

A photograph of a wooden surface with a red pawn on the left and a group of yellow pawns on the right. The background is a soft, out-of-focus grey. The title 'CUSTOMER SEGMENTATION' is overlaid in white, with the red pawn acting as the letter 'C' and the yellow pawns acting as the 'S' and 'G' in 'SEGMENTATION'.

CUSTOMER SEGMENTATION

PRESENTED BY COMPUTATIONAL SUCCESS CONSULTING

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WHAT IS CUSTOMER SEGMENTATION

- Process of dividing customers into groups based on similarities
- Purpose to better understand the value, characteristics, needs and behaviors of different customer segments
- Inform and optimize marketing strategies, customer engagement and product development



THE IMPORTANCE OF CUSTOMER SEGMENTATION TO ONLINE RETAILERS



IT'S ABOUT
GETTING THE RIGHT
CUSTOMERS



HIGHER
CONVERSION
RATES

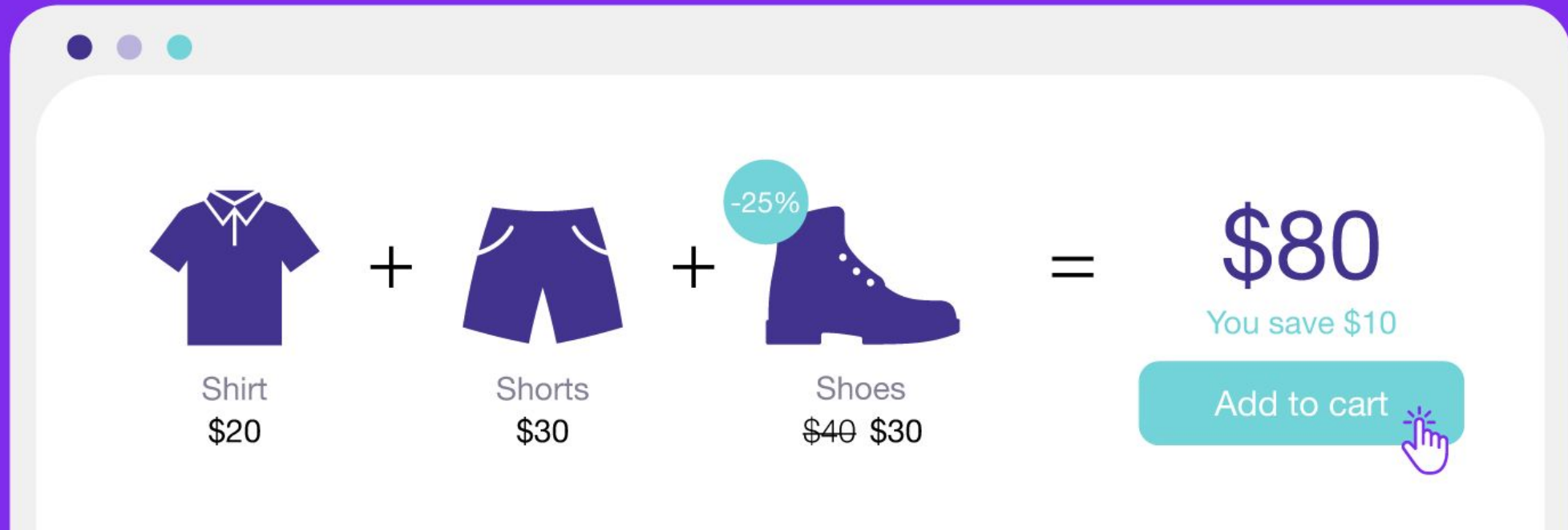


HIGHER AVERAGE
ORDER VALUES

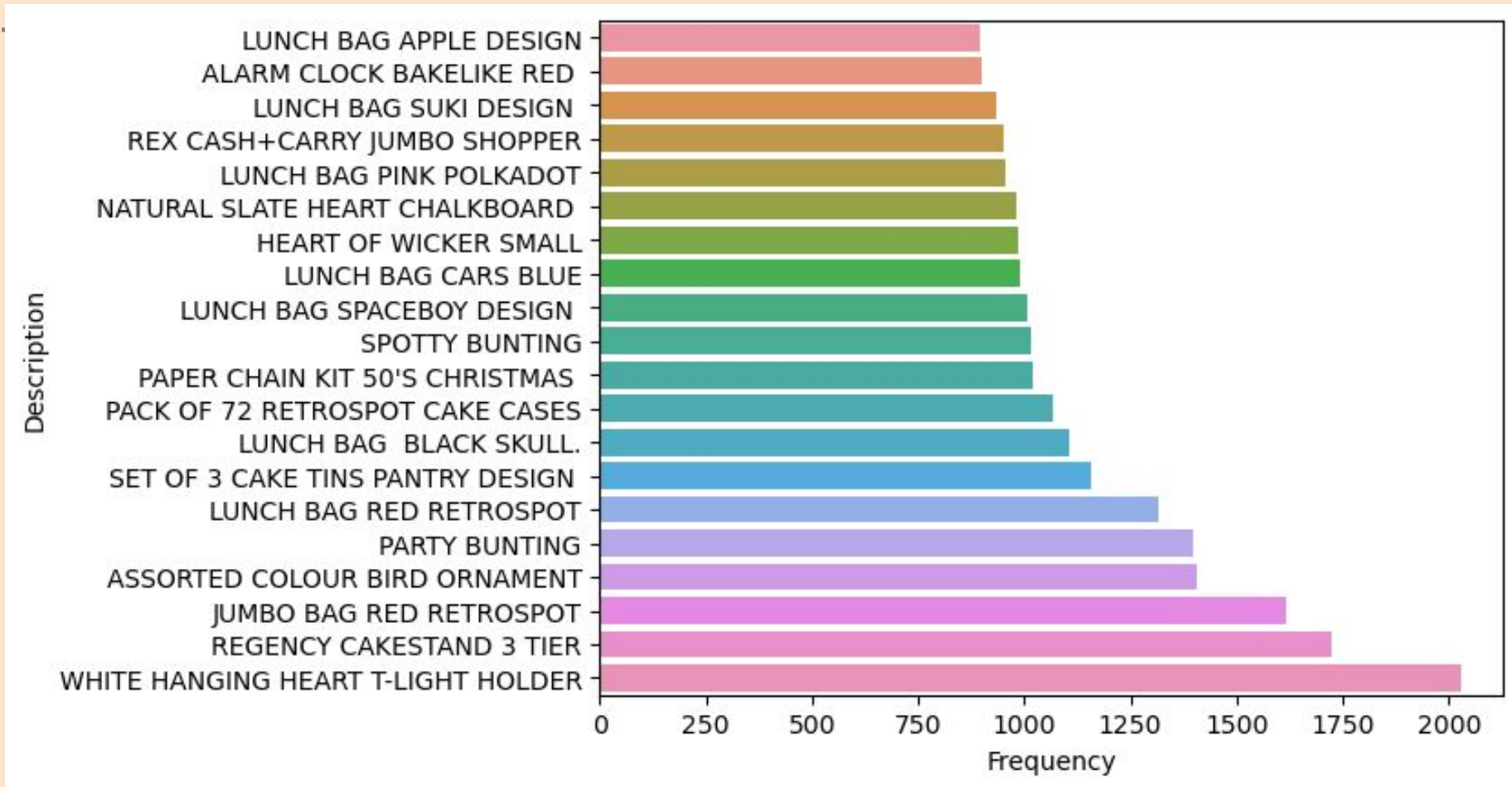


INCREASED PROFITS

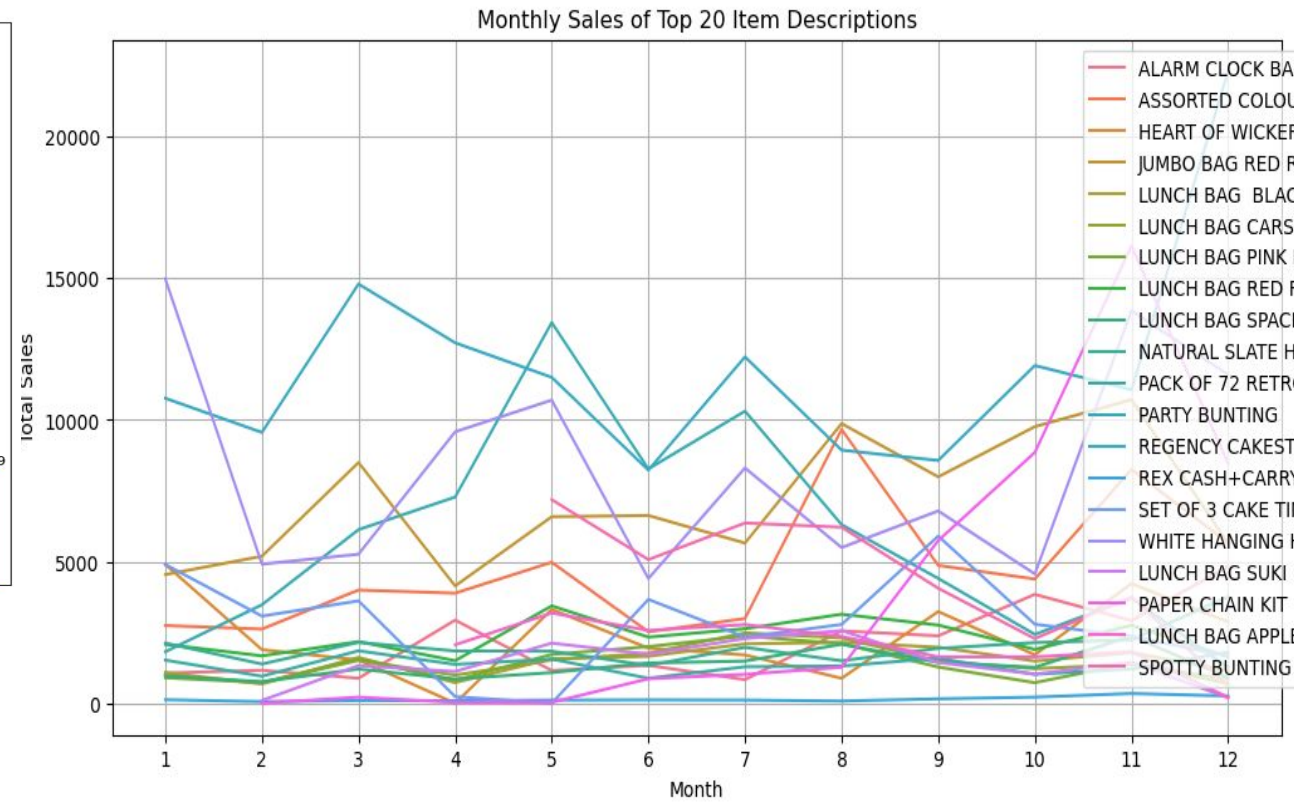
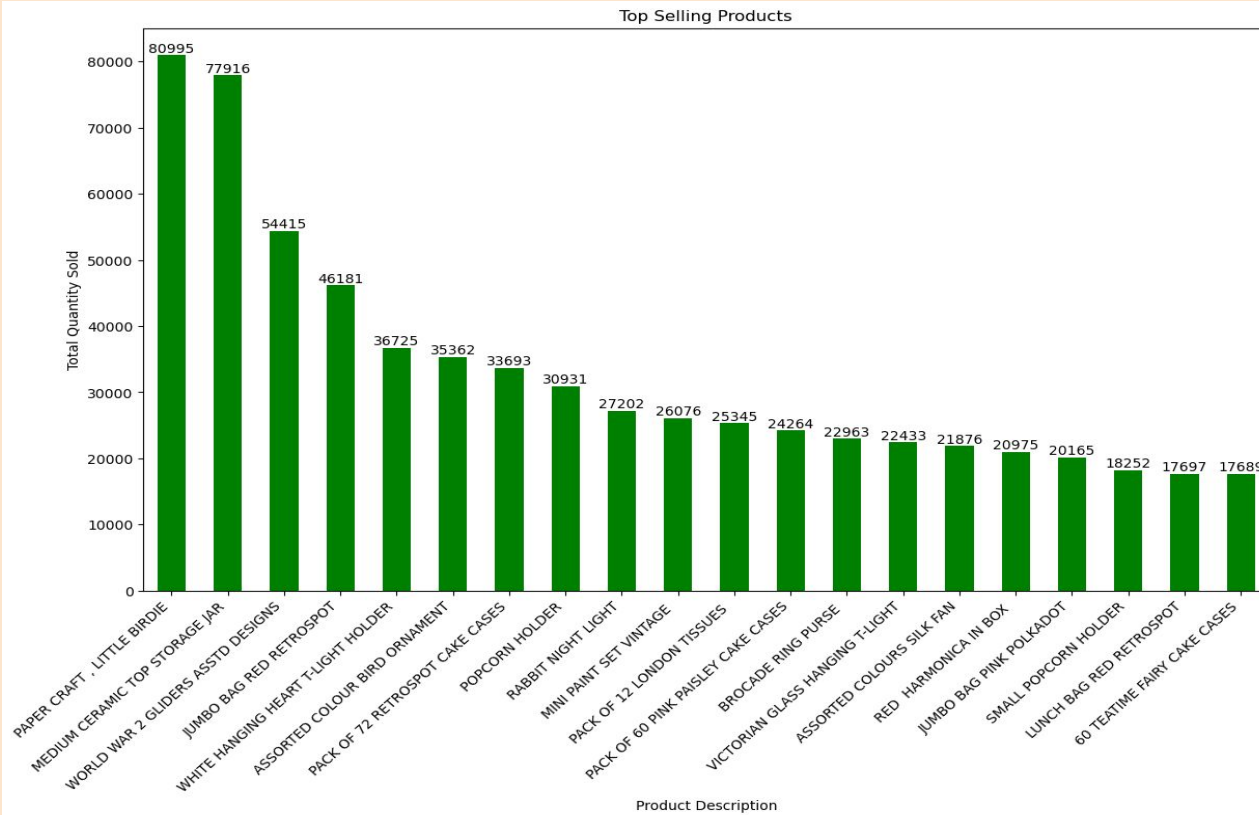
Initial Modeling and Ideas



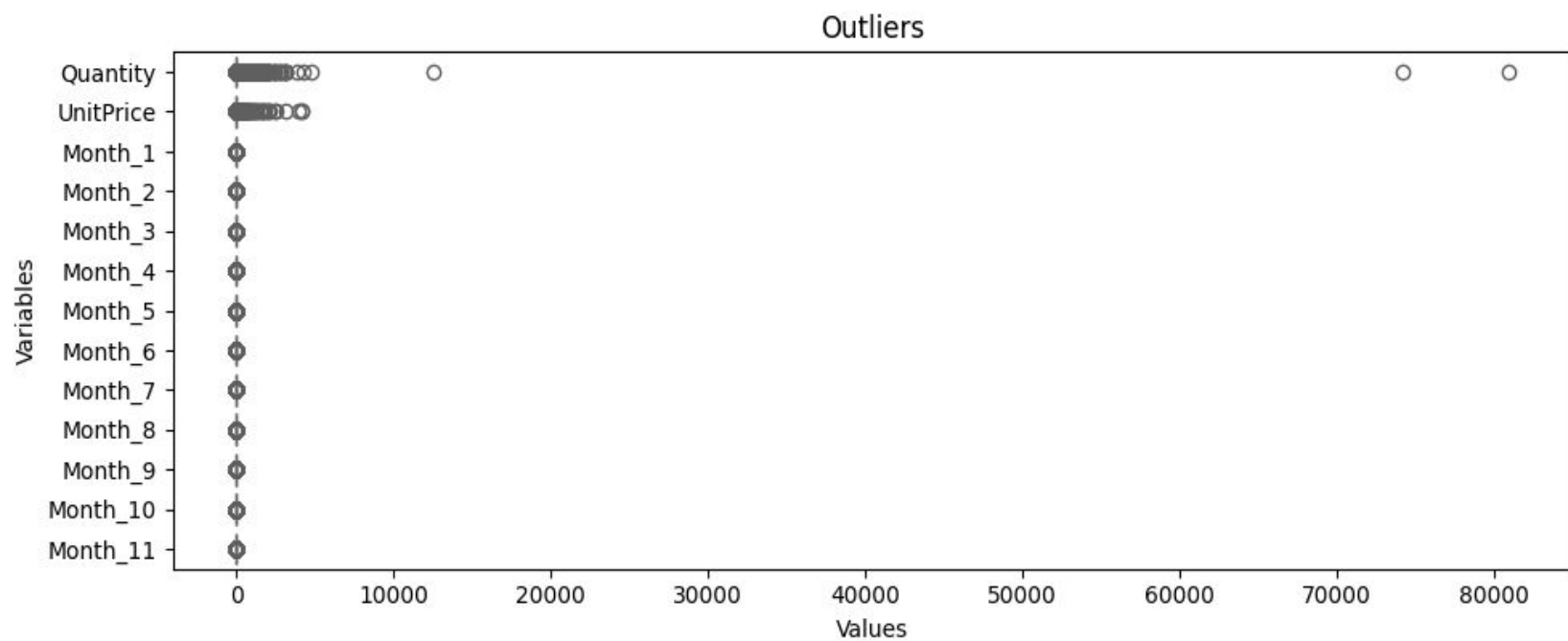
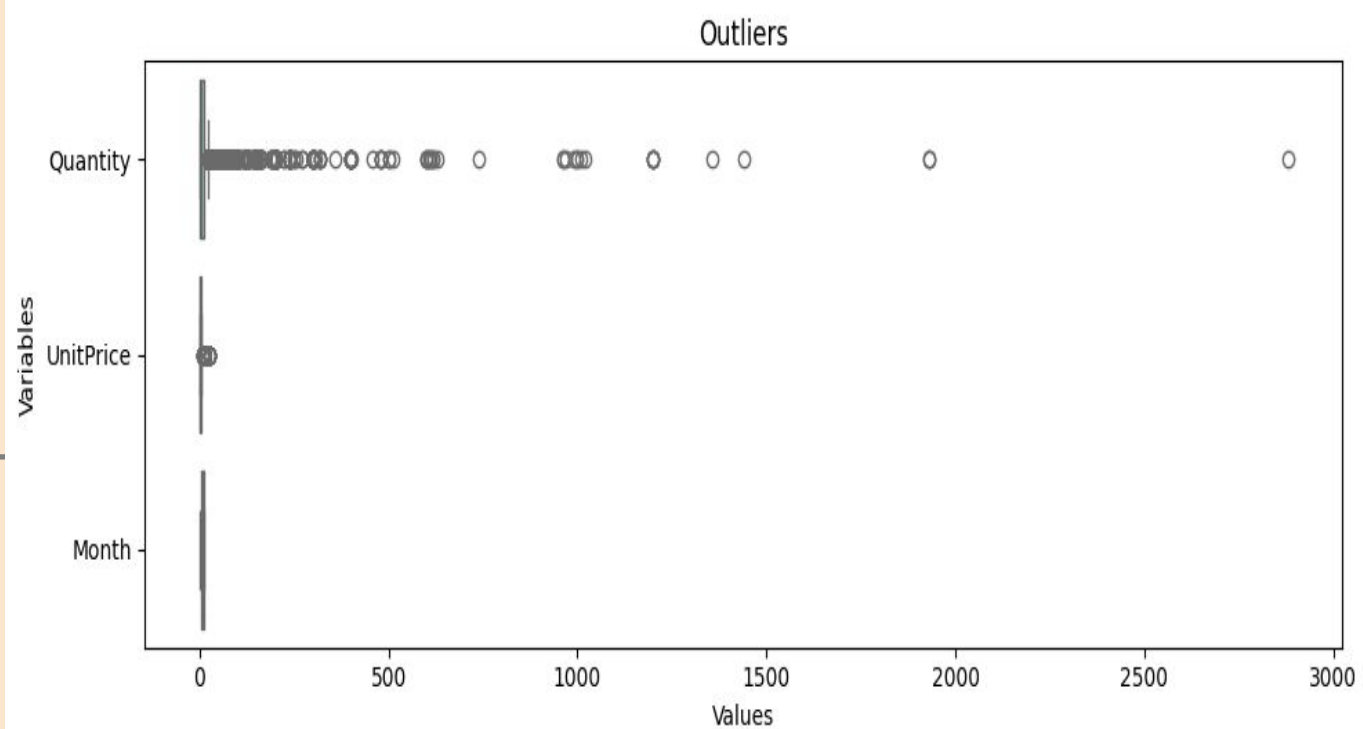
Pro4 Online Retailer



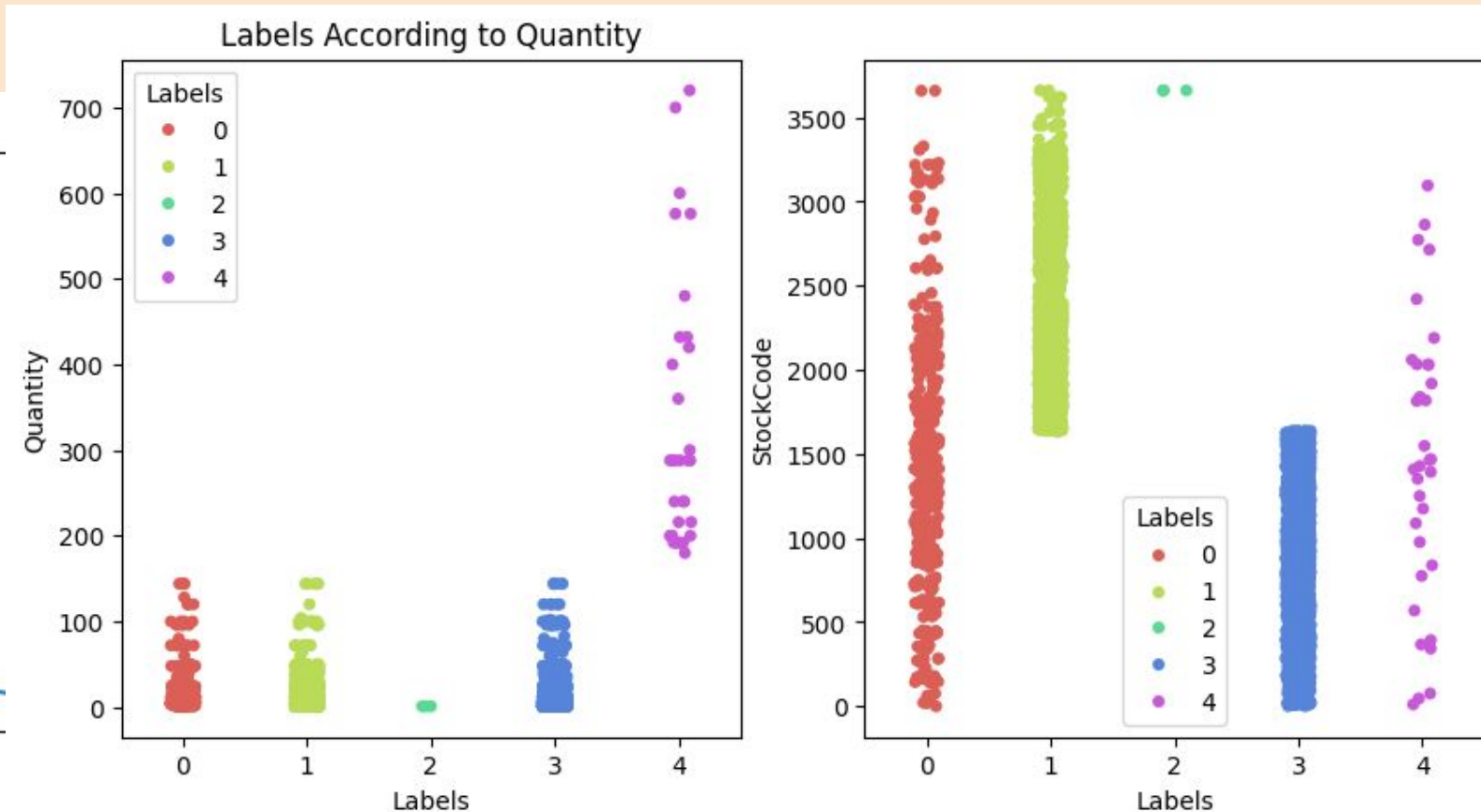
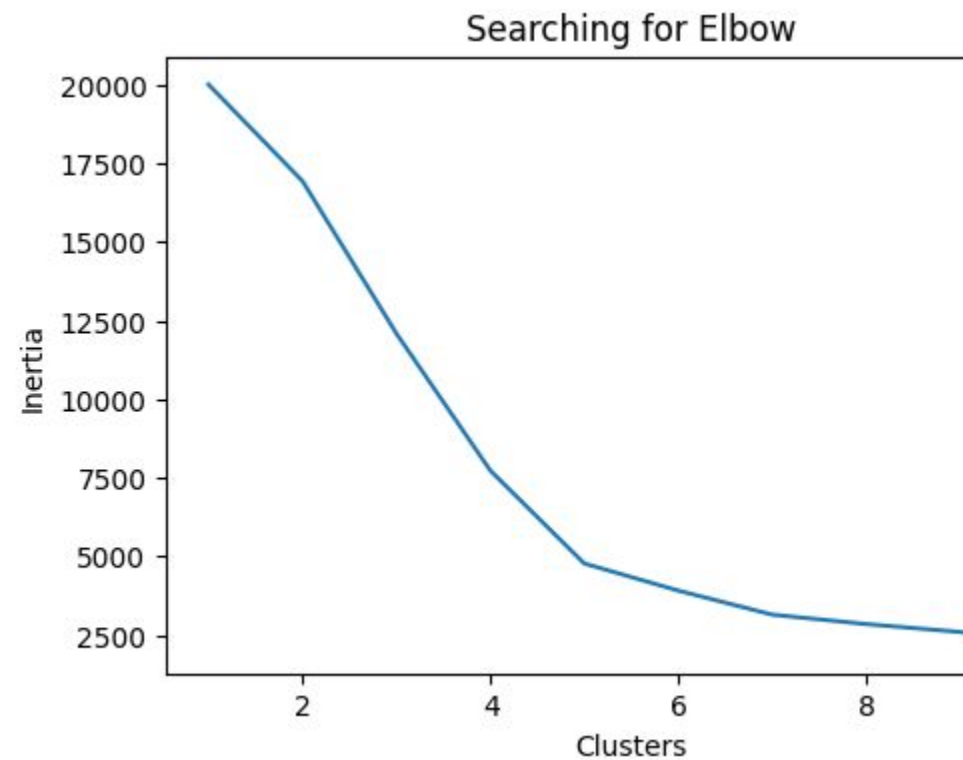
What can CSC do for Pro4?



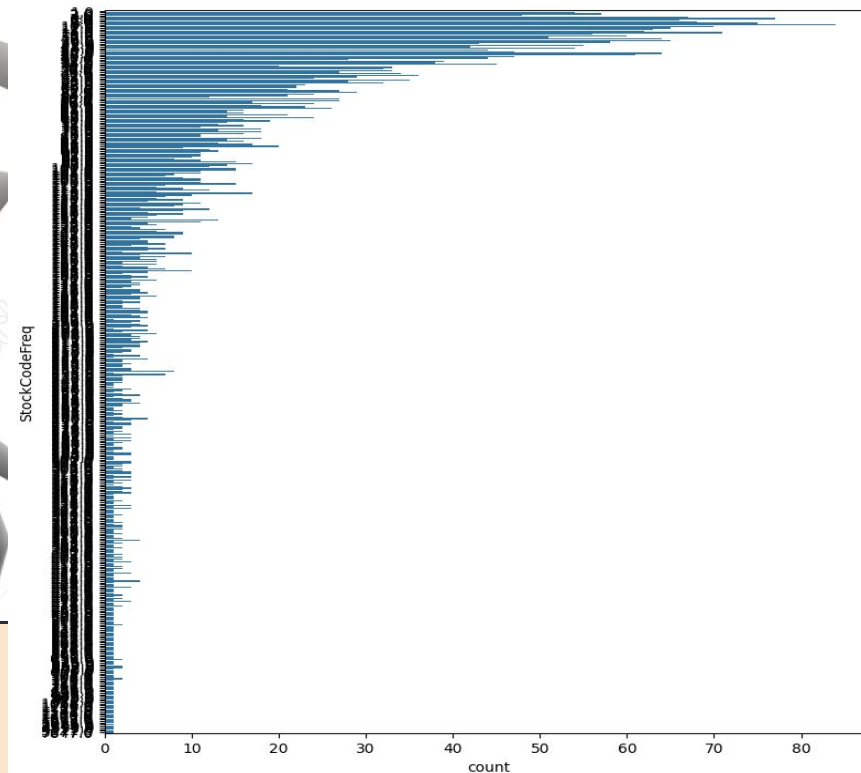
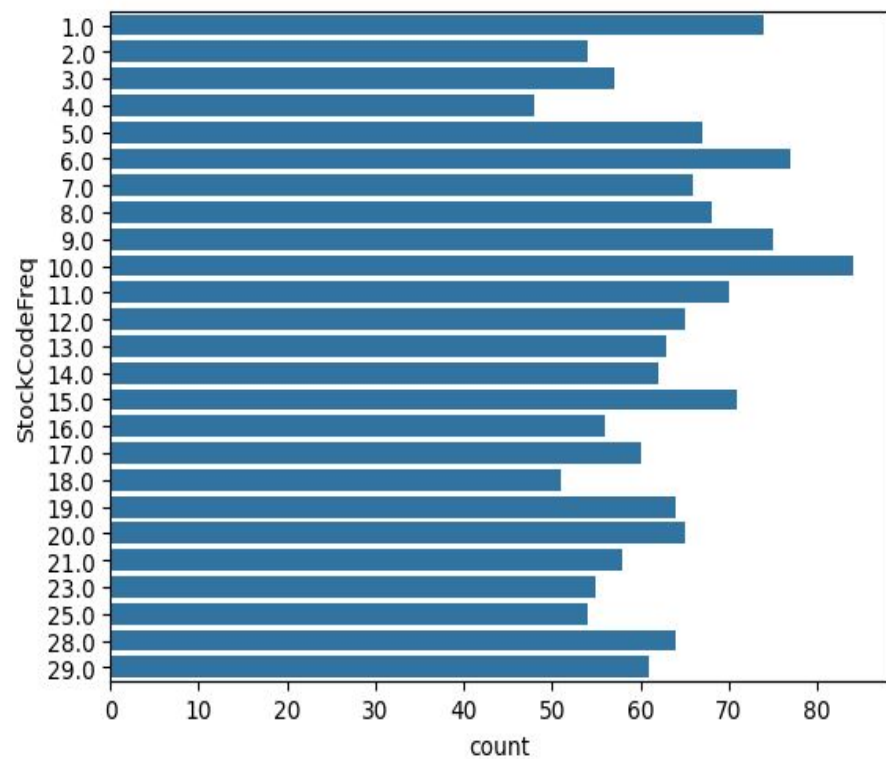
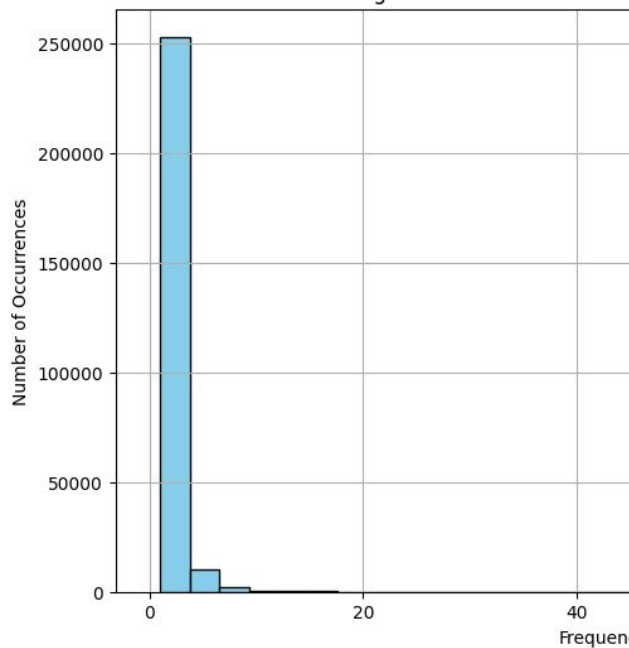
Poor Grouping



Clustering Item Quantity vs Stock Code



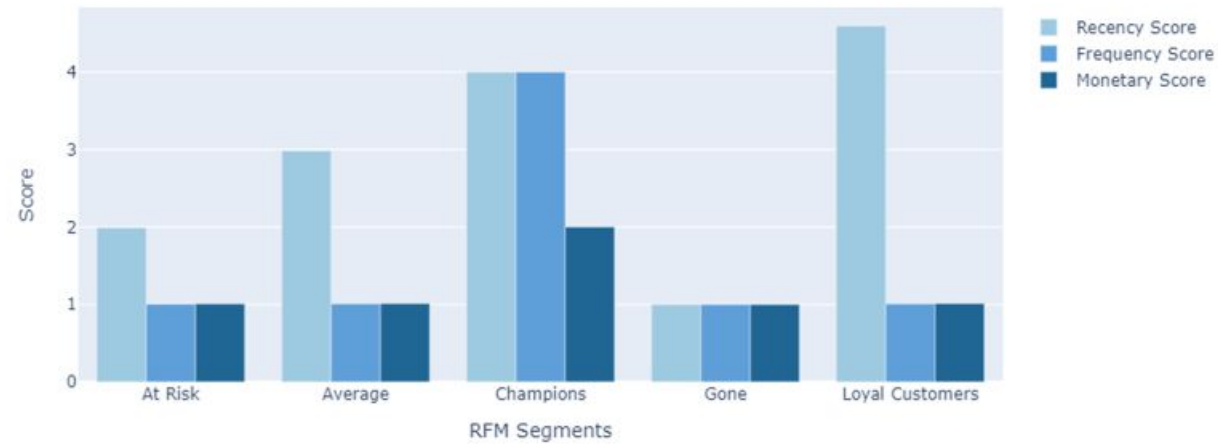
PITFALLS





CUSTOMER SEGMENTS RFM

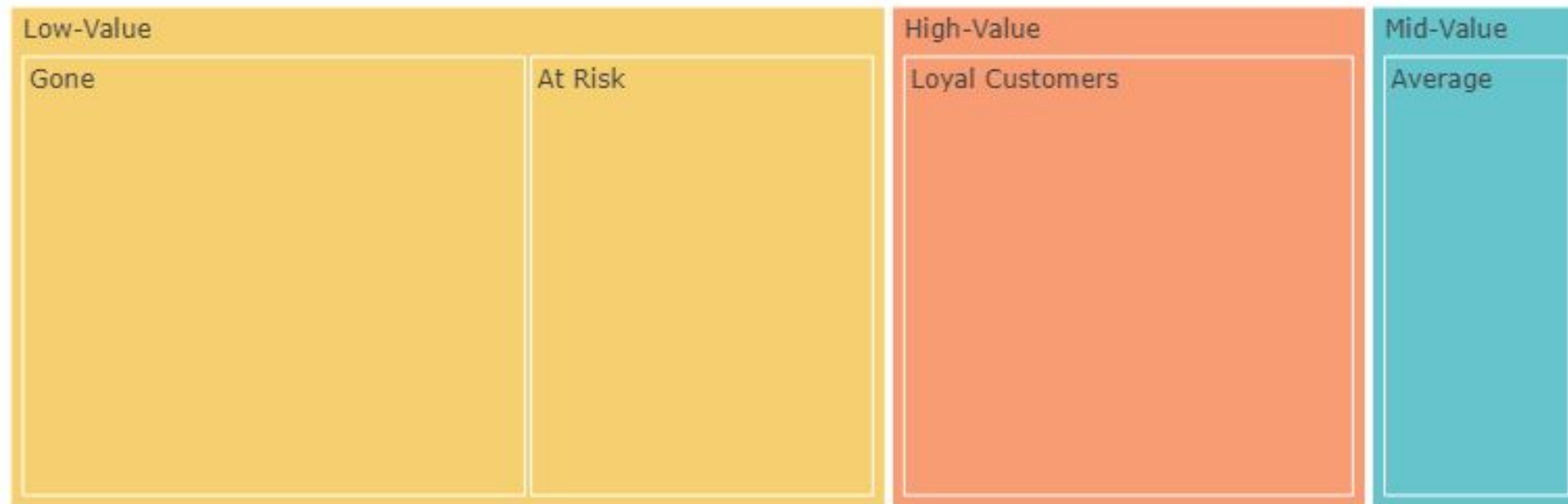
Comparison of RFM Segments based on AVG Recency, Frequency, and Monetary Scores



CUSTOMER SEGMENTS AVG RFM

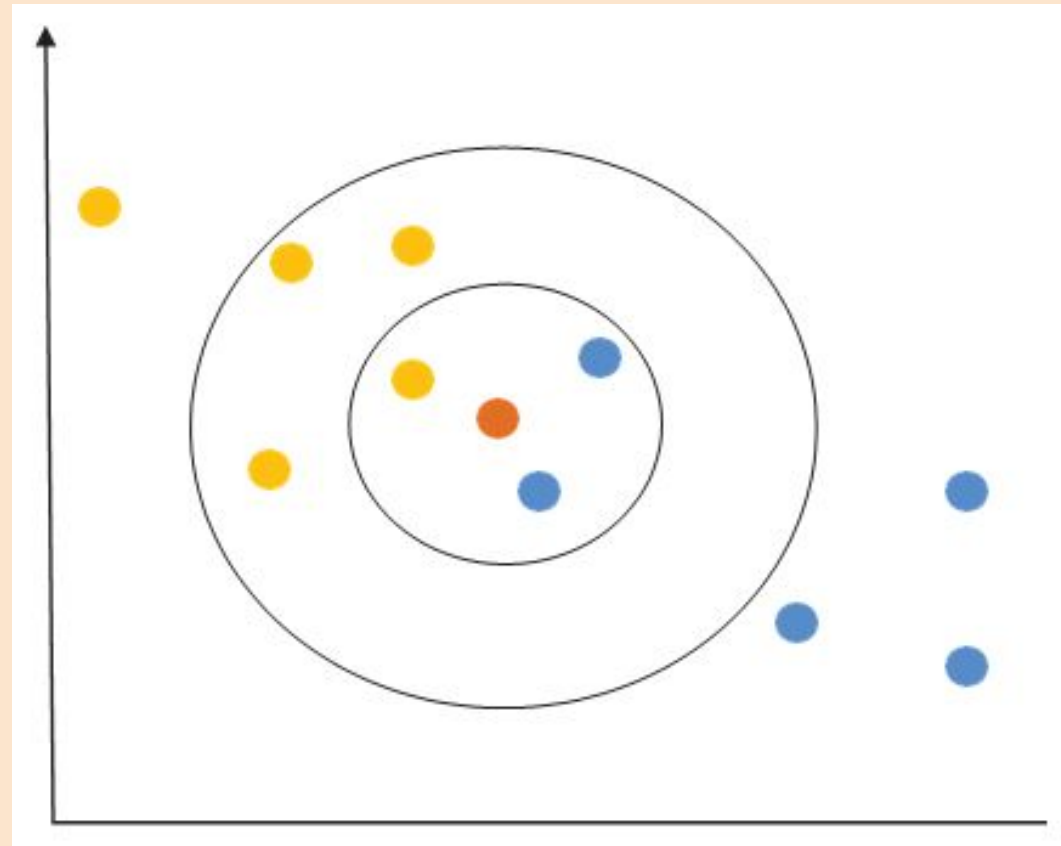
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RFM Customer Segments by Value



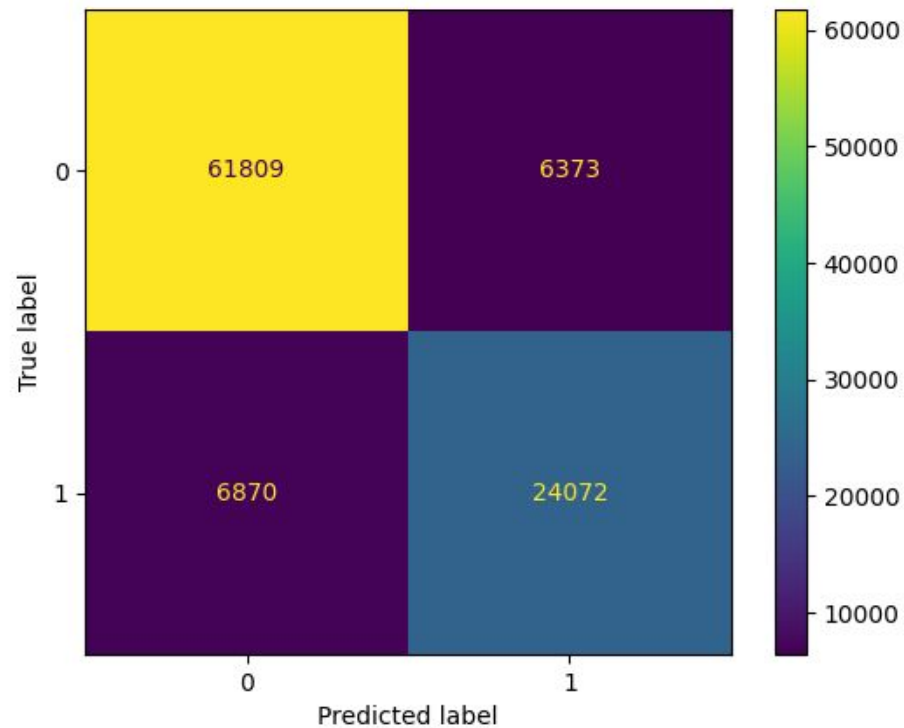
K-Nearest Neighbor Classification

Low-Value vs Mid/High-Value Customers



KNN Results

86.63% overall accuracy

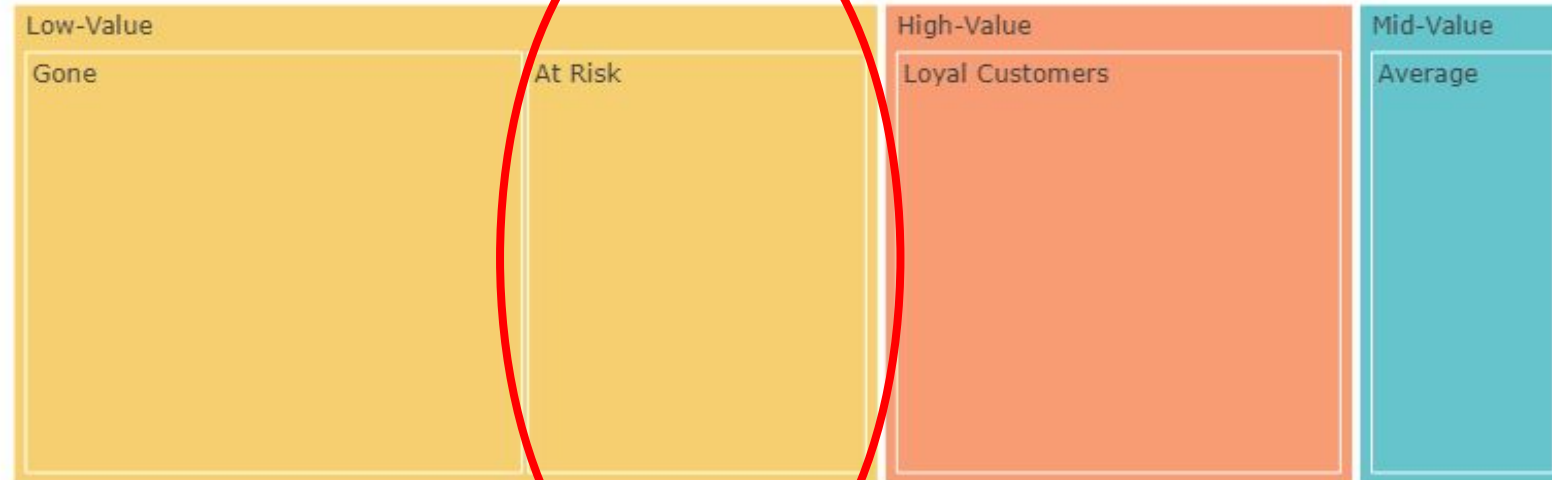


0 = 'Low Value'

1 = 'Mid to High Value'

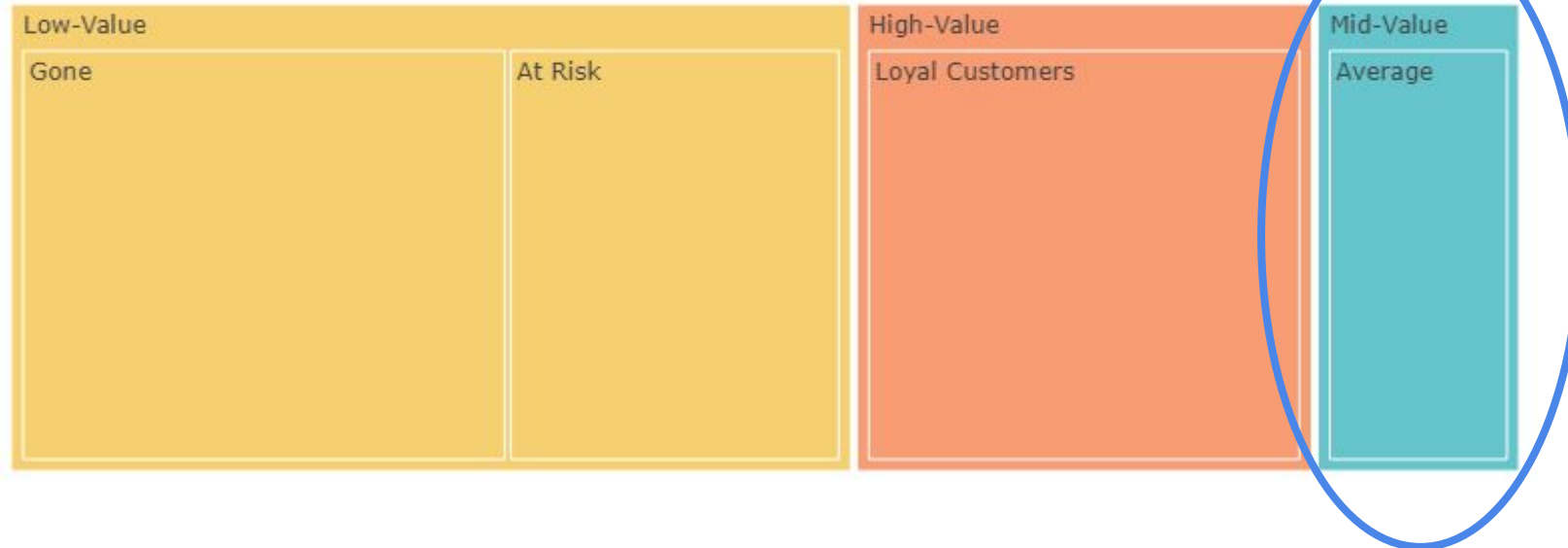
Focus: At Risk Customers

RFM Customer Segments by Value



Convert into Average Customers

RFM Customer Segments by Value



Conclusions

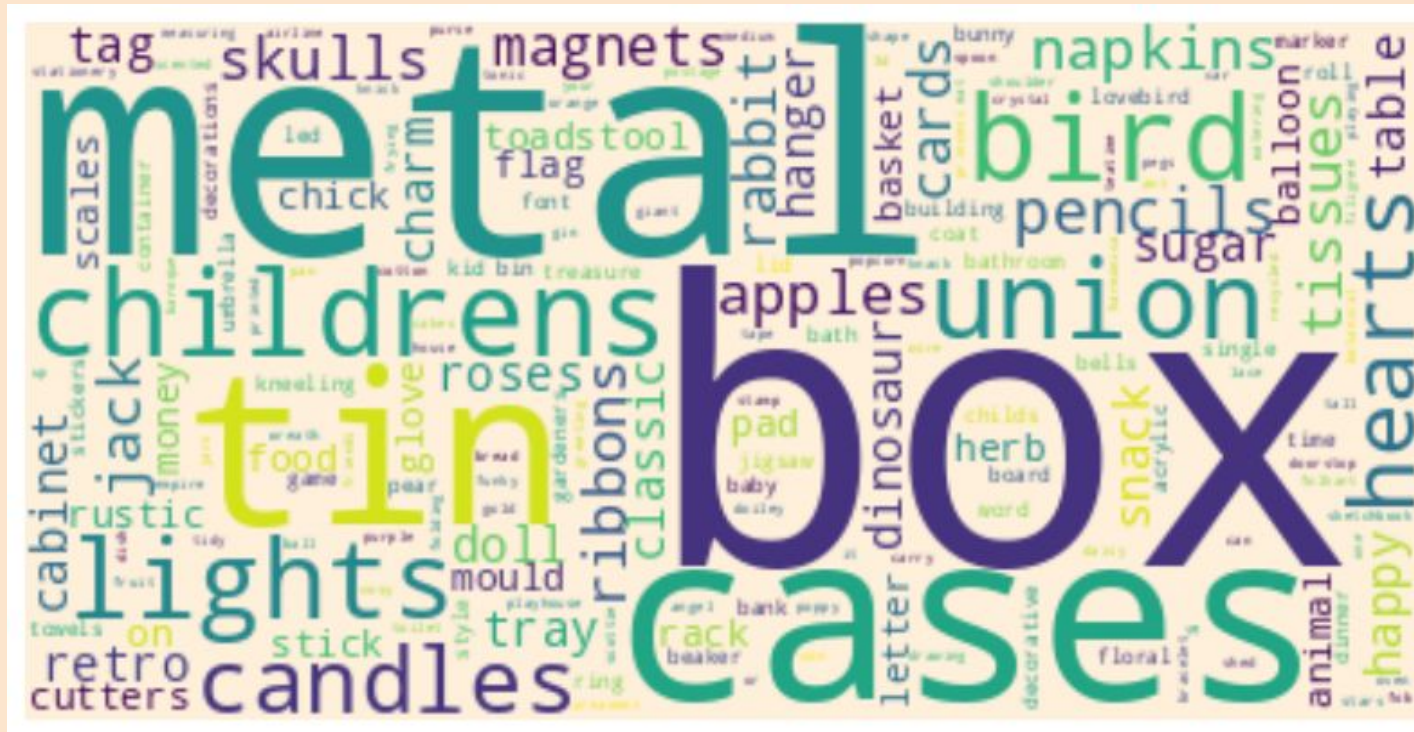
- **Pro4 Implements CSC' s Machine Learning to Identify At-Risk Customers**
- **Targeted Marketing Campaigns**
 - Incentives
 - Discounts
 - Reminders
- **Enacted Before Gone Customers**

Limitations

- **Need for a Larger Data Set**
 - Longer than a Year
 - More Columns: i.e. Wholesale vs Retail, Time Spent on Site before Purchase
- **Missing 'CustomerID'**
- **Reason for Returns**
- **Manual Entries**

If We Had More Time

Optimize More WordClouds for Presentation



Questions?

