

**A TECHNICAL REPORT ON THE ANALYSIS  
OF NEXT WAVE SUPPLY CO FOR THE  
YEAR 2019**

WRITTEN BY

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## 2. INTRODUCTION

**Objective of the Project:** This analysis examines Next Wave Supply Co performance data to gain comprehensive insights into the company's results for 2019. The project investigates sales patterns across their product category, identifying top-performing products and analyzing seasonal changes throughout the year. Additionally, I've analyzed regional sales distribution to determine regional strongholds and purchasing patterns across different markets. This technical report aims to uncover actionable insights regarding product performance, trends, and regional performance to inform strategic decision-making for future growth opportunities.

**Problem Being Addressed:** Some of the problems this analysis aims to solve are: To help the company not to understock on their most sold products, and to gain advantage over their competitors when it comes to marketing their products.

**Key Datasets and Methodologies:** The dataset used was a Sales data and some of the methods I used was to make sure my data is clean and consistent, before converting it to a standard excel table, then I used pivot tables and pivot charts to get insights on the particular metrics I want to see.

## 3. STORY OF THE DATA

**Purpose:** The dataset is a sales data, which shows how the company fared in year in review, the first thing I did was to clean the dataset, then I created my Pre-Analysis Board where I noted down important details that would help me better understand the dataset I am working with, then I started creating my Pivot Tables and Charts, as I was creating the charts I created another excel sheet which I called the In-Analysis Board, where I noted down important observations and insights from each of the chart. After that I started bringing in my charts to form a Dashboard, while creating the dashboard, I made sure I

followed all the rules that guides an effective dashboard. After creating the dashboard, I then wrote down my final observations and recommendations that I can give to the stakeholders.

**Data Source:** The dataset was given to us by the mentor of the Data Analytics Course

**Data Structure:** The dataset was structured in a tabular format with columns representing datapoints like, Order Date, Customer Name, City, Region, Salesperson, Ship City, Payment Type, Product Name, Product Category, Revenue etc.

**Important Features and Their Significance:** Some of the important datapoints in the dataset includes the Order Date which shows us when the product was ordered, the Customer Name, that tells us which customer ordered the product. The city it was ordered from, the sales person tells us the salesperson who made the sales, while the ship city tells us where the product was shipped to, and the revenue tells us the amount made from that product.

**Data Limitations or Biases:** The dataset was all cleaned up, except some missing values of which mentor told us to leave it as it was, as he was going to teach us how to handle missing values.

#### **4. DATA SPLITTING AND PREPROCESSING**

**Data Cleaning:** The dataset was all cleaned up.

**Handling Missing Values:** The dataset had missing values, But we were told to leave it like that.

**Data Transformations:** I standardized my dataset by changing it to a Standard Excel Table

**Data Splitting:** I separated the different datapoints to dependent and independent values by checking which datapoints depends on another datapoint before you can understand it. Like Shipping Price, Unit Price, Revenue and Quantity, which are all depended values

while datapoint such as Customer Name, City, Salesperson, Region are all independent values

**Industry Context:** The industry type of the data is a grocery store.

**Stakeholders:** The key stakeholders of this project are the CEO's, The Marketing Department, The Production Department, Store Keepers and other Investors.

**Value to the Industry:** The significance of this analysis to the industry is to help them know where and where to commit more resources as they would want to avoid wastage of resources, they would want to also know how they can take out perform their competitors by using the observations from their analysis to drive more sales and at the end increase their revenue.

## 5. PRE-ANALYSIS

**Identify Key Trends:** While looking at the dataset I saw a lot of rows with Nancy, which might indicate that Nancy was among the top salesperson, I also saw a lot of rows with Beverages, which might also indicate that beverages were among the top product shipped, from the dataset it also seems the northern region dominated revenue generation.

**Potential Correlations:** There were some strong correlations like that between top salesperson performance and top customer relationships (Nancy Freehafer's performance correlates with Company D's top customer status), Company size appears correlated with purchase volume, as larger companies (D, H, BB) dominate the top customer list

**Initial Insights:** Some of the key insights I saw that felt promising for analysis include: Which products category was the best performing , which region had the most sales, What was the total revenue generated by the company, in which month did the company performed well and when they didn't perform well.

## 6. IN-ANALYSIS

**Unconfirmed Insights:** While creating my charts some of the insights I got from them include:

- Nancy performed best for the year with a grossing revenue of \$104,242.34
- Jan performed least for the year with a revenue of \$16,350.50
- Company D performed super well for the year with a grossing revenue of \$67,180.50
- The month with the greatest sales is December
- The best region is the Northern region
- The best Performing Product for the year is beverages with a grossing revenue of \$110,577.11
- The highest number of transaction that occurred was between 0 - 1000 dollars with a total number of 218 transactions.
- New York tops the chart base on revenue generated by ship cities

**Recommendations:** Some of the recommendations I could give from these insights I got were:

- Jan performed least for the year and i do recommend to the stakeholders that he be retrenched and sent over for some training on sales and customer retention.
- Recommend company D for discounts in the coming year to encourage them to purchase more or make them the company of the year.
- The company should replicate measures implemented in December for months with low sales turn out
- The company should find the sales person resident in the Northern region and inquire measures implemented and convey this to the sales person in the west
- I recommend that the stakeholders inform all inventory staff to keep an eye on beverages in the coming year such that it does not get deplete at any time.
- I recommend that the stakeholders also inform all inventory staff to keep an eye on all items that are priced at 0 - 1000 dollars and make sure they don't run out of stock on those items.
- We can set up a sub-HQ at New York to ensure more customers gets interested in lower shipping fee encouraging more prior unacquired customers

**Analysis Techniques Used in Excel:** The Excel tool I used for this project was the Pivot Tables and Charts, I used these tools because of dynamism, with these tools I could get automatic updates on my Charts if the main dataset is updated.

## 7. POST ANALYTICS AND INSIGHTS

**Key Findings:** Some of the key findings from my analysis were.

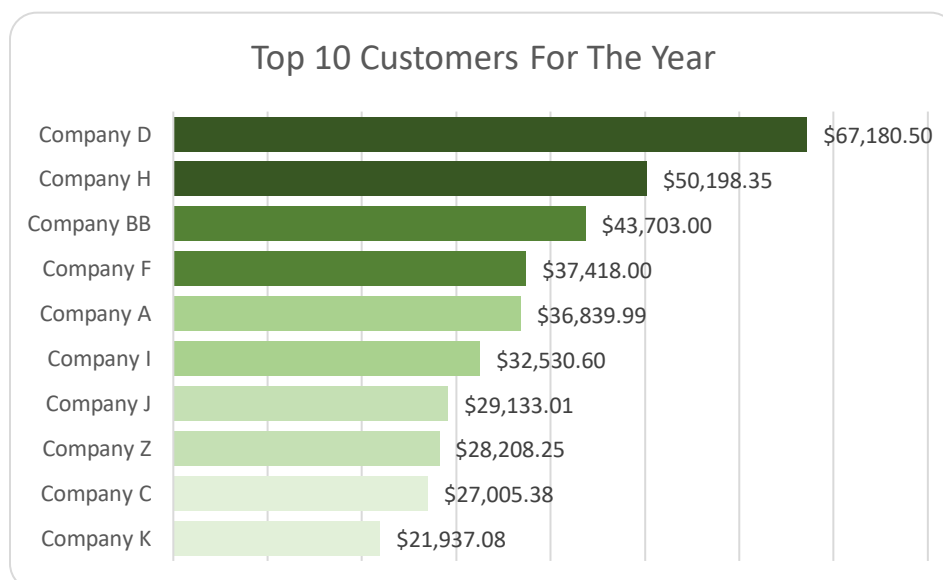
- The company generated a total of \$436,066.16 as revenue
- The top customer was company D with \$67,180.50
- The top salesperson was Nancy Freehafer with \$104,242.34
- Northern Region was the top region with total revenue of \$436,066.16
- The month with the best sales was December with a total sale of \$66,642.78 while February had the least sales
- The top cities included Network, Portland Miami etc.

**Comparison with Initial Findings:** With the highest number of transactions in the \$0-1000 range (248 transactions), the company still achieved substantial revenue (\$436,066.16), suggesting that smaller transactions form the backbone of their business rather than large deals.

## 8. DATA VISUALIZATION AND CHARTS

Some of the charts used in my project include:

### The Top 10 Customers



The bar chart reveals significant customer concentration for Next Wave Supply Co in 2019, with Company D (\$67,180.50) generating the highest revenue, followed by Company H (\$50,198.35) and Company BB (\$43,703.00). These top three customers represent a substantial portion of total revenue, while the remaining seven companies show a gradual decline in spending down to Company K (\$21,937.08). This distribution suggests potential business vulnerability if top accounts were lost, highlighting the need for strategic account management.

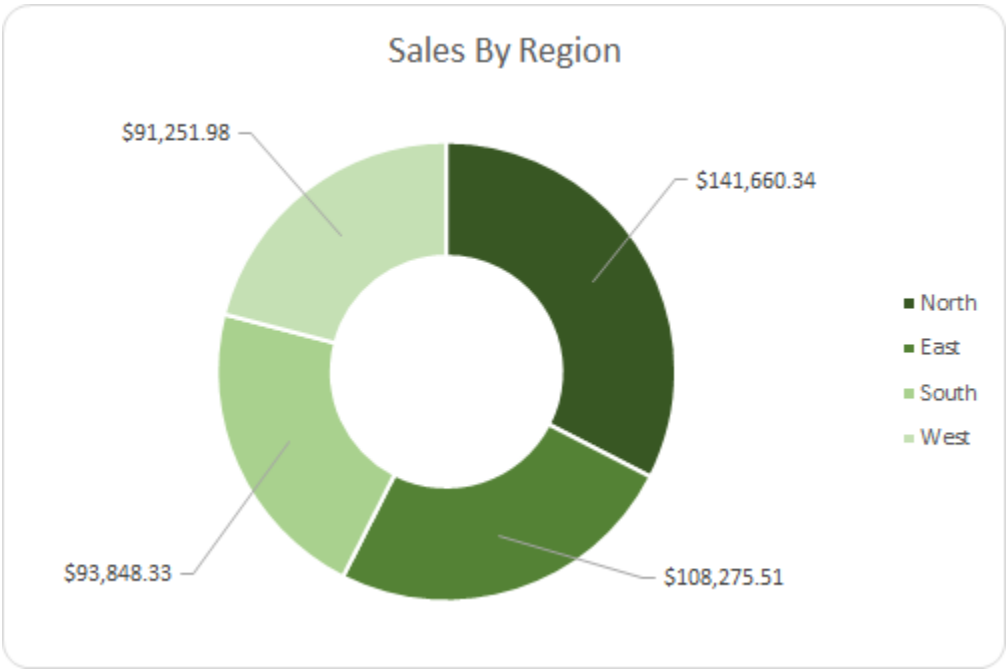
Sales Trend Report



The sales trend shows fluctuations throughout the year, with noticeable peaks in June (\$55,601.61), October (\$53,033.59), and a significant spike in December (\$66,642.78), which was the best month for sales, likely due to holiday shopping. Also, sales hit their lowest point in February (\$19,955.00), making it the worst month, possibly due to a post-holiday spending dip. Despite some mid-year declines, overall sales rebounded strongly toward the end of the year.

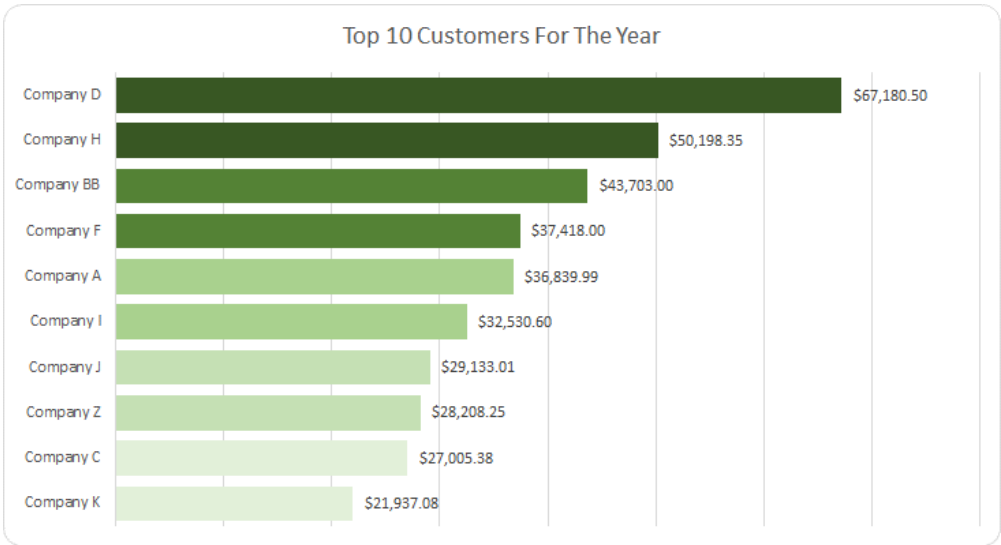


Regional Sales



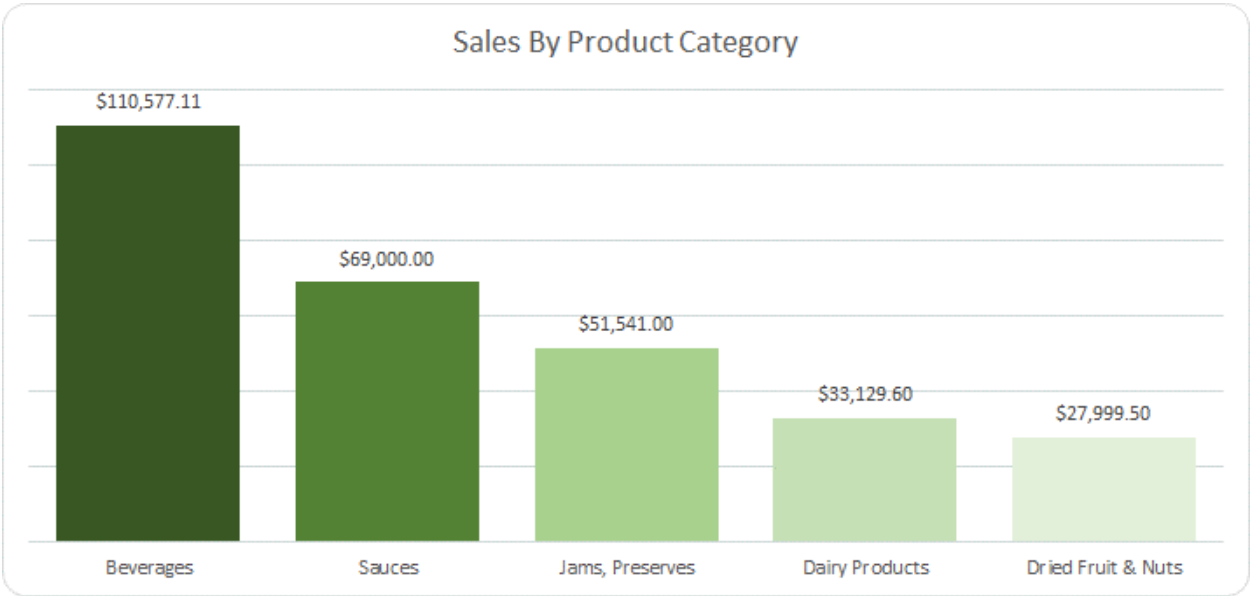
The sales distribution across regions shows that the North performed the best, generating \$141,660.34, followed by the East with \$108,275.51. The West and South had relatively lower sales, with \$93,848.33 and \$91,251.98, respectively. This indicates that the North is the strongest-performing region, while the South recorded the lowest sales. The significant gap suggests potential factors such as market demand, customer base, or sales strategies influencing regional performance.

Top 10 Customers



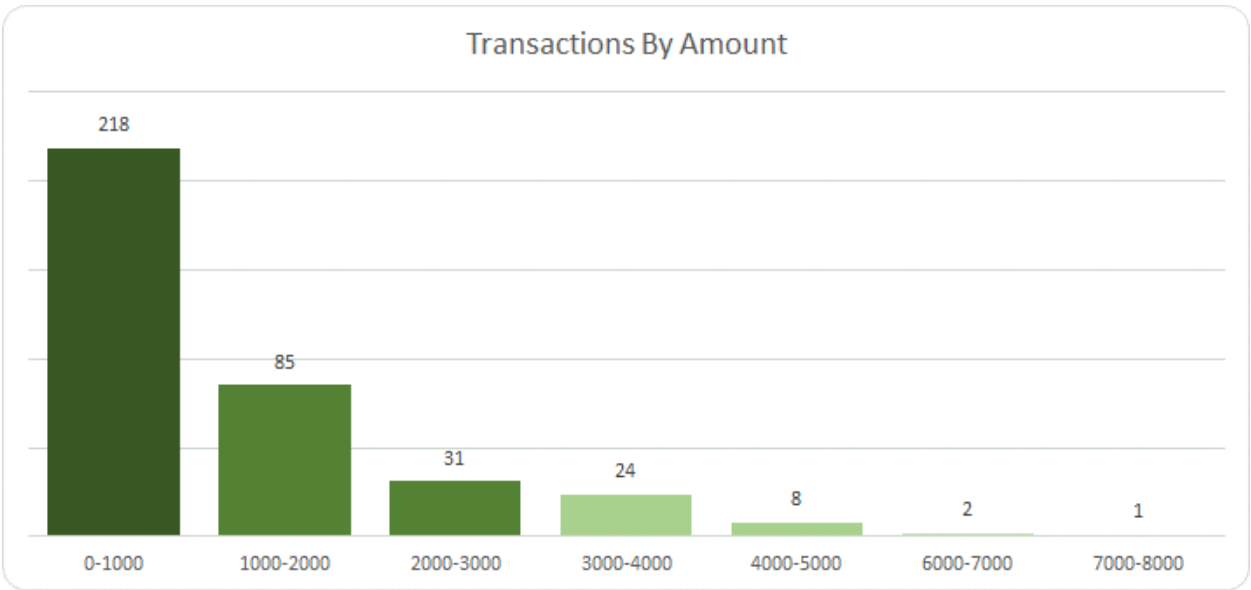
The top 10 customers for the year reveal that Company D contributed the highest revenue at \$67,180.50, followed by Company H at \$50,198.35 and Company BB at \$43,703.00. These companies represent the most valuable clients, playing a significant role in overall sales. Conversely, Company K generated the least revenue among the top 10, with \$21,937.08. This insight can guide customer relationship strategies, helping to maintain strong ties with high-value clients while exploring opportunities to increase engagement with lower-tier customers.

**Sales by Product Category**



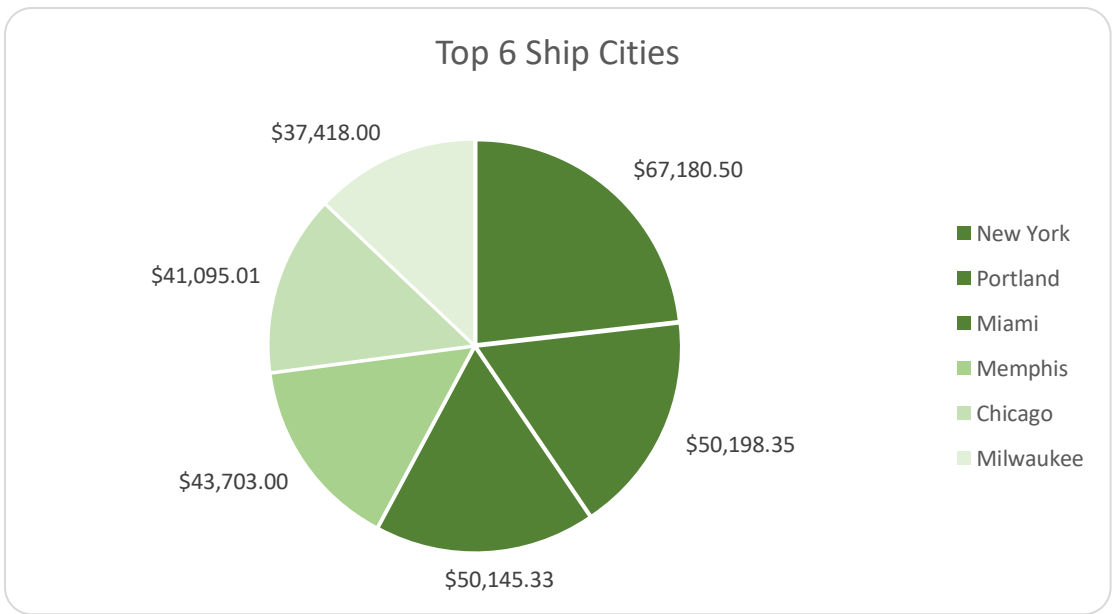
The Sales by Product Category chart shows that Beverages lead with the highest sales at \$110,577.11, significantly outperforming all other categories. Sauces follow in second place with \$69,000, while Jams & Preserves hold the third spot at \$51,541. Dairy Products and Dried Fruit & Nuts have the lowest sales, suggesting lower demand or market penetration. This indicates that Beverages dominate the market, while other categories may require improved marketing strategies or product innovation to boost sales.

Transaction by Amount



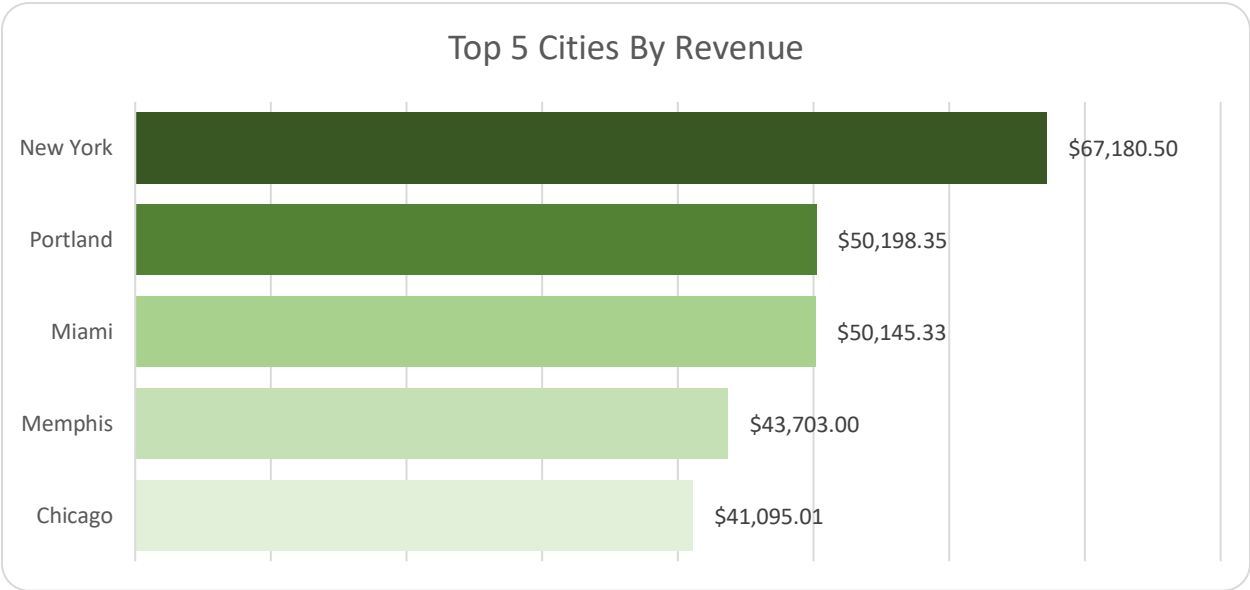
The Transactions by Amount chart reveals that most transactions fall within the 0-1000 range (218 transactions), followed by 1000-2000 (85 transactions). As transaction amounts increase, the frequency drops significantly, with only 1 transaction recorded in the 7000-8000 range. This suggests that customers predominantly make smaller purchases, indicating either affordability concerns, spending habits, or a pricing model that favors lower-value transactions. Encouraging higher-value purchases may require bundling strategies, discounts, or premium product offerings.

Top 6 Ship Cities

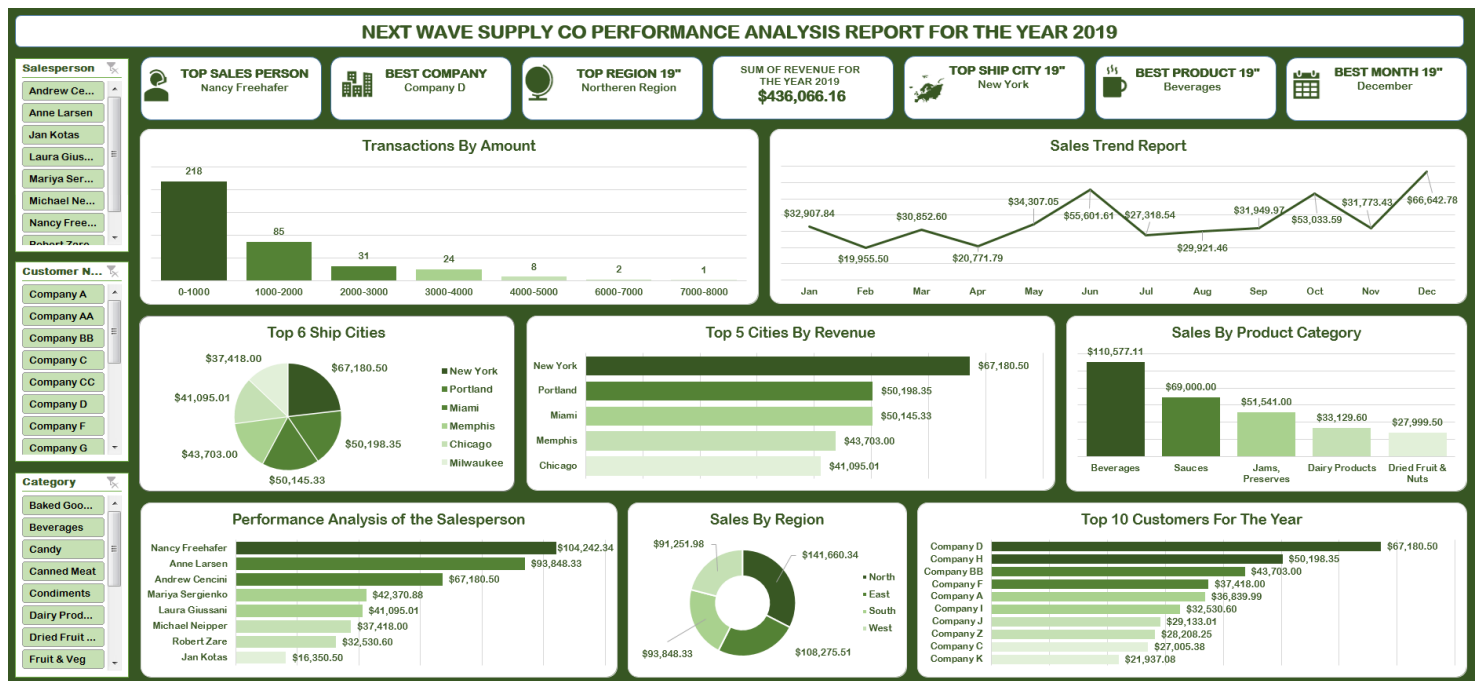


The Top 6 Ship Cities chart highlights New York as the leading city with \$67,180.50 in sales, followed by Portland and Miami, both exceeding \$50,000. Memphis, Chicago, and Milwaukee contribute lower sales, with Milwaukee at the bottom with \$37,418.00. This suggests that major metropolitan areas drive higher shipping volumes, possibly due to larger customer bases and better logistics infrastructure. Businesses could explore targeted marketing in lower-performing cities to boost demand.

**Top 5 Cities by Revenue**



The Top 5 Cities by Revenue chart shows that New York leads significantly with \$67,180.50, while Portland and Miami generate similar revenue at around \$50,000 each. Memphis and Chicago lag behind, with revenues under \$44,000. This suggests that New York is a dominant market, possibly due to higher demand or purchasing power. Targeted marketing and expansion efforts in Memphis and Chicago could help close the revenue gap.



seasonal demand. The **lowest performing months** were **February and April**, with revenues under **\$21,000**, pointing to periods of slow business.

- New York maintained its position as the top performing state with \$6.42M in sales, followed closely by Florida and California, highlighting strong coastal market presence.
- A consistent pattern shows men's products generally outperforming their women's equivalents across categories, suggesting opportunities for growth in the women's segments.

## RECOMMENDATIONS

Some of the recommendations I can give to the company include:

- **Expand High-Performing Categories** – Since Beverages significantly outperformed other categories, the company should consider expanding its product line within this segment or introducing complementary products. Additionally, marketing efforts should focus on promoting Sauces and Jams & Preserves, which also showed strong performance but have room for growth.
- **Target High-Value Transactions** – Since most transactions fall under \$1000, strategies to encourage larger transactions should be implemented. Offering bulk purchase discounts, loyalty programs, or exclusive high-value product bundles could incentivize bigger purchases.
- **Improve Underperforming Cities & Customers** – While New York, Portland, and Miami performed well, Memphis and Chicago showed weaker revenues. Targeted promotions, localized marketing efforts, and stronger partnerships with businesses in these regions could improve performance. Similarly, lesser-contributing customers should be engaged with personalized deals or incentives.
- **Salesforce Optimization** – While Nancy Freehafer and Anne Larsen are excelling, lower-performing salespeople like Jan Kotas might need additional training, mentoring, or performance-based incentives to boost their sales contributions.
- **Mitigate Seasonal Slumps** – Since February and April showed the lowest revenue, introducing special promotions, seasonal discounts, or bundled product offers during these months could help maintain steady sales. Additionally, analyzing customer preferences during these months could reveal opportunities to introduce new sales strategies.
- **Leverage December's Peak Demand** – The highest sales month being December suggests an opportunity to further maximize holiday season revenue. Increasing advertising, offering festive promotions, and ensuring stock availability for high-demand products could drive even higher revenues.

## 10. CONCLUSION

The **Next Wave Supply Co. Performance Analysis Report for 2019** highlights key trends in sales performance, regional strengths, and areas for improvement. The company's total revenue of **\$436,066.16** was primarily driven by strong contributions from **New York, Portland, and Miami**, with **Beverages** emerging as the most profitable product category. **Nancy Freehafer** led the sales team, and **Company D** was the highest-paying customer. However, certain areas require attention, including underperforming regions like **Memphis and Chicago**, low-revenue salespeople, and a reliance on small transactions.

To maintain and accelerate growth, the company should **expand high-performing product categories, encourage larger transactions, improve salesforce efficiency, and mitigate seasonal downturns**. Additionally, leveraging strong customer relationships and capitalizing on peak sales months like **December** can drive further profitability. By focusing on these strategic improvements, **Next Wave Supply Co.** can optimize its sales processes, strengthen market presence, and ensure sustained revenue growth in the coming years.