

Visualization Tool for Electric Vehicle Charge and RangeAnalysis

Project Report

1.Introduction

TheElectricVehicle(EV) has been receiving significantly more attention in recent years.Advances in both EV analytics and battery technologies have led to increase dautomotive markets hare.However, this grow this 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 datatransfer, and data analysis, to form a comprehensive transportation solution. Advances in all the seareas have contributed to the overall rise of EV's, but the common thread that runs through all these elements is data analytics.

2.Purpose

In the context of analyzing the performance and efficiency of electricvehicles, a literature survey would involve reviewing studies and articles that have been published on the topic of hotel performance and efficiency, as well as studies specific toelectric vehicles.

3.Problem Definition & Design Thinking

The literature survey would include sources such as academic journals,industry reports, and online articles. It would aim to identify key performance indicators(KPIs) and metrics that are commonly used to measure hotel performance andefficiency, as well as any best practices or strategies that have been identified forimproving performance.The literature survey would also explore any existing researchon electric vehicles specifically, and would aim to identify any unique challenges oropportunities that the electric vehicles faces in terms of performance and efficiency

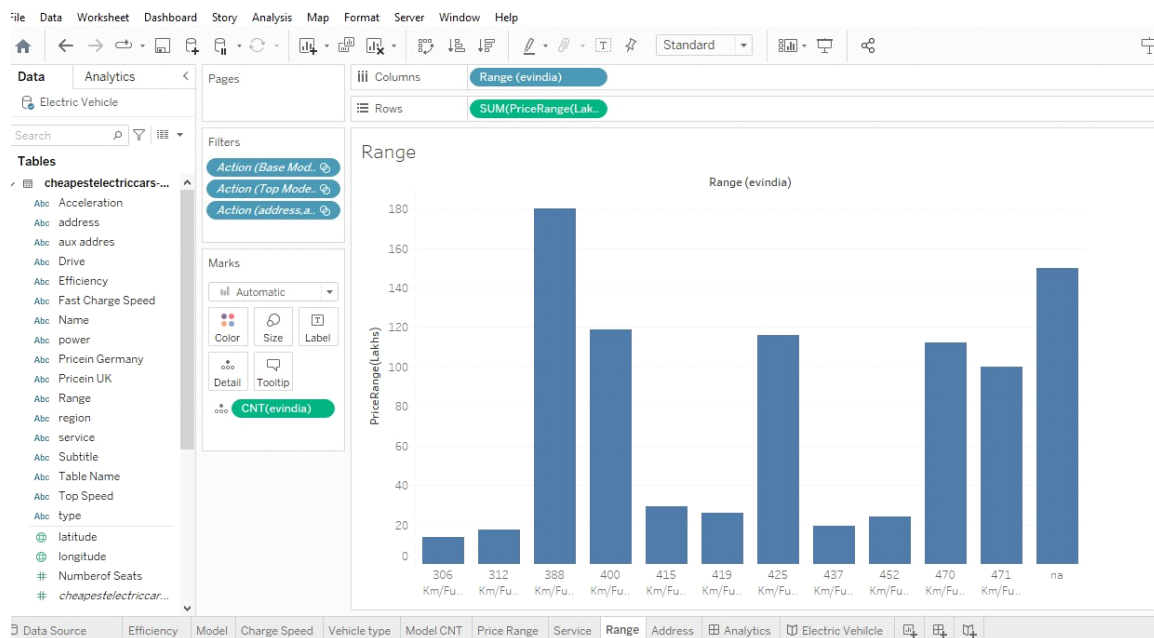
By solving or helping to solve the biggest issue in EV market. More people will understand and but the EV instead of ICE's.

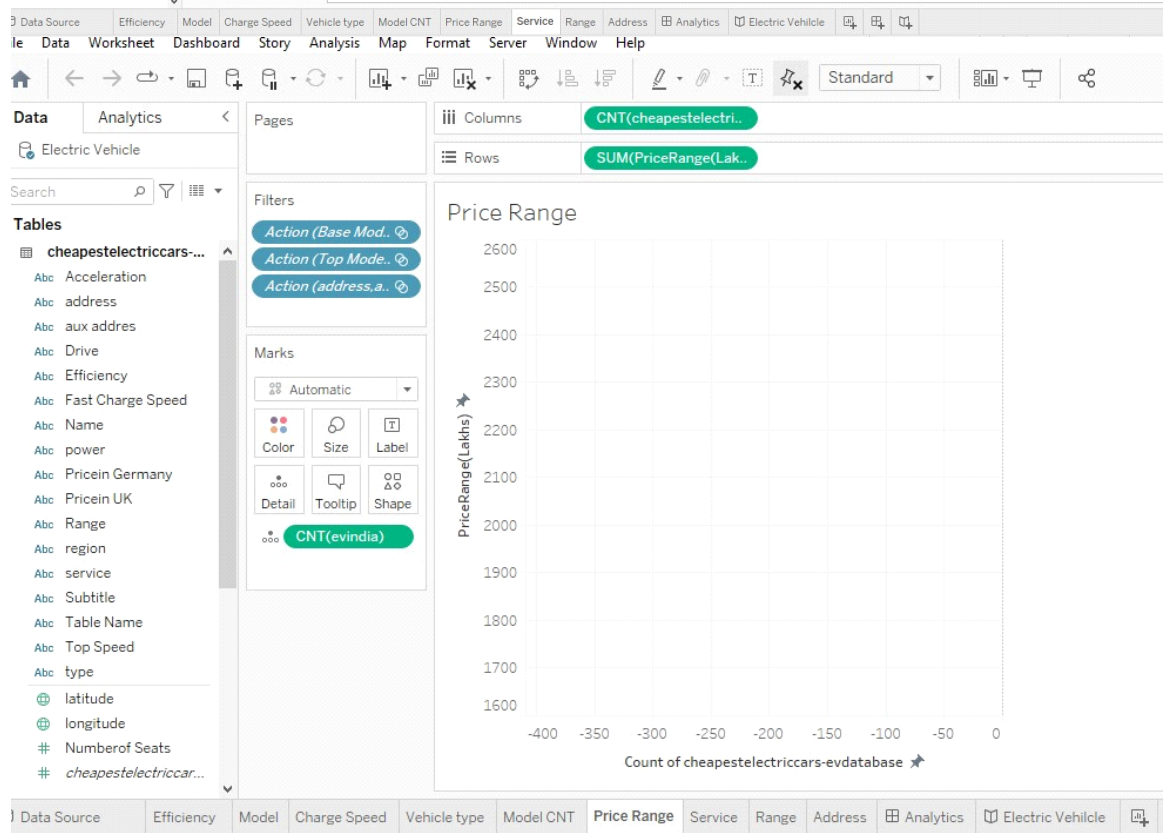
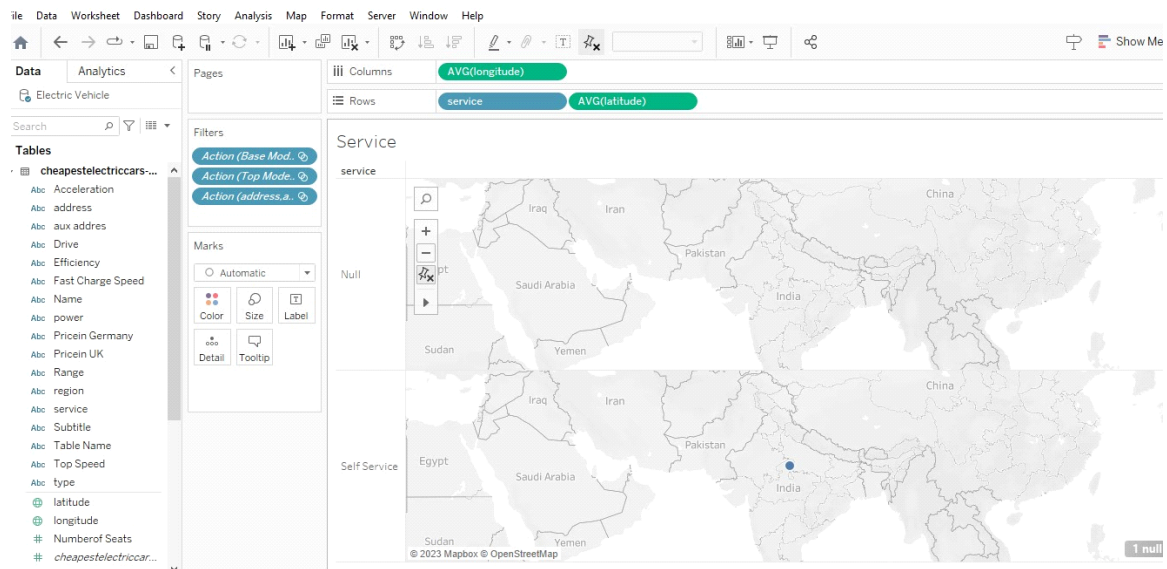
This project can provide the insights for the Car/Battery Manufacturers and it can also provide the insights for the people who are using the EV or Thinking to enter in EV Market.

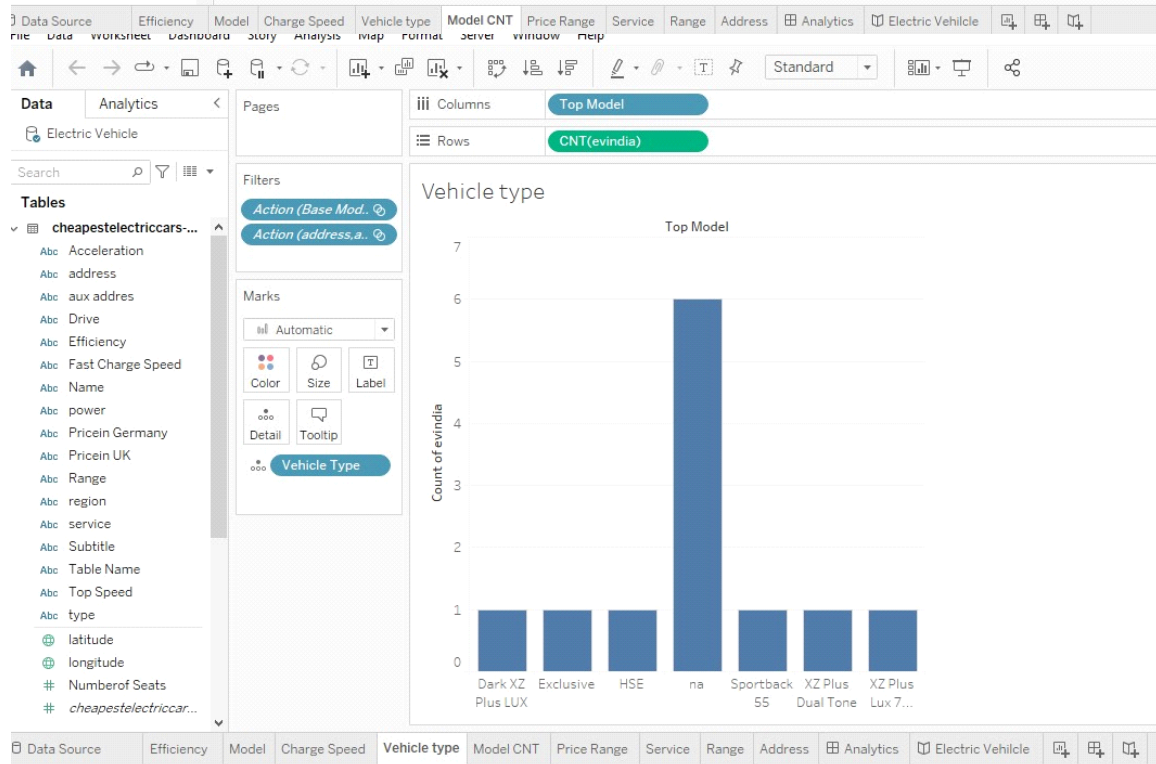
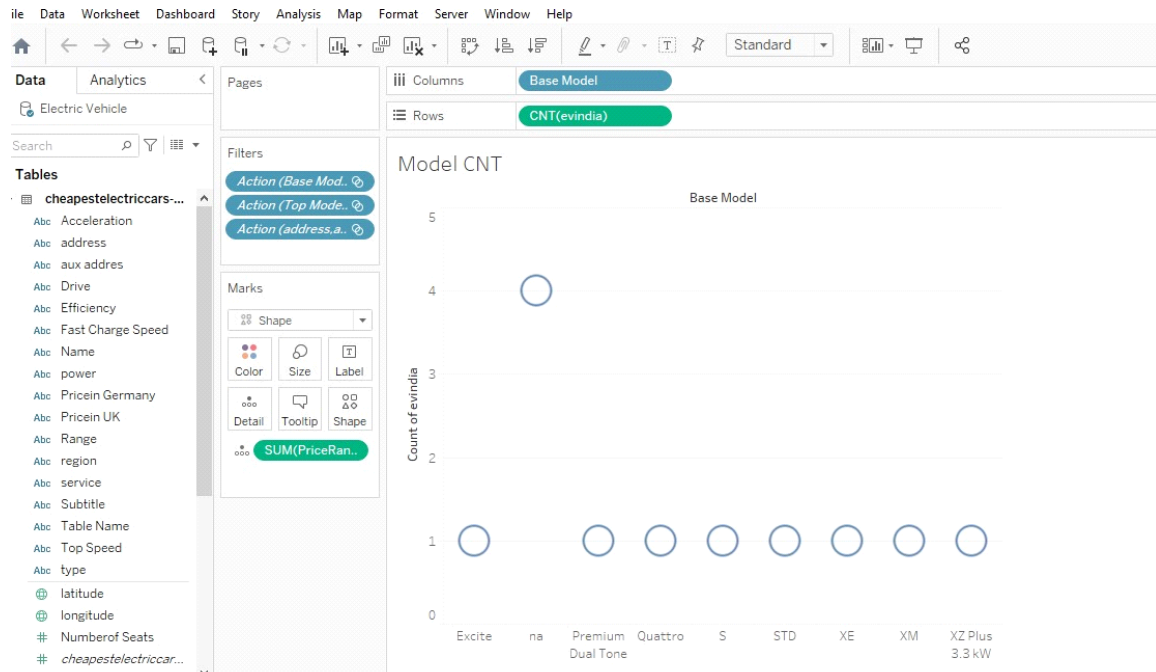
From given data sets, we performing different analysis of workbook from tableau .

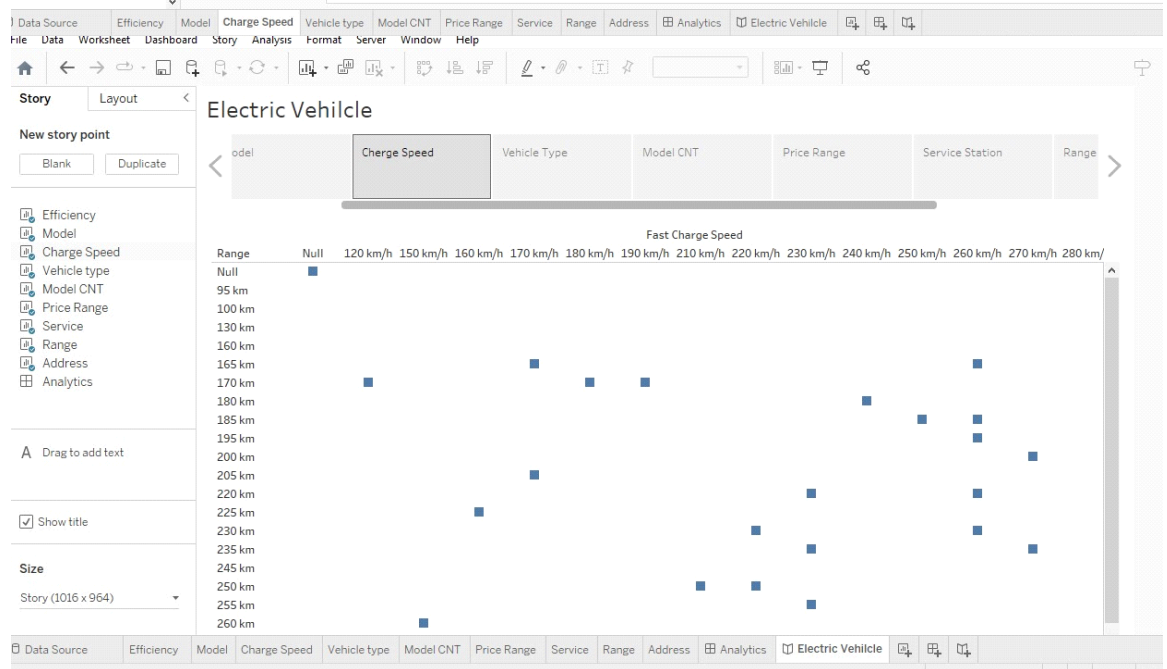
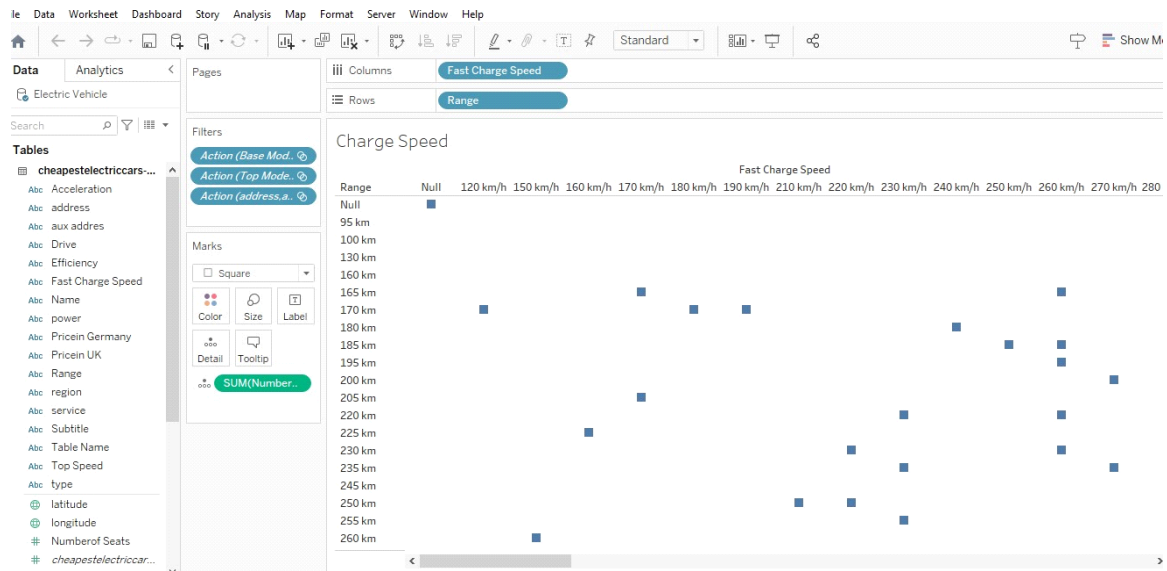
4. Results

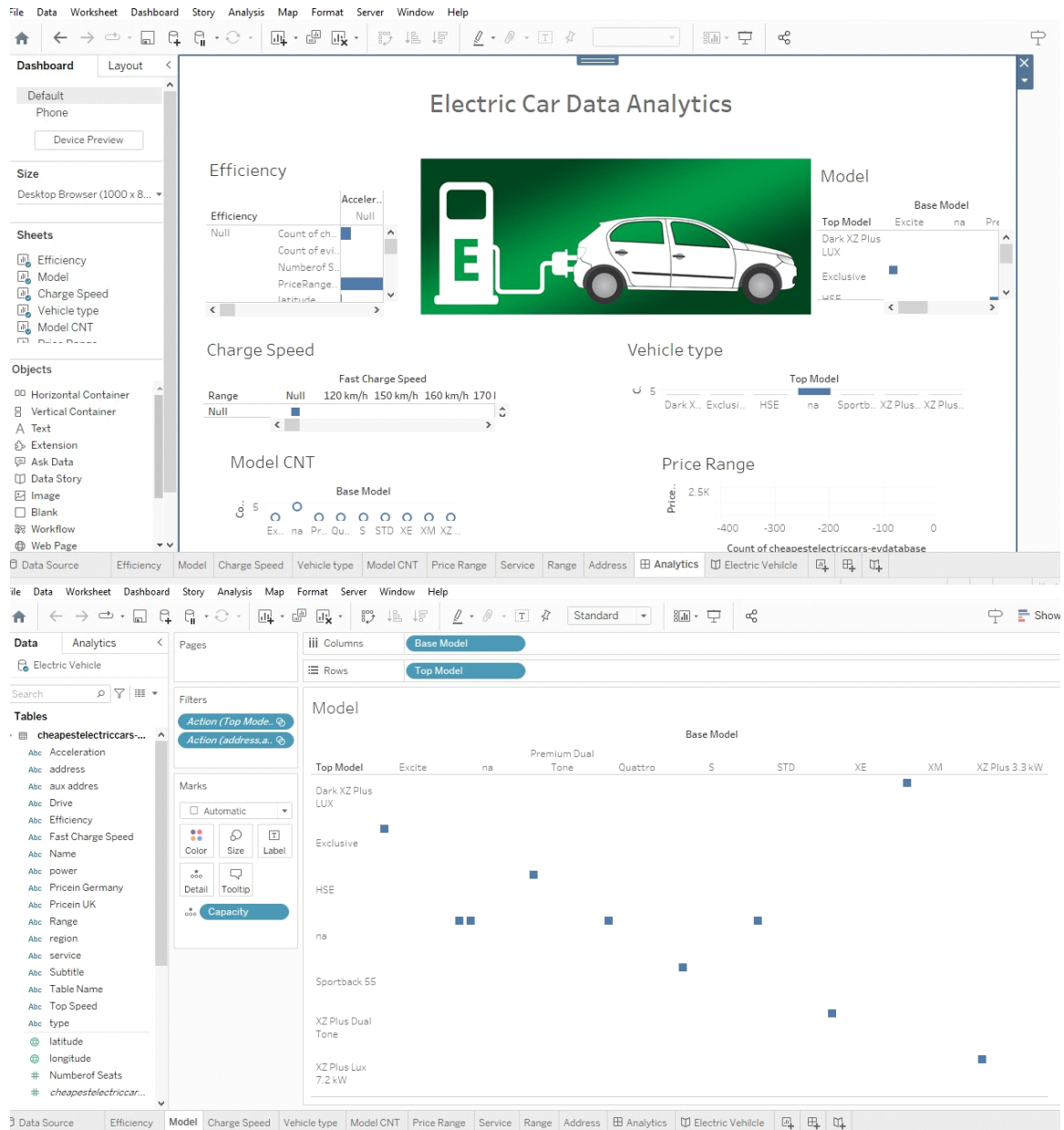
Screen shots of workbook, dashboard and story

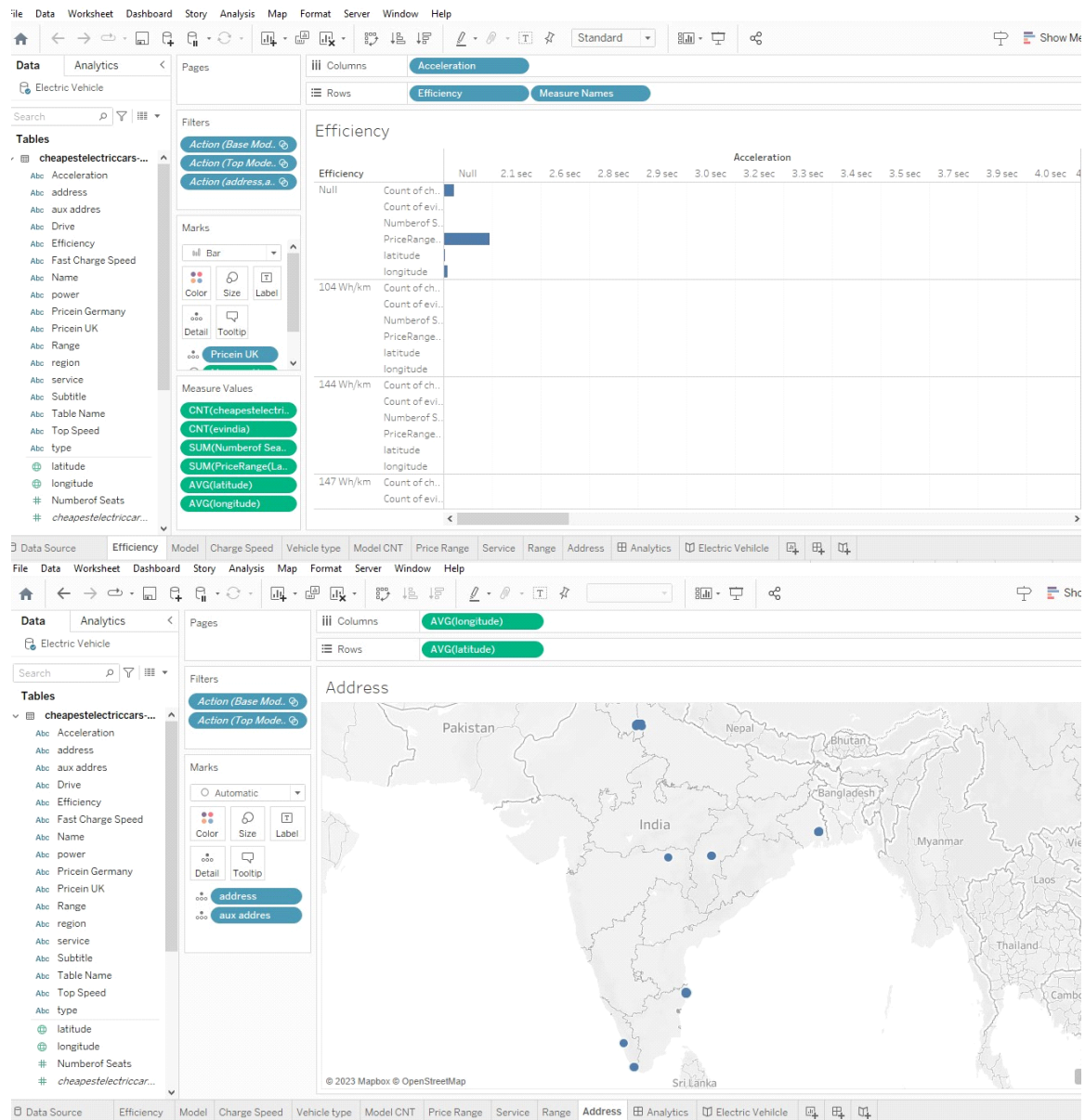












1. We find that the price rate of vehicle is very high for higher efficiency and with quick acceleration.

2. The model XZ lux 7.2kw is top model have capacity.

3. Fast charging speed is more in range above 200 and also above 330 range charge not available.

4. The na vehicle type top model had more count EV in india.

- 5. The na vehicle type model also had high count in base model**
- 6. Price range is 2600 lakhs EV in india**
- 7. The EV service station in delhi.**
- 8. The price range of EV in india high for charging speed 388km / full charge is about 1.80 lakhs**
- 9. The service station and address are given.The number of stations is more in capital delhi.**

5.Advantages and Disadvantages

Advantages of our project is we provide efficiency range, top model and price for charging speed.Also we mention that Km travel by EV per full Charge.

Disadvantages is less number service stations.