Optimizing Marketing Strategies with Customer Segmentation

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CS2 Project
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Introduction

Project's aim and goal.

Purpose: To optimize marketing strategies by understanding different customer segments.

Highlight: The importance of targeted marketing.

What is Customer Segmentation?

Customer Segmentation   - Grouping customers based on similar behaviors and attributes.

Benefits:

-Tailored marketing!

-Improved customer satisfaction!

-Increased sales!

Methodology

Data Collection : Gathered customer purchase data from the required Instacart dataset.

Analysis Tools : Utilized clustering algorithms to identify customer segments.

Key Metrics: Purchase frequency, time between purchases, and when the orders took place based on the day of the week and the hour of the day (expressed as an average).
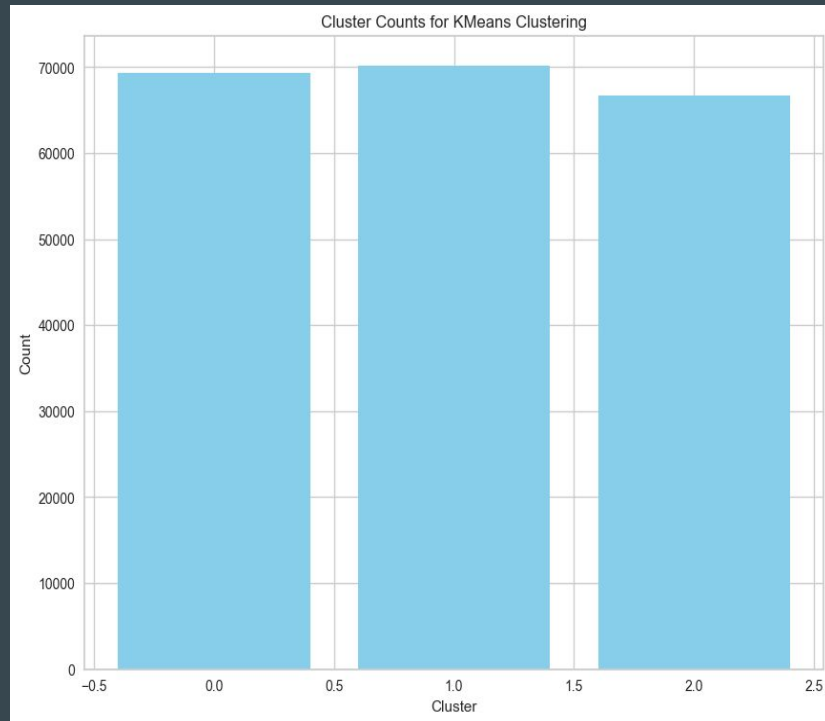
Data Overview

Highlight: This visual shows the established pattern of purchasing activity within the customer data.
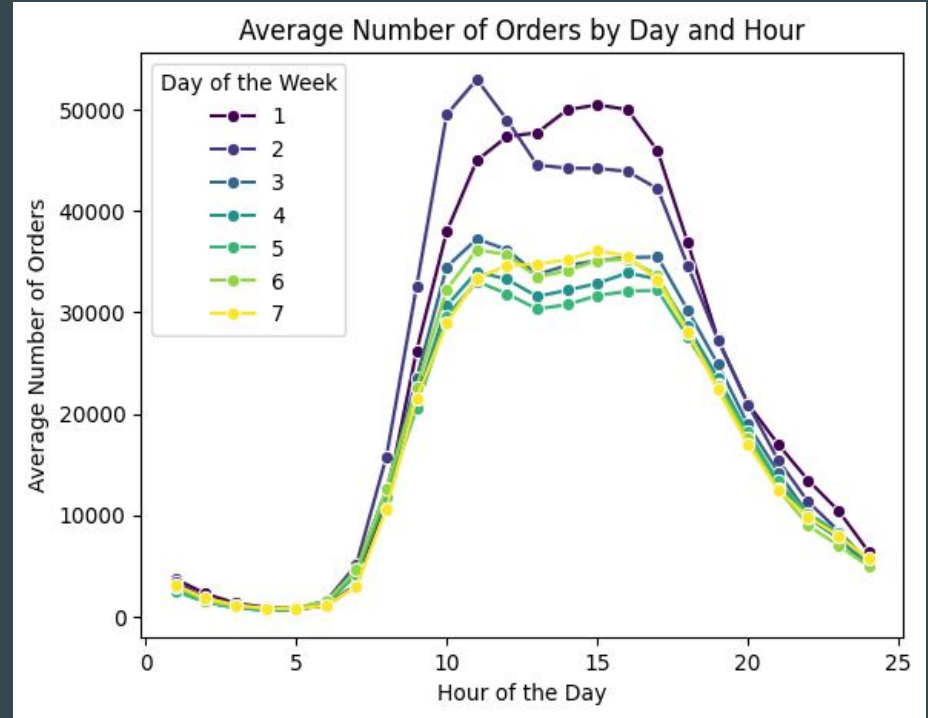
Key Findings

The chosen clustering algorithm discovered

three distinct customer groups:

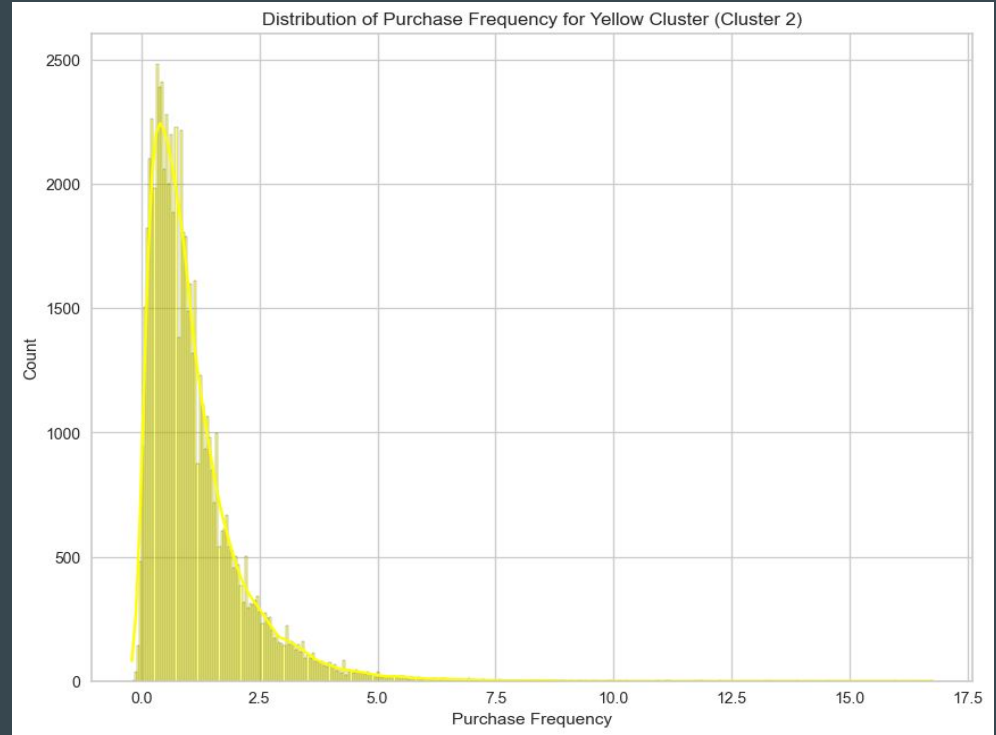-Frequent Shoppers

-After Hours Shoppers

-Weekend Shoppers

Frequent Shoppers Cluster

Characteristics:

-High purchase frequency

-Prefers weekday shopping

Strategy:

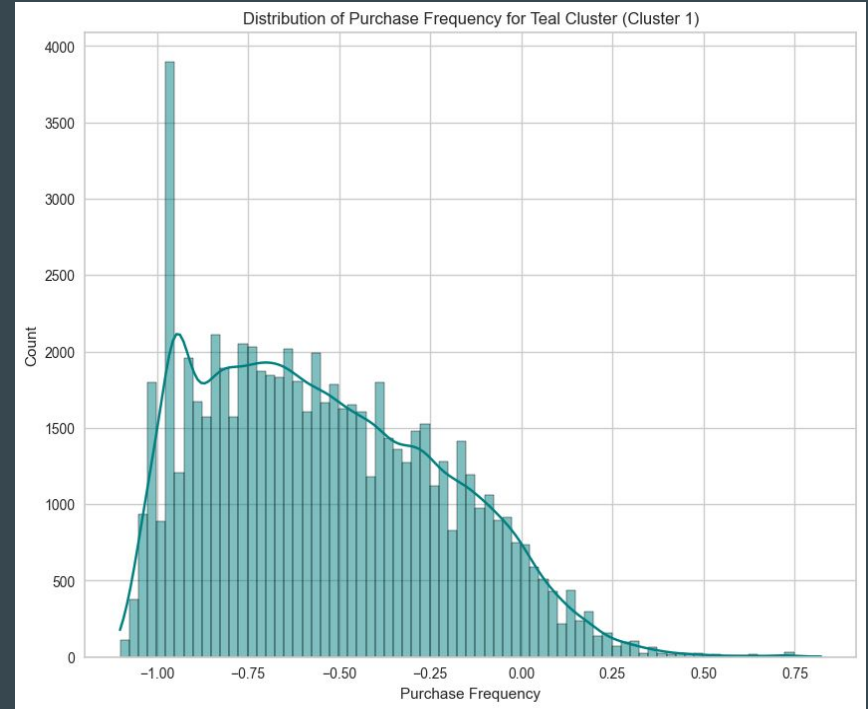-Loyalty programs and/or

frequent buyer discounts

After Hours Shoppers Cluster

Characteristics:

    -Lower purchase frequency

    -Longer time between purchases

    -Orders later in the day

Strategy:

    -Offer time-specific promotions

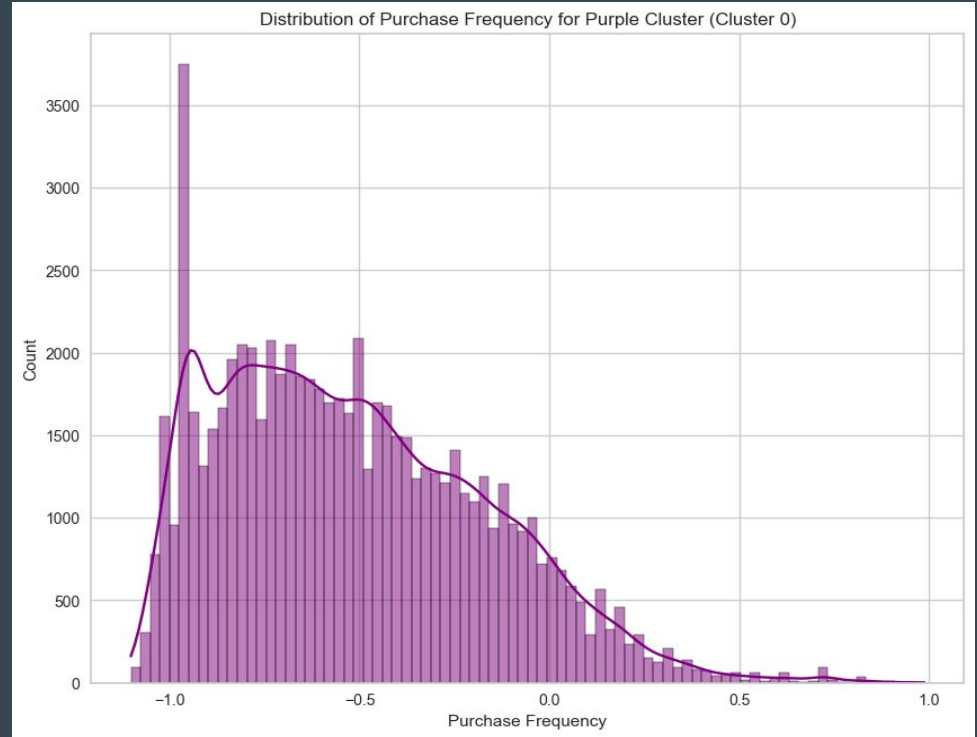Distribution of Purchase Frequency for Teal Cluster (Cluster 1)

Weekend Shoppers Cluster

Characteristics:

-Lower purchase frequency

-Longer time between purchases

-Orders slightly earlier in the day
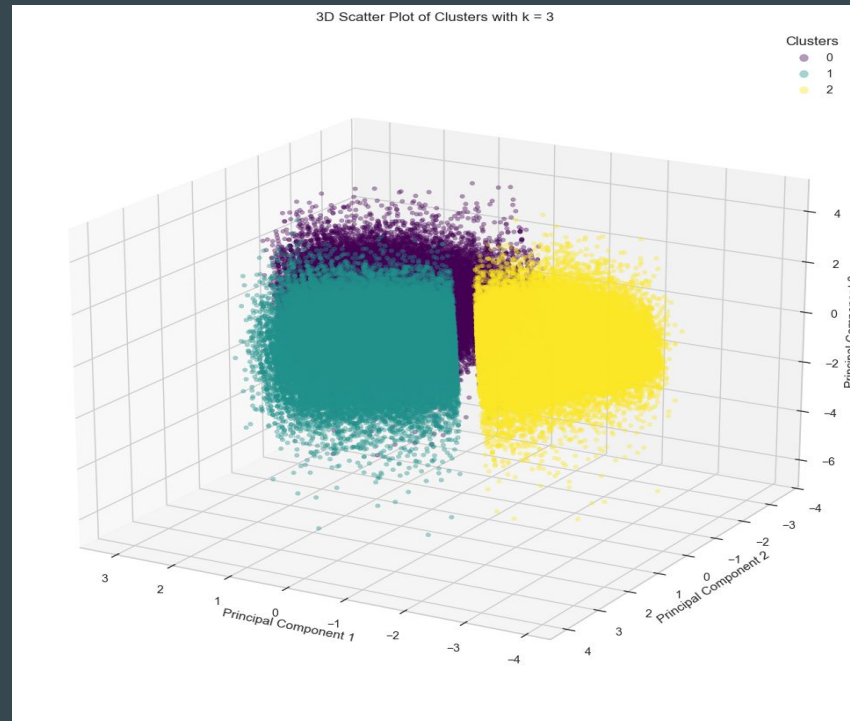
Strategy:

-Send personalized reminders

Distribution of Purchase Frequency for Purple Cluster (Cluster 0)

Visual Insights

Goal:

-To be able to show clear

separation in the clusters.

-To keep them as compact as

possible.

3D Scatter Plot of Clusters with k = 3

Conclusion

Summary of findings: Effective clustering leads to better-targeted marketing.

Next steps: Create the custom promotions, predict the results and implement.

Final thought: If you tailor your marketing efforts to your customer base you can significantly boost your customer engagement and sales!

THANK YOU FOR HAVING ME TODAY!

ANY QUESTIONS?