

Business Problem: Business Operations Analyst

Problem Statement:

Our company is experiencing inefficiencies in supply chain management, resulting in delayed deliveries, inventory imbalances (excess stock in some warehouses and shortages in others), higher operational costs, and reduced customer satisfaction.

Project Objectives:

1. Minimize Delivery Delays: Identify warehouses with prolonged shipping times and optimize delivery routes.
2. Enhance Inventory Management: Balance stock levels based on demand trends across different warehouses.
3. Improve Demand Forecasting: Leverage historical data to predict future demand and adjust inventory accordingly.
4. Maximize Profit Margins: Analyze product and location-based profitability to optimize revenue generation.

Expected Deliverables:

- Data Cleaning & Preprocessing: Utilize Python (pandas) for data cleansing and preprocessing to ensure high-quality insights.
- SQL-Based Analysis: Execute SQL queries to derive insights related to shipping performance, inventory levels, and demand fluctuations.
- Power BI Dashboard: Develop an interactive dashboard for real-time monitoring of stock availability, demand patterns, and delivery performance.

Final Outcome:

A data-driven Supply Chain Analytics Dashboard that enhances decision-making, reduces operational costs, and improves overall efficiency.

Project Timeline & Responsibilities:

- Deadline: The project is scheduled from 4th March to 25th March.
- Intern Responsibilities: Conduct research, analyze data, and implement solutions using Python, SQL, and Power BI to drive actionable insights and improvements.