



Aston Tan - SQL Project  
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A decorative graphic on the left side of the slide consisting of two overlapping squares. The top square is a lighter blue, and the bottom square is a darker blue.

# The Problem

The Regional Sales Director would like to know which product segment and which customer segment are performing the best and why.

Conduct an analysis to **identify the best-performing product segment** and make data-driven recommendations based on **orders, customers, product categories, and returns.**

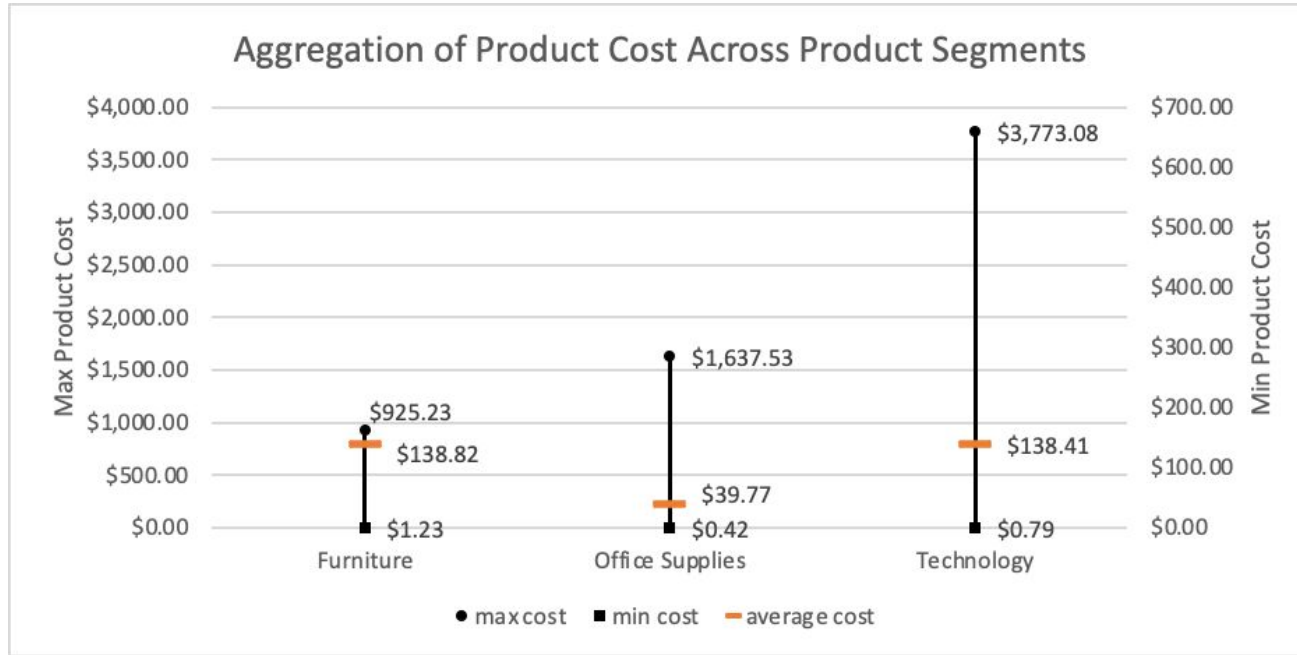
# Project Questions

- Which product segment has the highest product cost to consumer?
- Which product segment is currently the most profitable?
- Which product segment has the highest number of returns?
- What is the average discount applied to each product category?
- Do some product segments sell more than others in different quarters?
- Which product segment is experiencing the highest quantity of sales?
- Which customer segment are we experiencing the highest volume of orders from?
- Which customer segment is the most profitable?
- Which customer segment has the least number of returns?
- Which ship mode is the most profitable?
- Which ship mode experiences the highest number of returns?
- Which region is the most profitable?
- What are the main reasons for returns of Binders, Art, and Storage?



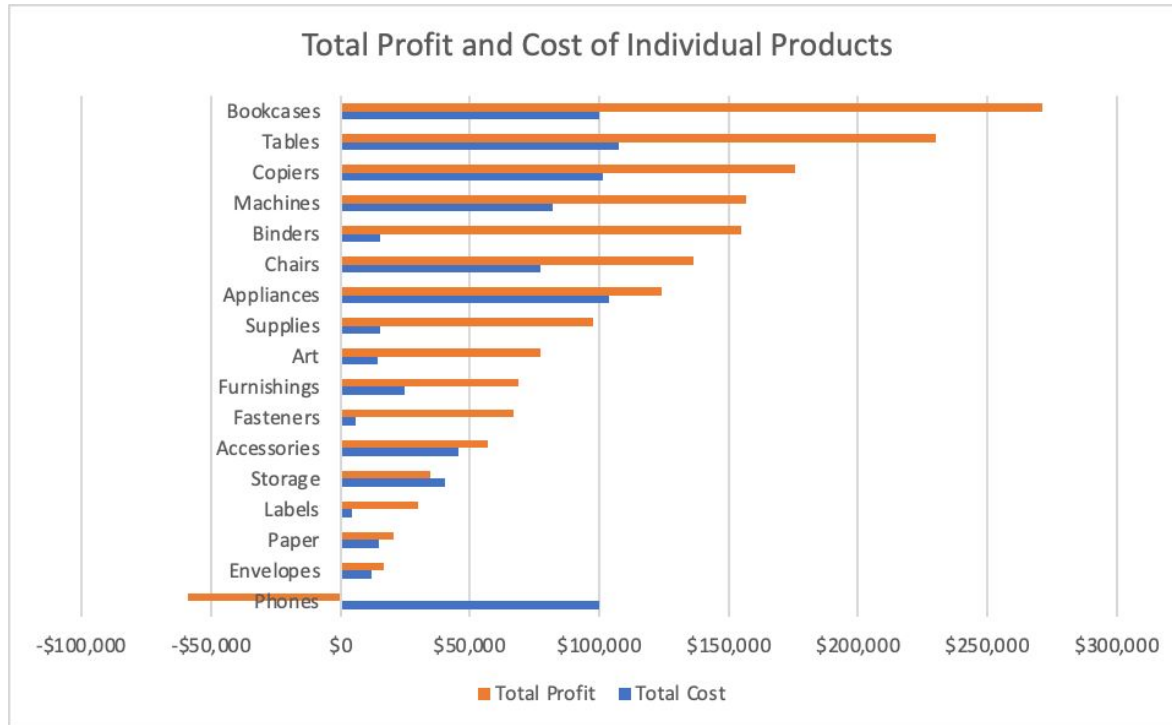
# **Cost Based Solutions**

# Which product segment has the highest product cost to consumer?



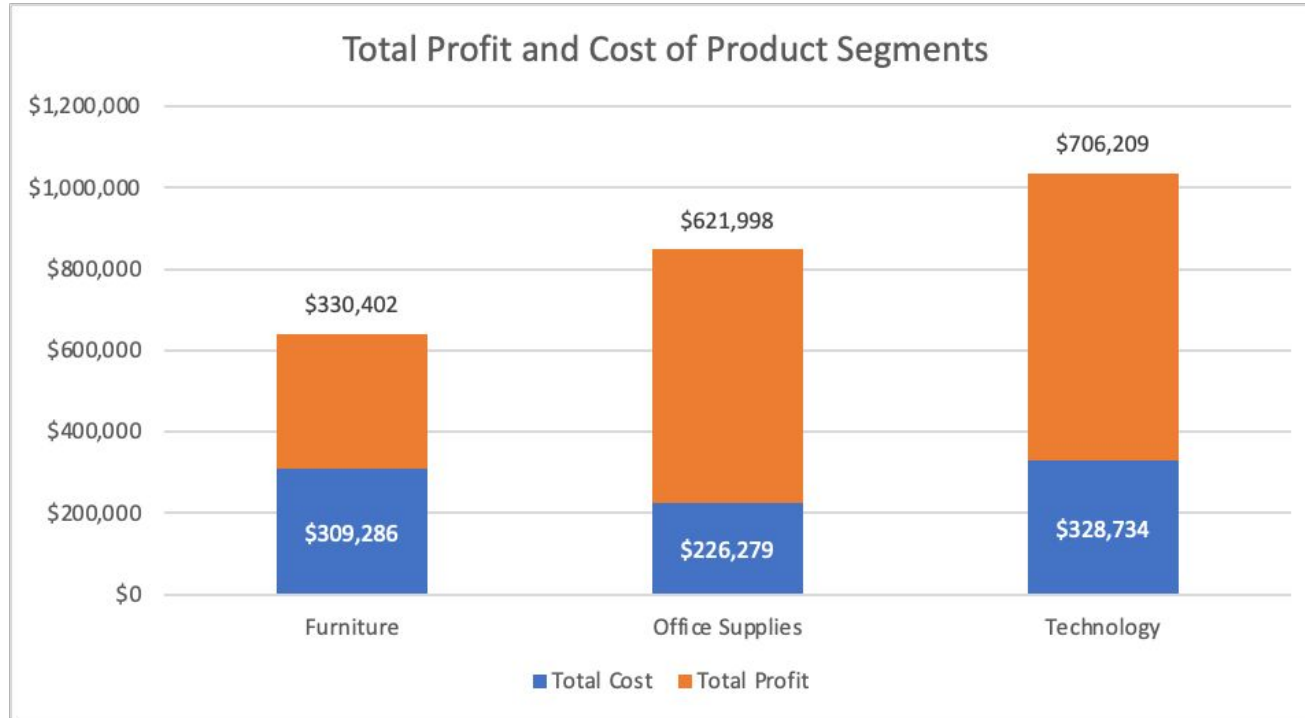
- Furniture has the highest average product cost
- Technology has the highest max product cost
- Furniture has the lowest min product cost

# Which sub product segment has the highest product cost to consumer?



- Bookcases are the most profitable followed by Tables, Copiers, Machines, and Binders
- Phones are unprofitable. Consider removing phones from the product mix

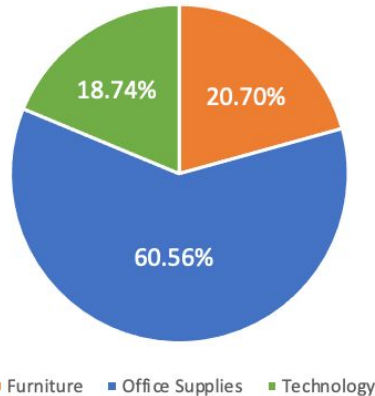
# Which is the most profitable product segment



- Technology is the most profitable product segment
- Technology also generates the most revenue

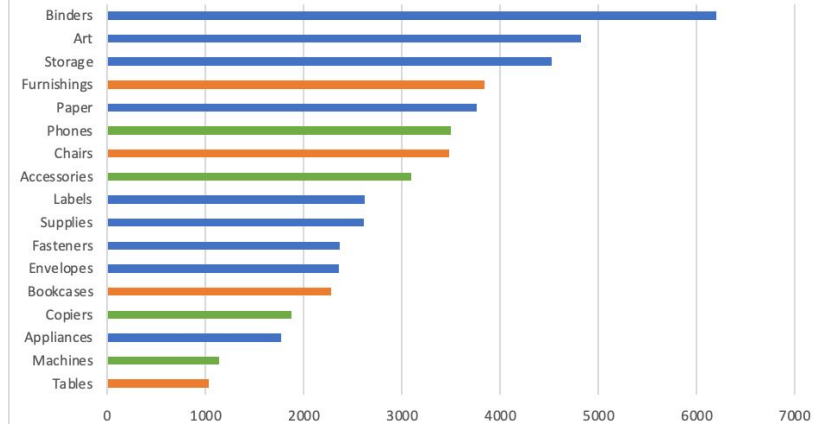
# Returns across product segments

Percentage of Total Returns Across Product Segments



- We currently experience the highest number of returns from Office Supplies

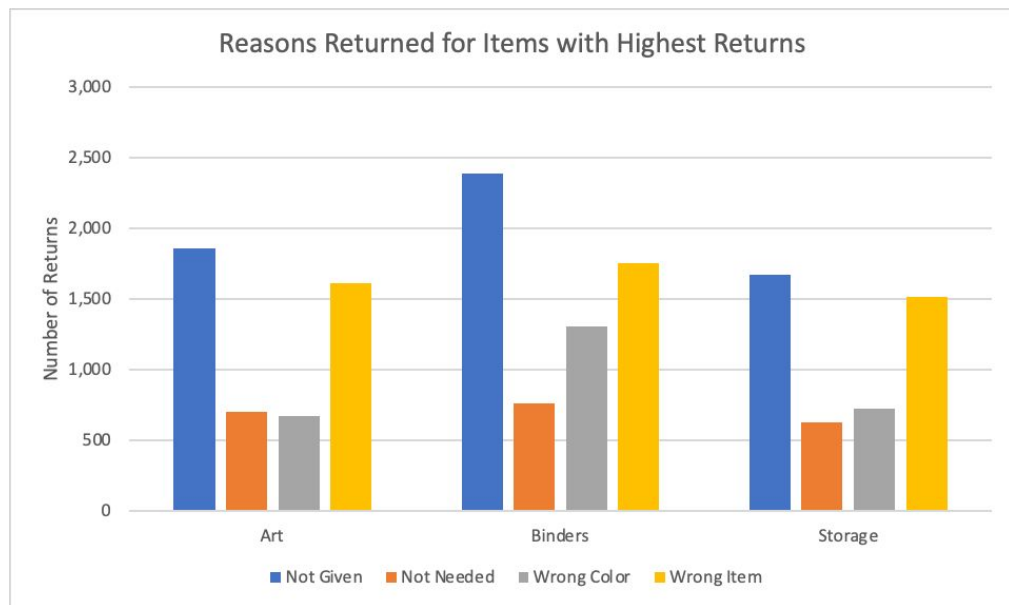
Total Returns of Products from Sub Product Segment



- Most of our returns come from Binders, Art, and Storage



# What is the main reason for returns?

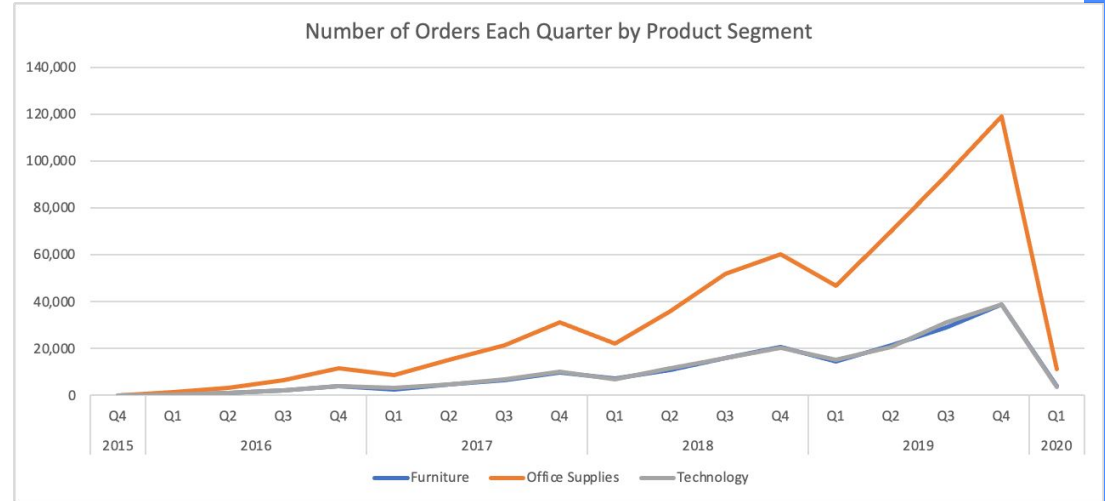


- Aside from Not Given, the main reason returned for all the products is Wrong Item, followed by Wrong Color
- Look into your distribution centers and investing into quality assurance



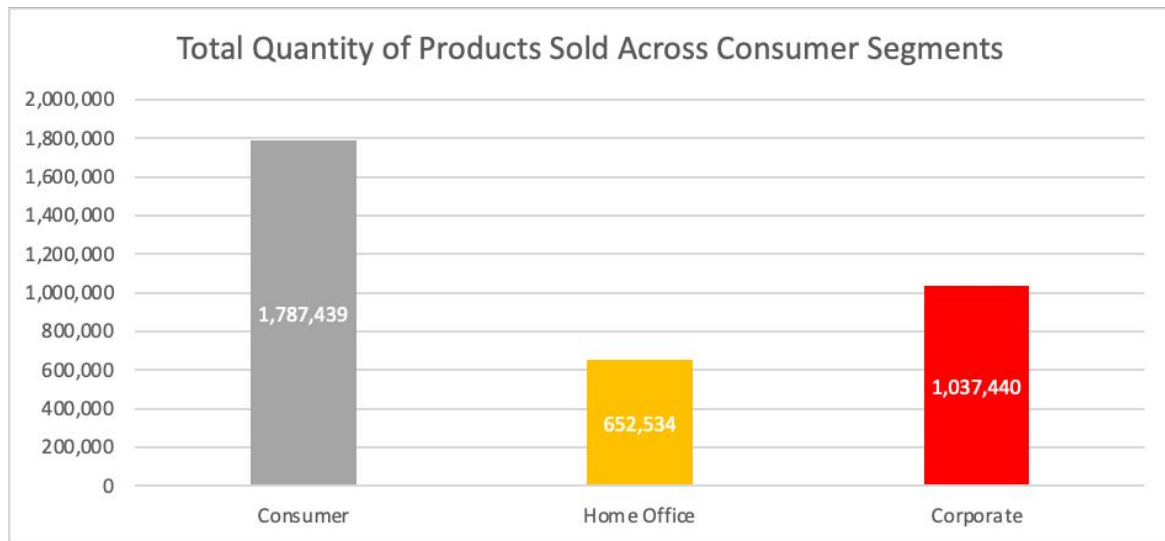
# **Revenue Based Solutions**

# Stimulating demand for products and consistent revenue generation



- We're experiencing the lowest profits from the Furniture segment, yet applying the highest discounts
- There's a cyclical trend in the number of orders. Consider applying discounts seasonally

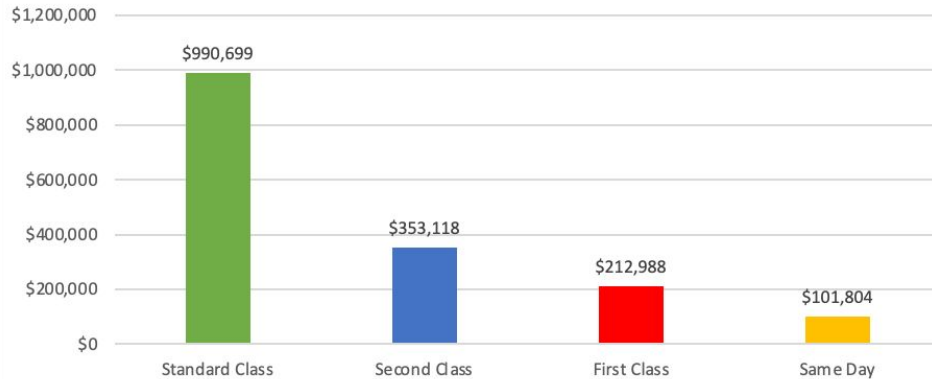
# Customer segment sales performance



- Most of our sales are to individual consumers
- Least of our sales come from the Home Office customer segment. Consider marketing our products more heavily towards Home Office/Corporate customer segments

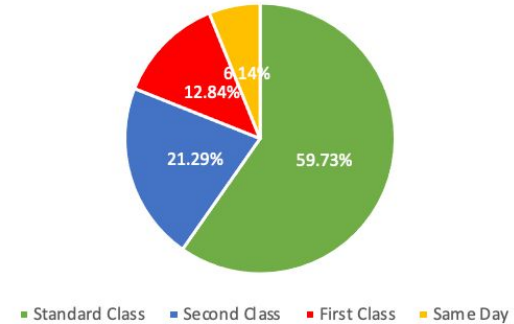
# Customer segment sales performance

Total Profits Generated Across Ship Modes



- Same-day shipping generate the least profits due to both price and quantity of orders

Percentage of Total Profits Generated Across Ship Modes

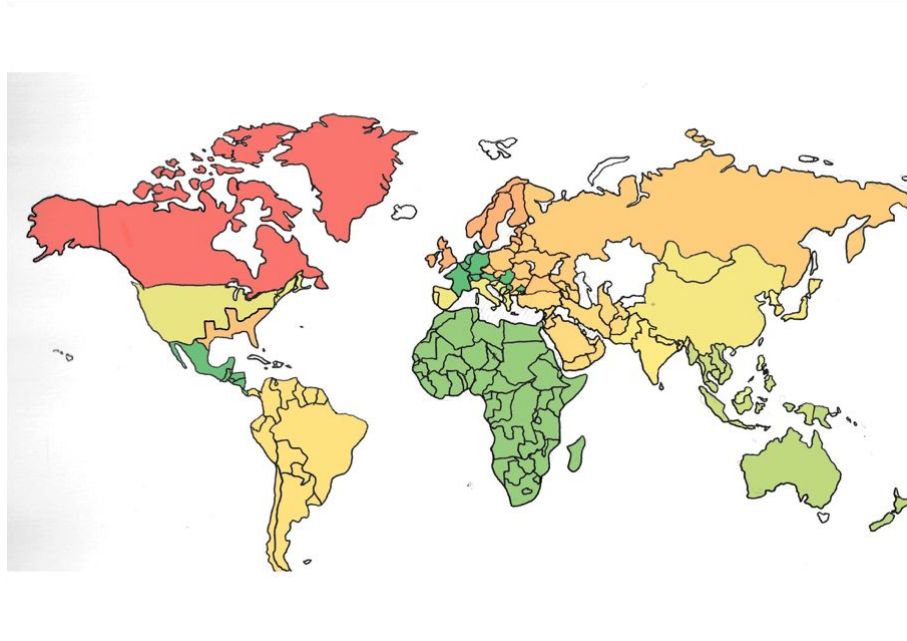


- Consider developing a different pricing structure. E.g. a subscription model instead of pay-per use (Amazon Prime)

# Profits generated from different regions

sub_region	sum_profit
Western Europe	\$194,388.68
Central America	\$187,787.92
Africa	\$154,212.88
Oceania	\$126,668.41

Northern Europe	\$50,245.69
Caribbean	\$42,920.82
North America	\$15,049.62
Central Asia	\$8,166.50



- Engage in more cultural marketing efforts
- Look to centralize distribution channels



**Technology** is the  
best performing  
product segment

- Generates the highest revenues and profits
- Experiences the lowest returns

## Cost Based Solutions

01

### Remove Phones

Remove phones from the profit mix since they're generating negative profits

## Recommendations

02

### Quality Assurance

Identify issues in product distribution and invest in quality assurance

## Revenue Based Solutions

03

### Discounts

Reduce discounts on furniture and apply discounts seasonally

04

### Geography

Stimulate demand in regions closer to your distribution centers



**Thank You  
Questions?**