

# **Business Questions**

## **1) Can plants handle the daily order demand?**

This business question investigated whether the plants had sufficient processing capacity to meet the daily order demand. We analyzed the daily order data and compared it with the daily plant capacity to determine if the plants were at full capacity or could meet the demand.

This would help in understanding order demand across plants ensures efficient resource allocation and production planning for optimal facility usage.

## **2) Which Carriers and Routes have the most delays and throughput times?**

This business question investigated which carriers and routes have the highest shipment delays and if the average delay in shipments varies based on different service levels like Door to Door (DTD), Door to Port (DTP), and Customer Referred Freight (CRF).

This would help in addressing routes with high shipment delays, which can help in improving carrier performance, enhancing logistics efficiency, reducing delivery times and improving customer satisfaction.

## **3) What is the Shipping volume distribution per route, service level and products?**

This business question investigated the weight distribution per route and which service levels within specific routes handle high volumes, it also probed the top 10 products sold per route.

This would help in analyzing weight distribution per route, informing effective inventory and supply chain management, and optimizing warehouse capacity and transportation logistics.

## **4) Which carrier transportation option is the most cost effective?**

This business question investigated which carrier transportation option is the most cost-effective and if there are specific carriers that are more cost-effective in certain modes of transport (e.g., air or ground).

This would help in identifying the most cost-effective carriers and modes, supporting informed decision-making, minimizing transportation expenses, and maximizing overall profitability.

## **5) Which customers have placed the highest number of orders?**

This business question investigated the top customers in terms of the number of orders placed and which customers constitute a significant portion of the total order count.

This would help in recognizing top customers, enabling tailored services, fostering stronger relationships, and implementing targeted marketing strategies for enhanced customer loyalty and business growth.