**Business Introduction**

Streamline Logistics Solutions has been a trusted leader in the supply chain and logistics industry for over two decades. We have built a strong reputation for delivering exceptional service, ensuring the swift and reliable transportation of products nationwide.

However, as we continue to grow, we face critical operational challenges that require innovative solutions to maintain our commitment to excellence.

**Business Problem**

Our current order fulfillment process presents several key challenges:

* **Mounting Order Backlogs** – Inefficient routing and resource allocation have led to growing backlogs, affecting delivery timelines and customer satisfaction.
* **Visibility Gaps** – Customers lack real-time updates on order progress, resulting in communication breakdowns.
* **Customer Frustration** – Delayed deliveries and inadequate communication channels have led to increased customer complaints, impacting our reliability.
* **Rising Operational Costs** – Additional expenses from overtime and expedited shipping to manage backlogs are driving up costs.

**Rationale for the Project**

Order fulfillment—receiving, processing, and delivering customer orders—is crucial to our operations. Backlogs, caused by high demand, inefficiencies, or disruptions, lead to delays and decreased customer satisfaction. Addressing these issues is essential to:

* **Enhance Customer Satisfaction** – Improved order processing results in better customer experiences and stronger loyalty.
* **Boost Operational Efficiency** – Optimized processes reduce costs and increase profitability.
* **Leverage Data-Driven Insights** – Informed decision-making enables better resource allocation and routing.
* **Safeguard Our Reputation** – Addressing inefficiencies ensures we maintain our industry-leading reliability.

**Project Aim**

The objective of this project is to develop an **interactive Excel dashboard** that provides comprehensive visibility into our order fulfillment processes. Key goals include:

* Optimizing delivery resource allocation based on order volume and location.
* Monitoring order progress and identifying potential delays.
* Enhancing customer communication with real-time delivery updates.
* Reducing order backlogs and operational costs.
* Improving customer satisfaction and reinforcing our reputation.

**Data Description**

This project utilizes a single dataset containing:

* **Order ID** – Unique identifier for each customer order.
* **Delivery Address** – Destination for the order.
* **Order Timestamp** – Date and time of order placement.
* **Order Status** – Current status (e.g., “In Progress” or “Completed”).
* **Driver ID** – Unique identifier for assigned drivers.
* **Vehicle Info** – Details of the delivery vehicle.
* **Current Location** – Real-time location of the driver.
* **Delivery Time** – Total time taken for order fulfillment (in minutes).
* **Delays** – Duration of any delivery delays (in minutes).

**Tech Stack**

**Tool: Microsoft Excel**

* **Data Processing:** Excel’s data manipulation and analysis functions.
* **Visualization:** Charts, graphs, and pivot tables for order and delivery insights.
* **Dashboard Creation:** Interactive visual reports for real-time monitoring.

**Project Scope**

* **Data Preprocessing:** Cleaning and formatting data for analysis.
* **Exploratory Data Analysis:** Identifying patterns, correlations, and anomalies.
* **Dashboard Design:** Developing an interactive Excel dashboard with intuitive visualizations.
* **Data Transformation:** Preparing data through encoding and normalization.
* **Data Analysis:** Extracting insights from order and delivery data.
* **Visualization & Reporting:** Creating clear, actionable visual representations.
* **Documentation & Recommendations:** Providing a detailed project report with findings and next steps.