



Module: ST3188 (Statistical Methods for Market Research)

UOL Student Number: 200630447

Word Count: 2993 (Excluding Bibliography, Executive Summary, Table of Contents and Questionnaire)

Market Research Proposal

Tesla, Inc.

Executive Summary

Tesla Inc. currently holds the title for being the biggest EV manufacturing company in the world and has the objectives to speed up the transition of automobiles worldwide from gasoline to fully electric, increase customer acquisition and retention and diversify its current product portfolio further. In line with these, are its aims, of trying to understand drivers' attitudes towards electric cars, understanding brand perceptions of competitor manufacturers as well as understanding market potential for new product lines and evolving trends in customer appetites.

An in-depth literature review was done, resulting in the derivation of factors affecting the identified research problems, which was graphically presented as an analytical model.

The research uses both an explanatory and conclusive design and since the target population is divided into Tesla and non-Tesla customers, a multiple cross-sectional design is utilised. Required data is gathered with a questionnaire and are sent via online surveys and emails to the participants who are selected through stratified sampling; Tesla customers based off the database given and non-Tesla customers through compiled public records and access panel information.

The collected data is then analysed through three multivariate analysis methods, Factor analysis, n-way ANOVA and cross-tabulations. and detailed research findings are mentioned to provide an idea of what to expect as results.

Points for further research are also provided, highlighting a few limitations to this research.

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1.0 Introduction

Tesla Inc. (formerly Tesla Motors) was called so, in honour of the physicist, Nikola Tesla and was created in July 2003, by a duo of engineers in Silicon Valley, namely Martin Eberhard and Marc Tarpinning. In 2004, Elon Reeve Musk took over and became the face of Tesla. The production, deliveries and revenue of Tesla has grown massively since 2008, after the launch of Tesla's first automobile, The Roadster. (Thompson et al., 2022)



(Source: (Dean, 2022))

According to Tesla Revenue and Production Statistics for 2022, Tesla has surpassed its nearest competitor SAIC-GM-Wuling (SGMW), making it the most popular Electric Vehicles manufacturer, as shown above. (Dean, 2022)

Tesla currently has 438 stores with one hundred centres for service worldwide (Keesee, 2022) and has 6 manufacturing plants in 3 countries, being America, Germany and China. (Crider, 2022).

The business offers batteries for stationary storage as well as solar roofs and panels for energy generation, for both residential and commercial use. Furthermore, Tesla offers a wide product portfolio, including crossover SUVs, midsize and luxury sedans. In 2017, they also unveiled a semi-truck called Tesla Semi, which further increases the range of products they offer. Its Model Y and

Model 3 took the first two spots in the most sold and delivered electric vehicles in the US in the first quarter of 2021. (Dean, 2022)

Tesla is currently trying to dominate the market share in the Electric Vehicles industry worldwide.

1.1 Business Objectives

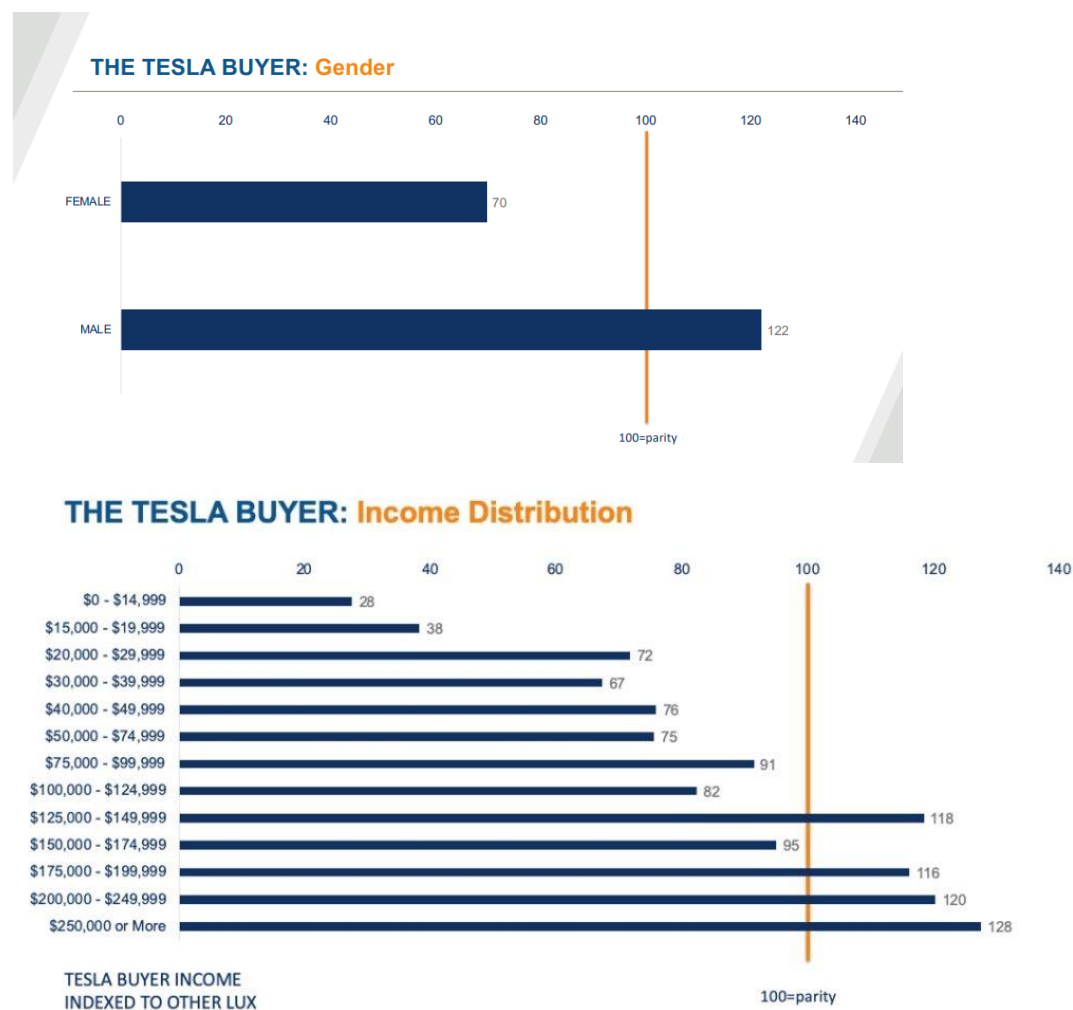
- Speed up the transition of the automobiles worldwide from gasoline to fully electric and be the ones to lead this change.
- Increase customer acquisition and aid in customer retention.
- Diversify its current product portfolio further and allocating its Research and development budget into innovating for new products.

1.2 Research Aims

- To understand drivers' attitudes towards electric cars such as maximum willingness to pay, perceived driving range limits on a single battery charge, and convenient access to charging points.
- To understand the brand perceptions of different vehicle manufacturing competitors, to assist in customer retention and acquisition.
- To understand market potential for new product lines and identify evolving trends in customer appetite by engaging in problem identification research.

2.0 The Business Context

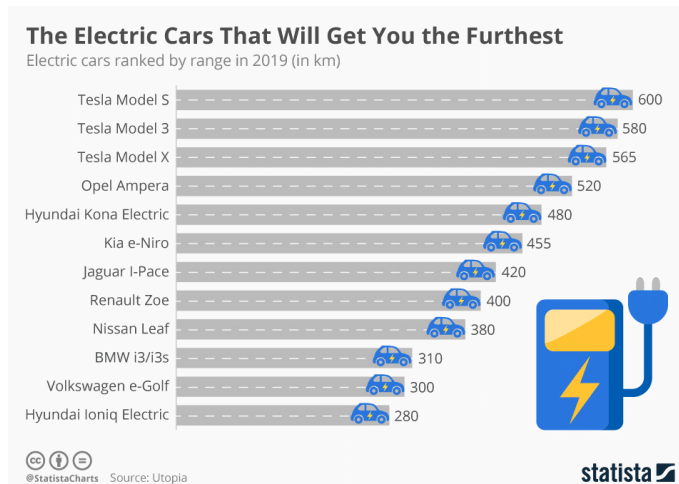
A recent study in November 2022 has found out that Tesla owners significantly comprise of males and further classified 70% of the drivers are 34 years old or younger, verifying the recent trend of the popularity of electric vehicles amongst the younger generations. (Cooper, 2022). Moreover, it is found that over 65% of Tesla's customers earn over \$125,000 a year, shaping the median Tesla buyer as a wealthy and young male employed in tech-industries. (Hailes, 2020)



(Source: (Hailes, 2020))

Tesla has products other than just their motor vehicles such as auto and financial services, sale of battery packages, solar panels and even retail merchandise. In-depth research published online, notes down the key strengths and weaknesses of Tesla.

The strengths are the reason the company is where it is today, dominating the electric vehicle industry. Its electric cars are tested and proven to cover the longest distances by far on a single charge, with Tesla taking the top three spots. The Tesla S can travel over 600km on a single full charge, outclassing its nearest rival, the Opel Ampera by 80km. (Gupta, 2023)

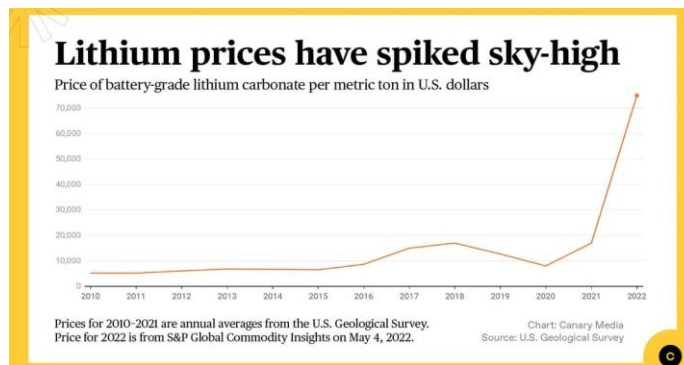


(Source: (Armstrong, 2019))

Moreover, Tesla is one of the most highly innovative firms worldwide, as it spends a major portion of its budget on R&D, figuring out how to satisfy their customers the best way. They had recently previewed the Tesla Semi, which is the first electric semi-truck in the world and their car designs are minimalistic, sleek and high-end, which provides their customer's unmatched comfort. They keep on adding value to their products by carefully monitoring the production process of the cars, from the conceptualisation to its final manufacturing. This has made Tesla very prevalent among people who are excited to see the future of what electric vehicle technology could be. (Madhav, 2022)

However, this rising demand for Tesla's vehicles has led to another set of problems. Tesla currently only has 6 plants, spread in the US, China and Germany, and this greatly limits their manufacturing capacity. Further as they diversify into more and more types of vehicles, there is lower priority on the manufacturing of previous models, causing delays and making them unable to sate every customer's need to get a Tesla. This may cause a mismatch between demand and supply for Tesla vehicles. (Hughes, 2021). Before Tesla changed to having in-house battery production, Panasonic used to provide Tesla with batteries. During the recent shareholder meetings, it has been said that the production rate of vehicles has fallen due to an inability to provide batteries and chips. They are struggling to get enough resources to manufacture batteries as well as enough chip technology for its vehicles due to the sudden price hikes in lithium and other materials. This struggle and shortage have resulted in Musk stating that lithium is "the single biggest cost growth item right

now.” Therefore, the sale of electric vehicles and their energy storage device has been directly decreased. (Betz, 2022)



(Source: (Spector & Olano, 2022) from U.S. Geological Survey)

Further business context on perceived safety is shown in the Appendix 1 and Pestel analysis is shown in Appendix 2.

2.1 Marketing Decision Problem

- How can we make it more known to customers that electric vehicles are better than gasoline vehicles?
- How could we enhance brand loyalty for our vehicles?
- What improvements should we make to our vehicles based on changes in customers' perceptions?

3.0 Components of research model

3.1 Marketing Research Problem

- Understand what factors could be influencing consumers' decisions on electric vehicle adoption.
- Identify the perceptions by customers of competing automobile manufacturers that determine the appeal to the automobile they purchased.
- Understand the aspects that impact perceptions towards electric vehicles.

3.2 Literature Review

Theories and earlier studies are used in this research to connect the factors that are applicable to the above research problems.

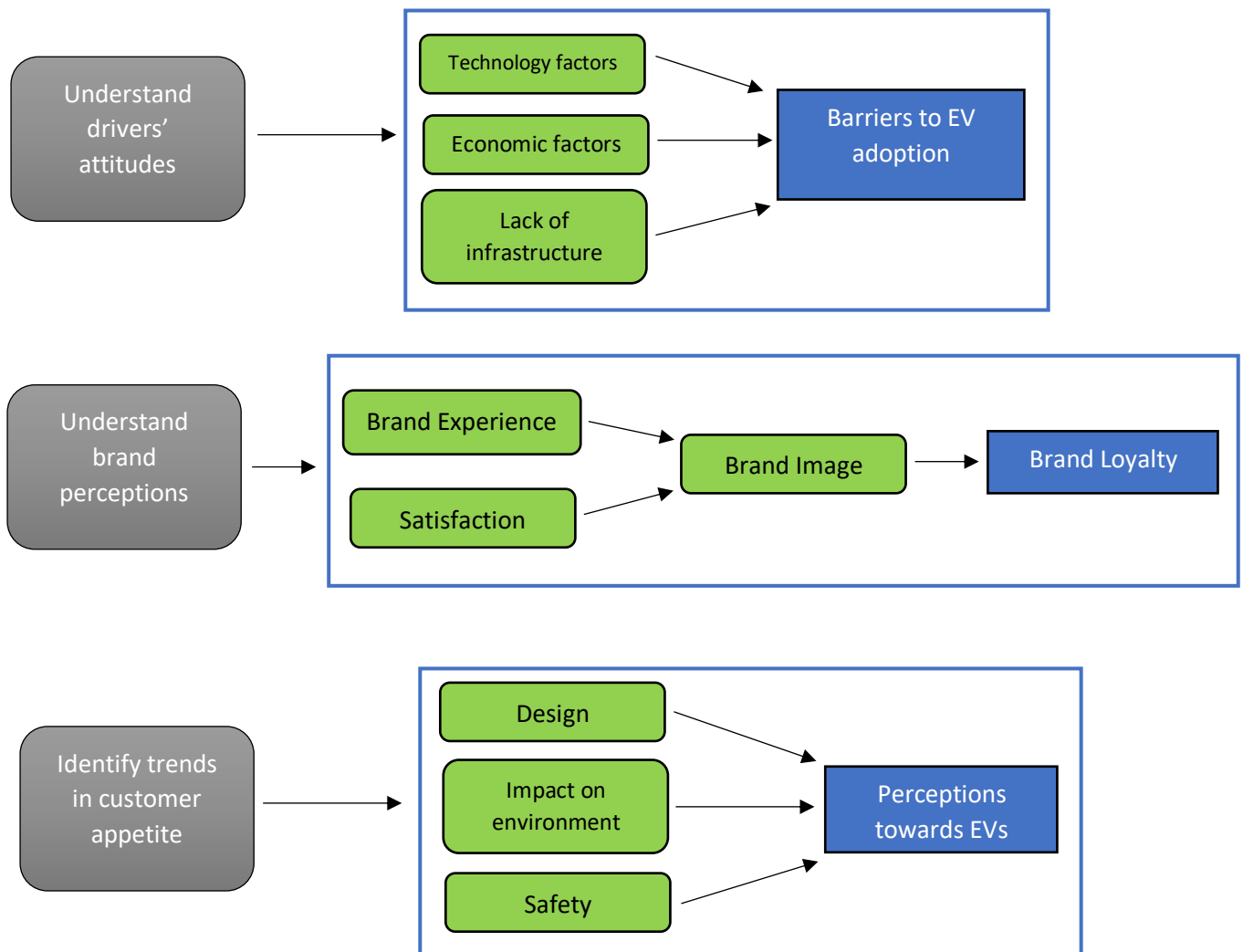
A paper published by (V et al., 2022) targeted to identify the determinants that could have an impact on consumers' decisions to use electric vehicles. They found technological factors such as range anxiety; according to research, it was found out that when it comes to EVs, driving range is a key worry (Jensen et al., 2013), moreover, it is hard to predict how much distance the residual battery power can go, as well as time for recharging; even though it is thought to be the least challenging aspect, it still helps to raise the factor of rejection for EV purchases (Carley et al., 2012). Another factor is the economical factor, which includes cost of the EV's purchase, fuel and battery. EVs are more expensive to produce because of the expensive technology involved. (Noel et al., 2020). The third factor is lack of infrastructure, because there is a shortage of charging stations, so for people wanting to drive longer distances, they would frequently ask for the availability of public charging stations to be expanded in more locations. (Habla, Huwe, & Kesternich, 2020)

(Mabkhot, Shaari, & Salleh, 2017) studied how brand image and loyalty are linked together for Malaysian local vehicle brands and stated that businesses should try to create a favourable brand image in the minds of their customers because brand image is how a customer views a brand. According to the study's findings, it was found out that brand image directly and significantly affects customer's loyalty to the local automobile brands. (Sayed, 2015) researched on how brand experience affects satisfaction and loyalty and results showed that for a customer in the automobile industry, brand experience is a major influence on brand loyalty and satisfaction.

A study by (Moosa & Hassan, 2015) aimed to determine the value that consumers perceive an automobile to be worth, while examining its effects on brand loyalty and customer satisfaction. The functional value, which are values that make customers' lives better and solve problems, of an automobile is the most important perceived value, next was emotional values and finally epistemic values, which are values influenced by factors such as knowledge and understanding, with social values being the least important reason. How customers perceive the value of an automobile is very important when improving brand loyalty and customer satisfaction.

(Ghasri et al., 2019) looked into the major reasons that affect consumers' decisions to buy electric vehicles, with a particular emphasis on the benefits that consumers perceive in the Australian market. They identified three factors, the first being design, which includes how customers view both the operational and visual characteristics of the car, as well as style and steadfast performance. The second factor was the impact on the environment, concerning the effects of EV usage on the environment and the final factor is safety, which goes through the capabilities of EVs in minimizing risks and accidents.

3.3 Analytical Model



3.4 Research Questions

1. Are technological factors a barrier to EV adoption?
2. Are economic factors a barrier to EV adoption?
3. Is lack of infrastructure a barrier to EV adoption?
4. Does brand image influence brand loyalty?
5. Does brand experience influence brand loyalty?
6. Does customer satisfaction influence brand loyalty?
7. Is vehicle design an aspect considered through customer perceptions on EVs?
8. Is the impact on the environment an aspect considered through customer perceptions on EVs?
9. Is safety an aspect considered through customer perceptions on EVs?

3.5 Hypothesis

- H1: Technological factors are a barrier to EV adoption.
- H2: Economic factors are a barrier to EV adoption.
- H3: Lack of infrastructure is a barrier to EV adoption.
- H4: Brand image significantly influences brand loyalty.
- H5: Brand experience significantly influences brand loyalty.
- H6: Customer Satisfaction significantly influences brand loyalty.
- H7: Vehicle design is a major aspect considered through customer perceptions.
- H8: Impact on the environment is a major aspect considered through customer perceptions.
- H9: Safety is a major aspect considered through customer perceptions.

4.0 Research Design

The research will start off by doing exploratory research, to try and understand the majority's opinion about Tesla with regards to the factors in the model such as satisfaction and experience, which cannot be directly measured, so a focus group discussion will be required to quantify these factors as statements and understand what level Tesla is at in terms of these factors. Based off the ideas generated from the focus group, we can include statements to describe the factors easier on the questionnaire later on.

The next step is to go ahead with a more detailed analysis by doing descriptive research to have a better understanding of the defined marketing phenomena, as well as testing the hypotheses mentioned prior and analyse the relationships of the factors in the analytical model.

The target population will be divided into Tesla and non-Tesla customers, further the information will be only taken once for each sample, so a multiple cross-sectional design will be utilised. A questionnaire is also used to gather data, asking participants questions regarding attitudes and perspectives on respective areas of Tesla's electric vehicles.

Considering Tesla's preference to use an online methodology, an online survey will be used to distribute the questionnaire, additionally, in comparison to other survey methods, it is one of the least time-consuming, which is necessary if the study is to be concluded in six months. Web surveys can be conducted by sharing the link to the questionnaire across Tesla's Twitter and other social media pages, moreover, it allows for the targeting of usually hard-to-reach respondents, which further increases the target audience. It won't have any interviewer bias and can be made visually appealing using graphical illustrations and links to other web pages, which can lead to a better-quality experience for the participants and therefore, more committed feedback. Data can also be gathered at a high speed with lower costs compared to other survey methods. However, being able to be answered by anyone clicking on the link results in low sample control and could cause a moderate quantity of data if there is a low response rate. Emails can also be used to share the survey to Tesla's customers based on the database provided by them and for non-Tesla customers, we will have to make use of customer lists from their competitors' customers as well as public records available online or elsewhere. Online surveys will be the best possible course of action as they can be answered anytime and anywhere by participants on their smartphones and tablets.

5.0 Sampling Design

5.1 Target Population

As mentioned above, the target population will be both non-Tesla customers, comprising of Tesla's competitors which also includes all hybrid and internal combustion engine vehicle owners, and Tesla customers, which are the elements and for both, the extent will cover a worldwide scale, as Tesla requested, moreover, it helps with generalisability. The sampling units will be the same as the elements and this research will be applicable to the year 2023.

5.2 Sampling Frame

Tesla's sampling frame can be the database provided by Tesla prior, and the customers can be further categorized based on regions to assist in the sampling technique mentioned next. As for non-Tesla customers, we will require the assistance of competitors to ask for customer lists and public records available online, as well as purchasing access panels by companies that maintain such databases such as government organisations who collect information for vehicle registry; which is expensive but is possible due to the large budget offered by Tesla and then identify details such as contact numbers and past purchases of automobiles to compile a list. Using this method reduces the risk of sampling frame errors.

5.3 Sampling Technique

This research will make use of probability sampling as it can help in reducing bias, by avoiding researcher bias when undergoing random selection, hence be more representative.

We will use stratified sampling for both Tesla and non-Tesla customers, and the strata should be based on demographics, so in this case, region will be the stratification variable. After the two populations are partitioned into subpopulations, which should consist of homogeneous elements and customers are then randomly selected from each stratum. When making the final selections, emails and web surveys will be sent to both the Tesla and non-Tesla participants. This method is better compared to the rest as it makes use of all the important subpopulations, hence makes the resulting participants more representative to the general population, as well as being precise.

5.4 Sample Size

A larger sample will be used as this study makes use of many variables, to reduce the aggregate effect of sampling error across the variables.

The following table by (Malhotra, Birks, & Nunan, 2017) illustrates the typical sample sizes for market research studies:

Type of study	Minimum size	Typical range
Problem identification	500	1,000–2,500 research (e.g. market potential)
Problem-solving research	200	300–500 (e.g. pricing)
Product tests	200	300–500
Test marketing studies	200	300–500
TV, radio, print or online advertising	150	200–300 (per advertisement tested)
Test-market audits	10 stores	10–20 stores
Focus groups	6 groups	6–12 groups

Tesla has mentioned that they want to engage in problem identification research and suggested a sample size of 5000 customers globally, moreover, Tesla vehicles are still a minority compared to the overall number of combustion engine vehicles and other hybrid vehicles, so considering all of this, the decided sample sizes are Tesla – 5000 customers and non-Tesla – 10,000 customers.

(Wu et al., 2022) mentions that the median rate of response for online surveys is 44.1 percent, further incidence rate will need to be taken into consideration. Assuming in these customer databases, 5% of these individuals bought vehicles on behalf of family members or for gifting, incidence rate will then be 95%, so the adjusted sample sizes for each is estimated as follows:

Tesla = $5000 \div (95\% \times 44.1\%) \approx 11,950$ customers

Non-Tesla = $10000 \div (95\% \times 44.1\%) \approx 23,900$ customers

6.0 Data Analysis

A few multivariate techniques will be used to analyse the data gathered:

- 1) **Factor analysis** - As we utilise multi-item scales in the questionnaire shown in Section 9.0, factor analysis helps reduce the data and summarise it, to define the underlying factors affecting variables such as customer satisfaction and safety, mentioned in the analytical model.
- 2) **n-way ANOVA** - It can be used to examine relationships between certain factors, such as the connection how barriers to EV adoption changes with technology and economic factors, as well as lack of infrastructure.
- 3) **Cross-tabulations** – This defines multiple variables simultaneously, like how brand experience and satisfaction influences brand image, which in turn affects brand loyalty.

7.0 Research Findings

With this research, we will understand the relationships between the variables mentioned in the analytical model, moreover, understand what further comments Tesla customers have in regard to their vehicles and their brand experience, and the reasons why non-Tesla customers would not buy Tesla vehicles, through the questionnaire provided. The general questions would help us clarify demographics for each customer and the questions on driving range would help Tesla determine what the upper average range is, so they could achieve that with their current and future vehicle models. The insights gathered from the questions on design can be used to see where Tesla could improve in order to get ahead of competitors. The question on charging station availability will help Tesla identify the areas that are in a dire need for more charging stations which will help customer retention.

8.0 Further Research

Since this research is limited to Tesla specifically and utilises a sample of Tesla customers only through the database given, it does not guarantee its generalisability to every single motorist worldwide, so there is an opportunity to broaden the scope, by examining customers whose data is not kept in Tesla's given database.

Moreover, in the business context, we only focused on the business objectives, so we can further research factors besides these, to understand more of Tesla's current problems and situation. Tesla can then feed these through the work already done in this research to hopefully bring in more insights.

9.0 Questionnaire

Kindly consider participating in this survey by Tesla Inc. This questionnaire will take about 10 minutes to complete and your feedback will remain anonymous. Select the options and/or answer in a way that best expresses your response to the questions below.

Your contribution and time spent are greatly appreciated!

Section 1: General Questions

1. Age
 - ☐ 18 - 30 years
 - ☐ 31 - 40 years
 - ☐ 41 - 50 years
 - ☐ 51 - 60 years
 - ☐ 61 years or older
2. Gender
 - ☐ Male
 - ☐ Female
 - ☐ Non-Binary
 - ☐ Rather not say
3. Estimate of yearly income
 - ☐ Less than \$80,000
 - ☐ \$81,000 - \$150,000
 - ☐ \$151,000 - \$200,000
 - ☐ Above \$200,000
4. Residential Country

If you are a Tesla owner, click [Section 2](#). If not, click [Section 3](#).

Section 2: Tesla Questions

5. How many Tesla models do you currently own?

- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4

6. Please select which models you own. (You may choose more than one.)

- ☐ Model X
- ☐ Model Y
- ☐ Model 3
- ☐ Model S

7. Have you ever been worried about how much range you have left in your vehicle?

- ☐ Yes, I had some slight concerns at times.
- ☐ No, never.

8. Please click on the number which indicates how strongly you agree or disagree with each of the following statements.

1: Strongly Agree

2: Agree

3: Neutral

4: Disagree

5: Strongly Disagree

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
i. Recharging times are too long.	1	2	3	4	5
ii. There are not enough features to justify the price.	1	2	3	4	5
iii. It is difficult to find charging stations when needed.	1	2	3	4	5
iv. The process of buying a Tesla is smooth and convenient.	1	2	3	4	5
v. Tesla is trying to be sustainable.	1	2	3	4	5
vi. The Tesla models are of all high quality.	1	2	3	4	5
vii. Tesla cars are very safe on the road, including its autopilot.	1	2	3	4	5

9. How would you rate the designs of the Tesla models from a scale of 1 to 7?



10. Select the image which best describes how satisfied you are about the range on your Tesla model.

RED: Extremely unsatisfied

ORANGE: Unsatisfied

YELLOW: Neutral

LIGHT GREEN: Satisfied

GREEN: Extremely Satisfied



11. Are the costs of maintenance and battery replacement affordable?

- ☐ Yes.
- ☐ No.
- ☐ I don't know.

12. If you have any comments in general about Tesla, please specify below.

-----END-----

Once again, thank you for taking part in this questionnaire!

Section 3: Non-Tesla Questions

13. Which brand of vehicle do you currently own?

14. What type of vehicle is yours classified as?

- ☐ Internal Combustion Engine (ICE)
- ☐ Hybrid Electric Vehicle
- ☐ Battery Electric Vehicle
- ☐ Plug-In Hybrid Electric Vehicle
- ☐ Autonomous Vehicle

15. **For Electric vehicle owners:** What do you think is a good range on a full charge?

- ☐ Less than 200 km.
- ☐ Between 200 km and 300 km.
- ☐ Between 300 km and 450 km.
- ☐ More than 450 km.
- ☐ I don't know.

16. On a scale of 1 to 5, how important do you consider a vehicle's impact on the environment?

1	2	3	4	5
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Not at all

Significant

17. Why haven't you considered buying a Tesla vehicle?

- ☐ Too expensive.
- ☐ I like my non-electric vehicle (ICE owners).
- ☐ Maintenance and battery replacements costs are high.
- ☐ Safety concerns on its autonomous capabilities.
- ☐ Others, please specify.

18. Do you think vehicle design is a major factor regarding vehicle purchase?

- ☐ Yes.
- ☐ No.

19. A) Have you been in any vehicular accidents recently?

- ☐ Yes.
- ☐ No.

B) If yes, do you think an autonomous driving feature would have helped you avoid them?

Please comment below.

20. Are you satisfied with your current vehicle?

- ☐ Yes.
- ☐ No.

21. On a scale of 1-10, how would you describe your overall experience when buying your vehicle?



Very Dissatisfied

Very Satisfied

22. **For Electric vehicle owners:** Have you been inconvenienced by the number of charging stations in your area?

- ☐ Yes
- ☐ No

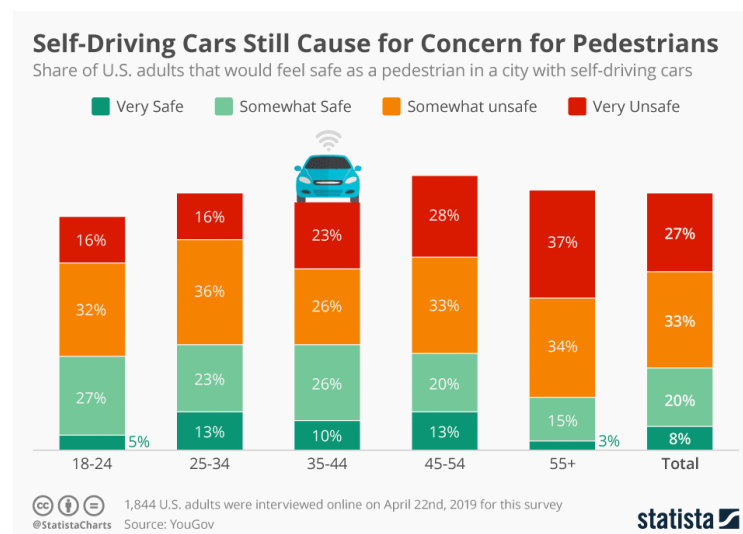
-----END-----

Once again, thank you for taking part in this questionnaire!

10.0 Appendix

10.1 Appendix 1: Perceived Safety

- Tesla cars are known for their self-driving capabilities, which has led to another issue as some pedestrians feel unsafe around them. The chart below highlights the fear age groups in the US feel about self-driving cars and to make it worse, many countries have yet to impose set regulations for self-driving, which could cause legal issues for projects that Tesla may have for self-driving. (Gupta, 2023)



(Source: (Richter, 2019) from Statista)

According to the US Department of Transportation, from July 2021 to October 2022, they have stated that there were six hundred and five crashes concerning vehicles with Advanced Driver Assistance Systems (ADAS), which allows them to autopilot, and Tesla comprised of four hundred and seventy-four of these accidents. (Richards, 2022)

10.2 Appendix 2: Pestel Analysis

- This research further tackles other macroenvironmental factors that electric vehicles have influenced. Standard internal combustion engines have caused vast concerns about carbon emissions and some governments have gone to the length of trying to ban the use of vehicles that use ICEs, which has led to the skyrocketing demand for electric vehicles and will continue for the foreseeable future. (Rahman, 2022) According to a report by International Energy Agency, “Sales were highest in the People’s Republic of China, where they tripled relative to 2020 to 3.3 million after several years of relative stagnation, and in Europe, where they increased by two-thirds year-on-year to 2.3 million. Together, China and Europe accounted for more than 85% of global electric car sales in 2021.” (Trends in Electric light-duty vehicles, 2022)
- Further, there has currently been high inflation in most developing and developed countries, resulting in soaring fuel prices, so the demand for EVs, being fuel efficient, have risen. However, the production costs of EVs are generally higher due to the employment of the latest technology in the manufacturing of them, moreover, finding and charging up EVs through charging points is time consuming which may cause disinterest in future customers. (Rahman, 2022)

Note: For the bibliography, journals by Habla and Mabkhot do not have the retrieved information in their citations, even though they were already entered in the fields on Word citations. The retrieved date for both is 27th February 2023. Moreover, the IEA report has no author, so it was cited as article name, year. The book by (Malhotra, Birks, & Nunan, 2017), is the essential reading provided, and in the citation, there was no DOI to enter, so it is listed without one below.

11.0 Bibliography

- Armstrong, M. (2019, February 22). Infographic: The Electric Cars that will get you the furthest. Retrieved February 27, 2023, from <https://www.statista.com/chart/17132/the-electric-cars-that-will-get-you-the-furthest/>
- Betz, B. (2022, April 25). Lithium shortages impact Tesla, other EV carmakers, numerous tech markets. Retrieved February 27, 2023, from <https://www.foxbusiness.com/markets/lithium-shortages-tesla-ev-tech-markets>
- Carley, S., Krause, R. M., Lane, B. W., & Graham, J. D. (2012, November 30). Intent to purchase a plug-in electric vehicle: A survey of early impressions in large US cities. *Transportation Research Part D: Transport and Environment*, 18, 39-45. doi:10.1016/j.trd.2012.09.007
- Cooper, S. (2022, November 12). Tesla owners may just deserve some of the hate they get, according to the study. Retrieved February 27, 2023, from <https://www.themanual.com/auto/study-reveals-tesla-owner-demographics/#:~:text=According%20to%20the%20data%20Jerry,millennial%20and%20gen%20Z%20generations.>
- Crider, J. (2022, April 13). Tesla's 6 factories are a new phase of its future. Retrieved February 27, 2023, from <https://cleantechnica.com/2022/04/13/teslas-6-factories-are-a-new-phase-of-its-future/>
- Dean, B. (2022, January 06). Tesla Revenue and Production Statistics for 2022. Retrieved February 27, 2023, from <https://backlinko.com/tesla-stats>
- Ghasri, M., Ardeshiri, A., & Rashidi, T. (2019, November 14). Perception towards electric vehicles and the impact on consumers' preference. *Transportation Research Part D: Transport and Environment*, 77, 271-291. doi:10.1016/j.trd.2019.11.003
- Gupta, S. K. (2023, January 16). Tesla Swot Analysis (2023). Retrieved February 27, 2023, from <https://bstrategyhub.com/tesla-swot-analysis/>
- Habla, W., Huwe, V., & Kesternich, M. (2020, June 16). Beyond Monetary Barriers to Electric Vehicle Adoption: Evidence From Observed Usage of Private and Shared Cars. *SSRN Electronic Journal*, 1-35. doi:10.2139/ssrn.3625452
- Hailes, D. (2020, January 29). Can tesla find new buyers? Retrieved February 27, 2023, from <https://www.coxautoinc.com/market-insights/can-tesla-find-new-buyers/>
- Hughes, J. (2021, December 07). Tesla SWOT analysis : What's next for Tesla? Retrieved February 27, 2023, from <https://businesschronicler.com/swot/tesla-swot-analysis/>

- Jensen, A. F., Cherchi, E., & Mabit, S. L. (2013, August 21). On the stability of preferences and attitudes before and after experiencing an electric vehicle. *Transportation Research Part D: Transport and Environment*, 25, 24-32. doi:10.1016/j.trd.2013.07.006
- Keesee, P. (2022, August 12). How many Tesla stores are there around the world? Retrieved February 27, 2023, from <https://optiwatt.com/blog/how-many-tesla-stores-are-there-around-the-world>
- Mabkhot, H. A., Shaari, H., & Salleh, S. M. (2017). The Influence of Brand Image and Brand Personality on Brand Loyalty, Mediating by Brand Trust: An Empirical Study. *Jurnal Pengurusan*, 50, 71-82. doi:10.17576/pengurusan-2017-50-07
- Madhav. (2022, October 04). Tesla SWOT analysis. Retrieved February 27, 2023, from <https://seoaves.com/tesla-swot-analysis/>
- Malhotra, N. K., Birks, D. F., & Nunan, D. (2017). Table 14.2. In *Marketing research: An applied approach* (Fifth ed., pp. 1-976). Harlow, England etc.: Pearson.
- Moosa, M. Y., & Hassan, Z. (2015, April 20). Customer perceived values associated with automobile and brand loyalty. *International Journal of Accounting and Business Management*, 3(1), 99-115. doi:10.24924/ijabm/2015.04/v3.iss1/92.107
- Noel, L., PhD, De Rubens, G. Z., Kester, J., & Sovacool, B. K. (2020, January 30). Understanding the socio-technical nexus of Nordic Electric Vehicle (EV) barriers: A qualitative discussion of range, Price, charging and knowledge. *Energy Policy*, 138, 111292. doi:10.1016/j.enpol.2020.111292
- Rahman, M. (2022, July 12). Pestel analysis of the Electric Car Industry. Retrieved February 27, 2023, from <https://www.howandwhat.net/pestel-analysis-electric-car-industry/>
- Richards, L. (2022, December 1). Tesla autopilot crashes: With at least a dozen dead, "who's at fault, man or machine?" Retrieved February 27, 2023, from <https://impakter.com/tesla-autopilot-crashes-with-at-least-a-dozen-dead-whos-fault-man-or-machine/>
- Richter, F. (2019, May 03). Infographic: Self-driving cars still cause for concern for pedestrians. Retrieved February 27, 2023, from <https://www.statista.com/chart/17881/self-driving-car-safety/>
- Sayed, D. A. (2015). Does Brand Experience Build Customer's Satisfaction and Loyalty in the Automobile Industry. *Journal of Marketing and Consumer Research*, 15, 103-112. Retrieved February 27, 2023, from <https://core.ac.uk/download/pdf/234694037.pdf>
- Spector, J., & Olano, M. V. (2022, May 06). Chart: Lithium prices are through the roof this year. Retrieved February 27, 2023, from

<https://www.canarymedia.com/articles/batteries/chart-lithium-prices-are-through-the-roof-this-year>

- Thompson, C., Lee, K., & Levin, T. (2022, June 12). Tesla just celebrated its 12th year as a public company. Here are the most important moments in its history. Retrieved February 27, 2023, from <https://www.businessinsider.com/most-important-moments-tesla-history-2017-2>
- Trends in electric light-duty vehicles. (2022). Retrieved February 27, 2023, from <https://www.iea.org/reports/global-ev-outlook-2022/trends-in-electric-light-duty-vehicles>
- V, S. K., Michael, L. K., Hungund, S. S., & Fernandes, M. (2022, June 12). Factors influencing adoption of electric vehicles – a case in India. *Cogent Engineering*, 9(1), 1-21. doi:10.1080/23311916.2022.2085375
- Wu, M., Zhao, K., & Fils-Aime, F. (2022, May 26). Response rates of online surveys in published research: A Meta-analysis. *Computers in Human Behavior Reports*, 7, 100206. doi:10.1016/j.chbr.2022.100206