Market Analysis Report for National Clothing Chain – Executive Summary

Problem statement:

This executive summary aims to support an online national clothing chain in creating a targeted marketing campaign. The campaign is necessary due to stagnant sales and a desire to regain lost customers. The goal is to advertise specific products, including shirts priced at $25, sweaters at $100, and leather bags at $1,000, to specific customers in specific locations.

Analysis

The following data were analyzed using Power BI:

- Average income, location, and population (data source: US Census Bureau)

- Product inventory, prices, customer ratings, product return rate, customer ID, names, location, and purchase history (company internal business data)

We began our investigation by identifying the areas with the highest income levels and examining any correlation between income and sales. Our findings revealed that customers with the highest salaries reside in Illinois, which also happens to be the region where 3 of the top 10 highest-spending customers in the last 6 months are located.
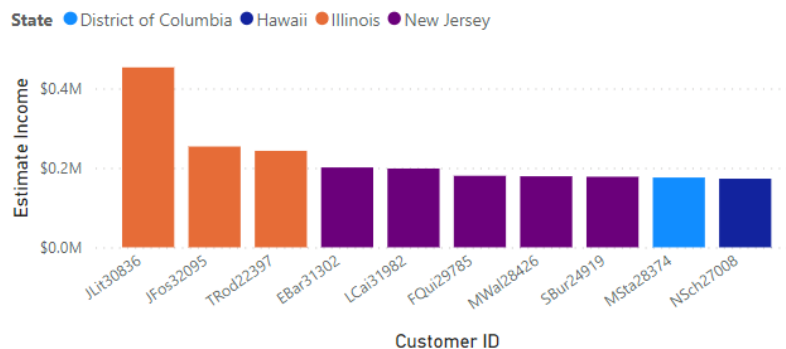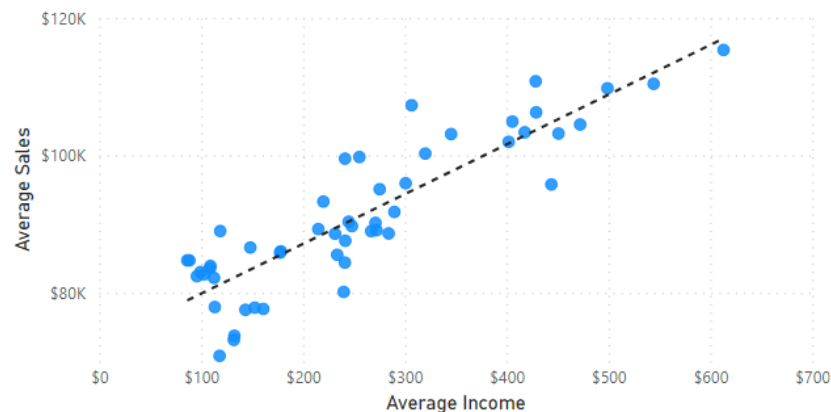

Linear regression was employed to study the relationship between customer income and product buying habits. The model revealed that there is a strong correlation between income and the probability of purchasing certain products.

The same technique was applied to analyze the correlation (R2 value) between customer ratings and the rate of product returns, revealing a moderate correlation.

We used the linear regression formula y = 72.43x + 72638.21 in our analysis. This helped us find the customer with the highest income (Jlit30836) and make data-driven decisions, such as focusing on advertising the Leather Bag product to individuals with higher incomes.

This is because the regression results indicate that higher-income demographics are more likely to make purchases. Therefore, targeting higher-income groups with increased marketing efforts is likely to lead to higher sales and revenue for the company.

We also analyzed the correlation between sales and states, which led to an interesting discovery: Florida was found to have a customer base that is disproportionately large when compared to its population.

Average Income by State correlation to Average Sales
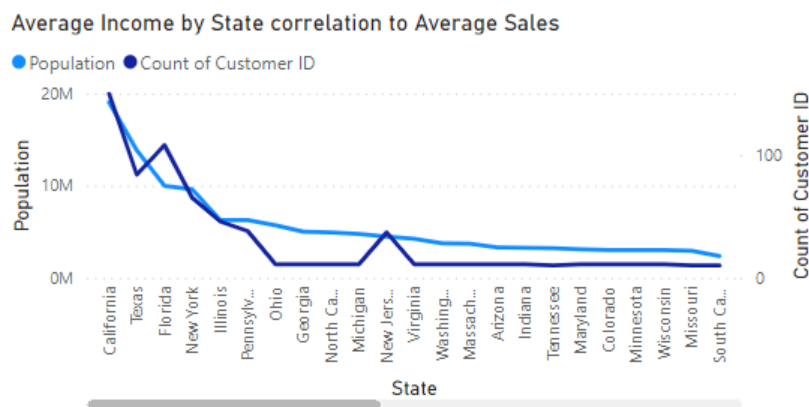
There could be a variety of reasons why the store would have a large customer base in Florida. Some potential factors could include:

- High population density: Florida is the third most populous state in the U.S., and a high population density can lead to higher sales figures for retailers.

- Tourism: Florida is a popular tourist destination, which could lead to higher sales from visitors.

- Demographics: Florida has a large retiree population, which could lead to higher sales of certain types of goods and services.

- Local economic conditions: Florida has a strong economy, with low unemployment and high economic growth, which could lead to higher sales figures for retailers.

Proposed Solution

Based on the findings from the analysis, the following solutions are proposed:

1. Target states with higher incomes, such as Illinois, New Jersey, and the District of Columbia, as customers from these states are more likely to make high-value purchases.

2. Focus marketing efforts on the leather bag product, which is priced at $1,000, as customers with higher incomes are more likely to purchase this product.