

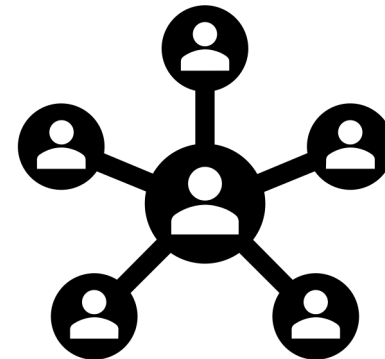
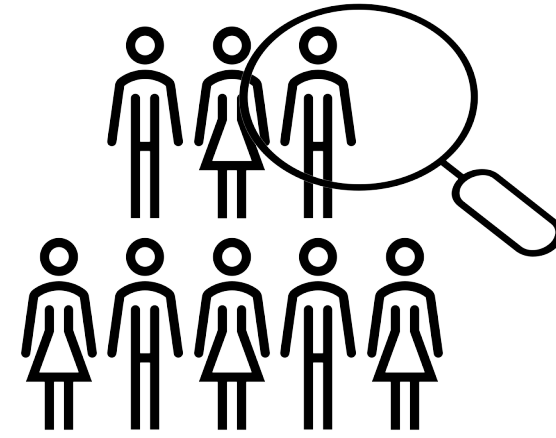
Office Supplies Inc. -A Super Store

How to increase revenue through Customer Segmentation



Introduction

- Office Supplies would like to increase its sales revenue through marketing promotions.
- By leveraging on past customer-transactional data, we can identify potential customers. Further through customer segmentation we can offer customized marketing promotions.



Methodology

Data

- Customer data for the year 2015 with 1900 datapoints and over 20 features
- Each data point in a a unique transaction with Order ID, Customer ID, Date, Product Category, Quantity, Sale etc.
- 1130 unique customers

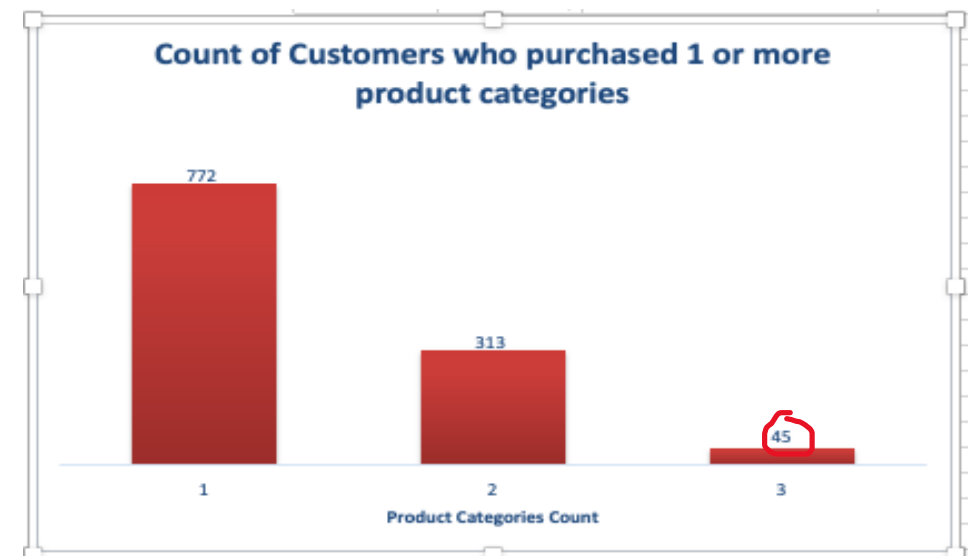
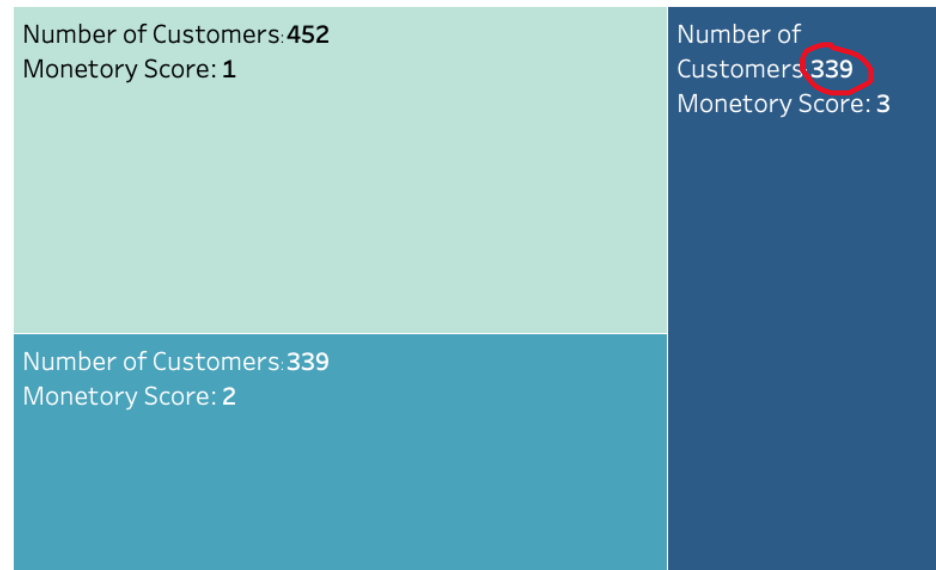
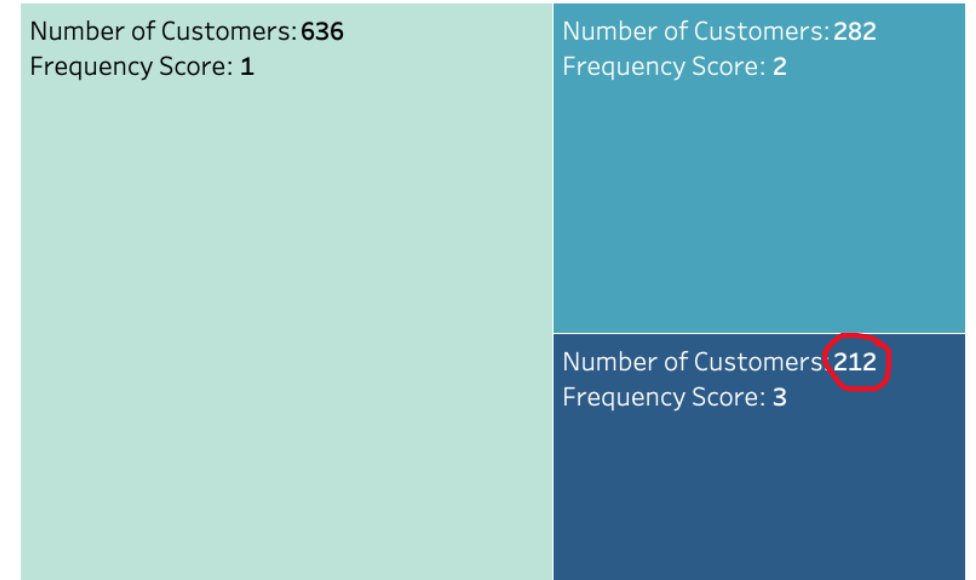
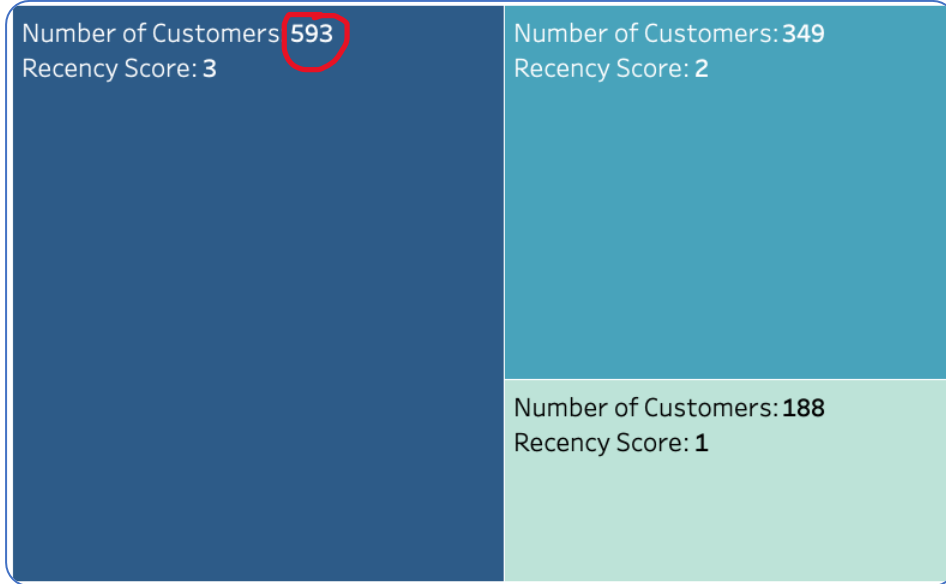
EDA

- Identifying types of customers using metrics- Recency, frequency, Monetary and Breadth

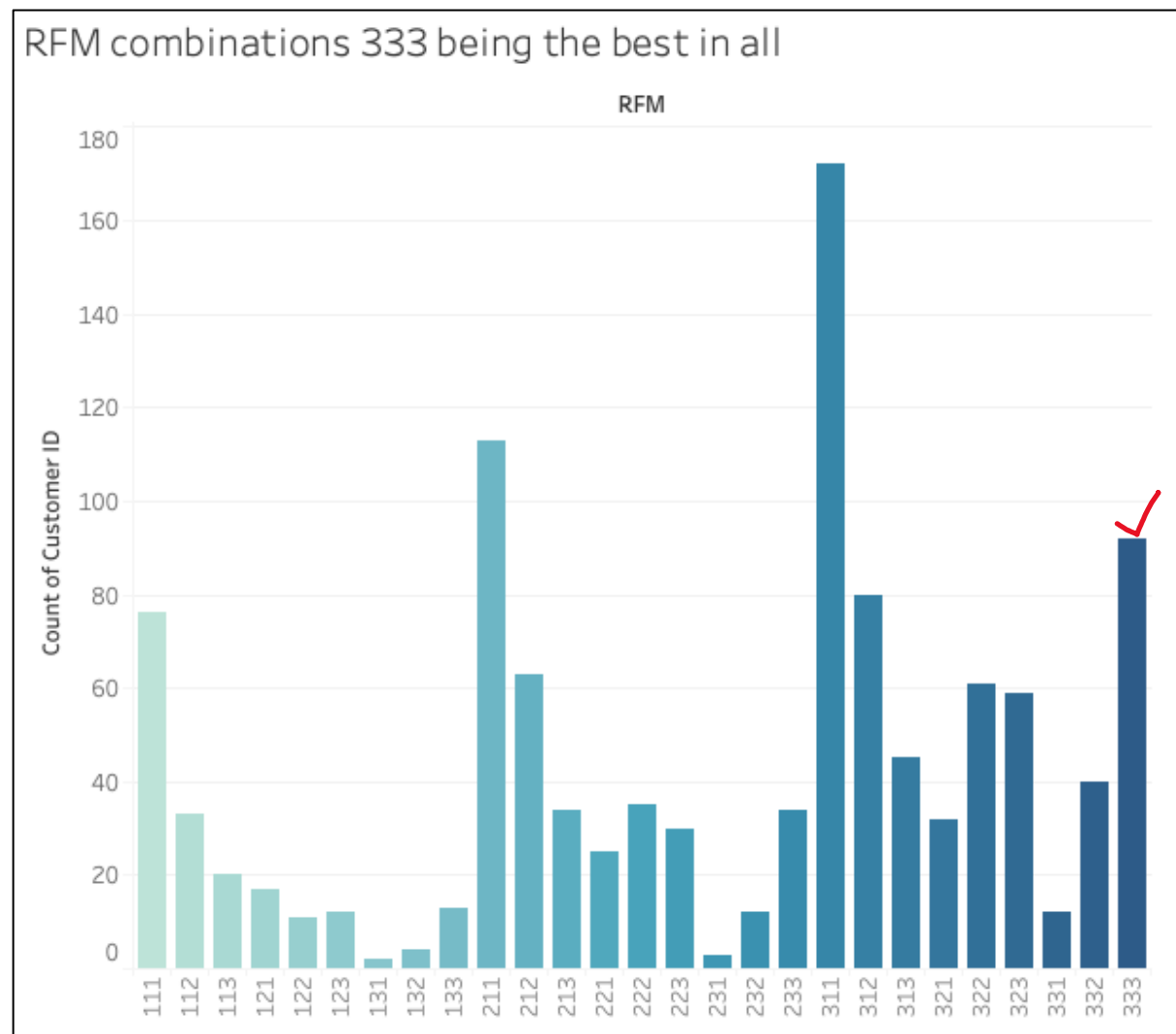
Future Analysis

- Proposing future Data Science paths to address the problem in detail.

Recency, Frequency, Monetary and Breadth



8% of Customers contribute to 67% of total Sales



Customer Category	Characteristics	Promotions/Offers
Best	Highest scores in all metrics. They are willing to purchase frequently, and they also spend generously.	Inform them of new product launches , recommend products based on past purchase and big-ticket items.
Big spenders	Top score in just one metric-Monetary	Recommend luxury products
Loyal	They buy frequently and likely to come back and who have tried different product categories. So top scores in both Recency and Frequency metrics.	They may not necessarily be big spenders. Offer them discounts on products and/or free shipping .
At-risk	Customers who have top score in Monetary and Frequency but not in Recency. Need to re-engage and retain them.	Discount pricing, exclusive offers/ coupons and new product launches. Engage them in Customer satisfaction surveys to find what are their likes and dislikes.
Churned	Lowest score in all metrics. They are lost customers.	Not worth spending very high budget promotional offers. They can be engaged with email marketing .

Future Data Science Paths:

Customer Segmentation through machine learning algorithms can discover new segments of customers which will aid in surfacing new insights.

Clustering analysis to further segment the customers into micro-segments and perform customized promotions to such extremely homogeneous group of customers.

Using **Recommendation engines** to identify and channel the promotions of certain type of niche customers.

Regression analysis to predict revenues.

Assumptions and Risks:

- Assuming that the loyal customers thus identified, will make a purchase after the marketing promotion.
- Potential loss of revenue from other customers who may not be loyal but may still have a need.
- Assuming that there is a budget for promotions that can be made to targeted customers.

Thank you

- Questions