Supply Chain Analysis Report - by Mayank Kumar (Email:

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Suggested Name for the Project:

CONVOY - Comprehensive Observation of Network Variability and Yield

Phases or Roadmap:

1. Define Objectives and Scope

Which specific aspect do you want to analyze?

- Inventory management
- Transportation logistics
- Procurement, etc

Identify Key performance Indicators (KPIs) to measure success

- Cost efficiency
- Delivery Time
- Inventory Turnover, etc

2. Gather Data

Collect relevant data from various sources such as ERP systems, transportation logs, inventory databases, and supplier records

Ensure Data Quality

- How?
 - o Cleaning data
 - Preprocessing data
 - Validating data
- Why?
 - o To Remove duplicates
 - Inconsistencies
 - o Errors

3. Data Analysis and Modelling

Perform Exploratory Data Analysis (EDA) to gain insights into the distribution, trends, and relationships within the data.

Statistical and Machine Learning techniques to model different aspects of supply chain

- Demand Forecasting
- Inventory Optimization
- Route Optimization

Develop Visualization Dashboards to communicate findings and insights effectively.

- 4. Identify patterns and Insights
 - Uncover potential areas for improvement
 - Optimization within supply chain

Analyze results

- Identify patterns
- Trends
- Anomalies

5. Recommendations and Action Plan

Actionable Recommendations: Based on insights gained

Prioritize recommendations

- Potential impact
- Feasibility of Implementation

Develop an Action Plan

- Steps Required
- Timelines
- Responsibilities
- Requirements
- 6. Implementation and Monitoring
 - Implement recommended changes and improvements
 - Continuously monitor key metrics and performance indicators to track the effectiveness of the implemented changes
 - Iterate on the analysis and recommendation based on ongoing feedback and performance monitoring
- 7. Documentation and Communication

Document the entire process

- Data Sources
- Methodologies
- Analysis Techniques
- Findings

Prepare a final report summarizing

- Analysis
- Insights
- Recommendations
- Outcomes

Communicate findings and recommendations to stakeholders

- 8. Evaluation and Iteration
 - Evaluate the impact of the implemented changes on supply chain performance and KPIs
 - Continuously improve and refine the process.