Mint Classic Cars – Inventory Optimization & Warehouse Consolidation

Business Case Summary

Client: Mint Classic Cars (Fictional Company)

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Tools Used: Power BI, SQL, Excel

Business Problem

Mint Classic Cars faced excess inventory across four warehouses, leading to underutilized space, high internal movement of stock, and operational inefficiencies. The company needed a strategy to optimize inventory levels and assess whether consolidating warehouses could reduce costs without hurting fulfillment performance.

Objectives

- Reduce excess inventory without impacting order delivery
- Evaluate warehouse performance and stock movement
- Simulate a scenario to consolidate underutilized warehouses

Key Findings

- Inventory can be safely reduced by up to 70%
- South and West warehouses operate well below capacity
- Merging South + West supports fulfillment while simplifying operations
- Total moving stock remains stable at ~170,000 units across the 3-warehouse model

Recommendation

- Merge South and West warehouses into a single location
- Maintain ~35,000 units each in North and East warehouses
- Proceed with a cost-benefit analysis and pilot implementation of the new structure

Outcome

The optimized 3-warehouse model:

- Preserves delivery performance
- Reduces inventory holding costs
- Simplifies operations while maintaining full service coverage