

Final Project – Proposal

Group Name: DKH3_DATA2_G1

Team Number: 184

Project Title: manufacturing downtime.

Team Members:

1. Yousif Naser Elsayed
2. Mohamed Elsaied Elsaied Mahmoud
3. Mostafa Mohsen Fathy
4. Osama Elsayed Shawki

1. Project Overview

The project aims to design and develop a comprehensive Power BI analytics solution for monitoring and optimizing manufacturing downtime in a production facility.

It integrates data from maintenance, production, equipment, and cost to deliver data-driven insights for improving plant reliability, operational efficiency, and cost control.

2. My Role and Responsibilities

Name	Responsibilities
Mostafa Mohsen Fathy	Clean raw data using Excel. Data exploration and pre-processing
Mohamed Elsaied Elsaied Mahmoud	Create data models and relationships between tables
Yousif Naser Elsayed	Design and develop dashboards in Power BI
Osama Elsayed Shawki	Analyze results and prepare presentation

3. Tools and Techniques Used

Power BI, DAX, Data Visualization, Report Design by Power Point.

4. Key Achievements / Contributions

- Improved data accuracy by cleaning and validating multiple datasets.
- Created a dynamic dashboard that summarizes key metrics.
- Supported the team in preparing the final presentation and report.

5. Lessons Learned / Reflection

This project improved my analytical thinking, teamwork, and ability to transform data into actionable insights.