
MARKET RESEARCH PROPOSAL - TESLA



MODULE: STATISTICAL METHODS FOR MARKET RESEARCH

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Executive Summary

Tesla is one of the dominant players in the EV market and is focusing on accelerating the transition to electric cars globally, to increase its market share.

This market research proposal is to help Tesla gain insights from its current customers and potential future customers regarding their maximum willingness to pay for electric cars, the perceptions that they have towards Tesla and other leading EV firms, and their future preferences to identify evolving trends in consumer appetite. These insights will help Tesla in order to maintain or increase their market shares by making changes to its marketing mix variables.

This proposal aims to give an understanding of the business context by examining the performance of EV market in general and Tesla's contribution in the EV market. It also looks into the strengths and weaknesses of Tesla when compared to its competitors, which was then used to come up with the marketing decision and research problems that Tesla was facing. An appropriate analytical model has been built to find the factors on which Tesla should focus on to meet the research aims, based on an exploratory literature review.

This study will follow both exploratory and conclusive research designs. The primary data, targeting both Tesla customers and non-Tesla customers, for this research will be collected with the help of a questionnaire using web surveys. The samples for conducting the primary research will be obtained using stratified sampling technique for both Tesla and non-Tesla customers.

The collected data will be analysed using ANOVA, factor analysis and cross tabulations to obtain in-depth insights and identify any relationships between variables in the analytical model.

The proposal also includes the constraints and limitations of the research. Further, avenues for further research are also proposed.

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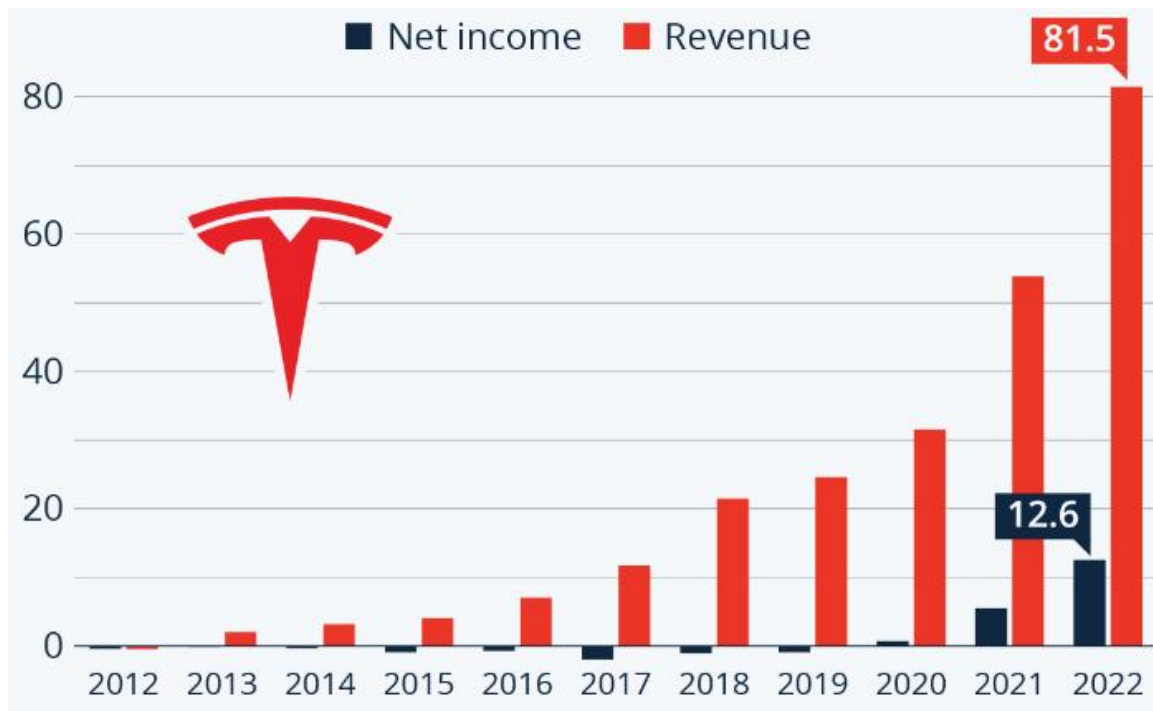
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1.0 Introduction

The Tesla company which was established in 2003, is ranked as the most automotive brand globally as of June 2022 and in honor of the creator Nikola Tesla, the company is named Tesla (Schreiber & Gregersen, 2023).

Tesla's revenue has been growing consistently for years and as seen from the diagram below, it had a whopping revenue of 81.5 billion US dollars in 2022.



Source:(Zandt & Richter, 2023)

Tesla sells a wide range of cars, including medium-sizes sedans and crossover SUVs, and in addition to selling cars, they also sell solar panels, solar roofs for energy creation, as well as batteries for energy reserves (Jones & Newswire, 2023).

“Tesla’s mission is to accelerate the world’s transition to sustainable energy and it’s vision is to create the most compelling car company of the 21st century by driving the world’s transition to electric vehicles” (Rowland, 2022).

This research aligns with the vision and mission statements and hence, could be used to fulfill Tesla’s goals.

1.1 Research Purpose

Business Objectives

- Accelerate the transition to electric cars worldwide since competitors are keen in raising their market shares.
- Increase customer acquisition and retention.
- Diversify the existing product range further and consider where to direct its R and D budget efficiently.

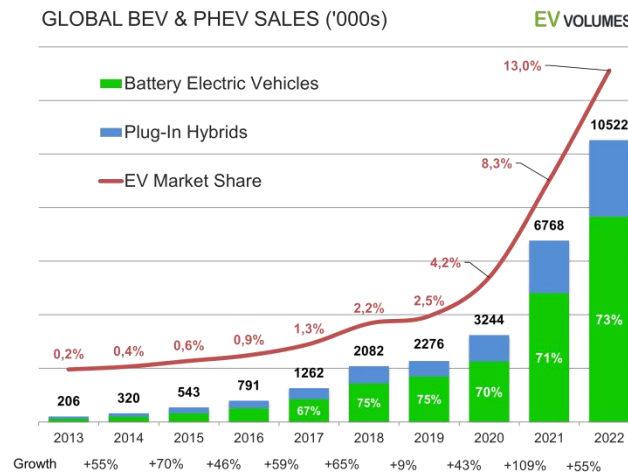
Research aims

- Understand drivers' attitudes (such as maximum willingness to pay) toward electric cars.
- Understand brand perceptions among motorists of different manufacturers to assist with customer acquisition and retention.
- Engage in problem identification research to study market potential for new product lines and evolving trends in consumer appetites.

2.0 Understanding the Business context.

EV Market

The EV market in general has been performing really well worldwide in recent times. EV sales have doubled in 2021 when compared to 2020 and it has risen significantly in 2022 ,as seen from the diagram below. EV sales are expected to have a 22.79% increase in 2023 (*Electric vehicles - US: Statista market forecast, 2022*).



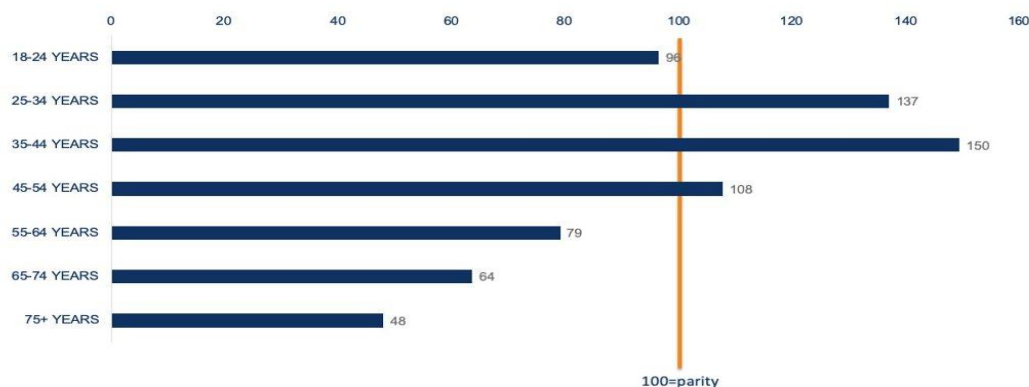
Source:(Irle, 2023)

Major players in the EV market are “Tesla, BYD Company Ltd, Daimler AG, Volkswagen AG and Toyota Motor Corporation”(Electric vehicle market analysis - industry report - trends, Size & Share, 2023). Tesla has been dominating the EV market in recent years and was estimated to have a market share of 65.4% in 2022 (Rapier, 2022).

Tesla

A typical Tesla consumer is of a specific category globally: wealthy young men who work in technology-based fields. Compared to conventional high-end car consumers, they tend to be young men of the age group 20-50 years old and of Asian origin. A research showed that, compared to 55% of other luxury brands, 65% of Tesla customers have yearly incomes of over \$125,000 (Hailes, 2020).

THE TESLA BUYER: Age



Source:(Hailes, 2020)

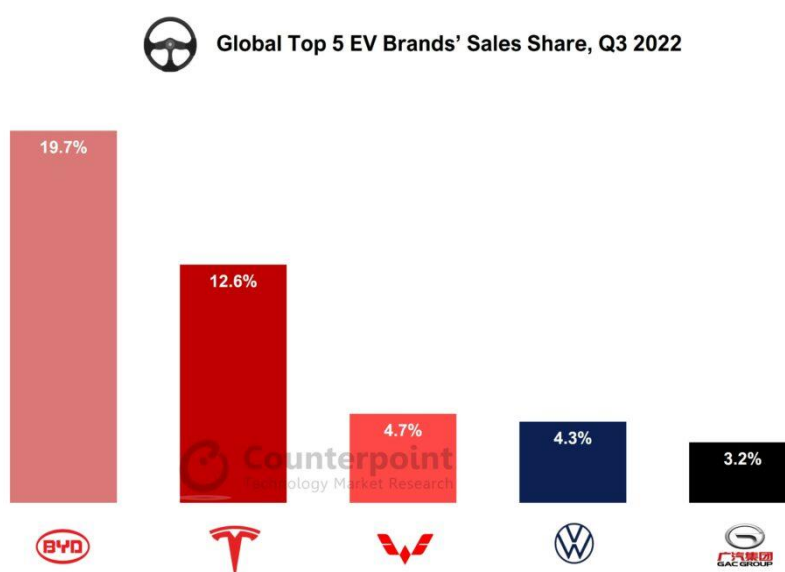
Tesla offers a wide range of EVs such as “Model S, Model X, Model 3, Model Y, Cybertruck and Roadster”(About, 2022). Tesla’s efficient use of modern technology is a major factor contributing to its competitive advantage in the EV industry. Most of Tesla's revenue comes from EVs, and in 2022, Model Y was the top-selling EV due to its remarkable speed range and uncluttered interior design, while Model 3 was third best-selling EV globally (Pontes, 2023).

Unlike its competitors who sell their products through third-party dealers, Tesla only sells its products through its own showrooms since they believe this provides a better purchasing experience for customers and avoids the additional expense of dealer service charges. Tesla keenly focuses on customer satisfaction by employing "Tesla Rangers",mobile technicians who come to the customer's location to fix any vehicle issues, reducing the need for customers to travel to service centers (How tesla sets itself apart from its competitors?, 2021).

Tesla is a highly innovative company in the EV market due to its persistent investment in research and development(R&D). In 2018, Tesla invested \$1.8 billion in cutting-edge technology development and due to their persistent investment, Tesla's Model 3 was considered as the EV that had the most-extensive battery range when compared to other chosen cars in US (Carlier, 2022).

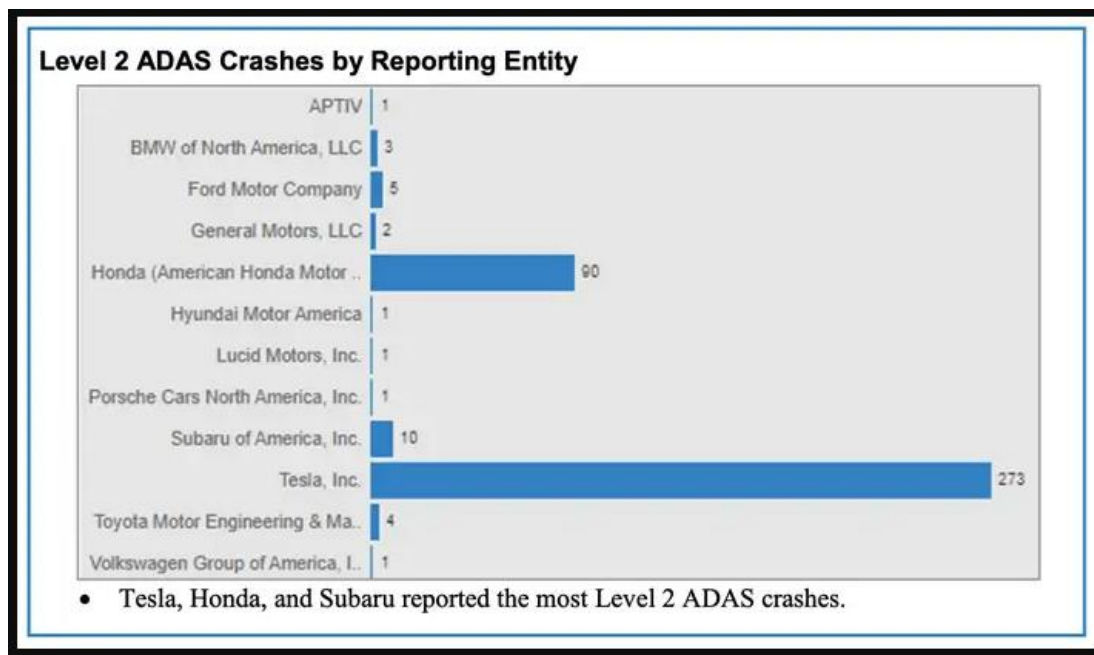
Tesla's marketing strategy mainly relies on satisfied customers who are incentivized to promote their products through word of mouth, rather than spending a lump of money on marketing campaign (Alvarez, 2019).

However, despite Tesla's success in the EV market, its market share has decreased significantly over the years. In 2021, Tesla's market share was 68.2%, compared to 79.4% in 2020 (Rapier, 2022). This decline is largely attributed to the availability of more affordable EVs from competitors that offer similar or better technology and production quality (Iliff, 2022).



Source:(Mukherjee, 2022)

Brands such as BYD, Ford and Hyundai have entered the market and are rapidly gaining market share by offering more affordable options for consumers (Menon, 2023). As seen in the diagram above, BYD had a higher market share than Tesla in the third quarter of 2022. BYD's EVs are priced below \$30,000, which is significantly lower than the cheapest Tesla Model 3, which costs \$44,380 and this price difference has caused consumers to switch to BYD (Lin, 2023).



Source:(Levin, 2022)

According to reports, it was found that Tesla vehicles running its Autopilot software have been involved in 273 accidents last year which was higher than in previous years. Data released by the NHTSA indicates that Tesla EVs made up 70% of the accidents involving auto-pilot featuring cars (Levin, 2022). This would certainly cause potential customers to be less interested in Tesla EVs and proves to be a weakness of Tesla.

3.0 Problem Definition

3.1 Marketing Decision Problem

1. At what price category will you place your EVs at?
2. How to improve motorist's brand perception about Tesla to be above that of different automobile manufacturers?
3. What other products or new features to the existing products should we focus on adding to our product portfolio?

3.2 Marketing Research Problem

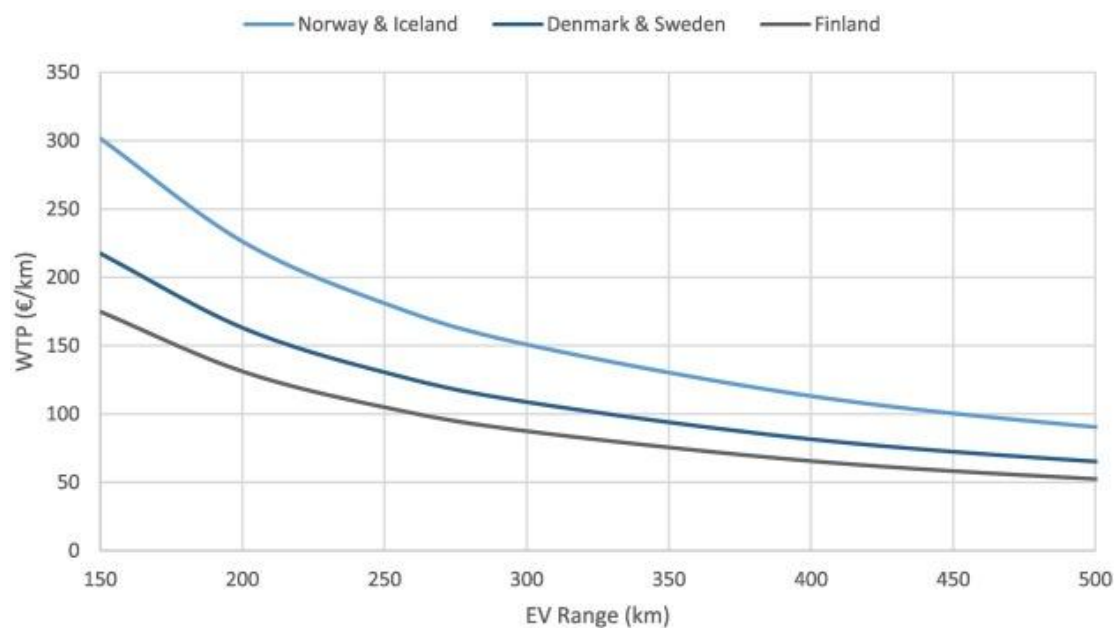
1. What is the maximum willingness to pay for EVs?
2.
 - a) Understand what factors influence brand perceptions for motor vehicle brands.
 - b) Compare Tesla's current brand perceptions against that of other leading motor manufacturers.
3. Determine factors that affect the preferences of Tesla and non-Tesla customers, and how it can influence future consumer preferences.

4.0 Research Approach

4.1 Literature Review

A study based on consumer's willingness to pay (WTP) for electric vehicles at different countries found that longer charging time and smaller driving range can decrease the utility of EVs and reduce the maximum amount a consumer is willing to pay for it, while consumers generally prefer shorter charging times as it allows them to get back on the road more quickly (Noel et al., 2019).

It was also noted by Noel et al. that driving range was found to be having an indirect relationship with WTP since the marginal price, consumers are willing to pay per additional kilometre reduces as EV range increases for all 5 countries.



Source: (Noel et al., 2019)

Another study indicated that WTP for EVs varies between countries, this was because consumers in well-developed countries might be willing to pay more for EVs due to the availability and convenience of charging options (Franzen & Vogl, 2012).

A research conducted on brand perceptions identified that consumer's brand perceptions on automobiles are strongly influenced by the car's country of manufacture (COM), since if the COM has high-quality manufacturing facilities, this can positively affect consumers' opinions of the brand and the vehicles it produces (Fetscherin & Toncar, 2010).

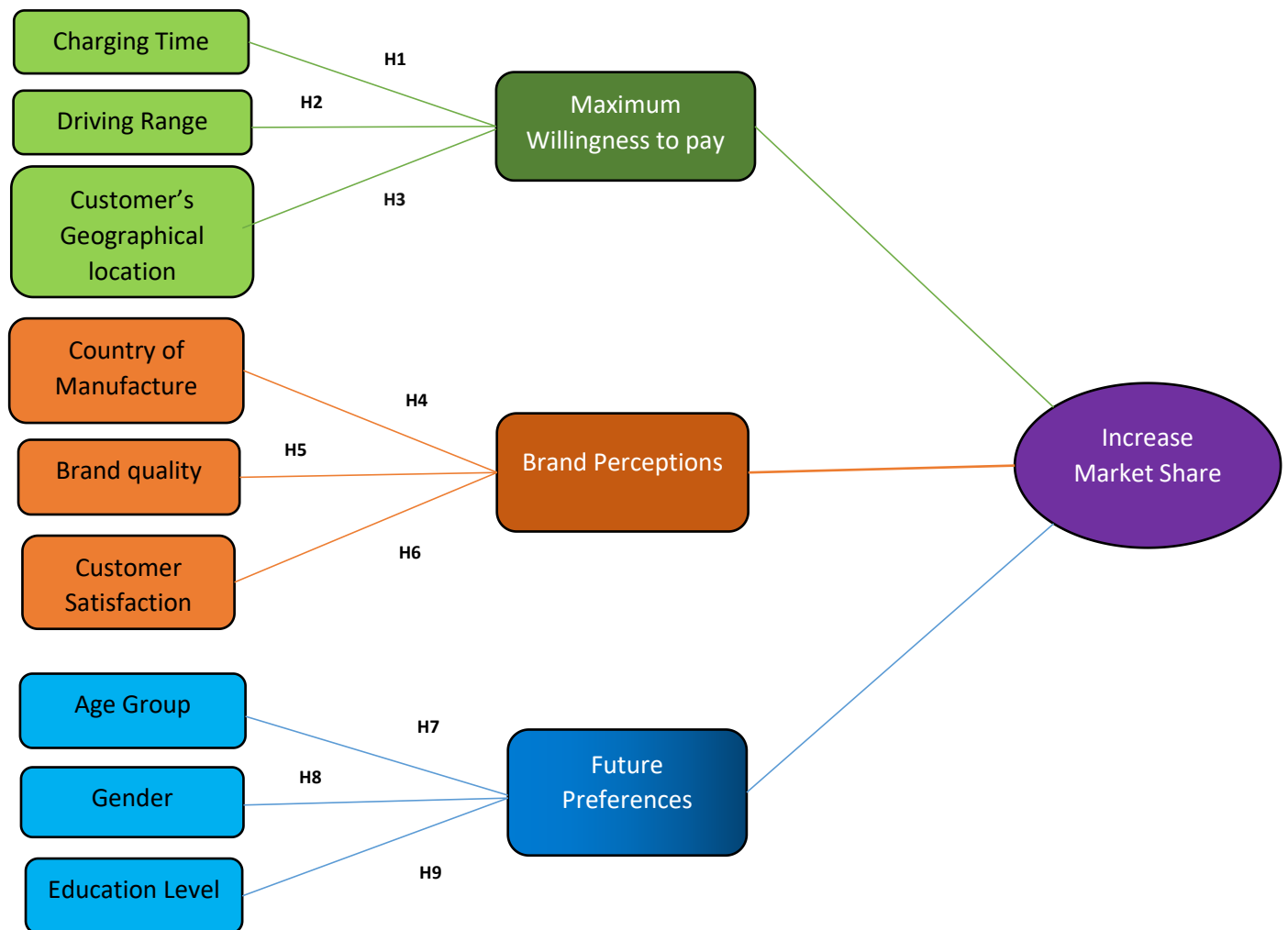
Another study found that car brand perceptions is influenced by both brand quality and customer satisfaction. When customers have certain expectations for a car's features and performance, consistent delivery of those expectations and high-quality products can lead to positive brand perceptions (Janoskova et al., 2021). In addition, Janoskova et al. noted that satisfied customers are more likely to view a brand as reliable and trustworthy, further enhancing their positive perception of the brand.

In a study conducted to examine the influence of socio-demographic and vehicle characteristics on vehicle preferences over a nine-year period, results showed that younger people and highly educated men tend to prefer Battery EVs, while highly educated women tend to prefer Hybrid EVs (Cirillo et al., 2017). Cirillo et al. also indicated that young people value environmental concerns and see Battery EVs as a more eco-friendly choice, highly educated women may prefer Hybrid EVs for their efficiency and performance, while highly educated men may prioritize innovation and technology, perceiving Battery EVs as the most technologically advanced car.

4.2 Research Questions

1. Does charging time affect maximum willingness to pay?
2. How does driving range affect maximum willingness to pay?
3. Does customer's geographical location affect their maximum willingness to pay?
4. Does country of manufacture have an impact on brand perceptions?
5. Does brand quality affect brand perceptions?
6. Does customer satisfaction affect brand perceptions?
7. Does age group have an impact on future preferences?
8. What impact does gender have on future preferences?
9. How does education level have an impact on future preference?

4.3 Analytical Model



4.4 Hypothesis

H1: Charging Time has significant impact on maximum willingness to pay

H2: Driving range has a negative relationship with maximum willingness to pay

H3: Customer's geographical location has significant impact on maximum willingness to pay

H4: Country of manufacture has an impact on brand perceptions

H5: Brand quality has an impact on brand perceptions

H6: Customer satisfaction has an impact on brand perceptions

H7: Age group has significant impact on future preferences

H8: Gender has significant impact on future preferences

H9: Education level has a positive relationship with future preferences

5.0 Research Design

Exploratory research would be carried out to understand the market context and to gain insights into factors affecting the dependent variables (maximum willingness to pay, brand perceptions and future consumer preferences) in the analytical model and hypotheses can be made.

This study will make use of both descriptive and causal researches under conclusive research. Causal research will aid to examine hypotheses and determine relationships between variables in the analytical model. Descriptive research will use a multiple cross-sectional design as data needs to be collected from both Tesla customers and competitor customers and information will be gathered only once from each sample using a questionnaire.

5.1 Using customer data provided by Tesla

Customer database and operational data from Tesla will be used to understand the market and it will act as a sampling frame for current Tesla customers. Moreover, with the use of operational data, machine learning models can be developed to understand consumer buying patterns and how it has changed over the years. This can be helpful in understanding future preferences and evolving trends in customer appetite as well. This data can be used to be compared with the primary data that is going to be collected for this research to check for the accuracy of results.

5.2 Data gathering techniques

Surveys will be used for fieldwork in this study since they are relatively easy to administer.

Since Tesla has customers worldwide and wants to collect information from them, online surveys will be most suitable and it is unrealistic to conduct personal, telephone or postal surveys due to consumers being in different time-zones and geographical locations.

Web surveys can be used to survey both Tesla customers and non-Tesla customers. Through this survey, a questionnaire will be sent out to our target sample and members can respond to it through internet. Skip patterns can be programmed in the survey to skip certain questions based on answers provided for previous questions, making the survey more efficient and convenient for participants.

To invite Tesla customers to participate in the survey, mails with personalised online survey link can be sent to them since we can get their e-mail addresses from existing customer database. To survey non-Tesla customers, Tesla can focus on social media advertisements which when clicked, will redirect them to the Tesla official website where they can answer the survey. By this method, non-Tesla customers can also view the product portfolio and background of Tesla from the website which may certainly be a way of attracting them to buy products from Tesla in the future. The response rates for the web surveys can be increased by highlighting the fact that “discount vouchers are for everyone who responds” in the mails and advertisements.

6.0 Sampling Design

6.1 Target population

Target audience for Tesla are individuals worldwide interested in purchasing EVs with a focus on those between the ages of 20 and 50 years old as of 2023. Within the target market, Tesla's customers and its competitors' customers are not mutually exclusive. Therefore for research purposes, the target market will be split into loyal Tesla EV customers and rest as non-Tesla customers. In ten years time, the age group we are interested currently will become 30-60 years old and we aim to focus on the preferences of this age group in the present and how it will vary across the span of ten years, to understand where to direct the R and D effectively.

6.2 Sampling Frame

Sampling frame should include EV consumers worldwide to access the need for EVs and thus the demand for Tesla.

Tesla Customers

Sampling frame will be Tesla's customer database that is provided by the client. The database can be categorized based on individuals between 20-50 years old.

Non-Tesla Customers

Non-Tesla customers will be chosen from public records such as motor vehicle registrations and also by contacting competitors to get customer lists. This record will include individuals who have purchased from competitors in a given time-frame and our sampling frame for non-Tesla customers who are individuals between 20-50 years old can be obtained by filtering this list.

6.3 Sampling Technique

A suitable technique to cover both **Tesla's customers** and **non-Tesla customers** would be a probability sampling technique and hence stratified sampling is chosen in this research. This method involves dividing the target population into stratas based on age range, geographic location and whether they are Tesla customers or not. Simple random sampling is then used to identify a set number of elements from each stratum. This will allow the company to analyse consumers with different characteristics and hence samples will be representative of the entire population. Stratified sampling is most suitable when compared with other probability sampling techniques since it is a flexible sampling method that can be customized to the specific research questions and characteristics of the population being studied. This technique is preferred over a non-probability sampling technique as statistical inferences are crucial for conclusive research.

6.4 Sample size

A sample size of at least 5000 Tesla customers is required and since this is a problem identification research, the recommended sample size for non-Tesla customers will be 1,000-2,500 hence sample size of 2400 will be taken for non-Tesla customers (Malhotra et al., 2017).

Not everyone in the customer database and motor registrations database would be the final consumer of Tesla products and competitor products respectively ,because for example, cars maybe gifted by parents to their children who are in college and hence we will not be able to get information from the final consumers, therefore the sample sizes have to be adjusted based on incidence rates. A study based on online surveys found that “the average response rate for online surveys was 44.1%” (Wu et al., 2022).

Assuming an incidence rate of 80% each for both target samples,the sample sizes are given below,

Target sample	Sample size
<i>Tesla Customers</i>	$5000 * (100/44.1) * (100/80) = \mathbf{14,172}$
<i>Non-Tesla Customers</i>	$2500 * (100/44.1) * (100/80) = \mathbf{7,086}$

7.0 Data Analysis

ANOVA can be used to understand how driving range, charging time and customer’s geographical location varies with customer’s maximum willingness to pay for EVs, and also to determine how consumer’s future preferences vary with their age, education level and gender.

Since brand perceptions, brand quality, customer satisfaction and country of manufacture are categorical variables, we can use **cross tabulations** to identify if there is any relationship between brand perceptions and rest of these variables. If any relationship is found, strength of the relationship can be found by the contingency coefficient statistic.

Factor analysis can be used to identify what features of existing products of both Tesla and competitors, and evolving products will be of interest to customers in the future. We can also understand if there are underlying salient factors driving the observed consumer’s characteristics ,hence evolving trends in consumer appetite can be identified.

8.0 Research Findings

- We aim to determine the optimum driving range and charging time that will maximize consumer's WTP. This information will help Tesla in setting prices for their EVs.
- We aim to identify any underlying factors driving consumer behaviour in terms of future consumer appetite. The data gathered on these factors will help to develop Tesla's marketing strategies that focus on these preferences and attract consumers based on that.
- We aim to identify which brand has a higher ranking in terms of brand perceptions. If Tesla seems to be leading, then we can assure that Tesla is on track whereas if it seems to be non-leading, then it should focus more on the factors that give low frequencies in the cross-tab.

9.0 Constraints and Limitations

Tesla has a large budget but has a time constraint of 6 months to perform the market research. This time limit imposed limits the available survey methods and therefore impacts the quality of insights that can be obtained. Although face-to-face surveys are the most suitable approach for collecting accurate responses from individuals, it is not practical to conduct them, given the global scale data collection and limited time-frame.

10.0 Proposed further research

- Tesla's customer base is not specific to 20-50 year olds and hence similar research designs can be extended to analyze the preferences of potential customers regardless of age.
- The framework for brand perceptions for EVs lacks a category for emotions or hedonic category. Further studies can investigate the role of emotions and motivations in consumer perceptions of EV brands.
- In order to evaluate this research's effectiveness, further research can be conducted to examine the demand for Tesla products and whether Tesla has become more dominant.

11.0 Questionnaire

11.1 Tesla customer's questionnaire

Tesla Customer Feedback Survey: Share your Experience and Help Us Improve!

This survey seeks to identify factors that can help Tesla improve its relationship with its customers and fulfil their needs and wants more accurately. By completing this survey, you will get a £50 worth gift voucher from Tesla and note that you can fill this survey only once. Your time and effort invested in participating is highly appreciated, while your responses will remain anonymous.

Estimated time to complete the questionnaire: 15 minutes

This questionnaire is split into 4 parts,

Part 1 : Willingness to Pay

Part 2 : Brand Perceptions

Part 3 : Consumer Preferences

Part 4 : Demographics

Part 1: Willingness to Pay

1) When purchasing a Tesla EV, to what extent would driving range and charging time affect your purchasing decision?

Not very important - 1

Not important - 2

Neutral - 3

Important - 4

Very Important - 5

	1	2	3	4	5
Driving range	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Charging time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2) If you are to buy a Tesla EV in the future, what is your maximum willingness to pay for this decision?

- | | |
|---|---|
| <input type="checkbox"/> 0 - 2,500 pounds | <input type="checkbox"/> 30,000 - 60,000 pounds |
| <input type="checkbox"/> 2,500 - 7,500 pounds | <input type="checkbox"/> above £60,000 |
| <input type="checkbox"/> 7,500 - 15,000 pounds | |
| <input type="checkbox"/> 15,000 - 30,000 pounds | |

Part 2: Brand Perceptions

3) In the table below indicate your preference by ticking the 5 -pointer scale below,

		Definitely Agree	Agree	Neither	Disagree	Definitely Disagree
i)	I have positive perceptions about cars manufactured in countries with high quality manufacturing facilities.					
ii)	I am extremely satisfied with the after sales customer service that Tesla offers.					
iii)	I have positive perceptions about the brand "Tesla".					
iv)	Tesla does not offer high quality products.					
v)	I would recommend Tesla to my family and colleagues.					
vi)	I am not satisfied with Tesla products at all.					
vii)	I'm willing to purchase from Tesla in the future.					
viii)	I have better perceptions for Tesla than for other brands.					

Part 3: Consumer Preferences

4) What was your main reason for buying a Tesla product?

- ☐ Design
- ☐ Performance
- ☐ Safety
- ☐ Environmental concerns
- ☐ Other (please specify)

5) Did you buy Tesla EVs for personal use /gifting someone?

- ☐ Personal Use
- ☐ Gifting
- ☐ Both

6) Have you purchased a Tesla product in the last six months ?

- ☐ Yes
- ☐ No

7) Rate the following features depending on how important they are to you in an EV?

(from most preferred to least preferred in order)

Technology	1
Safety	2
Charging Time	3
Driving range	4
Performance	5

8) Which of the following Tesla EVs do you prefer the most? (You can select multiple options)

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

9) What products should Tesla focus more on and add to their product portfolio in the future?

- ☐ Battery EV
- ☐ Hybrid EV
- ☐ Plug in Hybrid EV
- ☐ Fuel cell EV
- ☐ Electric bikes
- ☐ Electric sports car
- ☐ Other (please specify)

Part 4: Demographics

10) Which of the following best represents your age?

- ☐ Less than 20 years
- ☐ 21-30 years
- ☐ 31-40 years
- ☐ 41-50 years
- ☐ 51 years or over

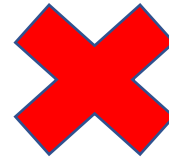
11) Please select your gender below:



☐ Male



☐ Female



☐ Prefer not to say

12) Country of residence:

13) Education Level:

- ☐ High school student or less
- ☐ High school graduate
- ☐ College student
- ☐ College graduate or higher

Thankyou for your time!



Complete and Submit

11.2 Non-Tesla customer's questionnaire

Non-Tesla Electric Car Ownership Survey: Share Your Experience and Help Us Improve!

This survey seeks to identify factors that can help Tesla to identify the needs and wants of potential customers more accurately. By completing this survey, you will get a £50 worth gift voucher from Tesla and note that you can fill this survey only once. Your time and effort invested in participating is highly appreciated, while your responses will remain anonymous.

Estimated time to complete the questionnaire: 15 minutes

This questionnaire is split into 4 parts,

Part 1 : Willingness to Pay

Part 2 : Brand Perceptions

Part 3 : Consumer Preferences

Part 4 : Demographics

Part 1: Willingness to Pay

1) When purchasing an EV, to what extent would driving range and charging time affect your purchasing decision?

Not very important - 1

Not important - 2

Neutral - 3

Important - 4

Very Important - 5

	1	2	3	4	5
Driving range	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Charging time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2) If you are to buy an EV in the future, what is your maximum willingness to pay for the decision?

- | | |
|---|---|
| <input type="checkbox"/> 0 - 2,500 pounds | <input type="checkbox"/> 30,000 - 60,000 pounds |
| <input type="checkbox"/> 2,500 - 7,500 pounds | <input type="checkbox"/> above £60,000 |
| <input type="checkbox"/> 7,500 - 15,000 pounds | |
| <input type="checkbox"/> 15,000 - 30,000 pounds | |

Part 2: Brand Perceptions

3) Rank the below brands according to the perceptions that you have for each brand by placing a tick appropriately.

Note: You can place only a tick in each row

	1	2	3	4	5
BYD					
Ford					
Tesla					
Hyundai					
Nissan					

4) Why haven't you purchased products from Tesla?

Note: You can select more than one option

- ☐ Tesla does not produce high quality products
- ☐ Tesla's country of manufacture has poor manufacturing facilities
- ☐ Found better affordable EVs from other brands
- ☐ Haven't heard much of Tesla through advertisements
- ☐ Satisfied with current brand
- ☐ Other (Please specify)

5) How satisfied are you with your current EV brand?

Extremely
unsatisfied



Unsatisfied



Neutral



Satisfied



Extremely
satisfied



Part 3: Consumer Preferences

6) What was your main reason for buying a product from Tesla's competitor?

- ☐ Design
- ☐ Performance
- ☐ Safety
- ☐ Environmental concerns
- ☐ Other (please specify)

7) Did you buy EVs for personal use /gifting someone?

- ☐ Personal use
- ☐ Gifting
- ☐ Both

8) Which of the following Tesla EVs do you prefer the most to have in future? (You can select multiple options)

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

9) Rate the following features depending on how important they are to you in an EV?

Technology	1
Safety	2
Charging Time	3
Driving range	4
Performance	5

10) Which of the following EV types do you see yourself having in the future?

- ☐ Battery EV
- ☐ Hybrid EV
- ☐ Plug in Hybrid EV
- ☐ Fuel cell EV
- ☐ Electric bikes
- ☐ Electric sports car
- ☐ Other (please specify)

Part 4: Demographics

11) Which of the following best represents your age?

- ☐ Less than 20 years
- ☐ 21-30 years
- ☐ 31-40 years
- ☐ 41-50 years
- ☐ 51 years or over

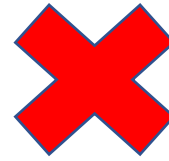
12) Please select your gender below:



☐ Male



☐ Female



☐ Prefer not to say

13) Country of residence:

14) Education Level:

- ☐ High school student or less
- ☐ High school graduate
- ☐ College student
- ☐ College graduate or higher

Thankyou for your time!!!

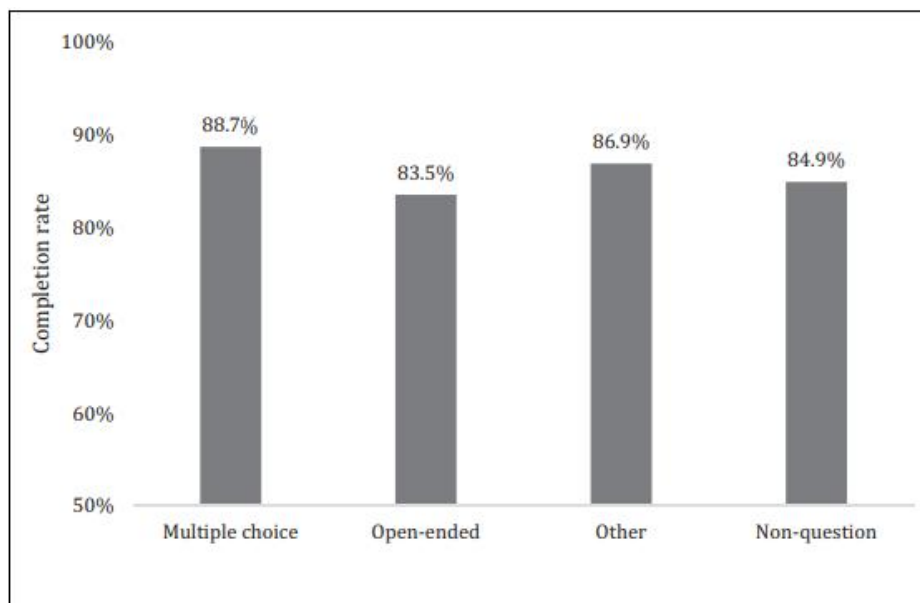


Complete and Submit

12.0 Appendix

12.1 Questionnaire layout

In a research conducted on identifying the key aspects of the questionnaire that affects the completion rate of online web surveys, it was found that completion rate of web surveys was highest for multiple choice questions and also identified that longer surveys had a negative relationship with the rate of completion (Liu & Wronski, 2017).



Source: (Liu & Wronski, 2017)

Hence to improve the completion rates for our web surveys, the questionnaire for our study is structured such that it has more multiple choice questions than other question types. There are 2 different questionnaires created for Tesla customers and Non-Tesla customers respectively since including all questions in a single questionnaire will most likely reduce the completion rate ,as seen from the previous study.

In the question regarding the maximum WTP, the units of cost given in the choices can be programmed to be automatically changed to the respondent's unit of national currency based on the location from which the individual is responding the survey.

Demographic questions are asked at the end since they include sensitive questions such as age and gender. Placing them at the end will increase the completion rate to some extent since once respondents have completed the previous questions, they wouldn't feel to give up by not completing the entire questionnaire.

The questionnaire can be made more attractive by giving attractive backgrounds in the website where the survey is going to be filled by the respondents. The web survey can be programmed in such a way that it gives Tesla questionnaire to Tesla customers and Non-Tesla questionnaire to the competitor customers.

Pilot tests were carried out to check the effectiveness of the questionnaire(in-person surveys and not online surveys).

12.2 Questionnaire Findings

General findings in both Tesla and non-Tesla customer's Questionnaire

- The extent to which driving range and charging time affects consumers' purchasing decision of EVs is and how this affects their maximum willingness to pay are found. This will help in finding an ideal price range to place the Tesla EVs.
- It is identified whether customers have bought EVs for personal use or for gifting someone or for both in the past to filter our consumers based on ones who have bought for personal use since they are the final consumers of Tesla and competitors.
- The most preferred Tesla EVs that consumers prefer to own in the future is found and using this, we can understand the Tesla model that is doing well in terms of attracting consumers.
- Future EV type preferences and ranking of features in an EV are identified which can help Tesla to identify which feature of EVs that they should focus more in the future.
- Demographic features are used to understand the consumer profile and used as factors for understanding dependent variables in the analytical model.

Unique Findings from Tesla customer Questionnaire

- The extent to which brand quality, country of manufacture and customer satisfaction have an effect on the brand perceptions is found using a multi-item scale. This will help in understanding how well Tesla is perceived as a brand in terms of their brand quality, manufacturing country and ability to satisfy customers.
- The features of Tesla EVs that made customers buy Tesla EVs are obtained. This will help to understand what Tesla EV features are satisfying the customers and determines what features, the customers like the most in Tesla EVs.

Unique Findings from non-Tesla Questionnaire

- The ranking of Tesla and competitors in terms of brand perceptions will be found only in the non-Tesla questionnaire assuming that Tesla customers are loyal and prefer Tesla the most. This will help to understand how well Tesla as a brand is doing in attracting consumers when compared to its competitors.
- Reasons as to why they haven't purchased from Tesla and have purchased from competitors will be identified. Frequencies of responses can be found using cross-tabs and the most significant reasons (most frequent) can be used to develop Tesla products and services.

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