Project Proposal

Project Description

This project aims to develop an interactive and insightful Power BI dashboard to analyze and visualize key business data. The dashboard will provide actionable insights to support decision-making and strategy formulation. The project will involve data cleaning, transformation, and visualization, ensuring high data quality and user-friendly design. The target audience includes internal stakeholders and external users, such as DEPI colleagues and Kaggle users.

Group Members & Roles

1. **Muhammed Ibrahim Abdelraouf** – Data Analyst (Data cleaning, transformation, and validation)

2. **Yousef Saber Abdel galil** – Power BI Developer (Dashboard design and development)

3. **Abdelrahman Saad Abdelmoneem** – Project Manager (Coordination, timeline management, and reporting)

4. **Nataly Gabra Farouk** – Data Visualization Specialist (Ensuring best practices in visualization)

5. **Sara Ahmed Helmy** – Quality Assurance (Testing and validation of data and dashboard functionality)

Team Leader

Abdelrahman Saad Abdelmoneem will serve as the team leader, responsible for overseeing the project, ensuring timely delivery, and coordinating communication among team members and stakeholders.

Objectives

1. Develop a Power BI dashboard that provides actionable insights for decision-making.

2. Ensure high data quality through thorough cleaning and validation processes.

3. Create an intuitive and user-friendly interface for stakeholders.

4. Deliver the project within the defined timeline and budget.

5. Generate at least 5 meaningful insights to support business strategy.

Tools & Technologies

- **Data Cleaning & Transformation:** Microsoft Power BI – Power Query

- **Dashboard Development:** Microsoft Power BI

- **Version Control:** GitHub

Milestones & Deadlines

1. **Project Kickoff & Planning** – 2-2-2025

2. **Data Collection & Cleaning Completed** – 24-2-2025

3. **Dashboard Prototype Ready** – 19-3-2025

4. **User Testing & Feedback Collection** – 29-3-2025

5. **Final Dashboard Delivery** – 5-4-2025

6. **Project Review & Documentation** – 6-4-2025

KPIs (Key Performance Indicators)

1. **Data Quality Score (Accuracy & Completeness)**

   o Target: Less than 5% missing or incorrect data after cleaning.

2. **Dashboard Performance (Load Time)**

   o Target: Dashboard load and refresh time under 10 seconds.

3. **Interactivity & Usability Score (Positive Feedback)**

   o Target: At least 90% positive feedback from DEPI colleagues or Kaggle users on clarity and ease of use.

4. **Number of Key Insights Generated**

   o   Target: At least 5 meaningful insights that support decision-making and business strategy.

5. **Report Distribution & Access**

   o   Target: Ensure 100% accessibility for target users without technical issues.

6. **Visualization Effectiveness (Readability Score)**

   o   Target: Achieve a readability score of 90% or higher based on feedback and best practices in data visualization.