# **Power BI Dashboarding project proposal**

# **1. Executive Summary:**

The Aim of this project is Analyze and understand the EV sector domain by creating dashboard which will focus on key aspects for managing future development of EV charging stations.

The EV Charging Stations dataset consist of 2705 records and 25 attributes like Latitude, longitude, Station name, vendors name, city, payment mode, charging/station type, staffed or unstaffed and various other fields.

# **2. Problem Statement:**

**Background:** EV charging stations data which describes the Distribution of EV station across Delhi and other location. It gives an in-depth detail description about EV stations located in different parts in Delhi.

**Objective:** To Develop Reports and analyze the data in order to understand the data which will help in improvement, growth and decision-making in developments related to EV stations across different locations.

**Scope:** Solve Consumer time consumption problem

Ease of payment

Customer satisfaction according to Quality Service

Solve the problem of distribution of EV infrastructure

Resolve issue of staff requirement at the station

# **3. Data Sources:**

The Dataset was downloaded from Kaggle platform – which was extracted from official website of government of India.

# **4. Methodology:**

Data Integration: Imported Excel Files into Tableau/Power BI

Data Manipulation: Transformed raw Data into useful Data using jupyter notebook

Dashboard: Created Dashboard Using Business intelligences tools like Tableau/Power BI

# **5. Expected Outcomes:**

- Interactive dashboards describing different aspects of EV charging station

- Appropriate Distribution of Stations

- Better suggestions for future investments in EV industry

# **6. Tools and Technologies:**

- Excel tool for basic data manipulation

- Jupyter notebook for data cleaning, analyzing and exploration

- Tableau for dashboard development

# **7. Risks and Challenges:**

- Lack of domain knowledge so Gathered additional domain knowledge – Vehicle type (4W, 3W, 2W), EV Hybrid stations near petrol pump stations [i.e. public prefer Electric stations nears or beside petrol pumps], Urban and rural staff requirements [DC requires staff] and etc.

-Ensuring data quality - By resolving inaccurate data like consisting of NONE value in some fields and irrelevant categories which were dropped from the dataset.

- Handled Incomplete or missing data in the dataset because the dataset consist of less number of records.

# **8. Conclusion:**

We have Concluded this Analysis with creating a dashboard which will help improve the EV Ecosystem by balancing the EV infrastructure and handle the consumer consumptions rate plus implying better investments in EV Charging Stations Domain.