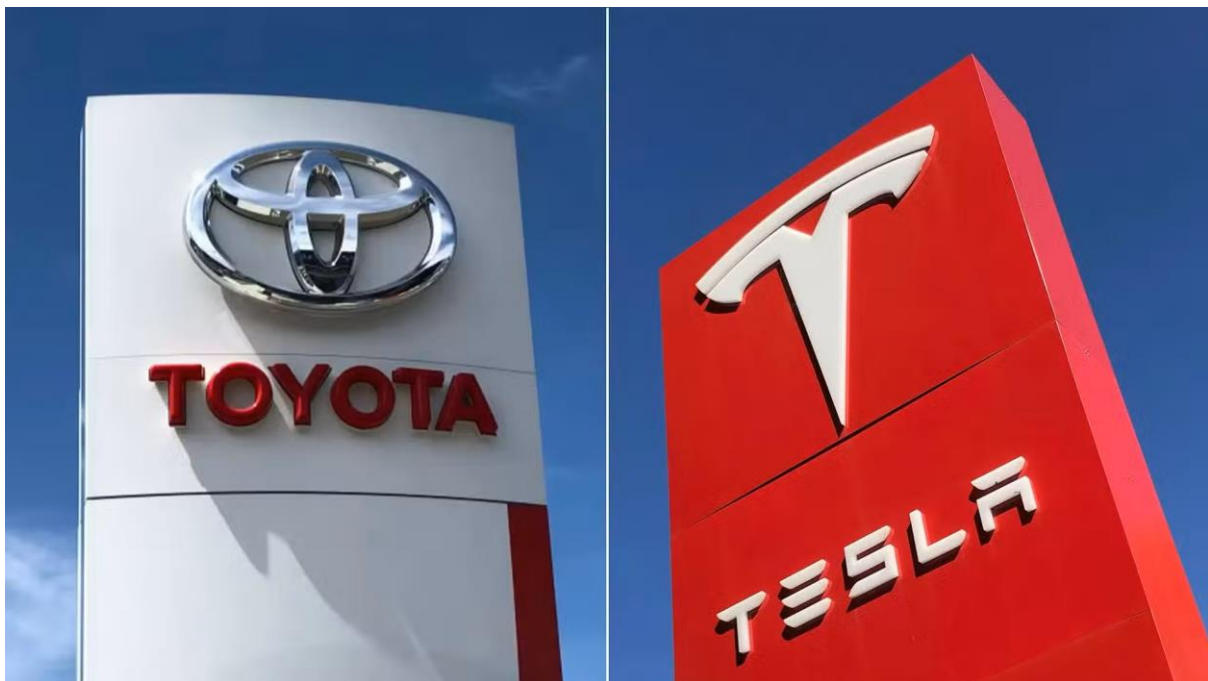


Figure 1: Toyota and Tesla

Source: (Drive, 2023)

The research is split into two large tasks. The former describes the critical analysis of the technological and environmental macro-environmental factors based on the appropriate frameworks, including PESTEL. The second assignment will assess the strategic reactions of Tesla and Toyota to these external changes in terms of Porter's Generic Strategies and the Growth Matrix created by Ansoff. The report concludes by stating the significance of constant environmental scanning and strategic flexibility to be able to be competitive in the long term.

2. Task 1: Critical Analysis of the Macro Marketing Environment

2.1 Overview of the Macro Marketing Environment

The macro marketing environment comprises the general external forces that affect the performance and the strategy of an organisation. Kotler and Keller (2022) state that it consists of six major factors or Political, Economic, Social, Technological, Environmental, and Legal (PESTEL) elements that, as an assembly, define how firms deal with markets and consumers. These are very uncontrollable but significant in the determination of strategic marketing decisions.

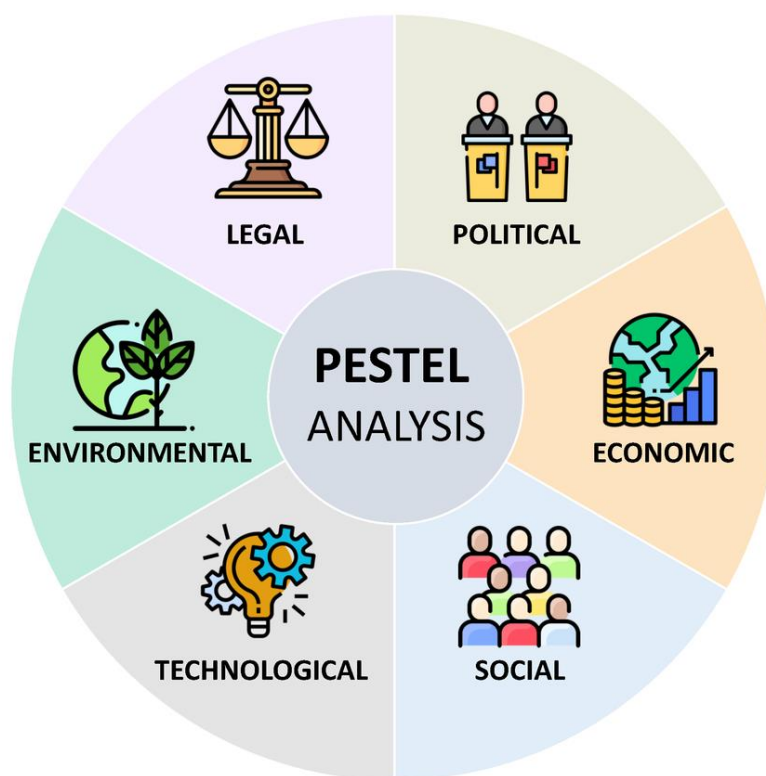


Figure 2: PESTEL Analysis

Source: (SpringWorks sarl, 2021)

Technological changes and environmental sustainability are two of the most disruptive external factors in the automotive industry. The disruptive elements in technology have transformed the design of vehicles, energy sources, and digital connectivity, and the environment has increased pressure on mobility in the world to switch to low emissions. The electric vehicle (EV) segment (USD 561 billion in 2023) is expected to experience a compound annual growth rate (CAGR) of 19.8 per cent between 2024 and 2030 (Statista, 2025). This is a growth that is largely due to the policies of the government, sustainability need by consumers, and technological innovation.

Within this evolving landscape, Tesla is the epitome of an innovator, an organisation that presents innovative products and establishes an industry pattern. Conversely, Toyota is a follower, i.e. it adopts technologies that have been tested and proven later but takes advantage of the scale, the reputation and process excellence to continue being competitive. The two companies are in a similar environmental condition, yet they react differently because of their organisational structures, cultures and market positions.

2.2 Selection of Two External Macro Marketing Actors

For this analysis, two macro-environmental actors, Technological and Environmental, have been chosen as they produce the most profound effect on the development of the EV industry.

2.2.1 Technological Factor

The competitiveness of the electric mobility market is based on technological innovation. The future of battery technology, autopilot systems, and digital ecosystems is changing consumer expectations and the performance of the products. An example of this is that battery capacity has grown more than 40 per cent over the past five years, and expenses are 89 per cent cheaper as of 2023, at USD 139 per kilowatt-hour (BloombergNEF, 2023). These advancements have seen EVs becoming more affordable and accessible to trigger mass-market adoption.

2.2.2 Environmental Factor

The automotive industry has made environmental factors a key strategic decision-maker. The transportation industry has been identified as contributing to about 24 per cent of the total carbon dioxide emissions in the world, and governments have been imposing strict carbon dioxide regulations (IEA, 2025). The Fit for 55 packages by the European Union requires the complete elimination of new car emissions by 2035, and other countries are also following suit, with the United States, Japan and China implementing 0-emission targets. These changes in regulations offer both opportunities for innovative companies and existential threats to companies at the back of the trail in transforming to pursue sustainability.

2.3 Critical Analysis of Each Actor

2.3.1 Technological Factor

The major drivers of innovation in the EV industry are AI and automation. Differentiation in safety and driving functionality is made possible by Tesla as the forefront of Autopilot and Full Self-Driving technologies that are trained on more than five billion miles of driving data (Zhang and Ding, 2024). Nonetheless, the social issues related to the stability of the system

and regulation imply that highly developed automation is a reputational burden in case of a safety scandal.

The predictive maintenance and ongoing software optimisation are facilitated by big data and analytics. Tesla has over-the-air (OTA) updates, which improve customer experience even after buying the car, loyalty, and are further reinforced by the innovation of 4680 batteries that increase range by 16% (Lambert, 2022). Although this is an advantage, consumer trust can be eroded in case data usages and performance upgrades are not as good as it had been projected.

The issue of cybersecurity is now a strategic issue because cars are becoming digital connected platforms. Tesla has been highly digitized, which exposes it to hacking and privacy vulnerabilities and, therefore, needs long-term investments. In 2023, the R&D expenditure was USD 3.9 billion, which increased by 34 percent annually (Centre, 2025), and the financial strain of obtaining intricate software ecosystems and ensuring an innovation pace is evident.

The 5G connection makes it possible to navigate in real-time, communicate and be responsive to vehicles as autonomous systems. Tesla incorporation supports its technology focus-based positioning, and Toyota is more conservative in adopting digital technology, which has curtailed its attractiveness to connectivity-oriented consumers, which weakens competitiveness in the innovation-oriented EV markets.

Digital transactions and blockchain provide better traceability in the supply-chain and transparency in battery sourcing. New dedication by Toyota, such as a USD 13.5 billion battery investment, solid-state battery development with a 1,200 km range and 10-minute charge (Kelly, 2021) can restore technological trust. Nevertheless, its historic conservatism has given Tesla, BYD and Rivian the narrative leadership, and left Toyota struggling to establish itself as an EV innovator without weakening its established brand based on its reliability.

2.3.2 Environmental Factor

Environmental forces have now turned into a moral requirement and a strategic force to automotive companies. The increasing climate consciousness has transformed consumer behaviour, as 68 percent of the world consumers have sustainability in their minds when buying cars (Deloitte, 2024). Such a demand speeds up the EV adoption and compels manufacturers to consider reduced lifetime emissions a part of the value propositions, and at the same time, expect them to address more stringent regulatory demands.

Tesla has successfully used the trends of sustainability by integrating the environmental leadership into the brand identity. Marketing communication and product design are guided by

its mission of speeding up the shift to sustainable energy. The Gigafactories of Tesla use renewable energy sources which largely brings in closed-loop production models. As of 2023, its worldwide fleet has already compensated over 20 million tonnes of CO₂ emissions and generated zero direct tailpipe emissions (Tesla, 2025), which allows the company to have high prices because of high green differentiation.

Nonetheless, Tesla is also dependent on the limited availability of such resources as lithium and cobalt that becomes a weakness in its operation associated with supply volatility and ethical sourcing. The production of batteries is also a source of environmental waste, posing a question of the complete environmental sustainability of EVs beyond promotional branding that might undermine the environmental standards of the company in the long term in the case of low recycling.

Toyota has also been struggling with its reputation because of its slow adoption of fully electric cars. Although the company had more than 23 million electrified cars in 2024, less than 1% of them were fully battery electric (Clifford, 2025). This conservative step preserved consumer confidence in safety but undermined the Toyota image as a pioneer in zero-emission mobility so that rivals took over the discourse on sustainable innovation.

However, the initiate of Environmental Challenge 2050 shows that Toyota has been committed to the environment in the long term, which involves becoming carbon-neutral in its manufacturing and vehicle life cycle, and reducing the CO₂ emissions of its new vehicles by 35 percent by 2030 than the level of 2013 (Toyota EU, 2024). The marketing strategies are thus different: Tesla relies on the environmental leadership in boosting brand equity, whereas Toyota relies on efficiency and trust during transition. Regulatory pressure, scarcity of resources, and ethics of battery disposal is a challenge that both companies must face as the environmental strategy continues to become more of a competitive position tool.

3. Task 2: Strategic Responses of Pioneering and Follower Organisations

3.1 Pioneering Organisation – Tesla, Inc.

The Tesla strategic reaction to the challenges of the technological environment and environmental factors is deeply based on the first-mover advantage, culture of innovation, and vertical integration. The Growth Matrix of Ansoff and Porter's Generic Strategies can be used in a critical assessment of its approach.

3.1.1 Ansoff's Growth Matrix Application

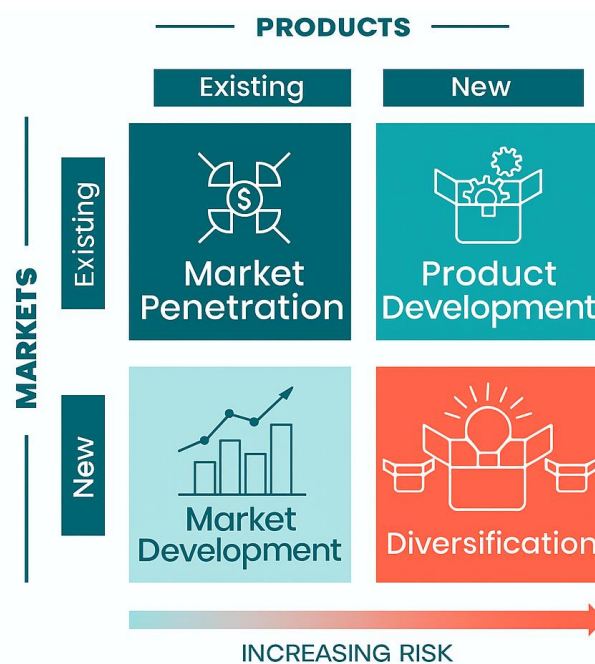


Figure 3: Ansoff's Growth Matrix

Source: (GeeksforGeeks, 2024)

Product Development

Tesla is a company that keeps applying technological improvements to its product line. Electric diversification is the introduction of Cybertruck, Semi, and Model Y. The product enhancement that preserves the competitive differentiation is represented by the 4680-battery technology and software-oriented design (Li et al., 2024).

Market Penetration

Tesla has a 21 per cent worldwide market share of EVs in 2023, leading in North America and Europe (Sayan, 2025). By lowering the average price of its vehicles by up to 15% in 2023,

Tesla made them more accessible and boosted demand in less-intensive markets as China and India.

Market Development

The entry into new geographic areas and production centres, such as Gigafactory Mexico (2025), increases distance to new markets and supply chain resilience. Direct-to-consumer (D2C) sales model is used at Tesla, whereby the dealerships are removed to allow greater influence on pricing, marketing communication, and customer experience.

Diversification

Diversification into other areas like Solar Roof, Powerwall, and Megapack energy storage, which Tesla has ventured into as part of its sustainable business, supports its sustainability story and provides its brand with integration across industries.

3.1.2 Porter's Generic Strategy Application

Tesla has mainly been practising the differentiation strategy with technologically progressive and environmentally friendly high-performance products, which are worth the high price. Its product differentiation goes further to brand experience that is based on innovation, luxury, and environmental stewardship. The high level of vertical integration (80% of its supply chain) makes Tesla affordable and provides the company with the ability to control the quality and sustainability of batteries (Qin, 2022).

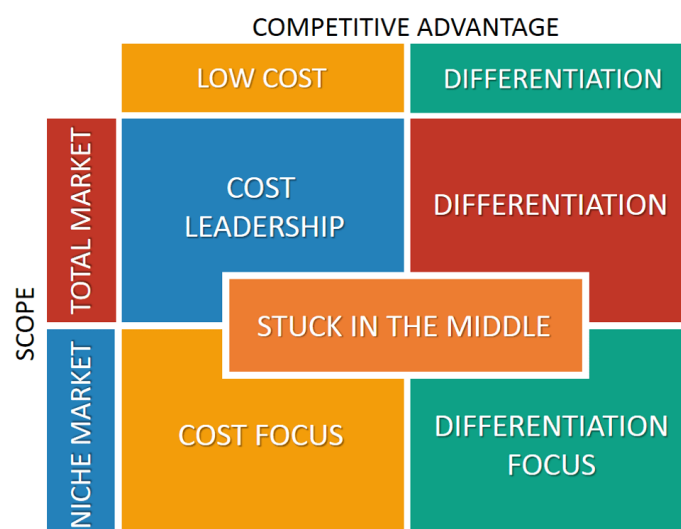


Figure 4: Porter's Generic Strategy

Source: (Bruin, 2021)

Tesla is also applying data-driven marketing to sustain brand loyalty. Its software gathers telemetric information to make predictive maintenance, energy optimisation, and personalised marketing decisions. This will increase customer retention and community engagement due to innovation-based communication.

Nevertheless, Tesla has issues with scalability, quality and regulatory compliance. This connection to the personal brand of Elon Musk, though quite strong, poses reputational risk to the company in case of controversy. In addition, the increasing competition of the Chinese manufacturers, who overtook Tesla in Q4 2024 EV shipments (3.4 million units compared to Tesla, 3.2 million units), intensifies the necessity of Tesla to stay ahead of the pack in terms of innovation and balance cost-effectiveness (Sriram and Roy, 2025).

3.3 Follower Organisation – Toyota Motor Corporation

The strategic response of Toyota is adaptive leadership in terms of risk mitigation and innovation. Its strategies are characterised by the views of a follower based on stability, gradual innovation, and globalisation.

3.3.1 Ansoff's Growth Matrix Application



Figure 5: Ansoff's Growth Matrix

Source: (Alam, 2023)

Product Development

Toyota is shifting from hybrid domination to full EVs. By 2026, the company plans to use 10 new battery-electric models and hopes to sell 3.5 million EVs every year by 2030 (Leussink and Shiraki, 2023). It's USD 14 billion in solid-state battery research and development would have the potential to transform the EV performance, with extended range and rapid charging.

Market Penetration

Toyota utilises its reputed clientele and international dealer network consisting of more than 17,000 dealerships across the globe to market EVs. It incorporates hybrid and EV products to win the different consumer preferences, especially in markets where EV networks are not well developed.

Market Development

Toyota focuses on emerging economies like India, Southeast Asia, and Africa, where it presents the hybrid-electric cars as a transition product. This gradual plan will see it remain profitable as it increases sustainable mobility in low-cost economies.

Diversification

The hydrogen fuel-cell technology of the company (Mirai model) reinvigorates energy diversity, which is consistent with the national strategy of hydrogen in Japan. Though it has not yet become mainstream, it shows what Toyota has planned to do in the long run in terms of multi-path decarbonisation.

3.3.2 Porter's Generic Strategy Application

Toyota uses the wide-ranging differentiation strategy, which is based on quality, efficiency and brand trust. Toyota engages in incremental innovation, unlike the disruptive innovation of Tesla, because the Toyota company seeks to optimise existing systems and not to radically change them. Its Toyota Production System (TPS) has remained a force of efficiency and sustainability in its operations throughout the world.



Figure 6: Porter's Generic Strategy

Source: (Creantho, 2022)

Environmentally, Toyota's Environmental Challenge 2050 sets ambitious goals:

- 100% renewable energy use in global plants by 2035,

- Zero CO₂ emissions in vehicle life cycles, and
- Reduction of water usage by 30% compared to 2013 levels (Jacque et al., 2024).

These programs go hand in hand with huge capital expenditure- more than USD 3.2 billion a year on sustainability and innovation initiatives.

Nevertheless, there is a danger in the follower strategy of Toyota. Its cautious nature also made its presence in the rapidly expanding EV market slow when Tesla and Chinese companies already dominate the market. The internal issue that the company also must deal with is the adjustment of the old corporate culture to the agility demanded by the digital revolution. However, financial stability, USD 31 billion net profit per year (2023), gives Toyota a solid base to strategically emerge as a catcher by means of long-term investment and collaboration (Liu, 2023).

4. Conclusion

This analysis highlights the existence of deep implications of technology and environmental macro-environmental factors on the worldwide automotive sector, especially in electric vehicles. The technological advancements, in particular, battery innovation and digital connections, have altered the competitive landscape, and environmental requirements have facilitated the process of making mobility carbon neutral.

Tesla is an innovative company that has used technology differentiation, environmental branding, and vertical integration to conquer the EV market. The proactive approach helps it to be constantly innovative, have a high customer involvement, and be a global leader in sustainable transportation. Scalability, regulatory risks, and growing competition, however, need Tesla to deal with to maintain long-term profitability.

Toyota, as a follower company, has pursued a cautious, data-focused strategy - emphasising reliability, hybrid know-how, and slow electrification. The long-term vision that it has shown through its vast investments in solid-state batteries, hydrogen technology, and carbon-neutral production can place it well ahead of early movers in efficiency and sustainability when such technologies are fully developed.

Finally, Tesla and Toyota examples show that strategic flexibility and innovation are necessitated by the forces of the macro-environment. Ongoing environmental scanning, technology anticipation, and responsive marketing are crucial to exist in an industry conditioned by swift disruption and green accountability. The future of the EV market will not only be the first to innovate but also the quickest to adapt and remain sustainable, trusted by its customers, and relevant globally.

References

- Alam, M. (2023) *Analysis and advantages of Ansoff matrix*. IdeaScale. Available at: <https://ideascale.com/blog/analysis-and-advantages-of-ansoff-matrix/> (Accessed: 8 December 2025).
- BloombergNEF (2023) *Lithium-ion battery pack prices hit record low of \$139/kWh*. Available at: <https://about.bnef.com/insights/clean-energy/lithium-ion-battery-pack-prices-hit-record-low-of-139-kwh/> (Accessed: 11 November 2025).
- Bruin, L. de (2021) *Porter's generic strategies explained with examples*. B2U – Business-to-you.com. Available at: <https://www.business-to-you.com/porter-generic-strategies-differentiation-cost-leadership-focus/> (Accessed: 19 November 2025).
- Centre, N. (2025) *U.S. R&D totalled \$892 billion in 2022; estimate for 2023 indicates further increase to \$940 billion*. Available at: <https://nces.nsf.gov/pubs/nsf25327/table/1> (Accessed: 11 November 2025).
- Clifford, J. (2025) *Toyota reaches six million electrified vehicle sales in Europe*. Toyota UK Magazine. Available at: <https://mag.toyota.co.uk/six-million-electrified-sales-europe/> (Accessed: 11 November 2025).
- Creantho (2022) *Michael Porter's three generic strategies model*. Available at: <https://www.creantho.com/michael-porters-generic-strategies.php> (Accessed: 8 December 2025).
- Deloitte (2024) *2024 global automotive consumer study*. Available at: <https://www.deloitte.com/an/en/Industries/automotive/perspectives/global-automotive-consumer-study.html> (Accessed: 11 November 2025).
- Drive (2023) *Toyota hybrids outselling Tesla electric cars nearly two to one*. Available at: <https://www.drive.com.au/news/toyota-hybrids-outselling-tesla-nearly-two-to-one/> (Accessed: 19 November 2025).
- GeeksforGeeks (2024) *Strategies of Ansoff matrix*. Available at: <https://www.geeksforgeeks.org/business-studies/strategies-of-ansoff-matrix/> (Accessed: 19 November 2025).
- Grant, R.M. (2021) *Contemporary strategy analysis*. 11th edn. Hoboken: John Wiley & Sons.

- IEA (2025) *CO₂ emissions – global energy review 2025*. Available at: <https://www.iea.org/reports/global-energy-review-2025/co2-emissions> (Accessed: 11 November 2025).
- Jacque, H., Mozafari, B., Dereli, R.K. and Cotterill, S. (2024) ‘Implications of water conservation measures on urban water cycle: A review’, *Sustainable Production and Consumption*, 50, pp. 571–586. Available at: <https://doi.org/10.1016/j.spc.2024.08.026>.
- Kelly, T. (2021) *Toyota to spend \$13.5 bln to develop electric vehicle battery tech by 2030*. Reuters. Available at: <https://www.reuters.com/business/autos-transportation/toyota-spend-over-135-bln-ev-batteries-by-2030-2021-09-07/> (Accessed: 11 November 2025).
- Kotler, P. and Keller, K.L. (2022) *Marketing management*. 16th edn. Harlow: Pearson Education.
- Lambert, F. (2022) *Tesla makes progress on 4680 battery cells, reduces dependence on them*. Electrek. Available at: <https://electrek.co/2022/10/20/tesla-progress-4680-battery-cells-reduces-dependence/> (Accessed: 11 November 2025).
- Leussink, D. and Shiraki, M. (2023) *Toyota to launch 10 new battery EV models by 2026*. Reuters. Available at: <https://www.reuters.com/business/autos-transportation/toyota-launch-10-new-battery-ev-models-by-2026-cto-2023-04-07/> (Accessed: 11 November 2025).
- Li, C., Na, J., Nan, K., Qin, J. and Wu, M. (2024) ‘Tesla’s product improvement strategies in the electric vehicle market’, *Advances in Economics Management and Political Sciences*, 92(1), pp. 177–185. Available at: <https://doi.org/10.54254/2754-1169/92/20231197>.
- Li, Y., Lin, J. and Xu, S. (2021) ‘Analysis of Tesla’s business model: A comparison with Toyota’, *Advances in Economics, Business and Management Research*, 190. Available at: <https://doi.org/10.2991/aebmr.k.210917.006>.
- Liu, Y. (2023) ‘Financial analysis and strategic forecast of Toyota’, *Advances in Economics Management and Political Sciences*, 43(1), pp. 218–224. Available at: <https://doi.org/10.54254/2754-1169/43/20232167>.
- Oluwadayomi Akinsooto, Ogunnowo, E.O. and Ezeanochie, C.C. (2025) *The evolution of electric vehicles: A review of USA and global trends*. Available at:

- https://www.researchgate.net/publication/391217615_The_Evolution_of_Electric_Vehicles_A_Review_of_USA_and_Global_Trends (Accessed: 11 November 2025).
- Porter, M.E. (2008) 'The five competitive forces that shape strategy', *Harvard Business Review*, 86(1), pp. 78–93.
- Qin, K. (2022) 'Analysis of Tesla's innovation strategy and influence of leadership', *Advances in Economics, Business and Management Research*, pp. 228–238. Available at: https://doi.org/10.2991/978-94-6463-054-1_26.
- Sayan Ghar (2025) *Tesla's international business strategy*. SSRN Electronic Journal. Available at: <https://doi.org/10.2139/ssrn.5258192>.
- SpringWorks sarl (2021) *How to conduct an effective PESTEL analysis?* Available at: <https://springworks.ch/en/pestel-analysis/> (Accessed: 19 November 2025).
- Sriram, A. and Roy, A. (2025) *Tesla posts record deliveries, concerns mount over EV demand post-tax credits*. Reuters. Available at: <https://www.reuters.com/business/autos-transportation/teslas-quarterly-deliveries-beat-analysts-estimates-2025-10-02/> (Accessed: 11 November 2025).
- Statista (2025) *Electric vehicles – worldwide*. Available at: <https://www.statista.com/outlook/mmo/electric-vehicles/worldwide> (Accessed: 11 November 2025).
- Tesla (2025) *Impact*. Available at: <https://www.tesla.com/impact> (Accessed: 11 November 2025).
- Toyota EU (2024) *Carbon neutrality*. Available at: <https://www.toyota-europe.com/sustainability/carbon-neutrality> (Accessed: 11 November 2025).
- Zhang, R. and Ding, X. (2024) 'A study on the impact of Tesla's autonomous driving technology on its performance', *International Journal of Global Economics and Management*, 5(2), pp. 72–78. Available at: <https://doi.org/10.62051/ijgem.v5n2.09>.

Appendix A: PESTEL Analysis of the Electric Vehicle Industry (Tesla vs. Toyota)

Factor	Tesla (Pioneer)	Toyota (Follower)
Political	Gains from global EV subsidies and green policies (e.g., U.S. \$7,500 credit).	Benefits from Japan's hybrid and hydrogen incentives; adapting to global EV mandates.
Economic	Holds 21% global EV share (2023); high R&D costs but strong profitability.	Investing \$13.5B in EV batteries; cost-focused mass-market strategy.
Social	Strong eco-conscious brand image; attracts innovation-driven customers.	Trusted brand; appeals to practical, reliability-seeking consumers.
Technological	Battery leads (4680 cell) and AI-driven autonomous tech.	Developing solid-state batteries; slower in automation but strong hybrid base.
Environmental	Achieved 20M tonnes CO ₂ reduction; renewable-powered factories.	Targeting carbon neutrality by 2050, it focuses on hybrid and hydrogen solutions.
Legal	Faces Autopilot and data regulation challenges in the U.S./EU.	Strong compliance; adapting operations to meet new emission standards.