DATA ANALYSIS REPORT
UNITED SUPERSTORE (TEAM E)

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INTRODUCTION

Established in 2014, United Superstore is a prominent online retail company that has experienced substantial year-on-year growth. In light of its success, the company is planning to expand into physical retail stores in strategically selected cities. This report contains the information-driven conclusions required to lead the expansion.

PROBLEM FACED

United Superstore faces specific challenges in its expansion into physical retail stores, which are:

1. Choice of Optimal Locations for Expansion
2. Understanding the Performance of Products
3. Efficiency in Logistics

DATA EXPLORATION

DEFINITIONS & EXAMPLE VALUES

Field Name	Definition	Example Value
Row ID	A unique identifier for each row in the dataset.	1
Order ID	A unique identifier for each order placed by customers.	CA-2017-152156
Order Date	The date on which the order was placed.	11/8/2016
Ship Date	The date on which the order was shipped.	11/11/2016
Ship Mode	The method or speed of shipping selected for the order.	Second Class
Customer ID	A unique identifier for each customer.	CG-12520
Customer Name	The full name of the customer who placed the order.	Claire Gute
Segment	The market segment to which the customer belongs (e.g., Consumer, Corporate, Home Office).	Consumer

Country	The country where the order was placed.	United States
City	The city where the customer resides.	Henderson
State	The state where the customer resides.	Kentucky
Postal Code	The postal code of the customer's address.	42420
Region	The region of the United States where the customer resides (e.g., East, West, Central, South).	South
Product ID	A unique identifier for each product in the catalogue.	FUR-BO-10001798
Category	The high-level category to which the product belongs (e.g., Furniture, Office Supplies & Technology).	Furniture
Sub-Category	A more specific classification within the product category (e.g., Chairs, Phones, Paper).	Bookcases
Product Name	The name of the product.	Bush Somerset Bookcase
Sales	The total sales amount for the order.	$261.96
Quantity	The number of units of the product ordered.	2
Discount	The discount applied to the product price (if any).	0%

Profit	The profit earned from the order after deducting costs.	$41.9136
Delivery Timeline	Duration of time taken to deliver order in days	3

ABNORMALITIES

All abnormalities found in the dataset were due to improper formatting of the data, such as:

1. Monetary values such as "sales" and "profit" were formatted as numbers instead of currency.

2. Unnecessary duplicate records were checked for.

3. Necessary missing values, data entry errors, and inconsistencies were checked.

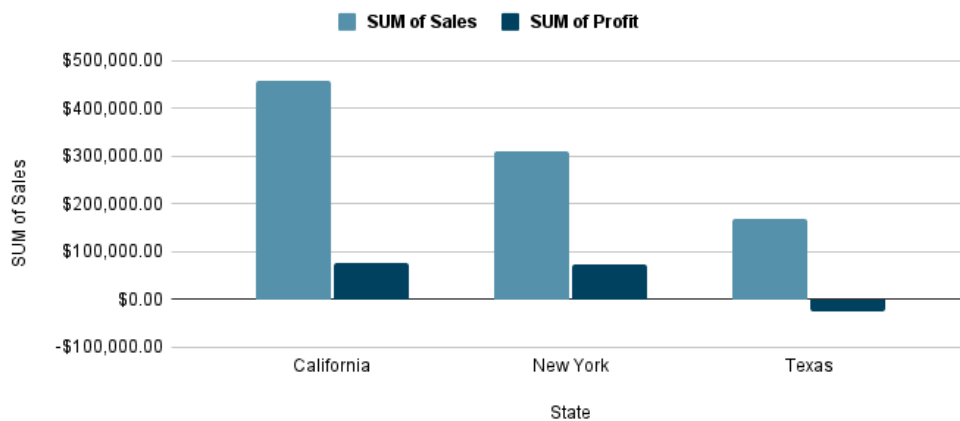4. Data formats were standardized across the dataset (i.e. dates)

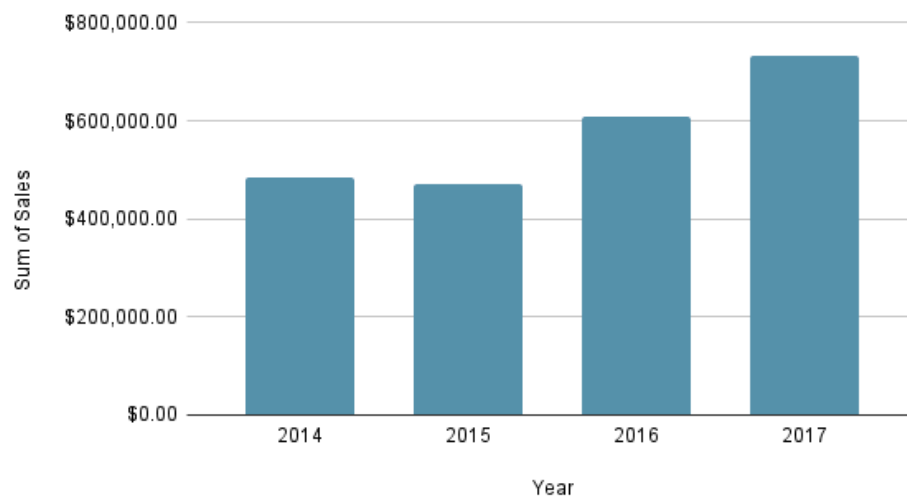# ANALYSIS

KEY PERFORMANCE INDICATORS

1. Sales
2. Top-selling category
3. Top-performing cities in terms of sales and profit
4. Number of orders from each states
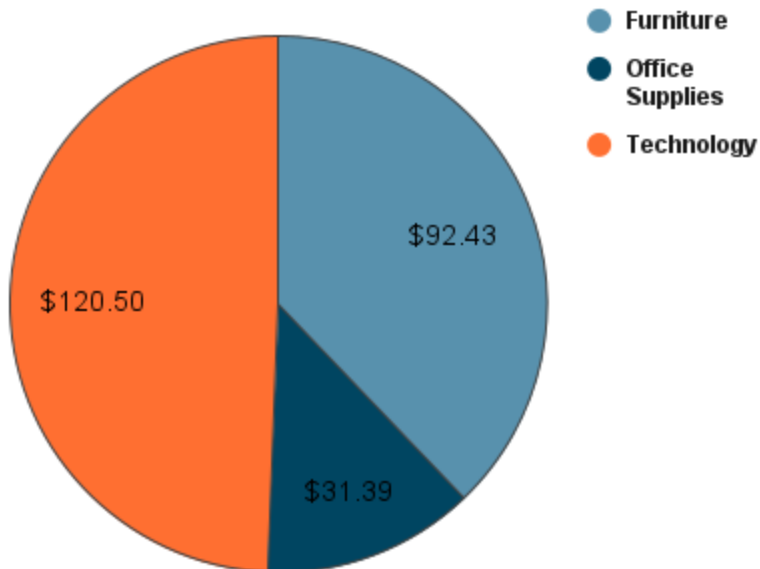5. Average delivery timeline

DATA VISUALISATION

Average Order Value Per Category
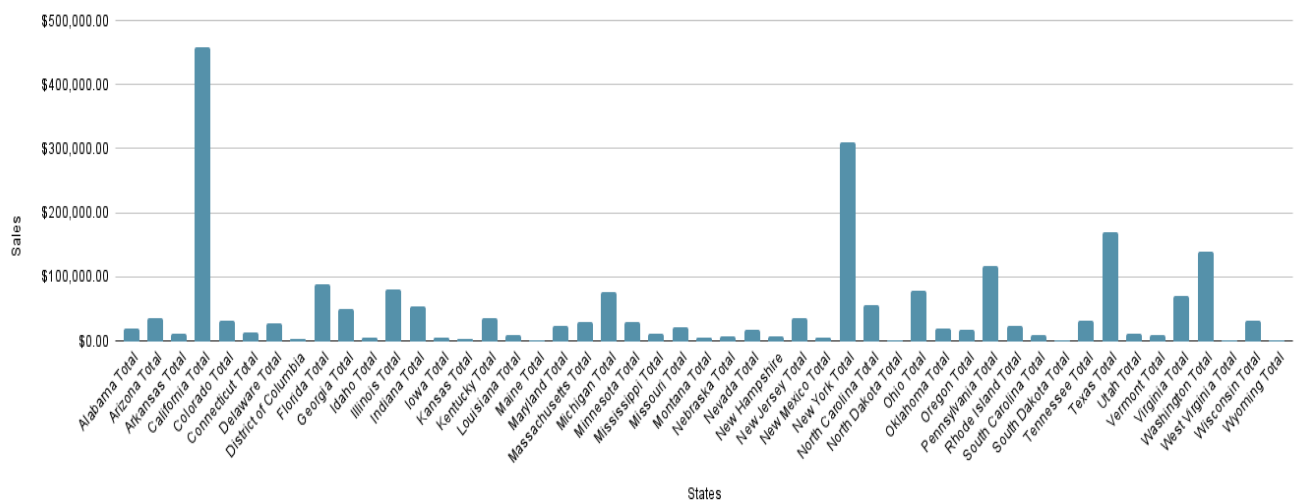

- 🔵 Furniture
- 🔵 Office Supplies
- 🟠 Technology

$92.43

$120.50

$31.39

Sales Performance Across All Statessss

ANALYSIS

S/N	OUTPUT	METHOD USED	SIGNIFICANT FINDINGS
1.	Year-on-Year Growth in Sales	Pivot Table ● Rows: Order-Date (In Year), in ascending order. ● Value: Sales (Sum of all sales in each year) ● Column: percentage growth in sales per year.	Positive growth is seen in overall sales of united superstore over the years from 2014 to 2017 despite other factors affecting sales in other states.
2.	Top three selling states	Pivot Table ● Rows: States ● Values: sum of profits, sum of item quantity, count of customer ID, sum of sales.	California, New York, and Texas were found to be the top three sellers, with California coming up with a total of $457,687.63. According to our analysis, it would be one of the post-strategic locations to open a physical store with a total customer count of 577.
3.	Average Delivery Timeline	Pivot Table ● Rows: Delivery Timeline (in days). ● Value:	The average delivery timeline is 4 days, which is fast. Although, considering the average delivery

		Delivery timeline (in days)	timeline for each state, it is found that states with lower profits also have longer delivery timelines, which is on the downside to customer satisfaction. For example DISTRICT OF COLUMBIA with an average delivery timeline of 6 days.
4.	Top performing product category and sub-categories.	Pivot Table ● Rows: Product Category, Sub Category	In our top three states, according to our analysis, people seem to purchase more phones in the technology category. Making more of these items available in our physical stores would also increase profit.

RESULTS AND CONCLUSION

There was significant growth in sales each year, despite low sales values in many states across the country. A clear overall performance of each state has been seen so far, with California, New York, and Texas topping the sales across the country, including a significant difference in the number of customers compared to other states, according to the charts. Furthermore, the average delivery timeline of four days improves customer satisfaction levels and encourages them to purchase more even when the need is urgent.

Within our top three states, New York City in New York and Los Angeles in California are our top performing states, with a sum of sales of **$256,368.16** and **$175,851.34,** respectively. These are key strategic cities to locate a physical store in.

Although some states like Texas and Illinois gave a lot of discounts, which made their profit margin decline to a negative level, that might not be a major factor to consider as Texas is still one of our topmost selling states.

United Superstore should focus on these cities and continue to watch out for cities with increasing sales, customers, and lower delivery timelines across the country. They should also continue to make more technology items available in their physical locations for easy pickup.