Empathy Map Canvas: Electric Motor Temperature Prediction using ML

1. Introduction to Empathy Map

An Empathy Map Canvas helps in understanding the end users of the system. For the electric motor temperature prediction project, the primary users include maintenance engineers, plant operators, and industry managers.

2. What the User Says

- We need to reduce unexpected motor failures.
- Motor overheating causes production delays.
- Maintenance costs are increasing.
- We need a reliable monitoring system.

3. What the User Thinks

- Can we predict failures before they happen?
- Is there a smarter way than manual monitoring?
- How accurate will the prediction system be?
- Will it integrate with existing systems?

4. What the User Does

- Regularly checks temperature readings manually.
- Schedules periodic maintenance.
- Responds to overheating alarms.
- Analyzes historical performance reports.

5. What the User Feels

- Frustrated with sudden breakdowns.
- Concerned about equipment lifespan.
- Pressure to reduce downtime.
- Hopeful for predictive maintenance solutions.

6. Pain Points

- Unexpected overheating.
- High repair and replacement costs.
- Lack of early warning systems.
- Manual and reactive maintenance.

7. Gains (Expected Benefits)

- Real-time temperature prediction.
- Reduced downtime.
- Lower maintenance cost.
- Improved motor lifespan and efficiency.