Project Coursera

(Analyse Data in a Product Database)

***Question 1*** – Where are items stored and if they were rearranged, could a warehouse be eliminated?

Assessing the frequency of customer ordering, all product lines are ordered at high and low frequencies. This factor cannot eliminate a warehouse.

 Instead, reduce a warehouse based on the 24-hour requirement for shipping a product. Yes, two warehouses can accommodate this: Warehouse “D” and Warehouse “C,” with the latter offering the best choice for reducing inventory while still maintaining operational efficiency.

This warehouse houses all “Vintage Cars” products for the business. Two items in this warehouse have the highest order frequency of 4 days. Based on capacity planning, I recommend rearranging the products to either Warehouse “A” or Warehouse “D.”

The reason why Warehouse “D” should not be eliminated is because of the product line it houses. The product scale of the “Ships”, “Trains” and “Trucks and Buses” are higher and more costly to move than the “Vintage Cars” in Warehouse “C”.

***Question 2*** – How are inventory numbers related to the Sales Figures? Do the inventory counts seem appropriate for each item?

There are a few orders whose “total inventory sold” numbers exceed their “in stock” inventory numbers. I have done an Order Details analysis and found several orders with comments stating that these orders are being cancelled, items not shipped, credit limits exceeded Etc.

***Question 3*** – Are we storing items that are not moving? Are any items candidates for being dropped from the product line?

Yes, there is one item stored in Warehouse “B” that is not moving at all. The product not moving is the “1985 Toyota Supra”. This product can effectively be removed from the product line.

With regards to candidates being dropped from the product line. I cannot say that any more products can be dropped based on the fact that item preferences are different for all customers. For example, one product can be ordered rarely by one customer and frequently from another. The Excel spreadsheet with information extracted from the database, displays products bought before 100 days and after 400 days. I have analysed the top 10 lowest-ordering products and assessed whether they are also part of the highest-ordering products. This is true for all top 10 lowest ordering products across all four warehouses.  Therefore, as stated above in “Question 1” we cannot reduce inventory based on this condition.