

# Market Analysis Report for National Clothing Chain

Linear Regression (Sales & Income)

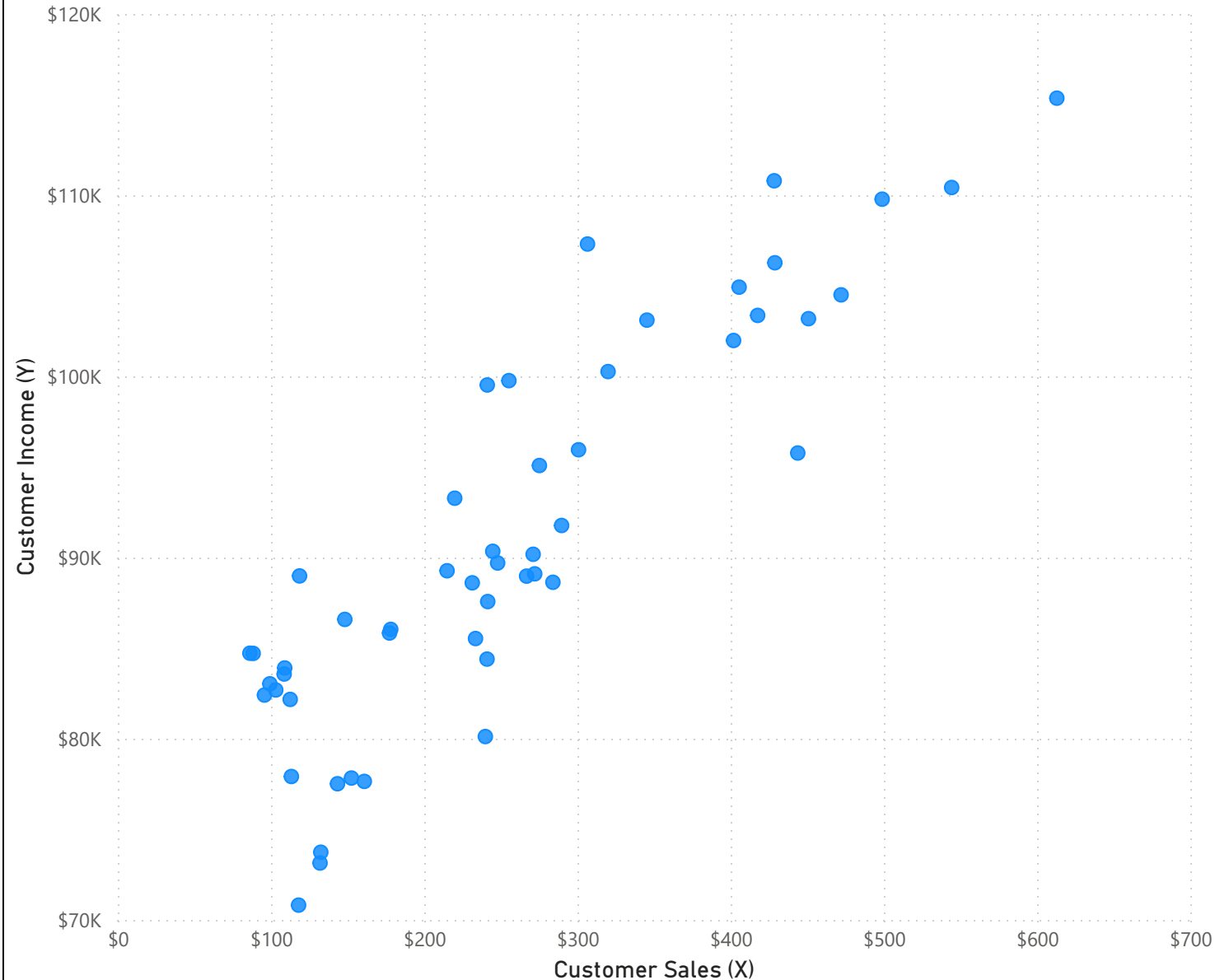
Correlation (Cust Rating and Prod Return Rate)

Customer Segmentation

Customer Demographics

# Linear Regression (Customer Sales & Income)

Customer Sales (X) and Customer Income (Y)



0.78

$R^2$

$$y = 72.43(x) + 72638.21$$

Final Regression Formula

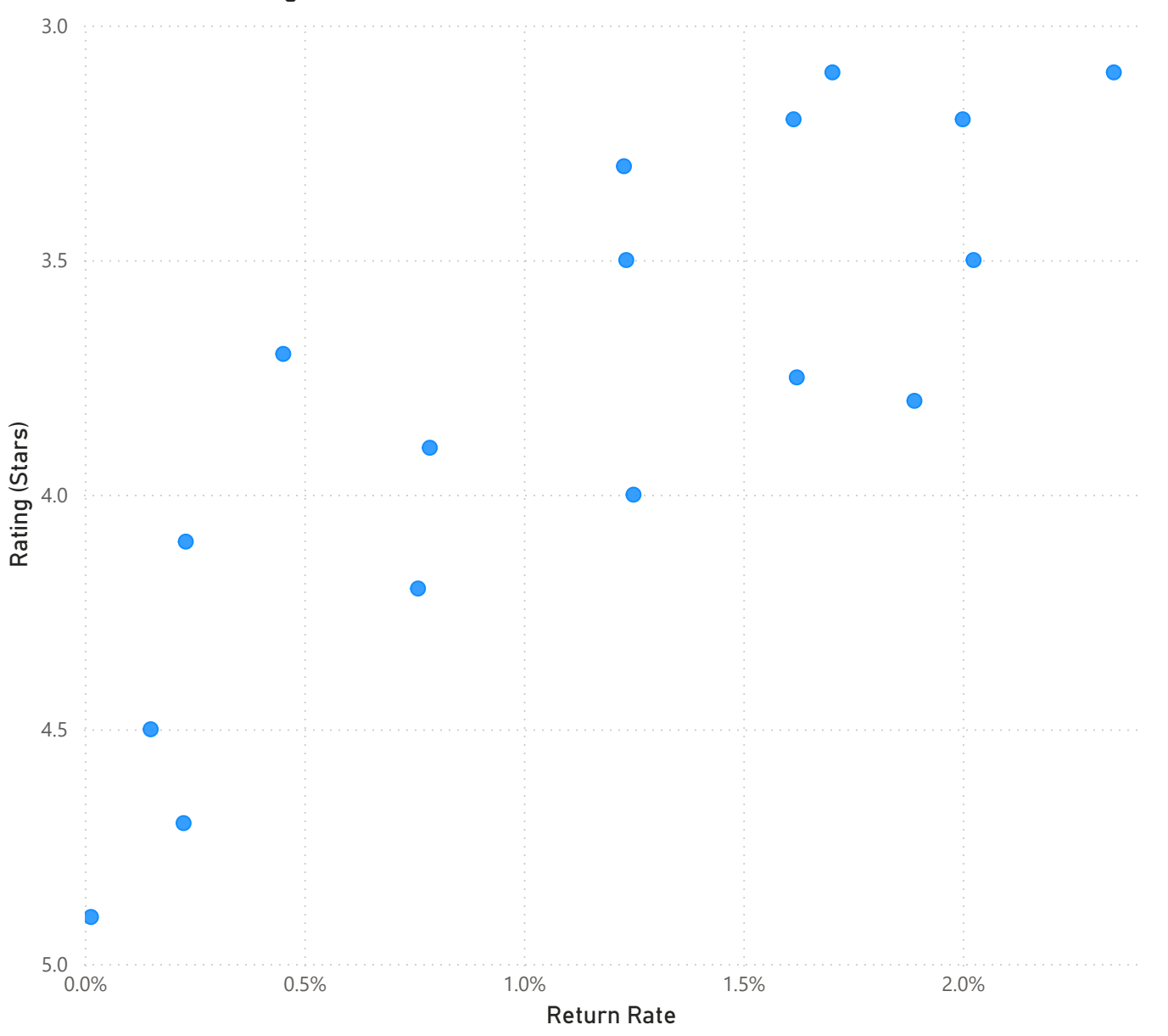
## Findings:

- We see a high Coefficient of Determination ( $R^2$ ) which suggest the variables are strongly correlated.
- The scatter plot shows a positive relationship between [Customer Sales] and [Customer Income] which means with increase in Customer Sales we see the Customer Income increases as well.

**Note:** Using the Final Regression Formula, we can estimate the Customer Income based on Customer Sales.

# Correlation between Customer Rating and Product Return Rate

Return Rate and Rating (Stars)



0.69

$R^2$

**Findings:**

- We see a medium Coefficient of Determination ( $R^2$ ) which suggest the variables are moderately correlated.
- The scatter plot shows a Negative relationship between [Return Rate] and [Rating (Stars)] which means with increase in Return Rate (X) we see the Rating(Stars) decreases.

# Existing Customer Segmentation

45

Average Customer Age

\$100,000 - \$114,999

Income Bucket Range

286.02

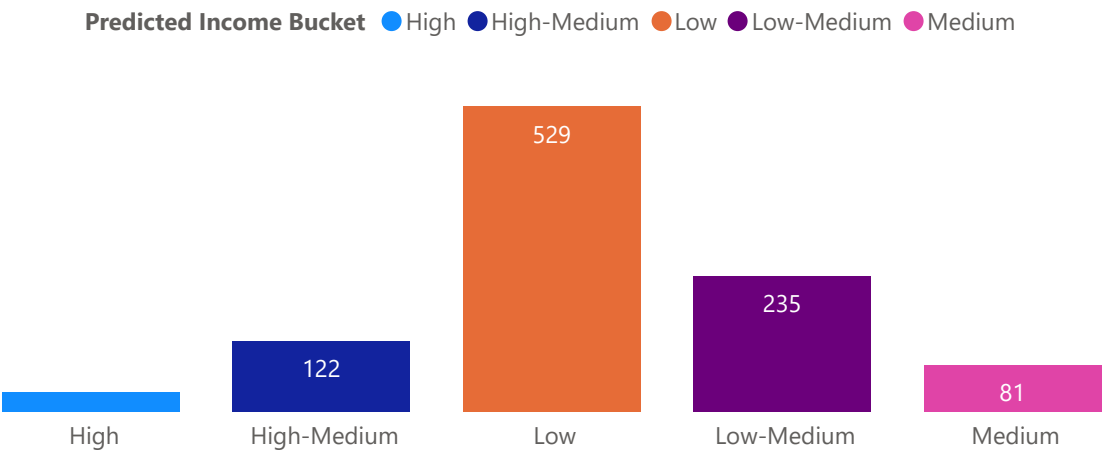
Average Customer Spending in Last 6 Months

\$93.35K

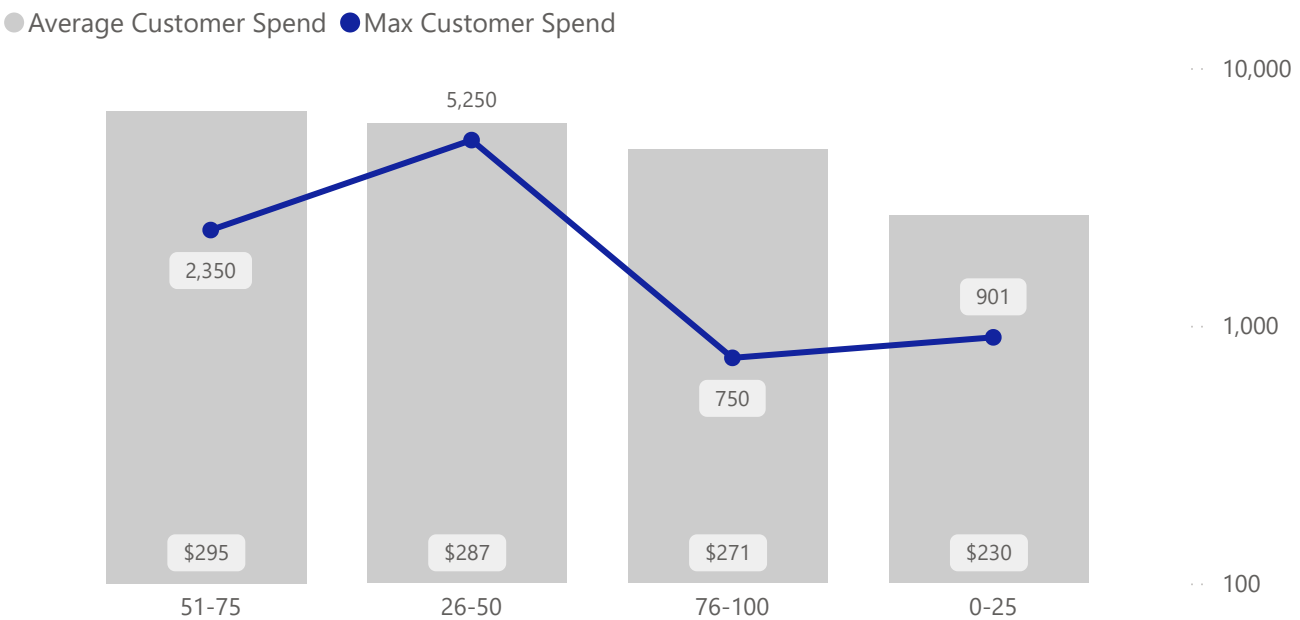
Average Predicted Customer Income

Customer ID	Customer Name	Product Recommendations
AAgu38852	Abel Aguilar	Shirt
ABak33614	Arlene Baker	Shirt
ABak36477	Anne Baker	Shirt
ABal38523	Allen Ballard	Shirt
ABar38831	Alma Barton	Shirt & Sweater
ABel38976	Alejandro Bell	Shirt & Sweater
ABen38905	Amanda Benson	Shirt & Sweater
ABro35015	Austin Brooks	Shirt & Sweater
ABut35079	April Butler	Shirt & Sweater
ACal37333	Amos Caldwell	Shirt & Sweater
ACha33420	Antoinette Chapman	Shirt
ACha37139	Alejandro Chambers	Shirt & Sweater
ACoo34447	Anthony Cook	Shirt
ACor37135	Andrew Cortez	Shirt & Sweater
ACra33314	Antonio Craig	Shirt & Sweater
ACra37187	Alice Craig	Shirt
ACum38588	Angel Cummings	Shirt
ADra38546	Andres Drake	Shirt & Sweater
ADun38780	Alberto Duncan	Shirt & Sweater

Customer Count by Income Buckets



Average Customer Spend by Age



# Existing Customer Demographics

State

All

Jon Little

Customer with the Highest Spending Over 6 Months

Jon Little

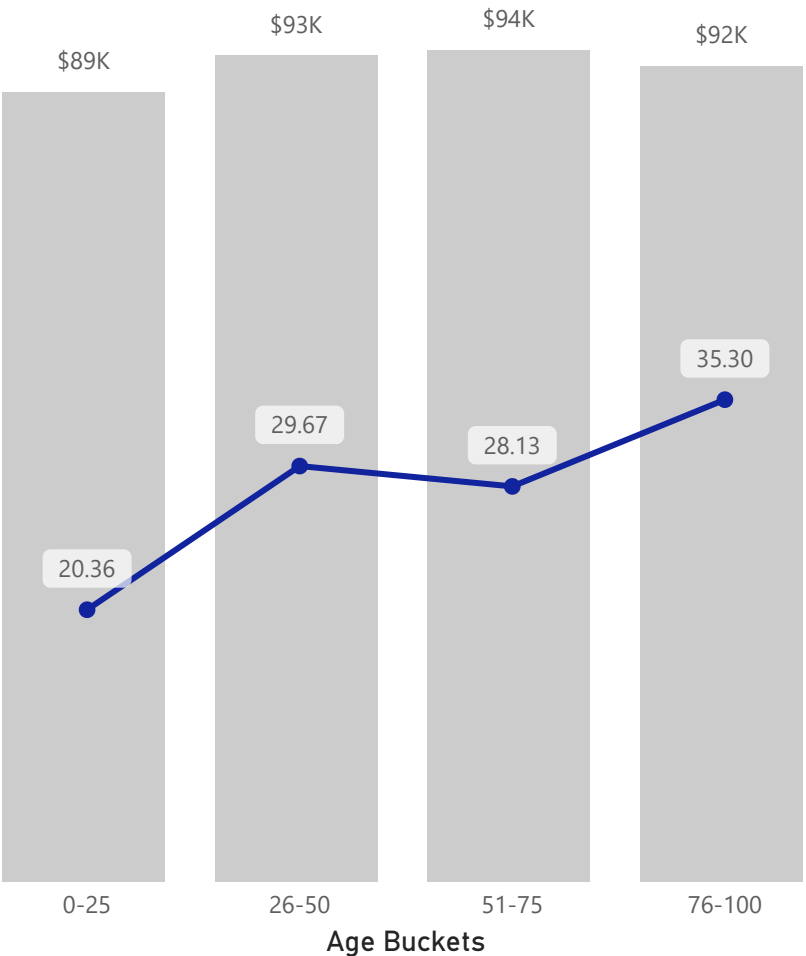
Customer with the Highest Income

Aaron Kelley

Customer with the Highest Num of Visits

Visit Count & Average Purchase Value for each Visit by Age

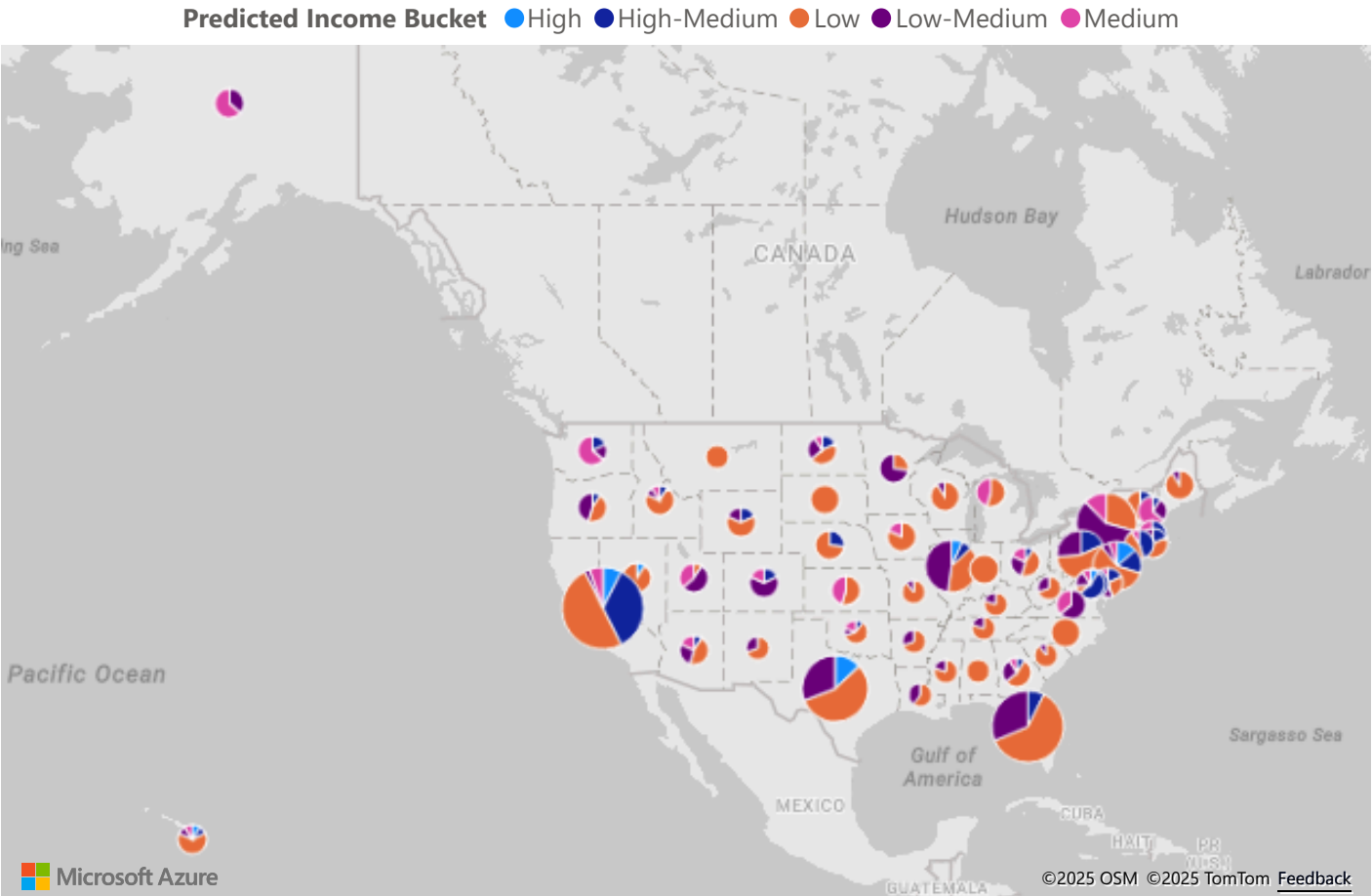
Average of Predicted Customer Income Average Purchase Value



Customer Demographics

Income by State Heat Map

Customer Demographics



State

All

Jon Little

Customer with the Highest Spending Over 6 Months

Jon Little

Customer with the Highest Income

Aaron Kelley

Customer with the Highest Num of Visits

