Company x Data Department Report

Executive summary

The purpose of this report is to provide insights into the company's sales operations based on data extracted from our sales database. We have conducted a detailed analysis of sales across various customer segments, product categories, and regions. Our analysis aimed at identifying areas for growth, understanding customer behavior, and recommending strategies to enhance the overall customer experience and business performance.

Data Cleaning and Analysis Process:
The analysis began with data cleaning to ensure the dataset was complete and accurate. We removed any duplicates, handled missing values, and ensured the data properly structured for analysis.
To gain insights, we leveraged several Excel tools, including pivot tables, pivot charts, and various formulas to summarize and visualize key metrics. This helped us identify important patterns, trends, and outliers. Additionally, charts were created to enhance data visualization, allowing for a clear and effective presentation of findings.

Key Tools Used:
- **Excel**: For data cleaning, pivot tables, pivot charts, and summary tables.
- **Charts**: Visual representations of sales data, including bar charts, pie charts, and line graphs, were used to make data insights more accessible and actionable.

Scope

- ### CUSTOMER LOYALTY

    To identify patterns in customer preferences, such as shipping modes and frequent buyers, and to improve retention strategies.

    - Q1. What is the Most Used Ship mode by our customers?
    - Q2. Who are our top 10 customers in terms of sales?
    - Q3. Who are our top 10 customers in terms of order frequency?

- ### STRENGTHS AND WEAK POINTS

    To uncover high-performing segments and geographic areas, as well as areas needing improvement, to allocate resources effectively.

    - Q4. Which segment of clients generates the most sales?
    - Q5. Which city has the most sales value?
    - Q6. Which state generates the most sales value?

- ### PERFORMANCE

To evaluate the profitability and sales performance of product categories and individual products, ensuring the company focuses on the most lucrative opportunities.

- Q7. What are the top performing product categories in terms of sales and profit?
- Q8. What is the most profitable product that we sell?

- **CUSTOMER EXPERIENCE**

To assess delivery efficiency and identify potential delays or issues, ensuring that the service meets or exceeds customer expectations.

- Q9. On Average how long, does it take the orders to reach our clients? "Based on Each Shipping Mode"

Data steps

- Here are the tables we used to conduct our analysis:

- Orders Table Return
- Table Shipping
- Cost Table
- People Table

The analysis

CUSTOMER LOYALTY

Q1. What is the Most Used Ship mode by our customers?

Row Labels	Count of Ship Mode
First Class	15.39%
Same Day	5.43%
Second Class	19.46%
Standard Class	59.72%
Grand Total	**100.00%**

ShipMode Contribution

- First Class
- Same Day
- Second Class
- Standard Class
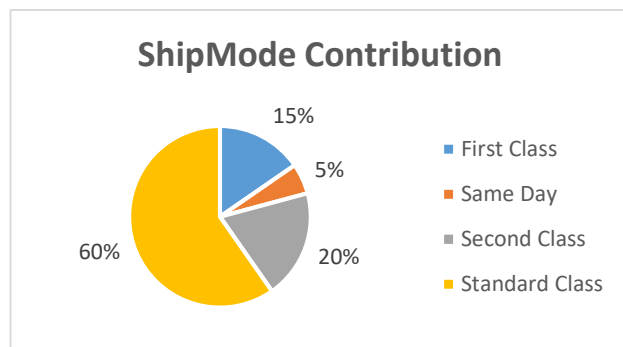
Insights:
- Based on the analysis of the Orders Table, the Standard Class shipping mode used in 59.72% of orders, making it the most popular choice among customers.
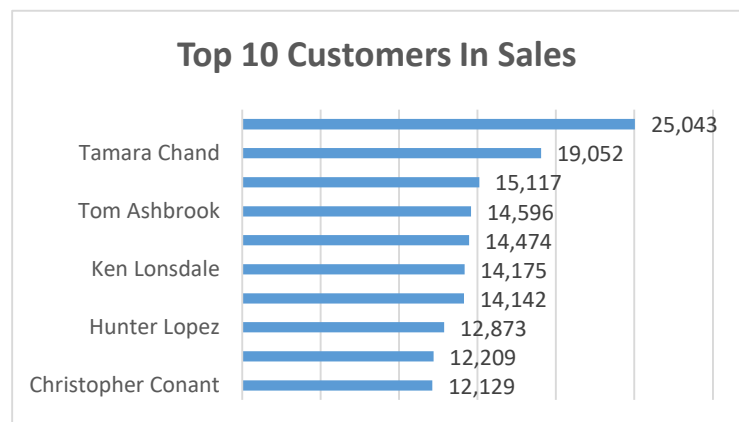- Same-Day shipping mode was the least used.

Recommendations:

- Focus promotional efforts on Standard Class to leverage its popularity.
- Investigate cost-reduction strategies for Standard Class to enhance profitability.
- Review and revise pricing or scenarios for Same-Day shipping to make it more attractive or consider phasing it out.

Q2. Who are our top 10 customers in terms of sales?

Based on the analysis of sales data, we identified the top 10 customers in terms of total sales, as shown below:

Row Labels	Sum of Sales
Christopher Conant	12,129
Sanjit Engle	12,209
Hunter Lopez	12,873
Sanjit Chand	14,142
Ken Lonsdale	14,175
Adrian Barton	14,474
Tom Ashbrook	14,596
Raymond Buch	15,117
Tamara Chand	19,052
Sean Miller	25,043
Grand Total	**153,811**

Top 10 Customers In Sales

Tamara Chand — 25,043 / 19,052
Tom Ashbrook — 15,117 / 14,596
Ken Lonsdale — 14,474 / 14,175
Hunter Lopez — 14,142 / 12,873
Christopher Conant — 12,209 / 12,129

Insights:

- Sean Miller is the highest contributor, generating $25,043 in sales, followed by Tamara Chand with $19,052.
- The top 10 customers collectively account for $153,811 in sales, representing a significant portion of total revenue.
- Most of these top customers have relatively close sales amounts, indicating a strong customer base within a similar range.
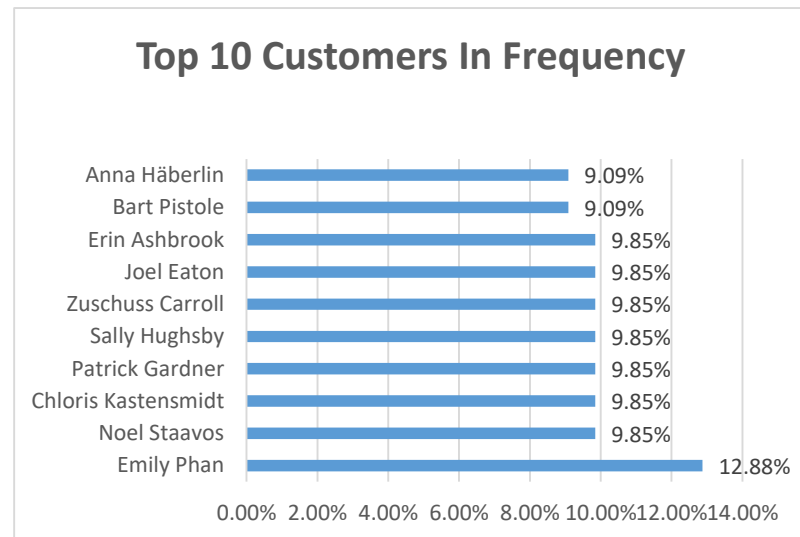
Recommendations:

- Customer Loyalty Programs: Develop tailored offers for these top customers to foster long-term relationships and encourage repeat business.

- High-Value Focus: Given their significant contribution, consider offering exclusive deals, early access to new products, or loyalty bonuses to the highest sales customers (e.g., Sean Miller and Tamara Chand).
- Customer Segmentation: Analyze whether these top customers share similar characteristics (e.g., region, product preference) and look for opportunities to expand this segment.

Q3. Who are our top 10 customers in terms of order frequency?

Based on the analysis of order frequencies, we identified the top 10 customers with the highest number *of orders, as shown below:*

Row Labels	Distinct Count of Order ID
Emily Phan	17
Noel Staavos	13
Chloris Kastensmidt	13
Patrick Gardner	13
Sally Hughsby	13
Zuschuss Carroll	13
Joel Eaton	13
Erin Ashbrook	13
Bart Pistole	12
Anna Häberlin	12
Grand Total	**132**

Top 10 Customers In Frequency

Customer	Percentage
Anna Häberlin	9.09%
Bart Pistole	9.09%
Erin Ashbrook	9.85%
Joel Eaton	9.85%
Zuschuss Carroll	9.85%
Sally Hughsby	9.85%
Patrick Gardner	9.85%
Chloris Kastensmidt	9.85%
Noel Staavos	9.85%
Emily Phan	12.88%

0.00% 2.00% 4.00% 6.00% 8.00% 10.00% 12.00% 14.00%

Customer Name	Order Frequency	Percentage of Total Orders
Emily Phan	17	12.88%
Noel Staavos	13	9.85%
Chloris Kastensmidt	13	9.85%
Patrick Gardner	13	9.85%
Sally Hughsby	13	9.85%
Zuschuss Carroll	13	9.85%
Joel Eaton	13	9.85%
Erin Ashbrook	13	9.85%
Bart Pistole	12	9.09%
Anna Häberlin	12	9.09%

Insights:

- Emily Phan has the highest order frequency, with 17 orders, making up 12.88% of total orders.
- A significant group of customers (Noel Staavos, Chloris Kastensmidt, Patrick Gardner, and others) each placed 13 orders, accounting for 9.85% of total orders.
- Together, the top 10 customers represent a substantial portion of total orders, contributing to over 70% of the total order frequency.

Recommendations:

- Customer Engagement: Engage these top frequent buyers with special offers or loyalty programs to retain them and encourage purchases that are even more frequent.
- Personalized Marketing: Since these customers place orders consistently, consider sending them personalized product recommendations based on their purchasing history.
- Customer Satisfaction: Given their frequency, it is important to ensure these customers are highly satisfied. A follow-up survey or dedicated customer service could help maintain their loyalty.

STRENGTHS AND WEAK POINTS

Q4. Which segment of clients generates the most sales?

Based on the analysis of sales by client segment and product category, we found the following sales distribution:

Sum of Sales	Column Labels			
Row Labels	Consumer	Corporate	Home Office	Grand Total
Furniture	391,049	229,020	121,931	742,000
Office Supplies	363,952	230,676	124,418	719,047
Technology	406,400	246,450	183,304	836,154
Grand Total	1,161,401	706,146	429,653	2,297,201

Segment Sales By Category
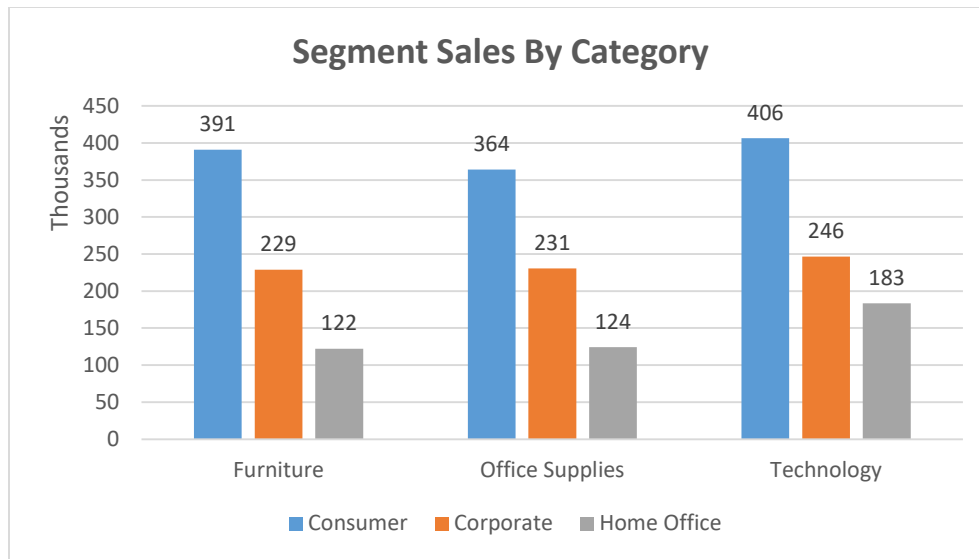
Insights:
- The Technology category contributed the most sales across all segments, with Consumer leading in total sales within this category.
- Consumer Segment generated the highest overall sales of $742,000, especially in Furniture, which was the top category for this segment.
- Home Office Segment generated $836,154 in total sales, and its top category was Furniture, which outperformed both Office Supplies and Technology.

Recommendations:
1. Product Focus: Given the strong sales performance in the Furniture category for both Consumer and Home Office segments, consider promoting more furniture products to these customer groups.
2. Segment-Specific Promotions: Focus on Consumer clients for the Technology category, where their spending is highest. Develop targeted marketing for this segment to further boost sales in this area.
3. Sales Strategy: Invest more in the Home Office segment, which shows consistent high sales across multiple categories. Consider expanding product offerings for this group, particularly in Furniture, to maximize potential revenue.

Q5. Which state by region generates the most sales value?

Based on the analysis of sales by region, we found the following distribution of sales across the four regions:

Row Labels	Sum of Sales
Central	**21.82%**
East	**29.55%**
South	17.05%
West	**31.58%**
Grand Total	**100.00%**

State by region VS Sales
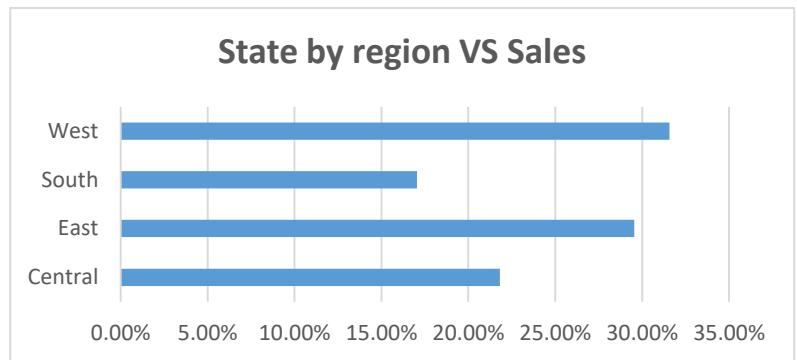
Insights:
- The West Region contributes the highest percentage of total sales, accounting for 31.58% of the overall sales.
- The East Region follows closely with 29.55%, making it another key area for the business.
- South and Central regions contribute 17.05% and 21.82%, respectively, indicating a relatively smaller share of sales.

Recommendations:
1. Focus on West Region: Since the West region generates the highest sales percentage; consider allocating more marketing and sales resources to this region.
2. Promotions in the East Region: The East region also represents a significant portion of sales. Tailor promotions or campaigns specifically for this region to further increase its contribution.
3. Expansion in Central and South: Given the lower percentages from Central and South, explore strategies to boost sales in these regions—such as localized promotions, partnerships, or identifying untapped customer segments.

PERFORMANCE

Q7. What are the top performing product categories in terms of sales and profit?

Q8. What is the most profitable product that we sell?

CUSTOMER EXPERIENCE

Q9. On Average how long, does it take the orders to reach our clients? "Based on Each Shipping Mode"

Final Insights

1. **Customer Loyalty**:
   - **Top 10 customers by sales** contribute significantly to the company's revenue. **Sean Miller** and **Tamara Chand** lead the group, representing a substantial portion of total sales. Focusing on loyalty programs and personalized marketing for these customers can further increase their engagement and drive more sales.

2. **Order Frequency**:
   - The **top 10 customers by order frequency** also play a crucial role in maintaining a steady flow of sales. **Emily Phan** tops the list with the highest frequency of orders, making up nearly 13% of the total orders. Targeting these high-frequency customers with exclusive offers can help retain them and even increase their order volume.

3. **Sales by Product Category**:
   - The **Technology category** is the highest-performing category across all client segments, with **Consumer** segment driving the most sales in this area.
   - **Home Office** segment showed strong sales in **Furniture**, and **Consumer** clients drove the most sales overall, particularly in the **Furniture** category. Tailoring promotions in these categories to the respective client segments can help further increase sales.

4. **Regional Sales Distribution**:
   - The **West region** generates the most sales at **31.58%** of total sales, followed closely by the **East region** at **29.55%**.
   - The **South** and **Central** regions, contributing **17.05%** and **21.82%**, present opportunities for growth. Strategies such as localized promotions, increased marketing efforts, or partnerships can help boost sales in these areas.

5. **Actionable Recommendations**:
   - **Focus on High-Value Clients**: Targeting the top customers based on sales and frequency, offering personalized services, promotions, or loyalty programs to enhance retention.
   - **Increase Focus in High-Performing Categories**: Focusing marketing efforts on **Technology** and **Furniture** categories, especially in high-performing regions like the **West** and **East**.
   - **Strengthen the South and Central Regions**: Allocating resources and creating tailored campaigns to expand sales in the **South** and **Central** regions.