**PROJECT & TEAM INFORMATION**

Project Title

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| ELECTRIC VEHICLES SALES ANALYSIS & RECOMMENDATION |

Team Information

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| *Team Name:*  *Team #* | Data TITANS |
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**PROPOSAL DESCRIPTION**

Motivation

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| India is a country with around 5 Crore Cars & almost 26 Crore Two-Wheelers. And in today’s time when global warming is increasing day by day, all those fossil fuel powered vehicles are only contributing to the increase of global warming.  Seeing this problem many manufacturers have stared introducing electricity powered vehicles in the Indian market.  Now the problem is, people are so used to their Petrol/Diesel, that they hesitate to switch to EVs. People either still consider EVs to be “toys” or have deemed them “too expensive”, because they don’t know much about it. They have range anxiety, they don’t know the cost of owning an EV vehicle, and they don’t know how many people have already started using EVs as their primary vehicles. |

Current Solution

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| Currently, to promote the sales of EV vehicles state governments are giving out subsidiaries to the people who buy EVs.  The NGT (National Green Tribunal) has banned Diesel vehicles in the NCR region and are soon planning to ban old petrol vehicles too, so that people would go for Electric Vehicles.  Manufacturers have also started recognising that Indians typically spend under INR 20 Lakh (at most) when purchasing a car and INR 1.5 Lakh when opting two wheelers, so manufacturers have stared launching EVs that are near this price bracket.  Companies are also providing extended warranties and free charging station so that more and more people would go for EVs. |

Project Goals

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| Our project aims to analyse the sales of Electric Vehicles across Indian States, as it would allow people to find out where EVs are being sold the most. This will further allow users to find out others factors like availability of Charging Stations and Service Centres.  Our project will also provide the users with apt recommendations based on their usage and their location using the data taken from Manufacturers and Other EV users (data like, real Range, running cost, service expenses and availability of fast charging stations).  All this will allow us to create a community that will allow more and more people to easily buy electric vehicles without hesitation. And this would allow us to get more and more data, which will not only help us but also the government and the manufacturers as they can get customer feedback and improve their products. |

Project Approach

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| For making this project, we will be using Power BI primarily. Data will be sourced from sites like Vahan Dashboard, SIAM, Cardekho and EV manufacturer sites, using Excel or CSV files for the data.  We will also import dataset containing EV specifications like range, power output, charging time, etc for using with out recommendation system.  Then using tools like DAX, Power BI Desktop, Slicers and Filters we will display the data to the user, either State wise or from the whole country.  The recommendation system will have a decision tree approach, asking the users a series of questions to give a final verdict. |

System Architecture

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| * **EV Sales Analysis** – Visualizes EV sales data sourced through sales reports using Power BI to identify trends and insights. * **EV Recommendation System** – Decision tree approach that Suggests the most suitable EVs based on user preferences and key factors. |

Project Outcome

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| This project will allow users to view sales of different types of EV vehicles/ all EV vehicles in his/her own state or across the whole country.  It will also allow users to get recommended an EV that will suit their needs and will be to their liking.  This will allow the promotion of EV sales and also provide information to people about EVs that they lacked earlier. |

Assumptions

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References

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| Power BI, DAX, Power Query, SIAM Reports, Vahan Dashboard, Respective company sales reports |