Case for NovaSphere Logistics

Background

NovaSphere Logistics is a mid-sized logistics company specializing in last-mile delivery services for e-commerce and retail businesses in metropolitan areas. The company prides itself on delivering packages quickly and reliably. However, recent operational data reveals inefficiencies leading to increased costs, delivery delays, and high carbon emissions. NovaSphere Logistics is seeking a detailed analysis and actionable solutions to address these issues.

The Challenge

Your team has been hired as consultants by NovaSphere Logistics. Using the provided dataset, your task is to analyze their current operations, identify inefficiencies, and propose actionable solutions for improvement using any software of choice.

Submission Requirements

1. Submit and explain code (if any), process, visuals (if any) and any other material.
2. Use slides for final report writing and they must be formatted using Microsoft PowerPoint or Adobe PDF and be PC-compatible.
3. The first or second slide of the presentation should list your team members.
4. It is advised to work as a team in solving the problem.

Dataset Overview

The dataset contains operational data for **350 deliveries** performed by NovaSphere Logistics. The data includes:

1. **Delivery_ID:** A unique identifier assigned to each delivery transaction.

2. **Delivery Time (minutes):** The time taken for each delivery, including delays.

3. **Package Weight (kg):** The weight of each package delivered.

4. **Carbon Emissions (kg CO2):** The environmental impact associated with each delivery.

5. **Cost ($):** The cost incurred by NovaSphere for each delivery.