

TASK 16Bi

TASK 15Bi

AKINOLA MARY TOSIN

VEPH/20B/DA103

TECHNICAL REPORT FOR GREENMART INC. 2019 GROCERY SALES REVIEW

Outlines

Introduction

Story of data

Data splitting and Preprocessing

Pre Analysis

Post Analysis

Data Visualization and Charts

Recommendation and Observation

Conclusion

INTRODUCTION

The aim of this analysis is to uncover valuable insights into Greenmart Grocery Store sales trends, seasonal peaks, the performance of the salespersons and customer preferences and revenue generated. The goal is to provide actionable data driven recommendations to inform business decisions, boost customer satisfaction and drive growth.

This analysis is to improve the sales performance by understanding the data, the sales trend, the products that have low sales and the products that generate the most revenue.

Key Datasets and Methodologies

This analysis will leverage a combination of revenue generated, the customers, product category and region. To uncover meaningful Insights, Microsoft Excel will be employed for data manipulation and analysis, utilizing features such as pivot tables to summarize data and data visualization charts to illustrate trends and patterns.

Story of the Data

The dataset used for this analysis was provided by my mentor at Vephla University. Each row in the dataset represents a unique transaction, identified by an Order ID, and includes key details such as revenue generated, product type, quantity sold, and the associated sales representative. The columns capture a wide range of variables including customer location, product category, sales region, and payment method.

This data tells the story of a firm operating across multiple countries, showcasing the variety of goods sold, the quantity purchased by different customers, and the impact of seasonal trends on revenue. It also provides insight into individual sales performance and the roles of shipping recipients and sales personnel in each transaction. Through this dataset, we can better understand how sales are distributed across regions, the preferences of customers, and the factors that drive overall business performance.

DATA SPLITTING AND PRE ANALYSIS

Data Cleaning;

- The top row was freezes to aid easy navigation
- The data revenue column was formatted to represent value in dollar currency.
- Maintained all the words in each column on a proper casing.

Data Splitting

For this analysis, the dataset was organized by separating the variables into independent and dependent categories.

- Independent variables include:
Customer Name, Salesperson, Region, Ship Name, Ship Country, Payment Type, Product Name, Category, and Order ID. These variables provide contextual information about each transaction and help explain the conditions under which sales occurred.
- Dependent variables include:
Revenue, Quantity, Unit Price, Shipping Fee, and Zip Code. These variables reflect the measurable outcomes influenced by the independent variables, particularly in terms of financial performance and distribution.

The dataset represents operations in the grocery retail industry, where business success is primarily measured by revenue generated. In this context, revenue is considered a key indicator of value and performance. The analysis is aimed at uncovering trends that can help improve profitability, customer targeting, and operational efficiency.

The primary stakeholders in this project are the chief executives and business decision-makers, who rely on data insights to guide strategy, optimize sales operations, and make informed choices regarding product offerings and regional focus.

PRE ANALYSIS

In the pre analysis of this data, i looked into the potential analysis and the potential insights, the potential analysis discussed;

- Best performing region by revenue generated,
- performance analysis of each salespersons by revenue
- customer performance analysis based on revenue
- customer performance analysis based on quantity purchased

- payment type usage on revenue generated
- best performing goods for the year by quantity
- best performing goods for the year by revenue
- performance analysis for the shipping countries

The potential insights from the pre analysis include;

- Finetune the best region and explore more options to gain more grounds against competitors.
- Payment method that is mostly used for high revenue transactions
- Stocking up most purchased goods
- Impact of the store location on the revenue generated
- Which countries generate the most revenue

IN ANALYSIS INSIGHTS

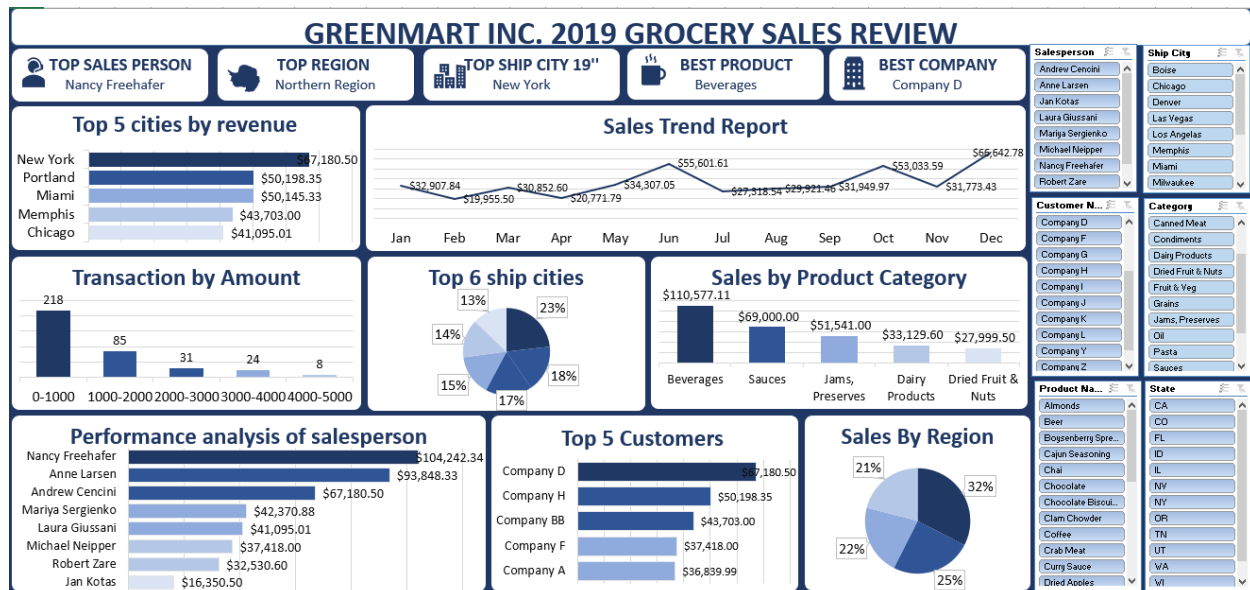
1. Nancy performed best for the year with the grossing revenue \$ 104,242.34.
2. Jan performed least for the year with the grossing revenue of \$16,350.50
3. For the sales trend, December generated the highest revenue of \$ 66,642.78, while February generated the least revenue of \$ 19,955.50.
4. North performed best for the year with 32% of the revenue generated while west performed least and generated 21% of the revenue
5. Company D performed super well with \$67,180.50 grossing revenue.
6. Company F performed second best with \$ 50,198.35 grossing revenue.
7. The best performing product for the year is beverages grossing a revenue of \$110,577.11
8. The majority of the transactions (218) falls within the 0-1000 price range, indicating a strong demand for affordable items.
9. For the product category, beverages generated the highest grossing revenue of \$110,577.11
10. New York tops the chart for the revenue generated based on ship city.

Recommendations

1. Jan performed least for the year and I do recommend to the stakeholders that he be retrenched or sent over for some training on sales and customer retention.
2. Nancy performed best for the year and I recommend Nancy for a promotion to encourage her and others to do more.
3. Recommend company D for discount in the coming year to encourage more purchase or make them the company of the year.
4. Sales for the month of february was very low compared to other months, i do recommend to check what caused it, so as to prevent a recurrence in the future and i also recommend that the stakeholders replicate measures implemented in december for months with low turn out
5. I recommend the top 10 countries to be given gifts at the end of the year to encourage them more.
6. Study what makes the north successful and do the same for the west. Find the salesperson resident in the Northern region, inquire measures implemented and convey this to the sales person in the west.
7. I recommend that the stakeholders inform all inventory staff to keep an eye on the beverages in the coming year so that it does not get to deplete at any time.
8. The higher priced products were less popular among the customers, so the stakeholders should give a flexible payment plan for the higher priced goods to encourage customers to buy them, and I do recommend the stakeholders should invest in advertisements of the high priced goods more.
9. Set up a sub headquarters at New York so that more customers there will patronize more as a result of low shipping fees.

DATA VISUALIZATION

DASHBOARD



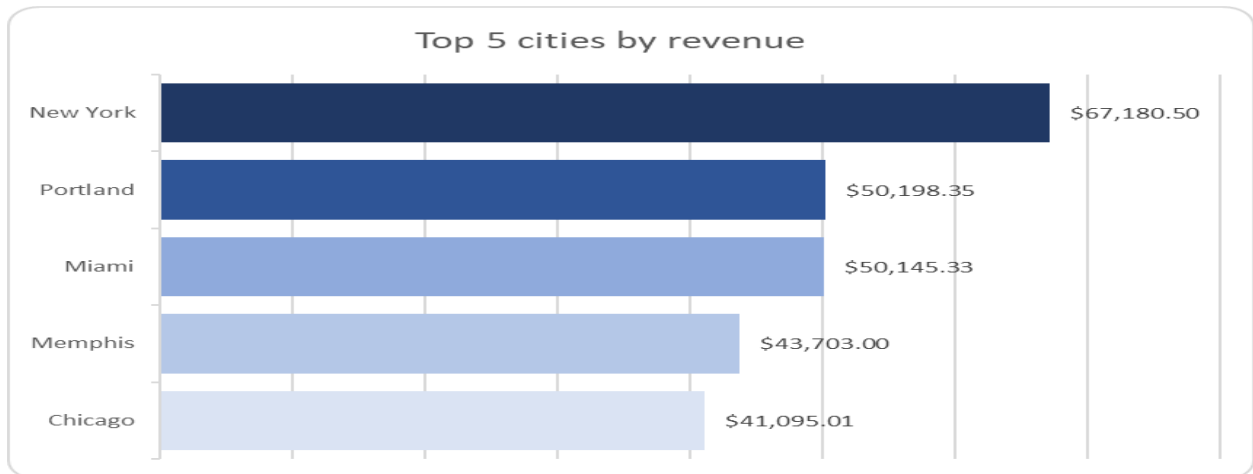
Dashboard Description

The visualization was carried out using Microsoft Excel as a tool for data analysis and visualization. While making use of Microsoft Microsoft Excel for analysis and visualization, a deep analysis was carried out and this helps to show insights on the sales trends.

The dashboard focuses on how revenue is generated, how much revenue is generated, the salesperson that generated the highest revenue, the top region and the best customers that generates high revenue.

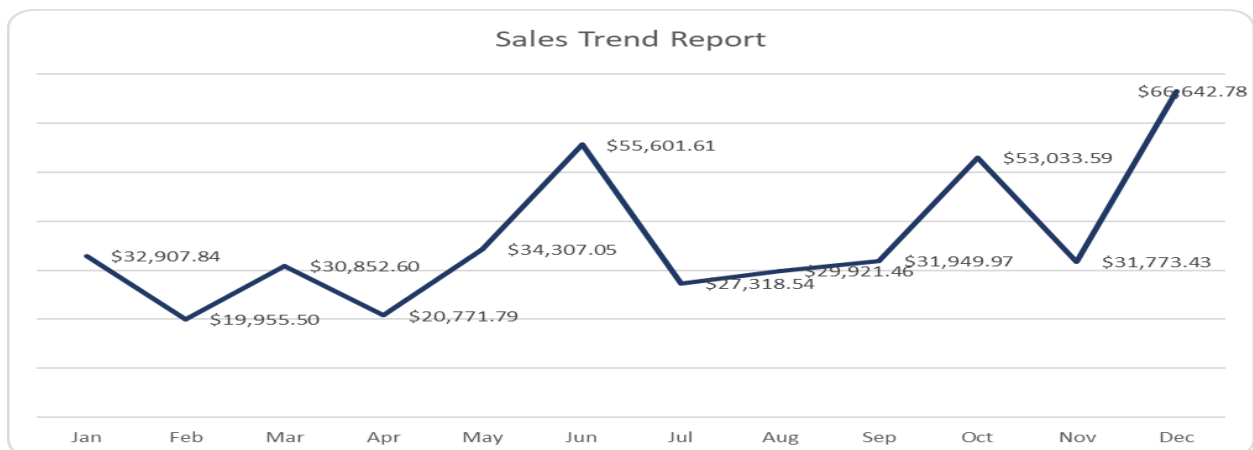
CHARTS AND GRAPHS

TOP 5 CITIES BY REVENUE



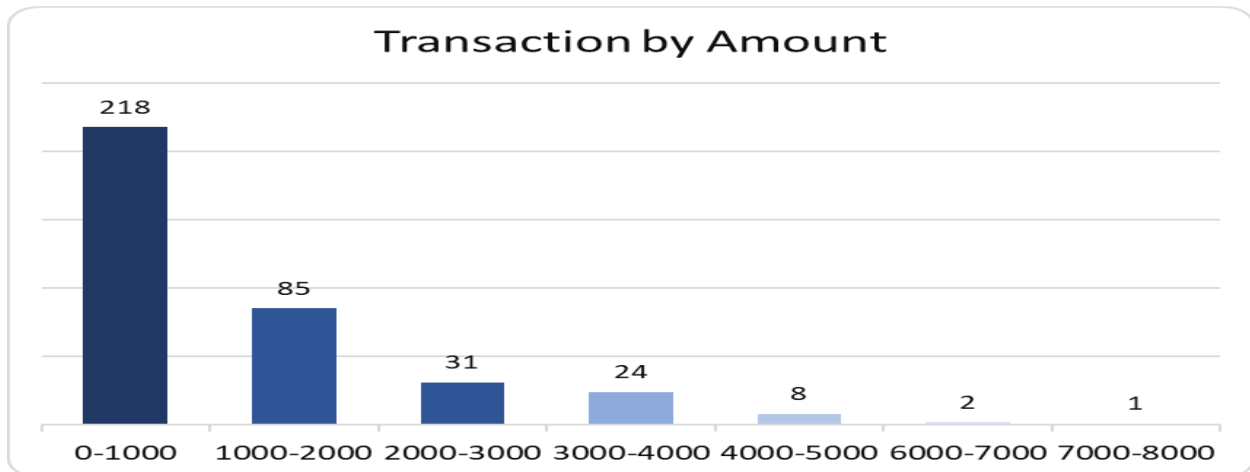
The bar chart represents the relationship between the cities and the revenue generated, New York tops the chart as the best city with \$67,180.50 revenue generated.

SALES TREND REPORT



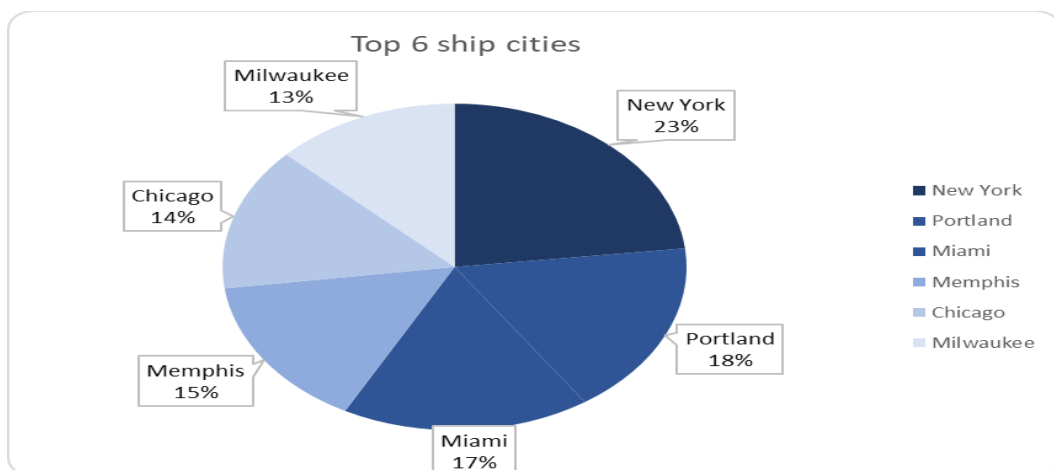
For the sales trends report, January, february, march and april generated an average revenue, there was a significant increase in the revenue generated in june with a total revenue of \$55,601.61 and it dropped to \$27,318.54 in july and december closed the year with a total revenue of \$66,642.78 for the year and december was the best month for the year because the highest revenue for the year 2019 was generated in december.

TRANSACTION BY AMOUNT



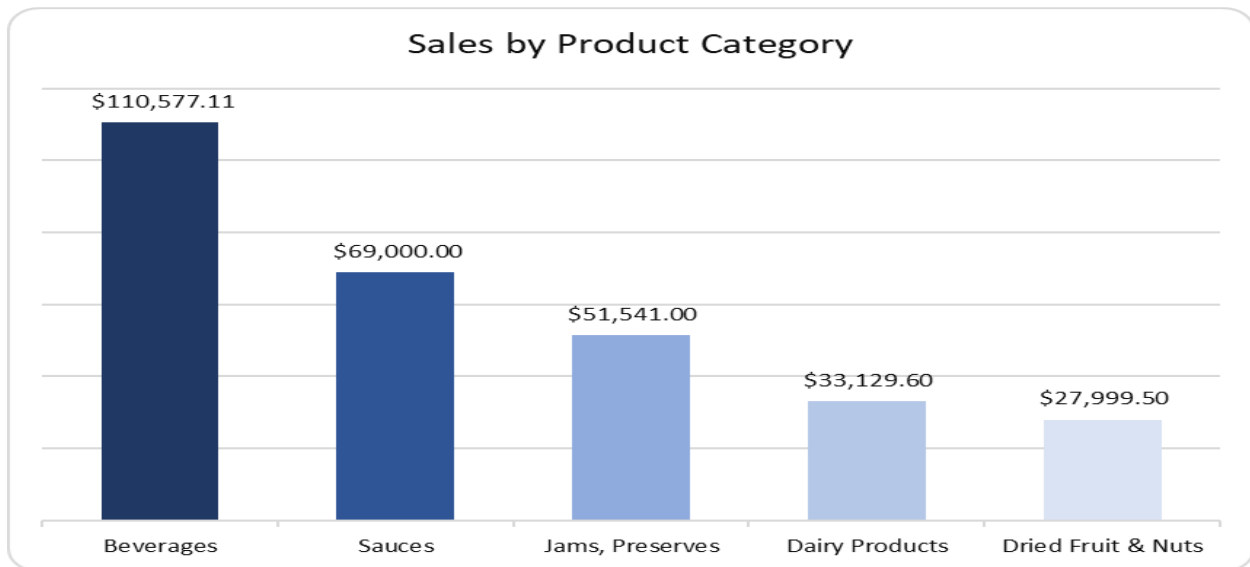
Transaction by Amount is the third chart on the dashboard and this talks about the number of products sold and the revenue generated for the company, products sold between 0-1000, 218 units were sold while products worth 7000-8000, only one unit was sold. This chart shows that the customers bought more of the affordable products.

TOP 6 SHIP CITIES



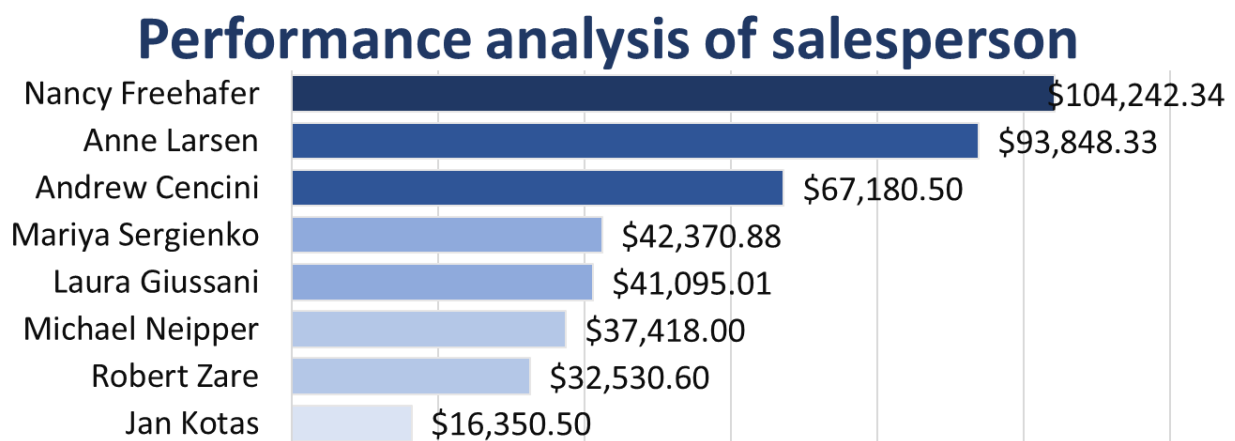
The top 6 ship cities is the fourth on the dashboard and this pie chart shows the relationship between the ship cities and the revenue in order to gain insights to cities that generate the most revenue. New York is the city that generates the most revenue and it covers 23% of the revenue generated by the top 6 ship cities.

SALES BY PRODUCT CATEGORY



The fifth chart on the dashboard is titled sales by product category and it is represented using a column chart. I used the 5 best products that generate revenue. The chart shows that beverages generated the highest amount of revenue of \$110,577.11, followed by sauces, jams, preserves, dairy products, driedfruits and Nuts.

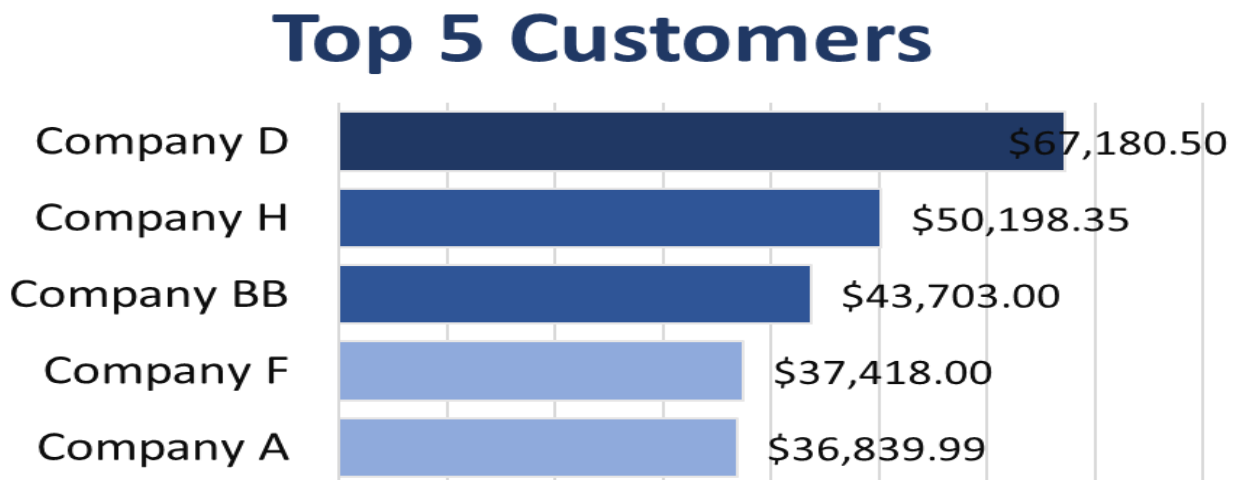
PERFORMANCE ANALYSIS OF SALESPERSON



Performance analysis of salesperson is the sixth chart on the dashboard and it is represented by a bar chart showing the relationship between each salesperson and how much revenue they generated. Nancy Freehafer is the best salesperson in this category

with a total revenue of \$104,242.32 for the year while Jan Kotas performed least for the year and he generated \$16,350.50 revenue.

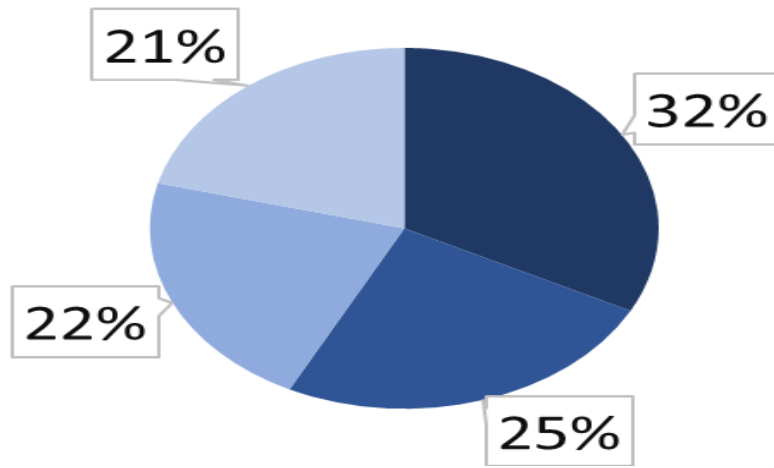
TOP 5 CUSTOMERS



The top 10 customers which is the seventh chart on the dashboard shows the relationship between the best customers and the revenue generated. Company D is the best customer for the year as they had the highest revenue of \$67,180.50 generated for the year. Followed by company H, company BB, company F and company A

SALES BY REGION

Sales By Region



The "Sales by Region" chart is the final visualization on the dashboard, highlighting the relationship between geographical regions—North, East, South, and West—and the revenue they generated. Among these, the Northern region stands out as the highest performer, contributing a total revenue of \$141,660.34. On the other hand, the Western region recorded the lowest revenue, generating \$91,251.98. This comparison provides valuable insights into regional sales performance, indicating where the company is performing strongly and where there may be opportunities for growth or improvement.

RECOMMENDATION AND OBSERVATIONS

1. New York tops the chart as the best city with \$81,180.50 revenue generated.
2. Nancy Freehafer is the best salesperson for the year 2019 and she generated a total revenue of \$104,242.34 for the company.
3. For the sales trend, December generated the highest revenue of \$ 66,642.78, while February generated the least revenue of \$ 19,955.50.
4. North performed best for the year with 32% of the revenue generated while west performed least and generated 21% of the revenue
5. Company D performed super well with \$67,180.50 grossing revenue.
6. The best performing product for the year is beverages grossing a revenue of \$110,577.11

7. The majority of the transactions (218) falls within the 0-1000 price range, indicating a strong demand for affordable items.

Recommendations

1. Since New York is the best city, I recommend that the sub headquarters move to New York.
2. Nancy Freehafer should be promoted so as to encourage the other sales persons to perform better.
3. The stakeholders should make inquiries about what was done differently in the month that had the highest revenue which is December and replicated to months like February that had low revenue.
4. Jan Kotas had the least revenue, I recommend that he be retrenched or sent on training to boost his sales.
5. Company D should be named the company of the year and loyalty points be given to the companies that made the top 10 customers
6. Focus marketing efforts in regions with the highest revenue generated
7. Ensure that the affordable priced products do not run out of stock so that the company does not lose customers to their competitors.

CONCLUSION

1. Nancy Freehafer performed well for the year and although Jan Kotas has a very low sales, he can be sent to trainings or sent to Nancy to show him how to make better sales
2. Affordable priced goods are high in demand. Hence, I recommend that the company review the prices for the high priced goods or run sales discounts.
3. New York as the best city should have a sub headquarter so it encourages the customers in New York City to purchase more products