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Market and Sales Potential of Electric Cars among the College Going Omani Youth with Special Reference to Tesla

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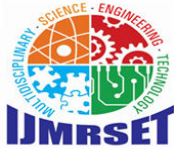
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ABSTRACT: This study investigates the market potential and sales prospects of electric cars among the college-going Omani youth with a specific emphasis on Tesla. It aims to understand the factors influencing their preferences, attitudes, and behaviors towards electric vehicles, contributing valuable insights to stakeholders in the automotive industry, policymakers, and marketers. With the global shift towards sustainable transportation, the adoption of electric vehicles has gained momentum. However, understanding the preferences and motivations of specific demographics, such as college-going Omani youth, is crucial for specific marketing strategies and product development. A mixed method was used combining primary data collected through field surveys, interviews, and schedules with secondary data from industry reports and scholarly papers. Ethical considerations were paramount ensuring participant-confidentiality with informed consent. Convenient sampling method was adopted drawing samples from college-going Omani youth. Market potential analysis identifies the key drivers and barriers to adoption, including infrastructure development, government incentives, and different consumer perceptions. Sales potential assessment delves into the likelihood of conversion of interest into actual purchase among college-going Omani youth. Factors such as brand perception, product features, pricing strategies, and after-sales services were critical in influencing purchase decisions. Understanding the different perspectives of consumer behavior and decision-making processes is essential for developing targeted marketing campaigns and enhancing the overall customer experience. Conclusions drawn from the study emphasize collaborative endeavors among the government, car manufacturers and customers. It emphasizes the significance of marketing techniques and collaborative efforts to have an integrated communication strategy prompting the way for a sustainable transportation system.

KEYWORDS: Market potential, sales potential, electric cars, college-going Omani youth

I. INTRODUCTION

A sustainable green economy is one of the compelling commitments evidently manifested in the Oman Vision 2040. Generating and promoting green products is one of the main ways to attain a green economy (Pawlewicz & Cieślak, 2024). Overwhelming dependence on fossil fuel of automobiles caused climate emergency (Piri et al., 2024). Such ever-increasing fuel use, particularly among youth, added to the gravity of the issue (Tran et al., 2024). Wu et al. (2023) state that the surge in fuel use comes almost in an electrifying rise in carbon emissions causing ozone damage. Garus et



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al. (2024) state that pooling transportation resources, manufacturing and using eco-friendly vehicles are one of the ways it could be controlled. The increasing number of automobiles, especially passenger cars, poses a direct threat to environment in terms of its carbon emission (Prycinski et al., 2024). It lays the reason for promoting an alternate transport mechanism that is environmentally friendly.

Industry profile of electric cars

The global market for electric cars is dominated by China with 50 percent of its market share followed by the United States of America and Japan with 17 percent and nine percent respectively.

Market share of electric cars: a global scenario

No.	Country	Market share %
1	China	50
2	United States of America	17
3	Japan	9
4	Norway	8
5	Germany	7
6	France	4
7	Canada	2
8	South Korea	2
9	Others	1
10	Total	100

Source: Canalys. (2024, January 8). Canalys Newsroom - Global EV market forecasted to reach 17.5 million units with solid growth of 27% in 2024 - <https://www.canalys.com/newsroom/global-ev-market-2024>

The profile of the electric car market of the GCC shows that Kuwait leads with 66.5 percent share of electric cars of its total car market followed by Bahrain (49.2 percent) and Qatar and Oman (31.4 percent each).

No.	Country	Market share%
1	Kuwait	66.5
2	Bahrain	49.2
3	UAE	31.1
4	Qatar	31.4
5	Oman	31.4
6	Saudi Arabia	17.4

The market size of electric cars in GCC is expected to touch USD 4.36 billion by 2024-2025 and USD 10.42 billion by 2029. The major players in the segment of electric cars in GCC are Toyota, Nissan, Hyundai Motor Company, Tesla and Volkswagen. The market leaders of electric cars in the USA and China are Tesla and BYD respectively.



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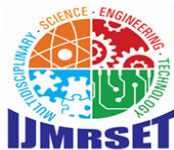
Model	Country	Electric vehicles sold
Tesla model Y	USA	772,364
Tesla model 3	USA	364,403
BYD Atto3/Yuan Plus	China	265,688
BYD Dolphin	China	222,825
GAC Aion S	China	160,693

The market leaders of electric cars (models) in the GCC countries are Ceer in Saudi Arabia, Tesla in the UAE, Volkswagen in Qatar, Mays in Oman, Renault in Kuwait and Hyundai in Bahrain. Market leaders vary from country to country.

Country	Model
Saudi Arabia	Ceer
UAE	Tesla
Qatar	Volkswagen
Oman	Mays
Kuwait	Renault
Bahrain	Hyundai

The major electric car brands that are marketed in the local market of Oman are Mays, Renault, Tesla, Chevrolet, BMW, Hyundai, Nissan, Ford and Porsche.

NO	Model:
1	Mays
2	Renault
3	Tesla
4	Chevrolet
5	BMW
6	Hyundai
7	Nissan
8	Ford



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II. NEED OF THE RESEARCH

Need of the research could be perceived from three different perspectives; they are societal, customer (market), and business (industry). The societal point of view with reference to the need for the research is that the products that are marketed should be environmentally friendly. The perspective of the market (customer) is that the ultimate beneficiaries of the product should be satisfied, and the third viewpoint is that the business (industry) should have better and quicker returns on the investment made. Therefore, the need of the hour is that a product that is marketed should meet these expectations. Since the market is overwhelmed with automobiles running on fossil fuel, especially passenger cars, those vehicles may be replaced with environmentally friendly substitutes that are customer and profit oriented. Therefore, in this context, there is a need to understand the interest, willingness, and ability of the market to buy electric cars.

III. PROBLEM STATEMENT

Global warming or climate change is one of the major negative consequences of anti-environment business practices. These are man-made disasters and may be solved only by the corrective plans and its imminent implementation. It's high time that the involved and responsible stakeholders had to seriously plan and execute innovative ideas and its commercialization to mitigate the worse consequences of global warming. Electric cars, its marketing and use are inevitable that supplement the overall effort in this regard. Being the ultimate buying decision maker, the customers should have potential enough to buy electric cars since there are various factors that are involved in its process. Pricing is one of such major factors both the marketers and customers are concerned about. Since electric cars are in the inception stage of its life cycle, it may take more time for technological maturity that may bring the cost and price down making it more affordable for customers to buy and marketable for manufacturers. To align with the Oman Vision 2040 in this regard requires understanding and knowledge of Omani market with regard to its interest, willingness and ability to buy/afford electric cars.

Research questions and objectives

The research questions revolve around the three basic components of market potential i.e. interest to buy, willingness to buy and ability to buy with reference to buying electric cars. The research objectives are laid down deriving it from the research questions. To find out the interest, willingness and ability of Omani youth to buy electric cars in general and Tesla in particular were the study objectives.

Scope of the study

The study is conducted in the city of Muscat among the college going Omani youth ranging from 17 to 35 years of age during the period from February 2024 to April 2024.

IV. LITERATURE REVIEW

Wang et al. (2024) state that there is a growing tendency among the Chinese population to substitute vehicles using conventional fuels with electric vehicles (EV). The authors further state that this substitution brings in eco-friendliness and consequently a better environment to live in. Parczewski and Wnek (2024) state that boom in the popularity of EVs across the globe and the reported restrictions with regard to registration of combustion engine vehicles are the positive indicators for a possible transition from the era of fossil-fueled transportation to electric-powered vehicles. Frieske et al. (2024) found that, in the context of German markets, electric vehicles started dominating the roads over conventional vehicles with the support of government through its pro-EV policies.

Steinbach and Blaschke (2024) state that the financial viability of buying an EV is paramount when it comes to selling it to the middle-class segment and even the rural customers who may fall in the category of low-income group. It is further noted that the customers or the potential buyers don't have the clarity of its maintenance and re-charging cost, driving comfort, mileage efficiency and resale value. Patil et al. (2024) state that, in alignment with Parczewski and



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Wnek (2024), supportive government policies on EVs and the economic incentives or subsidies given by governments may further boost the market demand, production and sale. Nair et al. (2024) also support the argument of Patil et al. (2024) that such positive approaches of governments may have a highly influential impact on the market growth of EVs. Moreover, favorable government policies on EVs positively influence consumer behavior towards owning electric vehicles (Limpasirisuwan et al., 2024).

Li et al. (2023) state that there may be an adverse scenario of availability of EV charging facilities when and where those are needed and hike in the cost and price of EVs and its spare parts. Reddy et al. (2024), in their study, state that biofuels may be an effective alternative to electric vehicles. If it becomes a possible competitor to electric vehicles, the price of electric vehicles may further diminish.

V. RESEARCH METHODOLOGY

Descriptive research design was used to conduct the study on market and sales potential of electric cars among the college going Omani youth with special reference to Tesla. Primary and secondary sources were used for collecting the required data. Primary data were collected from the target respondents of 189 college-going Omani youth using convenience sampling method. 189 duly filled-in questionnaires were collected out of a total of 250 questionnaires electronically distributed. The secondary data sources were journals, magazines, books and electronic links. A structured questionnaire bifurcating it into personal and study profiles with a five-point Likert scale was used to collect the primary data from the target population and the questionnaire was based on the objectives of the study to find out the interest, willingness, and ability to buy electric cars with special reference to Tesla. On the ethical line, privacy and confidentiality of the data collected were strictly maintained with an ethical note that the data collected would be used only for the study purpose. The research was carried out from the month of February 2024 to May 2024. Tables, graphs and figures were used to present the data and frequencies and percentages were used to analyze the data. The study got certain limitations and those were lack of pertinent data as the study was rare in the region, partisan responses and, obviously, lack of sufficient time to do a broader study that was necessary to get more accurate picture on the study-outcome.

Expected contributions

The anticipated contributions of the study have bifurcated implications i.e. especially on the policy makers and the industry of electric car manufacturers and its marketers. The policy makers get inputs and insights on the market potential and sales potential of electric vehicles in Oman in general and in Muscat in particular. The data, its analysis and findings rationalize its expected contributions to the market, industry (business policies) and the government (public policies). In particular, the industry (business policy makers) gets market information in the form of market potential (interest, willingness and ability) to buy their product (electric cars) and that (information) could be utilized in formulating their policies and strategies to invent, innovate and commercialize (eco-friendly) electric cars. On the other side, government (public policy makers) also get suitable inputs and insights to formulate public policies regarding eco-friendly electric cars to substitute the traditional cars on roads.

Data analysis

The primary data on market and sales potential of electric cars among the college going Omani youth with special reference to Tesla were collected and analyzed using the measures of frequency of descriptive statistics that showed the rate of data occurrence contextually how often it occurred. The analysis, which was dichotomized into personal and technical profiles, where personal profile comprised the data of descriptive statistics of gender, age, education and income and the technical profile comprised qualitative data of market and sales potential of electric cars among the college going Omani youth with special reference to Tesla.



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Gender Profile

Gender	No. of Respondents	% of Respondents
Male	82	43
Female	107	57
Total	189	100

Age Profile

Age (Years)	No. of Respondents	% of Respondents
17-22	104	55
23-28	66	35
28-34	19	10
total	189	100

Education profile

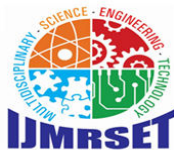
Education Profile

Education	No. of Respondents	% of Respondents
Diploma	63	27
Bachelors	126	67
Total	189	100

Income

Family income	No. of Respondents	% of Respondents
More than 1000	97	51
500-1000	64	34
Less than 500	28	15
Total	189	100

Market potential of electric cars in the target market (college-going Omani youth) of the city of Muscat



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Market potential of electric cars in Muscat city was evaluated considering the three components of market potential that are interest of the target market to buy electric cars, willingness to buy and ability (financial) to buy electric cars. Responses were taken in all the three aspects of market potential.

Interest of the college-going Omani youth to buy electric cars

The data given below show the rate of interest among the college going Omani youth to buy electric cars. About 46 percent of the college going Omani youth agree (32 percent agree and 14 percent strongly agree) that they are interested to buy electric cars. While 22 percent neither agree nor disagree to the statement, 32 percent disagreed to the statement that they are not interested to buy electric cars.

Interest to buy electric cars

Response	No. of Respondents	% of Respondents
Strongly Agree	26	14
Agree	61	32
Nether Agree or Disagree	41	22
Disagree	35	18
Strongly Disagree	26	14
Total	189	100

Willingness of the college-going Omani youth to buy electric cars

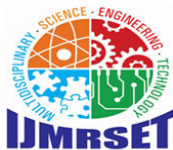
The analysis given below shows the willingness of the college-going Omani youth to buy electric cars. 40 percent of the college-going Omani youth agree (30 percent agree and 10 percent strongly agree) that they are willing to buy electric cars. While 38 percent of the college-going Omani youth disagree that they are willing to buy electric cars, 22 percent stood neutral.

Willing to buy electric cars

Response	No. of Respondents	% of Respondents
Strongly Agree	18	10
Agree	57	30
Nether Agree or Disagree	42	22
Disagree	39	21
Strongly Disagree	33	17
Total	189	100

Ability of the college-going Omani youth to buy electric cars

Ability of the college-going Omani youth to buy electric cars was the third component of market potential which literally meant money-power of the youth to buy an electric car. If somebody has just money but no interest, no willingness, the particular person doesn't turn to be a potential buyer. So market potential is all the three-in-one condition. The analysis given below shows that 33 percent of the total Omani youth agree the fact that they are able to buy an electric car. But 39 percent disagree to it and 28 stood neutral.



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Ability to buy electric cars

Response	No. of Respondents	% of Respondents
Strongly Agree	16	8
Agree	47	25
Nether Agree or Disagree	52	28
Disagree	44	23
Strongly Disagree	30	16
Total	189	100

Sales potential of Tesla electric cars in the target market (college-going Omani youth) of the city of Muscat

Sales potential of Tesla electric cars in the target market (college-going Omani youth) of the city of Muscat was evaluated considering the three popular components of sales potential that are interest of the target market to buy Tesla electric cars, willingness and ability (financial) to buy Tesla electric cars. Responses were taken in all the three aspects of sales potential.

Interest of the college-going Omani youth to buy Tesla electric cars

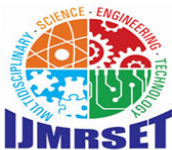
The analysis given below is about the sales potential of the college going Omani youth in buying Tesla electric cars. The analysis shows that 44 percent of the total respondents agree (33 percent agree and 11 percent strongly agree), 34 percent disagree (19 percent disagree and 15 percent strongly disagree) and 22 percent neither agree nor disagree the fact that they are interested to buy Tesla electric cars.

Interest to buy Tesla electric cars

Response	No. of Respondents	% of Respondents
Strongly Agree	21	11
Agree	62	33
Nether Agree or Disagree	42	22
Disagree	36	19
Strongly Disagree	28	15
Total	189	100

Willingness of the college-going Omani youth to buy Tesla electric cars

The data given below are about the willingness of the college going Omani youth to buy Tesla electric cars. The study shows that 33 percent of the total respondents agree (23 percent agree and 10 percent strongly agree), 35 percent disagree (21 percent disagree and 14 percent strongly disagree) and 32 percent neither agree nor disagree the fact that they are willing to buy Tesla electric cars.



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Willingness to buy Tesla electric cars

Response	No. of Respondents	% of Respondents
Strongly Agree	19	10
Agree	43	23
Nether Agree or Disagree	60	32
Disagree	40	21
Strongly Disagree	27	14
Total	189	100

Ability of the college-going Omani youth to buy Tesla electric cars

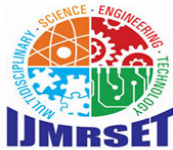
The analysis given below is about the ability of the college going Omani youth to buy Tesla electric cars. The data show that 31 percent of the total respondents agree (21 percent agree and 10 percent strongly agree), 38 percent disagree (23 percent disagree and 15 percent strongly disagree) and 32 percent neither agree nor disagree the fact that they are able to buy Tesla electric cars.

Ability to buy Tesla electric cars

Response	No. of Respondents	% of Respondents
Strongly Agree	19	10
Agree	40	21
Nether Agree or Disagree	58	32
Disagree	44	23
Strongly Disagree	28	15
Total	189	100

VI. FINDINGS

The data analysis on the dynamics of electric car market, with an emphasis on its market and sales potential, among the college going Omani youth with special reference to Tesla serves an empirical evidence on the potential of the target market in terms of generic demand for electric cars and of Tesla in particular in terms of its sales possibilities. According to the study, there is a rising trend towards electric vehicles (EVs) among the youth due to increased environmental consciousness and technology improvements in cars to address the environmental threats. Important results show that people choose EVs with cutting-edge technologies and stylish designs, which is in line with international trends in sustainable transportation. The development of charging infrastructure, financial incentives from the government, and the popularity of Tesla vehicles all have a big impact on Oman's adoption rate of electric vehicles. In order to hasten the adoption of EVs, proposals emphasize the need of ongoing innovation, affordability, and awareness efforts. The help of foundation advancement and supporting enactment by policymakers is fundamental for a smooth move to maintainable transportation. In arrange to oblige the changing prerequisites and inclinations of Omani youth and move closer to a cleaner and more proficient future, partners may work together to address these issues and make a transportation environment that's greener and more feasible. Comprehensive investigation has yielded significant findings about the patterns of electric car adoption among Omani youngsters. These insights are practical tactics meant to accelerate the expansion of this new market niche, not only observations. Our recommendations are based on a thorough study of the psychological and technological developments that affect consumers' decisions to embrace electric vehicles (EVs).



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Support an all-encompassing strategy that takes into account a number of factors while taking into account the particular goals and worries of our intended audience. This strategy aims to encourage the college-going Omani youth to have a broad interest in and acceptance of electric cars. Our plan takes into account pragmatic issues like improving the accessibility of charging infrastructure and guaranteeing cost, which are significant variables that have an immediate influence on EV adoption rates. Furthermore, it should be understood that emotional appeal and environmental awareness influence customer preferences, particularly in the younger market. As a result, another suggestion goes beyond the basic functionality to include components that align with the ideals and worldviews of younger customers. hope to provide an engaging story that inspires people to choose environmentally friendly modes of transportation by emphasizing the modern technology and advantages of electric vehicles. Ideas also stress the need of customized messaging and focused marketing strategies that are directed towards Omani youth. These programs are designed to be relevant and resonate with the intended audience by taking into account the particular cultural background and preferences that exist in Oman. Essentially, a combination of realistic answers, emotional appeal, and cultural sensitivity in all-encompassing strategy to encourage Omani youngsters are used to embrace electric cars. By putting these suggestions into practice, a positive change is seen in the automobile industry marked by a rise in the use of environmentally friendly vehicles and a greater understanding of environmental responsibility among younger people.

Strong Preference for Electric Cars: The college-going Omani youth have a strong preference for electric cars because of its sophisticated technological appeal and eco-friendliness. **Strong Brand Appeal of Tesla:** According to respondents, Tesla is the most desired brand, indicating the importance of Tesla's reputation and technical innovations in influencing consumer decisions. **Cost-related variables and inspirations:** Whereas the starting costs may be a stress, considering electric vehicles is energized by the long-term investment funds on gasoline and support costs. **Infrastructure Restrictions:** The adoption of electric vehicles is severely hampered by the absence of a widespread infrastructure for charging, underscoring the urgent need to build more charging networks. **Educational Initiatives:** It is evident that there is a need for educational initiatives that raise public knowledge about electric vehicles. These programs have to be scatter far reaching myths almost electric vehicles' positive natural impacts whereas tending to issues like run uneasiness and battery execution issues. **Interest of the college-going Omani youth to buy electric cars:** Majority of the college-going Omani youth are interested to buy electric cars. 46 percent agree (14 percent strongly agree and 32 percent agree) as compared to 32 percent disagree while 22 percent neither agree nor disagree. **Willingness of the college-going Omani youth to buy electric cars:** 40 percent of the college-going Omani youth agree that they are willing to buy electric cars as compared to 38 percent who disagree. **Ability of the college-going Omani youth to buy electric cars:** Contradictory to the positive opinion given to interest and willingness, the youth don't agree that they have the ability to buy electric cars. **Interest of the college-going Omani youth to buy Tesla electric cars:** Majority of the college-going Omani youth (44 percent in total) agree to the fact that they are interested to buy a Tesla electric car. **Willingness of the college-going Omani youth to buy Tesla electric cars:** 33 percent of the college-going Omani youth are willing to buy. **Ability of the college-going Omani youth to buy Tesla electric cars:** 33 percent of the college-going Omani youth are able to buy Tesla cars.

VII. CONCLUSION

The study highlights the substantial market potential among the Omani youth for electric automobiles, indicating a strong desire for eco-friendly mode of mobility. Particularly in the automobile industry, Tesla is a shining example of innovation and environmental consciousness, and it represents the larger trend towards sustainable transportation. This is a fundamental shift in the way customers consider sustainability in their decisions, not just the adoption of new technologies. The confluence of several important elements emphasizes this critical juncture in the automobile sector. First, younger generations are becoming more conscious of environmental issues, which is generating interest in eco-friendlier transportation choices. Second, because of technological advancements like Tesla's creative designs, electric vehicles are now more visually pleasing in addition to being more functional. Last but not the least, customer tastes now place a higher value on sustainability, efficiency, and long-term cost savings.



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