CAPSTONE PROJECT 1 Power BI Dash boarding project proposal by Vijaya raju PGA36

1. Executive Summary:

This Power BI project focuses on the comprehensive analysis and visualization of critical business aspects for a leading food delivery company in India. The primary objectives of this project are to analyze demand for food orders, conduct a detailed price analysis, track key performance indicators (KPIs), and manage the inventory of raw materials effectively.

2. Problem Statement:

Background: Limited visibility into real-time performance metrics hinders timely decision-making.

Objective: Visualizations on Order Trends, Customer Segmentation, Geographic Distribution, Price analysis that includes Average Order Value (AOV), Discounts and Promotions, Inventory Management

Scope: Initial focus on sales, meals orders, inventory turnover, and fulfillment centers data across all product categories and regions.

3. Data Sources:

Primary Data: meals orders, inventory turnover, and fulfillment centers from internal databases.

Secondary Data: External data sources for market trends and demographic information.

4. Methodology:

Data Integration: Extract and integrate data from various sources into Tableau/Power BI.

Dashboard Design: To identify key metrics and design visually appealing dashboards.

Interactivity: Implement interactive features for drill-down analysis and trend exploration.

5. Expected Outcomes:

- Interactive dashboards providing real-time insights to understand Demand and pricing.
- Enhanced decision-making through visual representation of key metrics.
- Develop a dynamic pricing strategy that adjusts prices based on demand fluctuations.
- Real-time tracking of raw material inventory levels to prevent stock outs and overstock.

6. Tools and Technologies:

- Power BI for dashboard development.
- SQL and excel for data extraction and transformation.
- Python for data mapping.

7. Risks and Challenges:

- Integration challenges may arise while connecting to diverse data sources.
- Ensuring data accuracy and consistency across dashboards.
- Changes in the market, such as shifts in consumer preferences or economic downturns, impact demand.
- Handling large volumes of data can affect the performance and speed of dashboards.

8. Conclusion:

This Power BI project equips the food delivery company with data-driven insights to enhance operational efficiency, optimize pricing strategies, and improve customer satisfaction. By leveraging these insights, the company can make informed decisions to drive growth and maintain a competitive edge in the rapidly evolving food delivery market in India.