**Market Analysis report for National Clothing Chain**

In this project I worked with four files given and upload them into Power Bi once the files we add in Power Bi so cleaning up and adjusted where need before starting with the analysis this was mainly for product inventory table and purchase list table the first had all the information combined and for the second the some organizing need to be done, once these where done I worked on generating a histogram and column chart after that I used the x = b-y/-m linear regression formula to predict the expected income of each customer.

# The Answers

The answers we got from the analysis made is that correlated sales and income is a positive relation which means the higher the income means higher sales which can be seen in the scatter plot visual and by the correlation coefficient card visual, for the rating and return rate it’s a negative relation meaning the lower rating of a product the high the return rate which can also be seen in the scatter plot visual and by the coefficient correlation card visual on the product page, the linear regression formula used is x = b-y/-m which give us the expected of income for each customer, the customer with the highest expected income is Jon Little and in term of which of the 3 items the chain should focus T-shirt since it’s in the price range of majority of customer and it was recommend for 92.3% of the customer base.

# Recommendations and suggestions

The chain should focus on advertising it’s product mainly to north east part of the USA since it has the highest average income based on the heat map visual, after grouping the product into three categories based on price the chain has high stock of product that are below 100$ as shown in the waterfall graph the chain should work on advertising these products to increase sales, the chain should work on the low rated products because these item cause high return rate which lead to a lot of lose as seen in the scatter plot graph, they also need to advertise more the high rated items as it doesn’t have much quality Issue based on the return rate and finally T-shirt should be high priority for the chain as it’s in price range for most of their customer as shown in the pie chart.