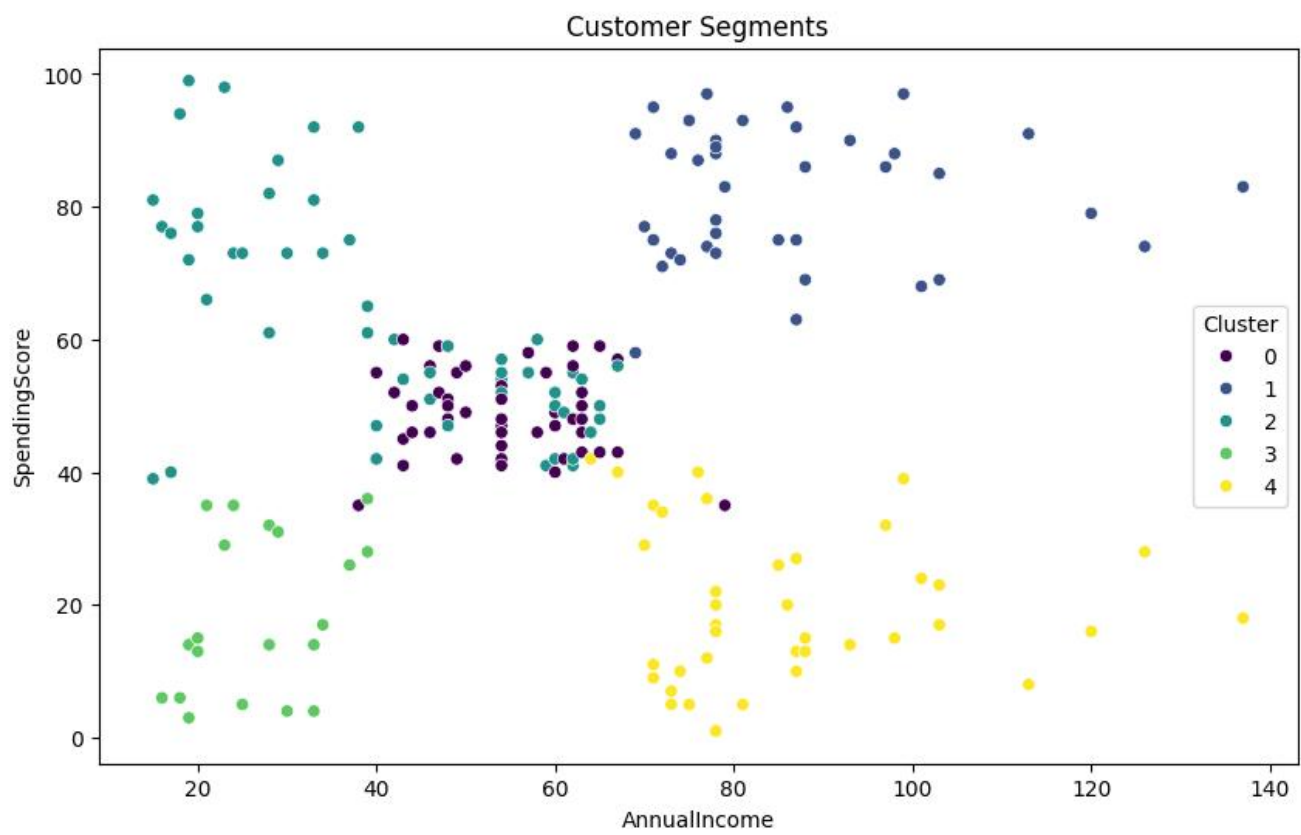# REPORT ON INSIGHTS AND RECOMMENDATIONS

Customer Segments

Overview

The graph represents a segmentation of customers based on their annual income and spending score using K-Means clustering. Five distinct clusters have been identified and are represented by different colors.

Key Findings

Cluster 0 (Dark Blue)

1. **Income Range**: Approximately $70k to $140k
2. **Spending Score**: High (60-100)
3. **Description**: High-income and high-spending customers. Likely to be the customers who spend a lot on luxury items or high-end services.

Cluster 1 (Purple)

1. **Income Range**: Approximately $40k to $70k
2. **Spending Score**: Moderate (40-60)
3. **Description**: Mid-income customers with moderate spending. They might be budget-conscious but willing to spend on value-for-money products.

Cluster 2 (Turquoise)

1. **Income Range**: Approximately $20k to $40k
2. **Spending Score**: Moderate to High (40-80)
3. **Description**: Lower-income customers who still spend relatively high. These could be younger customers or those who prioritize spending on specific categories despite lower income.

Cluster 3 (Green)

1. **Income Range**: Approximately $20k to $50k
2. **Spending Score**: Low (0-40)
3. **Description**: Low-income and low-spending customers. These customers are likely very budget-conscious and prioritize savings over spending.

Cluster 4 (Yellow)

1. **Income Range**: Approximately $70k to $140k
2. **Spending Score**: Low (0-40)
3. **Description**: High-income customers with low spending. These could be affluent customers who are either very frugal or spend primarily outside of the categories measured in this dataset.

Recommendations

Targeted Marketing Strategies

1. **Cluster 0**: Focus on premium products and exclusive offers. Consider loyalty programs that reward high spending.
2. **Cluster 1**: Highlight value-for-money deals and discounts. Promote products that balance quality and price.
3. **Cluster 2**: Emphasize aspirational marketing. Products that offer a sense of luxury or status might appeal to this group.
4. **Cluster 3**: Offer budget-friendly options and savings plans. Highlight practical and cost-effective products.
5. **Cluster 4**: Investigate the spending preferences of this group further. They might respond well to investment-related products or services that offer long-term benefits.

Product Placement and Inventory Management

1. Stock high-end products in areas frequented by Cluster 0.
2. Ensure mid-range products are available and prominently displayed for Cluster 1.
3. Budget products should be easily accessible and well-promoted for Cluster 3.
4. For Cluster 4, consider stocking a mix of premium and budget products to cater to their diverse spending habits.