Visualization Tool for Electric Vehicle Charge and Range Analysis

SUDHARSAN COLLEGE OF ARTS & SCIENCE Perumanadu, Pudukkottai

Faculty mentor: M.Arivazhagan, Assistant Professor

Project done by

SANJAY KUMAR R – Team Leader SANTHIYA P – Team Member SNEKA A – Team Member SUGANYA C – Team Member

Introduction

A vehicle that can be powered by an electric motor that draws electricity from a battery and is capable of being charged from an external source and have an electric motor instead of an internal combustion engine.

The Electric Vehicle (EV) is not new, but it has been receiving significantly more attention in recent years. Advances in both EV analytics and battery technologies have led to increased automotive market share. However, this growth is not attributed to hardware alone. The modern mechatronic vehicle marries electrical storage and propulsion systems with electronic sensors, controls, and actuators, integrated closely with software, secure data transfer, and data analysis, to form a comprehensive transportation solution. Advances in all these areas have contributed to the overall rise of EV's, but the common thread that runs through all these elements is data analytics. The new EV's are combined Electrical storage and propulsion systems with electronic sensors, controls, and actuators, integrated closely with software, secure data transfer to form a comprehensive transportation solution

Aim

To Extract the Insights from the data with SQL and put the data in the form of visualizations, Dashboards and Story we employed Tableau tool and published in Tableau public.

Charging stations by region and type in India

EV Charging stations map of India

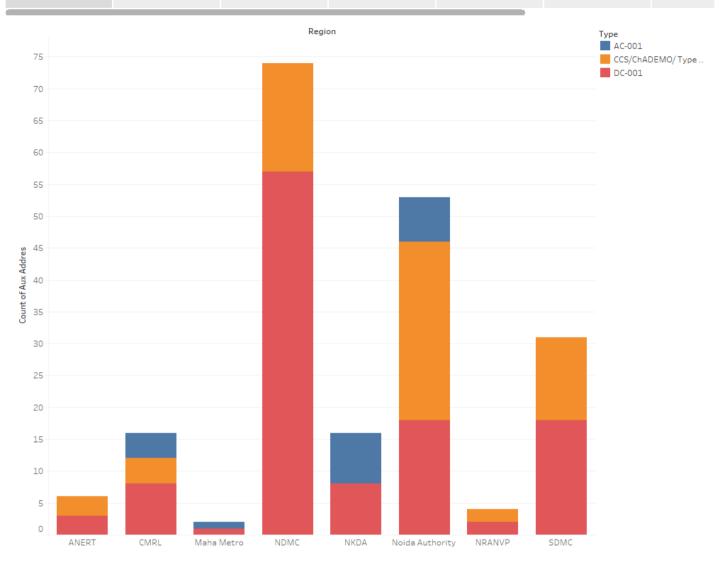
Different EV cars in India

Top speed for different Price for different cars Brands

in India

Top 10 most efficient EV Brands

Brand according to Bodystyle



Charging stations by region and type in India

EV Charging stations map of India

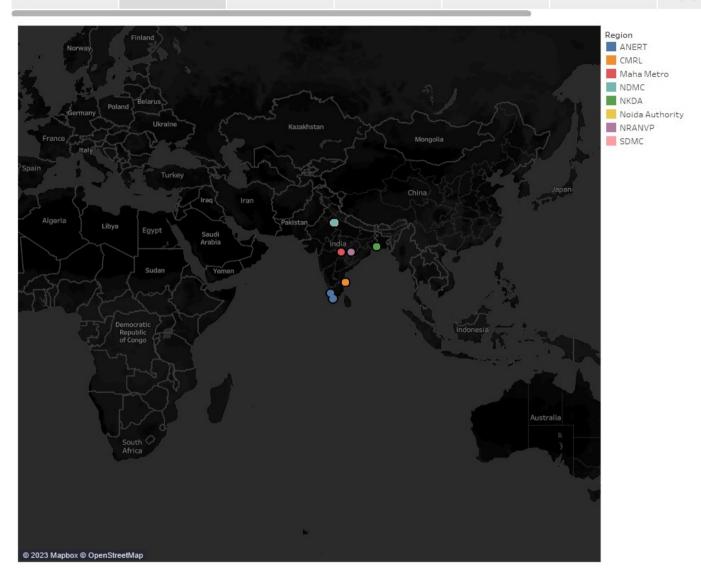
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Charging stations by EV Charging stations Different EV cars in Top speed for different Price for different cars Top 10 most efficient Brand map of India Brands EV Brands region and type in India in India according to India Bodystyle Car Jaguar I-Pace MG ZS EV Audi E-Tron Audi E-Tron GT BMW iX BYD E6 Hyundai Kona Electric Jaguar I-Pace Mercedes-Benz EQC MG ZS EV Porsche Taycan Tata Nexon EV Audi E-Tron GT Tata Nexon EV Max ■ Tata Tigor EV Mercedes-Benz EQC BMW iX Tata Tigor EV BYD E6 Tata Nexon EV

Charging stations by region and type in India

EV Charging stations

Different EV cars in India

Different EV cars in India

Top speed for different in India

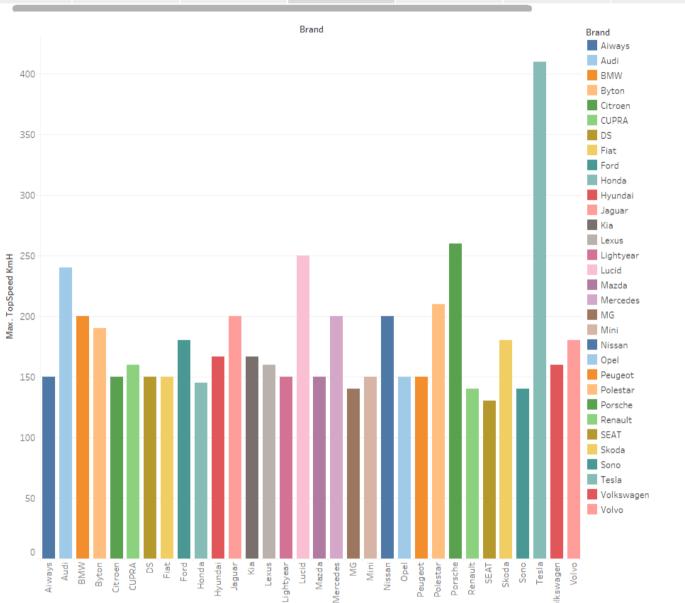
Top speed for different in India

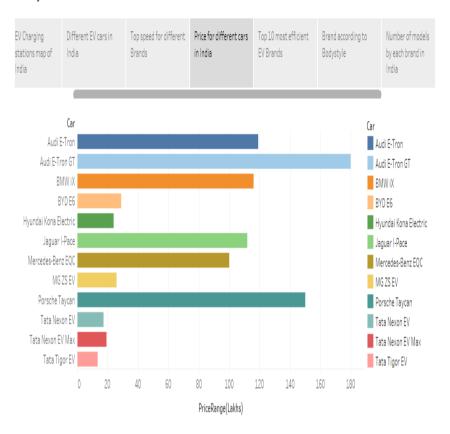
Price for different cars in India

EV Brands

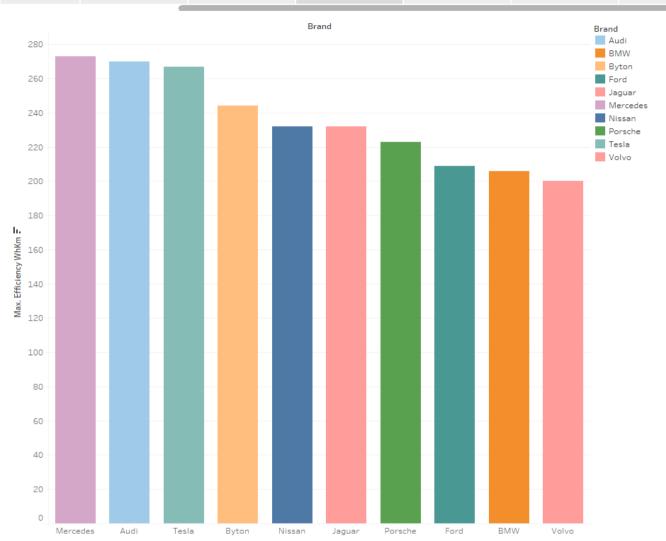
Brand according to EV Brands

Brand according to EV Brands

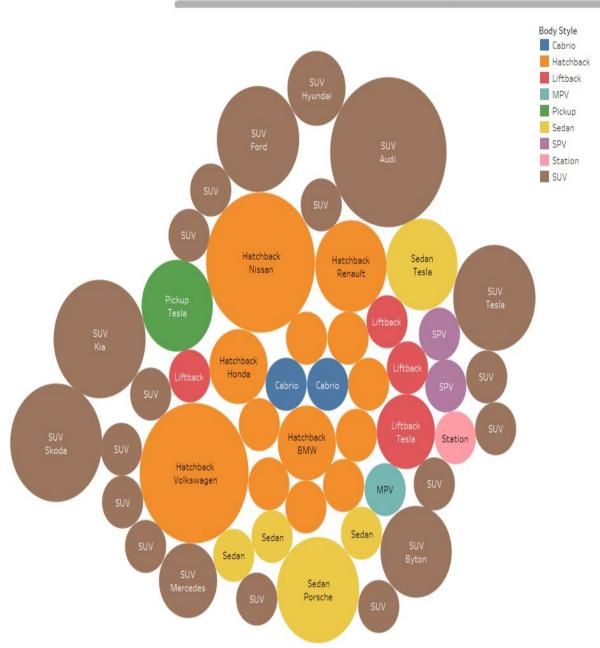




Different EV cars In India Brands Top speed for different Brands Top 10 most efficient EV Brands Brand according to Bodystyle Brand in India Brand in India Brands Brand Brand



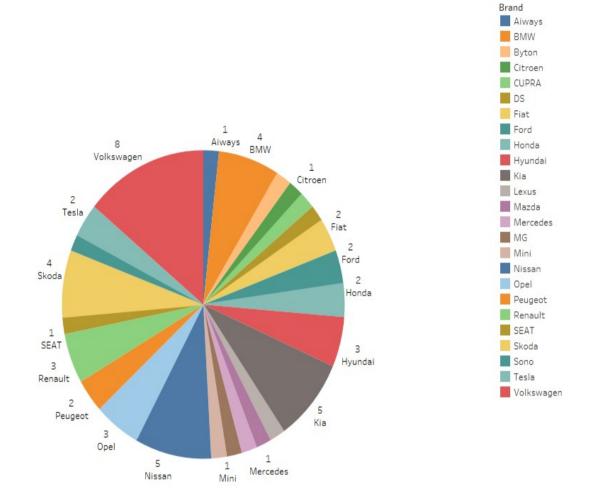
Different EV Top speed for different Price for different cars in India Brands In India EV Brands EV Brands Brand according to Bodystyle PowerTrain type



Different EV Top speed for different Brands Top 10 most efficient EV Brands Brand according to Bodystyle Brand in India Brands Brand in India Brands Brand according to Bodystyle Brand in India Brand India Brand in India Brand in India Brand in India Brand India Brand India Br

Tata	BYD	Hyundai	Count of Car 1
Audi	Jaguar	MG	
	Mercedes-Benz		
BMW	Porsche		

Different EV Top speed for different Price for different cars in India Brands In India EV Brands Bodystyle Brand according to Brand fliterd by PowerTrain type



Conclusion

We have extracted the Insights from the data and put the data in the form of visualizations, Dashboards and Story. We conclude from that visualizations Tesla, is a fastest electric car and Tata have more number of models in electric cars in India.