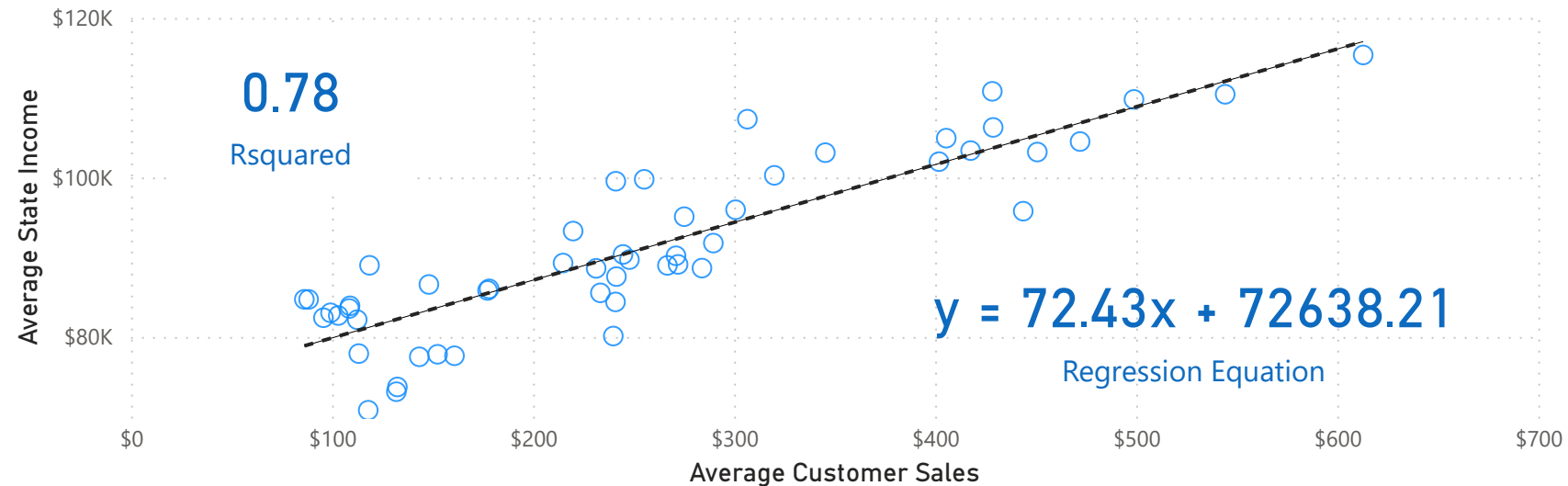


Clothing Chain Market Analysis: Income



Average Customer Sales and Average State Income



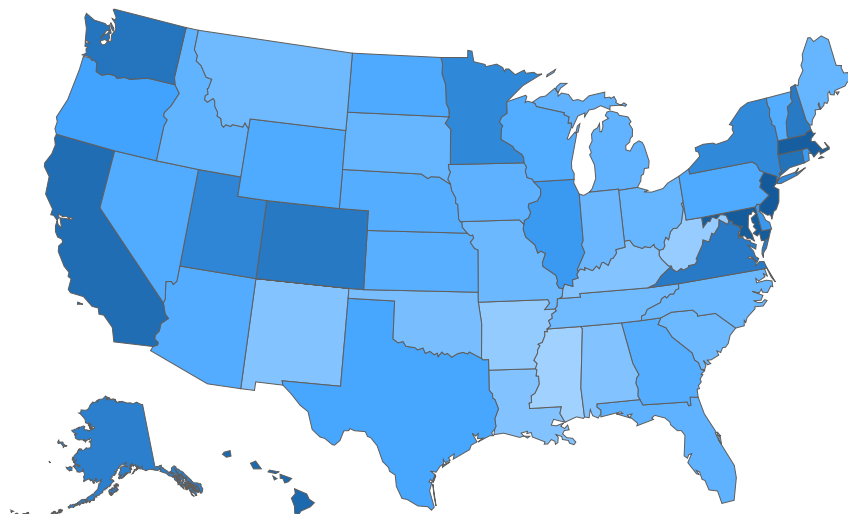
\$91.14K

Average of Total Average Income

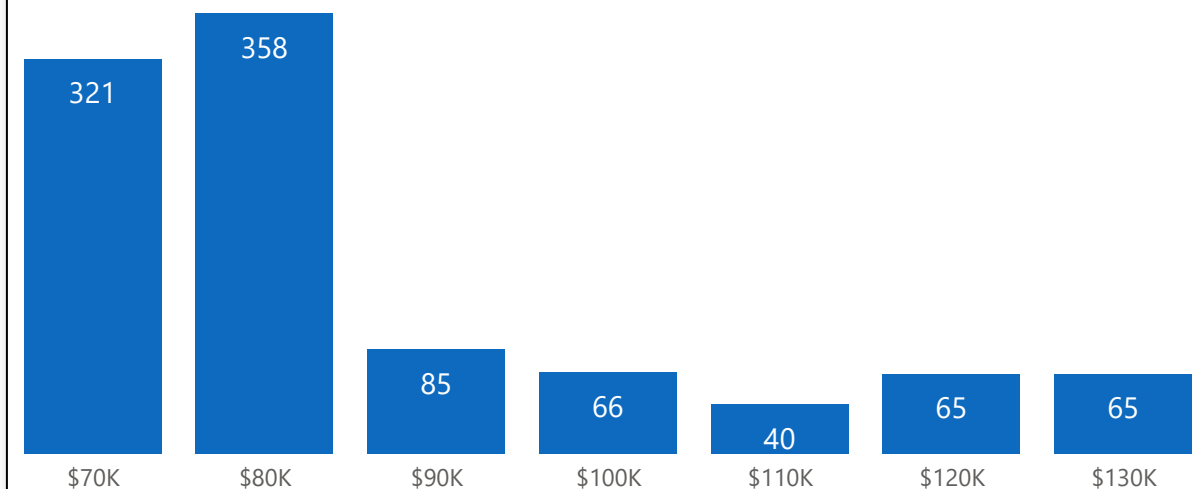
\$93.36K

Average of Predicted Customer Income

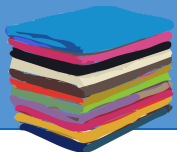
Average Income by State



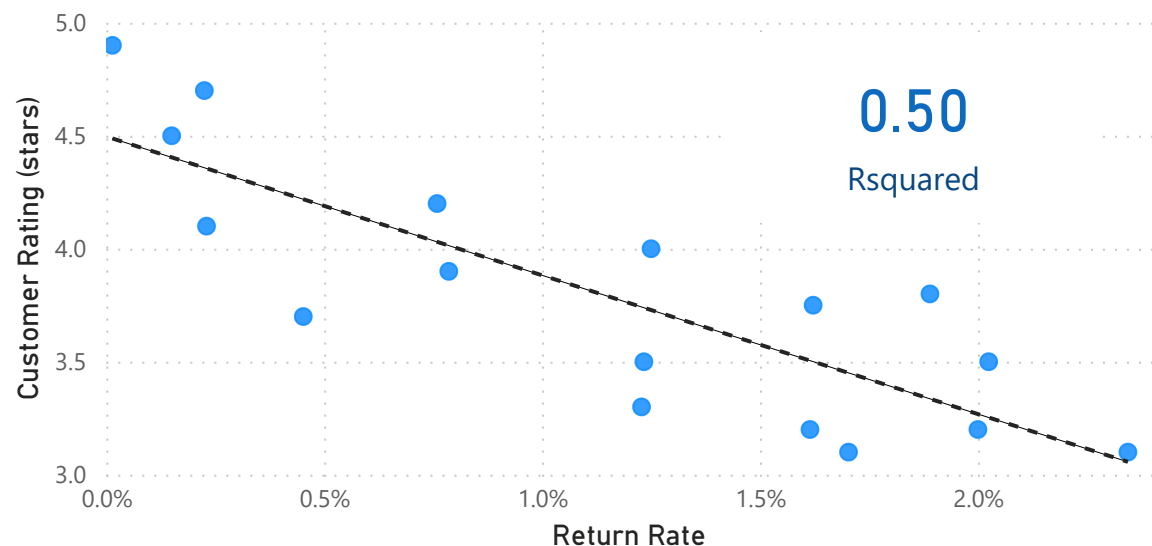
Predicted Customer Income Distribution



Clothing Chain Market Analysis: Product Analysis



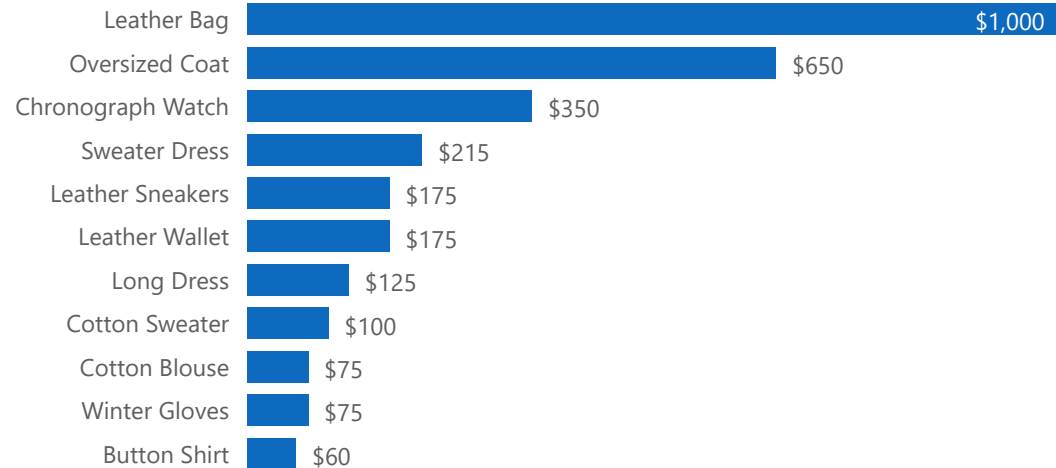
Return Rate and Customer Rating (stars)



Customer Rating (stars)

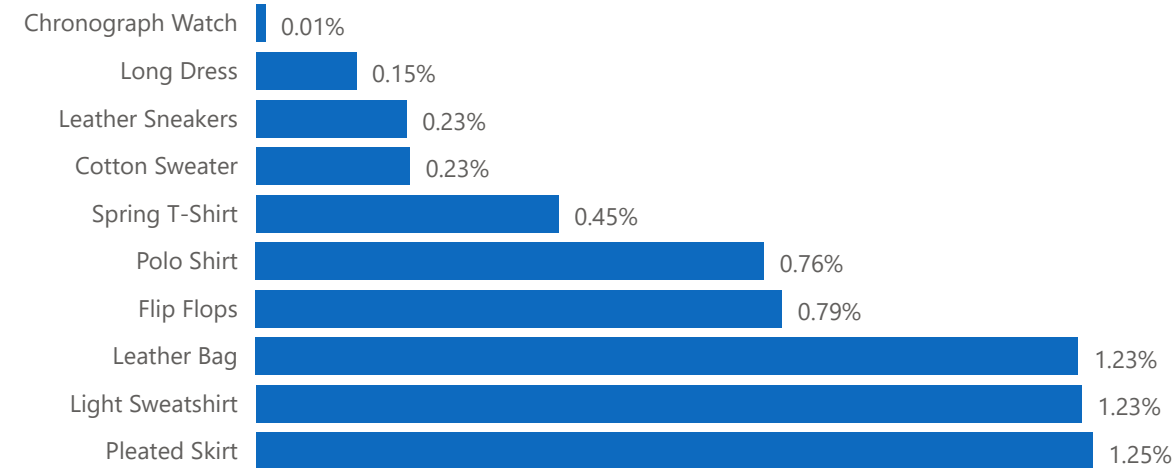


Current Price



Current Price

Best Return Rates



Return Rate

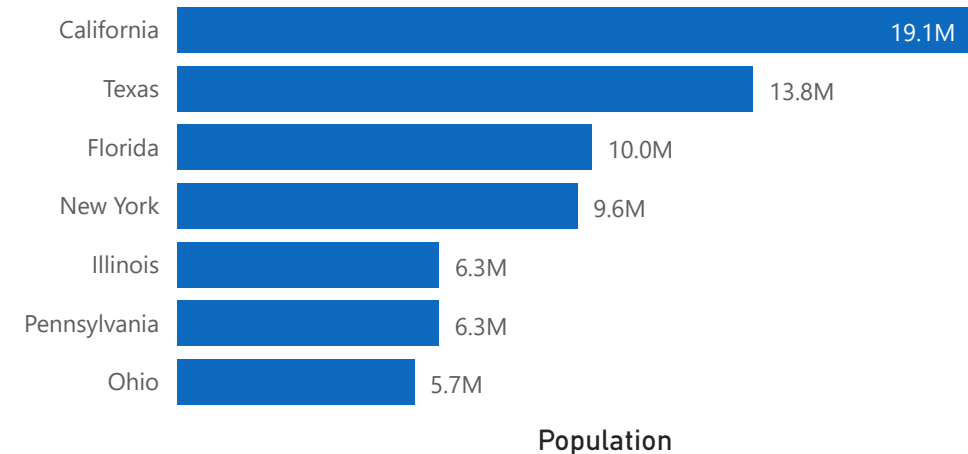
Clothing Chain Market Analysis: State Income Analysis



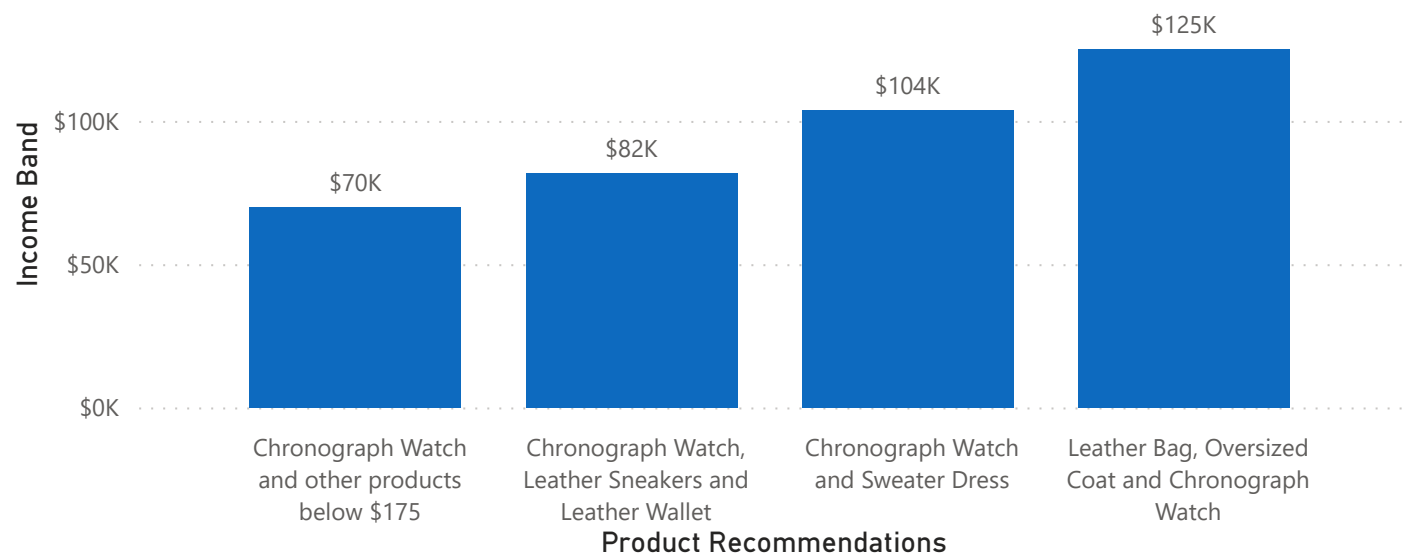
Predicted Highest Earning Customers

Jon Little	JLit30836	Illinois	38	\$452,908.85
Full Name	Customer ID	State	Age	Max Predicted Inco...
Jody Foster...	JFos32095	Illinois	34	\$253,719.47
Full Name	Customer ID	State	Age	Max Predicted Inco...
Tonya Ro...	TRod223...	Illinois	61	\$242,854.59
Full Name	Customer ID	State	Age	Max Predicted Inco...

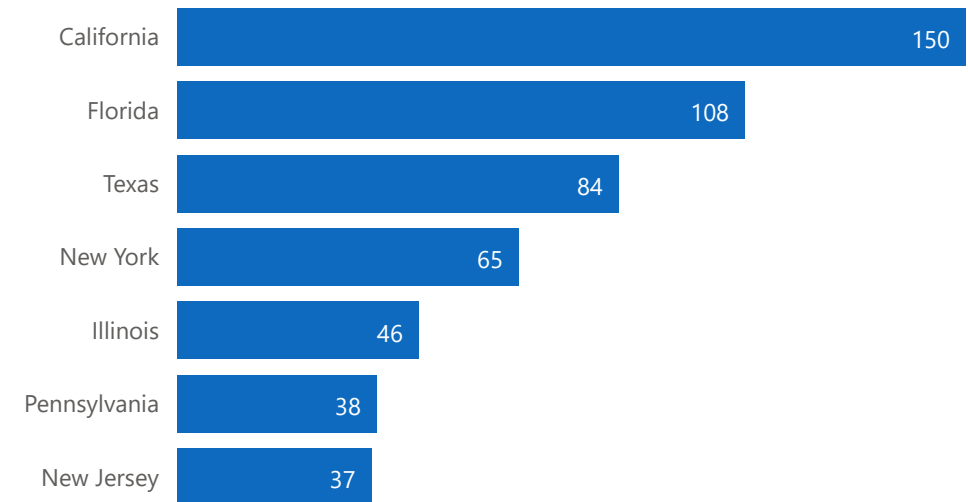
Top 10 States by Population



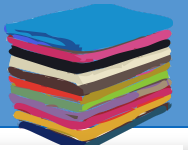
Product Recommendations by Average Predicted Customer Income



Top 7 States by Customers



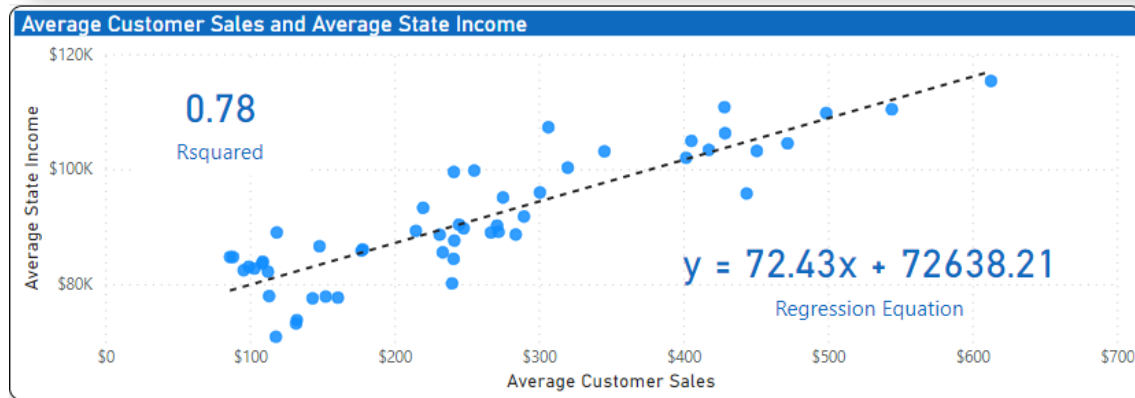
Clothing Chain Market Analysis: Product Analysis



Question 1

What is the correlation between income and sales?

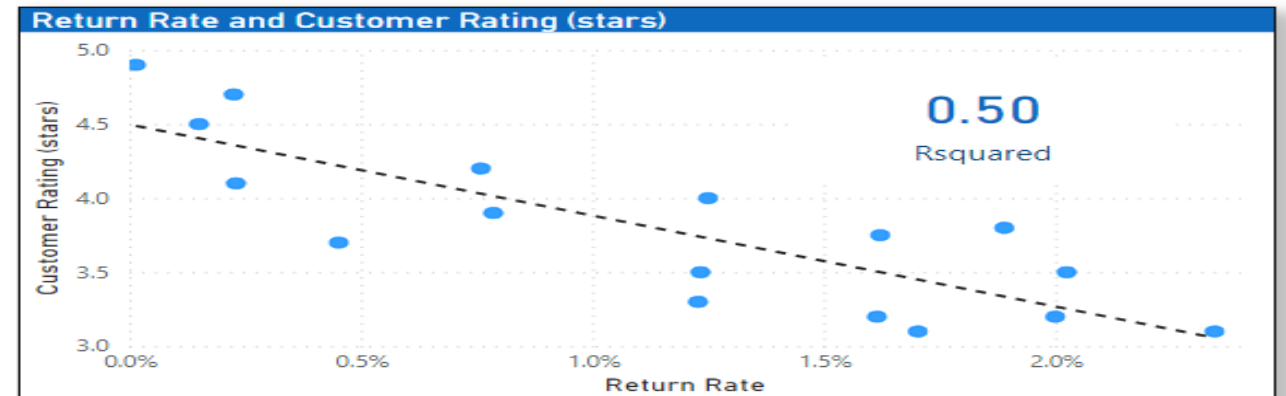
Customer income and sales has a strong positive correlation ($r^2 = 0.78$) as seen in the chart below



Question 2

What is the correlation between customer ratings and product return rate?

Customer ratings and product return rates have a moderate correlation ($r^2 = 0.50$) as seen on the chart below



Question 3

What is the linear regression formula to predict customer income?

The regression formula required to predict the customer income is
 $y = 72.43x + 72638.21$

Question 4

Which customer do you predict has the highest income?

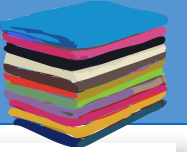
Jon Little, 38 from Illinois is the customer predicted to have the highest income (\$452,909)

Question 5

Which product will be advertised the most?

The product to be advertised the most is the Chronograph Watch. The watch has the highest product rating, the lowest product return rate and sells at a moderate price.

Clothing Chain Market Analysis: Product Analysis



Customer Income

1. The customer sales and the average customer have a strong correlation ($r^2 = 0.78$) which means customer purchases/sales is a good predictor of the customer income
2. The average predicted income is not far from the average income from state data. Difference = \$2.12k
3. From the map, areas like New Jersey, Maryland and District of Columbia have the highest average income
4. The income prediction histogram is right skewed, with a mode of \$70k to \$80k earners

Product Analysis

1. The product return rate and the customer ratings have a moderate correlation ($r^2 = 0.50$). One cannot reliably predict the customer ratings based on the return rate.
2. The Chronograph Watch has the highest rating (4.9), followed by the Leather Sneakers and Long Dress (4.7 and 4.5 respectively).
3. The Chronograph Watch also has the best (lowest) return rate (0.01%) followed by Long Dress (0.15%) and Leather Sneakers (0.23%).
4. The Leather Bag is the most expensive product at \$1000, followed by the Oversized Coat and Chronograph Watch (\$650 and \$350 respectively)

Other Analyses

1. The top three highest predicted earners are from Illinois. The highest predicted earning customer is 38 year old Jon Little (\$453k). The other two are Jodie Foster, 34 (\$254k) and Tonya Rodriguez, 61 (\$243k)
2. California, Texas and Florida have the largest population with New York and Illinois in 4th and 5th respectively
3. These five states are also the top five states with the most customers
4. New Jersey is the only state in the top 7 highest customers list that isn't in the highest populated states
5. Due to its price, rating and return rate, the Chronograph Watch is recommended for all the customers
6. The average age cannot be used to determine the average customer income as all the income ranges have similar average ages