

| Section              | Description   |
|----------------------|---|
| Project Overview     | By leveraging machine learning techniques to predict permanent magnet resistance in electronic motors, this project aims to enhance reliability, efficiency, and cost-effectiveness across various industrial and commercial applications reliant on motor-driven technologies.   |
| Data Collection Plan | The data collection plan outlines systematic methods to gather, process, and manage data essential for developing accurate machine learning models to predict permanent magnet resistance in electronic motors. By leveraging diverse data sources and applying robust quality assurance measures, the project aims to enhance predictive capabilities and contribute to advancements in electronic motor technology. |

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|-----------------------------|---|
| Raw Data Sources Identified | These raw data sources collectively provide the foundational information needed to develop and train machine learning models for predicting permanent magnet resistance in electronic motors. The integration of these diverse data types ensures comprehensive coverage of factors influencing motor performance and resistance characteristics. |
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### Data Collection and Preprocessing Phase

|               |   |
|---------------|---|
| Date          | 20 June 2024  |
| Team ID       | 739809  |
| Project Title | Predicting Permanent Magnet Resistance Of Electronic Motor Using Machine Learning |
| Maximum Marks | 2 Marks   |

### Data Collection Plan & Raw Data Sources Identification Report:

This data collection plan outlines systematic methods to gather and preprocess data for developing accurate machine learning models to predict permanent magnet resistance in electronic motors. By leveraging both primary and secondary data sources, the project aims to enhance predictive capabilities and contribute to advancements in electronic motor technology.

### Raw Data Sources Report:

| Source Name    | Description   | Location/URL  | Format | Size  | Access Permission |
|----------------|---|---|--------|-------|-------------------|
| Kaggle Dataset | My dataset contains (u_q,coolant, stator_winding, u_d,stator_tooth) | <a href="https://www.kaggle.com/datasets/wkirsng/electric-motor-temperature">https://www.kaggle.com/datasets/wkirsng/electric-motor-temperature</a> | CSV    | 122MB | Public            |