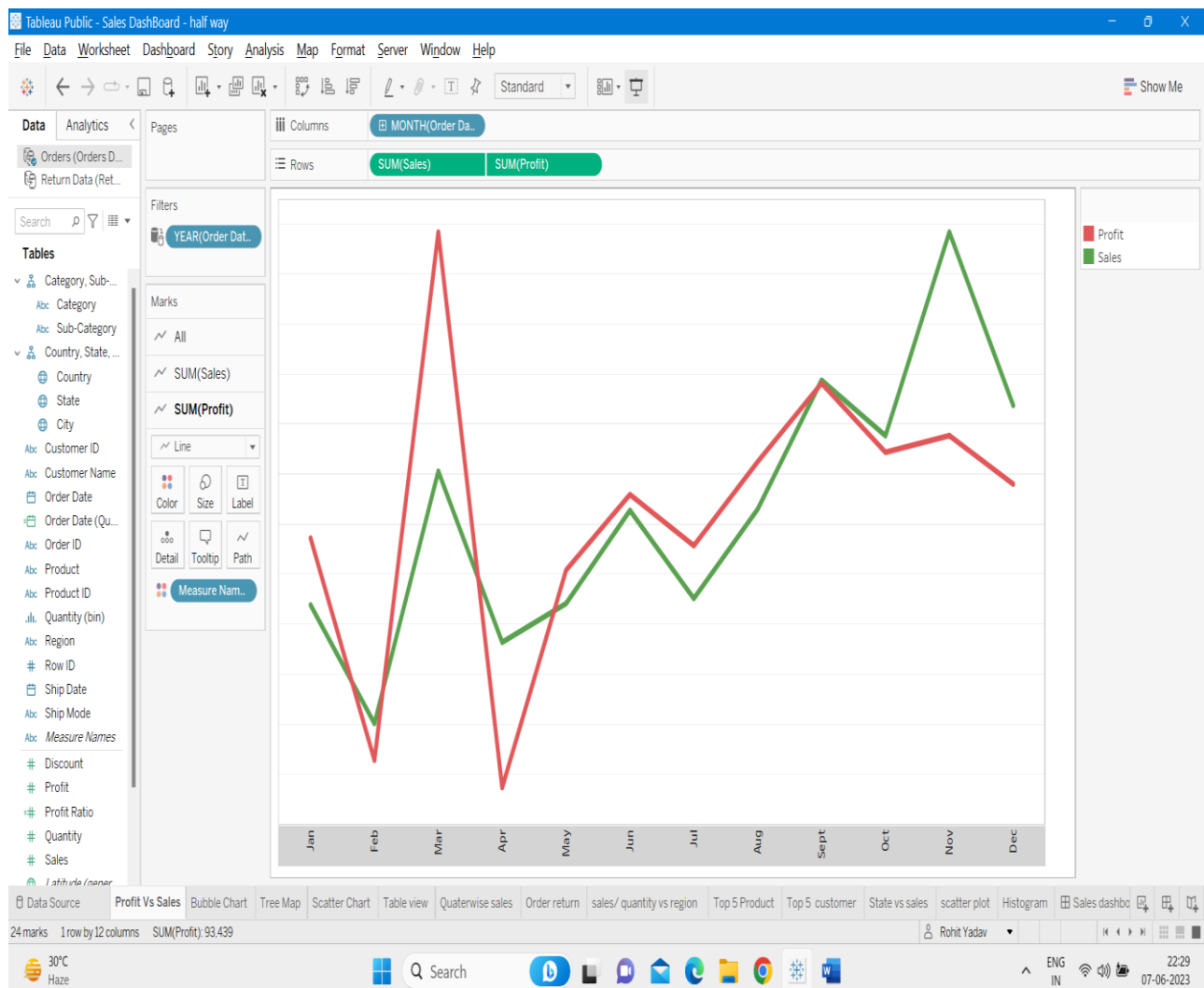


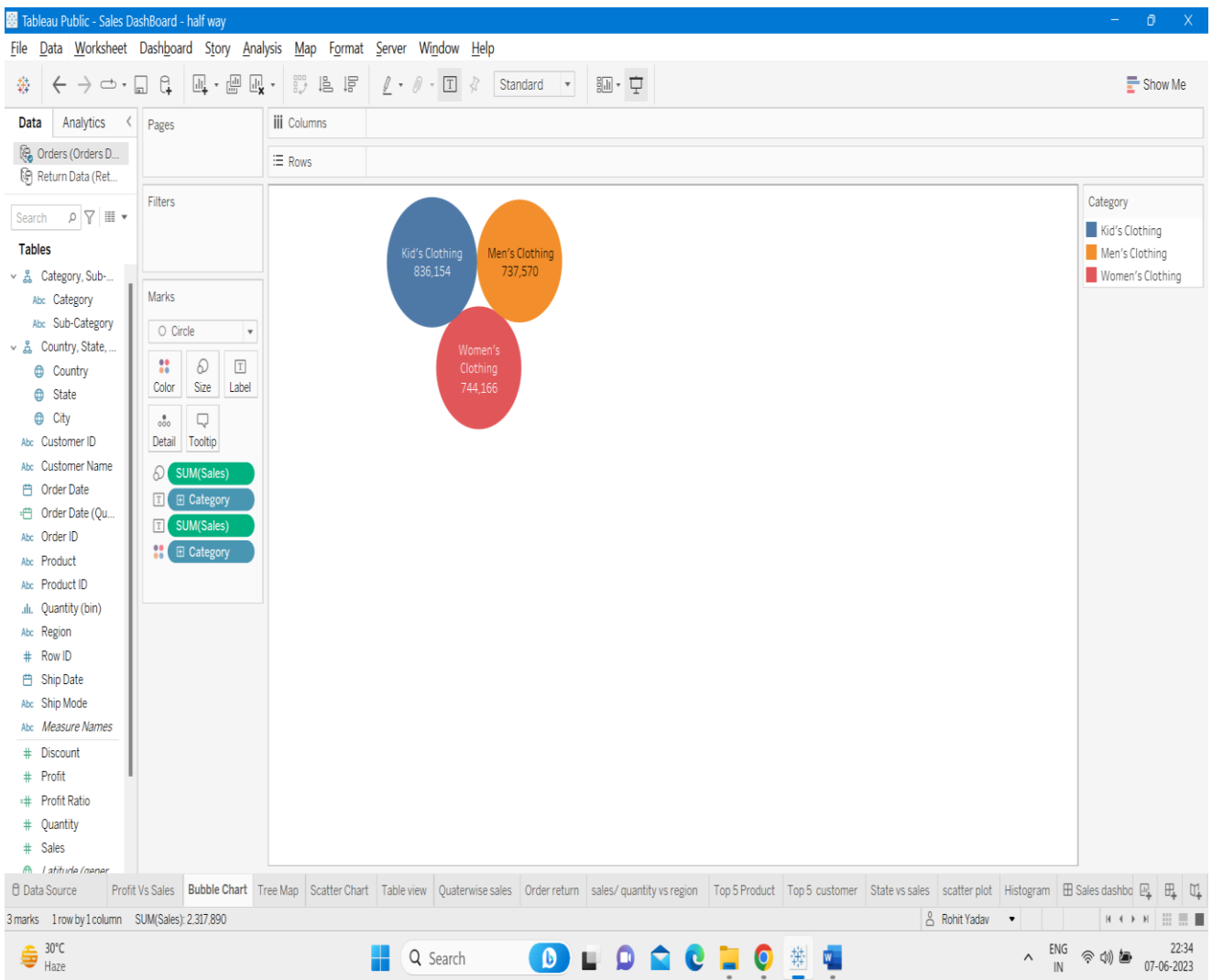
TABLEAU PROJECT - SALES ANALYSIS

1. Analyse the *Sales/Profit* for all the months of 2017 as a continuous line chart and area chart.

Solution: On columns – we drag order date then selected month and as per measures on row darg sales and profit then selected dual axis for the both the line on same axis then on filter, we added order date and selected year 2017 .

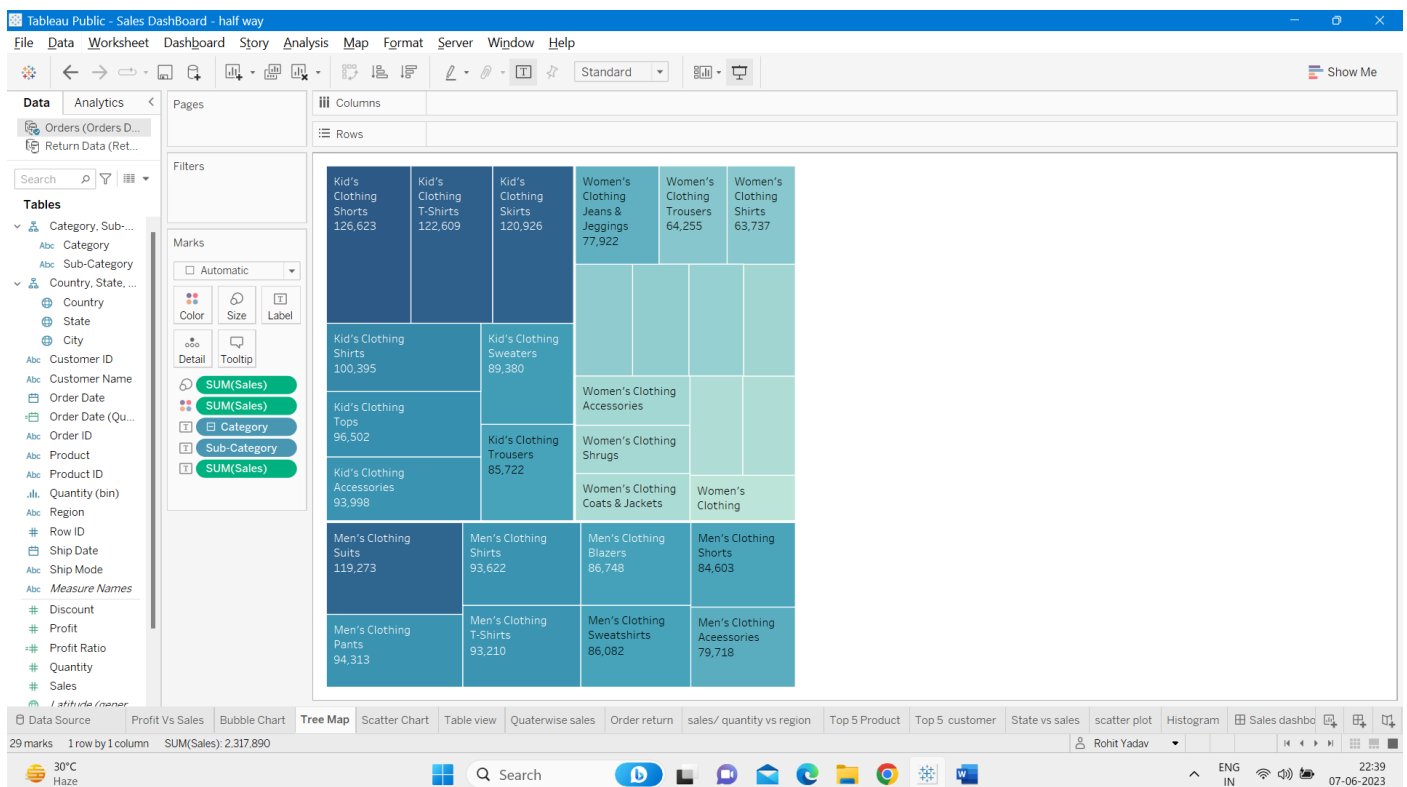
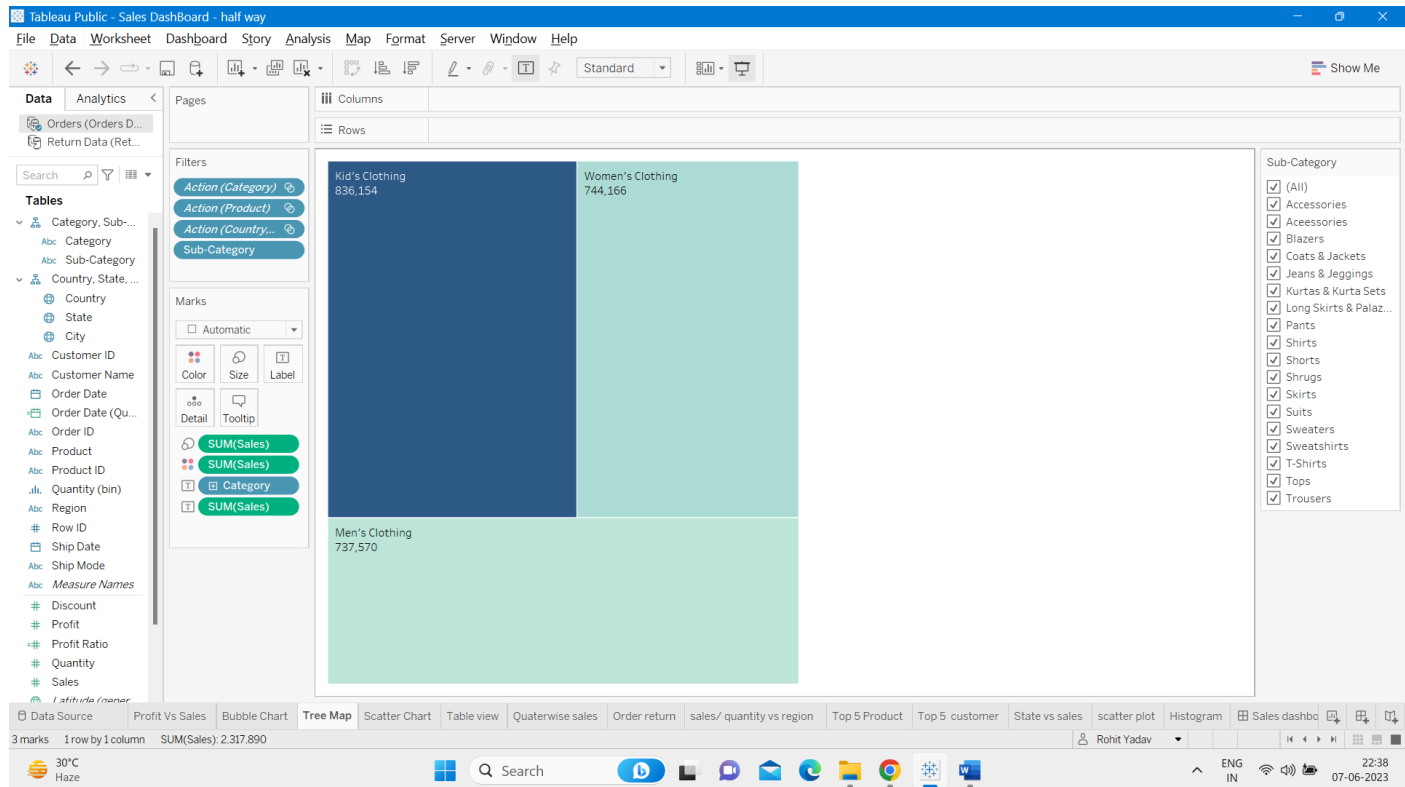


2. Show *Category-wise Sales* as Packed Bubbles Chart suggesting categories with highest to lowest sales.



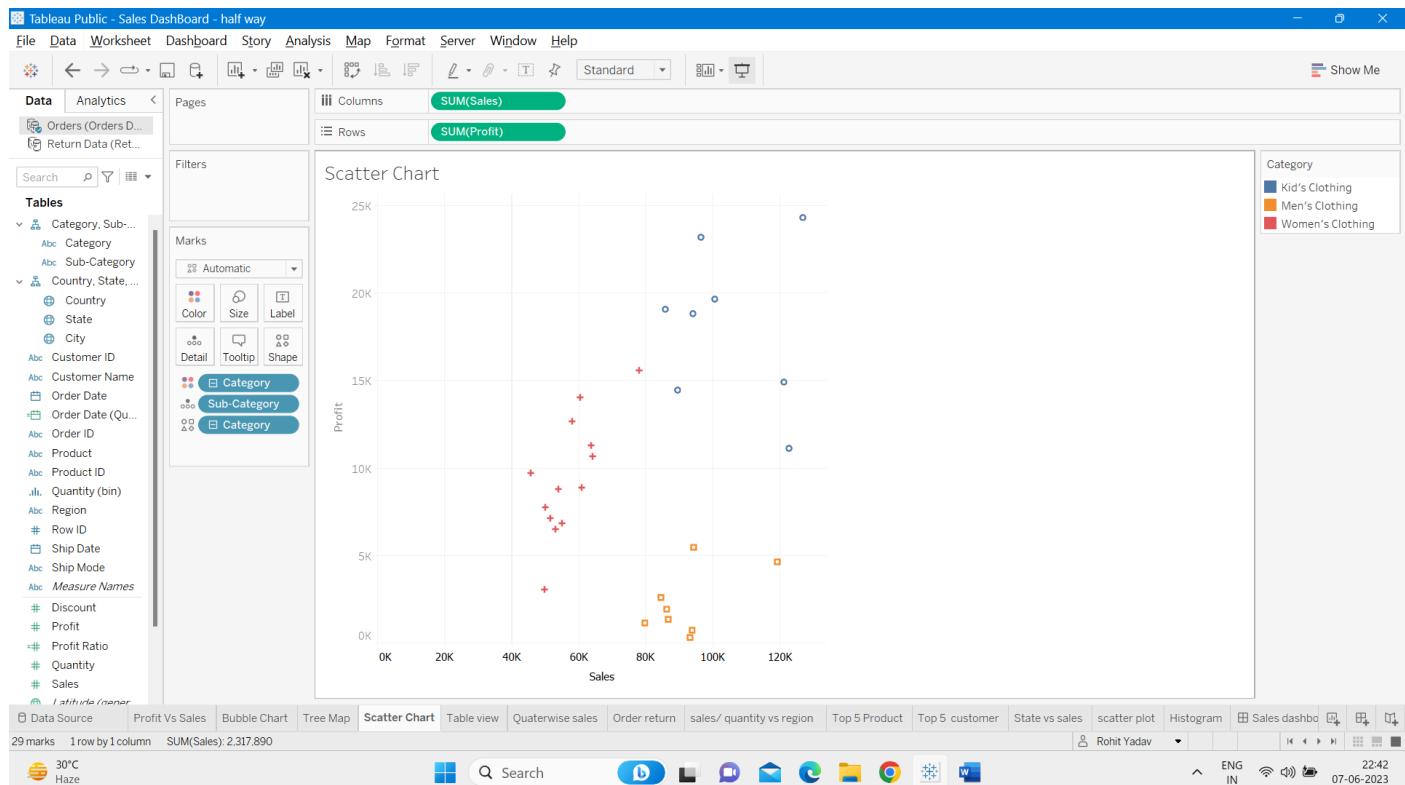
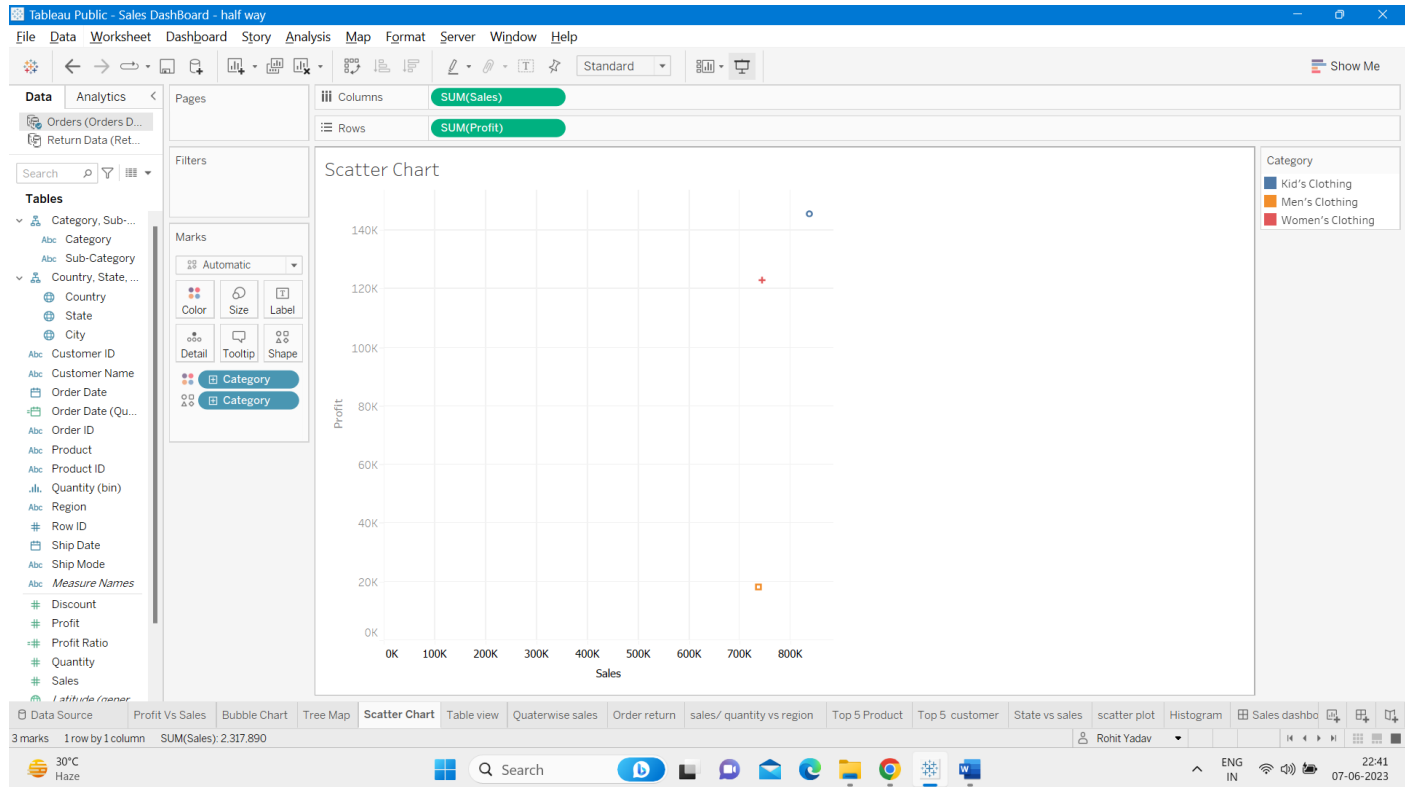
3. Create a Tree map chart showing *Sales* by *Category* and *Sub-Category*.

Created hierarchy on category and sub category for the tree chart and selected sales and category H for the tree map



4. Visualize Sales vs Profit on a Scatter Plot with Category and Sub-Category breakdown.

Sales on col and profit on row



5. Compute aggregated values for all Sales KPIs like *Total Sales*, *Profit*, *Profit Ratio*, *Discount* in a Table view.

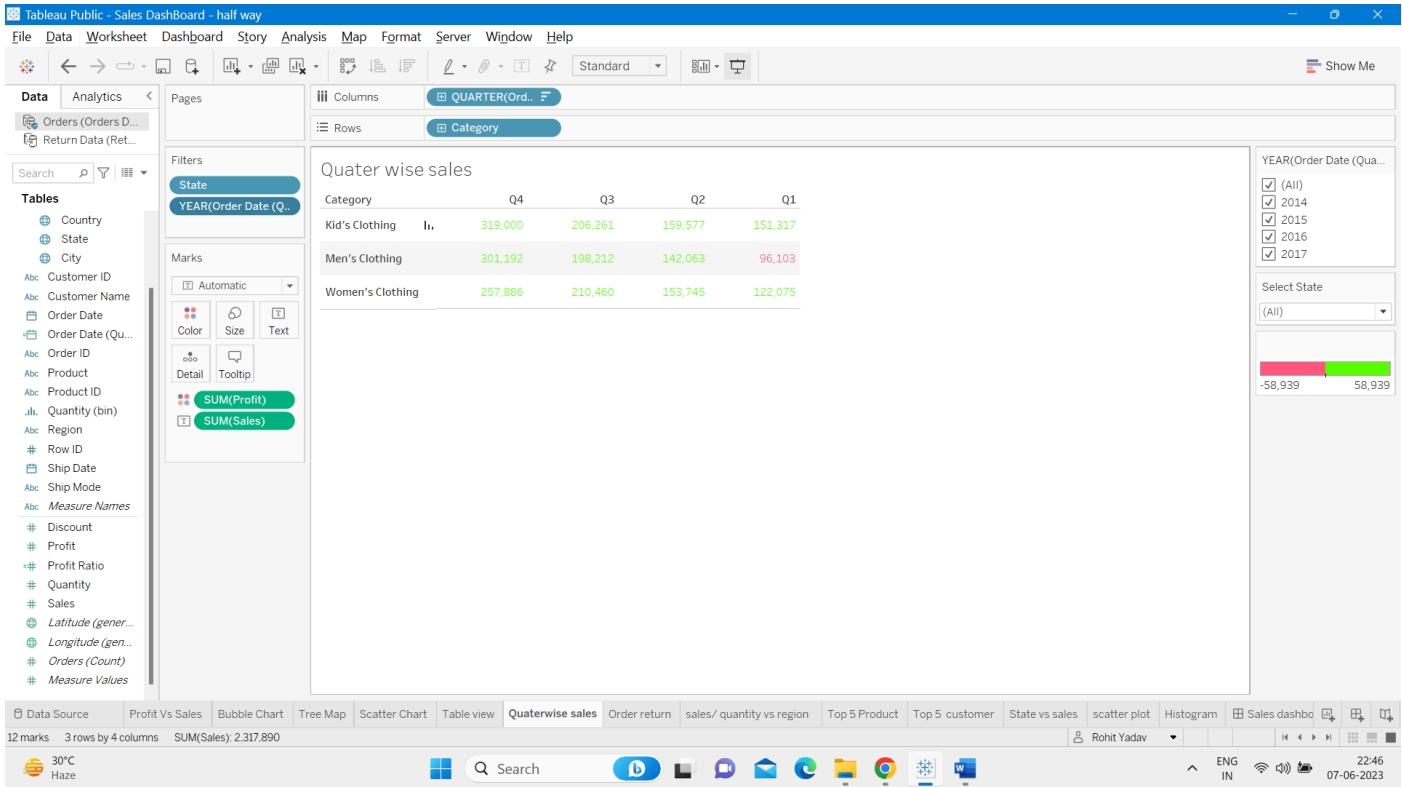
The screenshot shows the Tableau Public interface with a table view. The columns are Category, Sales, Profit, Profit Ratio, and Avg. Discount. The rows are Kid's Clothing, Men's Clothing, and Women's Clothing. A dialog box is open for the Profit Ratio calculation, showing the formula $\text{SUM}([\text{Profit}]) / \text{SUM}([\text{Sales}])$. The dialog also indicates that the calculation is valid and has 3 dependencies.

Category	Sales	Profit	Profit Ratio	Avg. Discount
Kid's Clothing	836,154	145,455	0.174	0.132
Men's Clothing	737,570	18,062	0.024	0.174
Women's Clothing	744,166	122,880	0.165	0.157

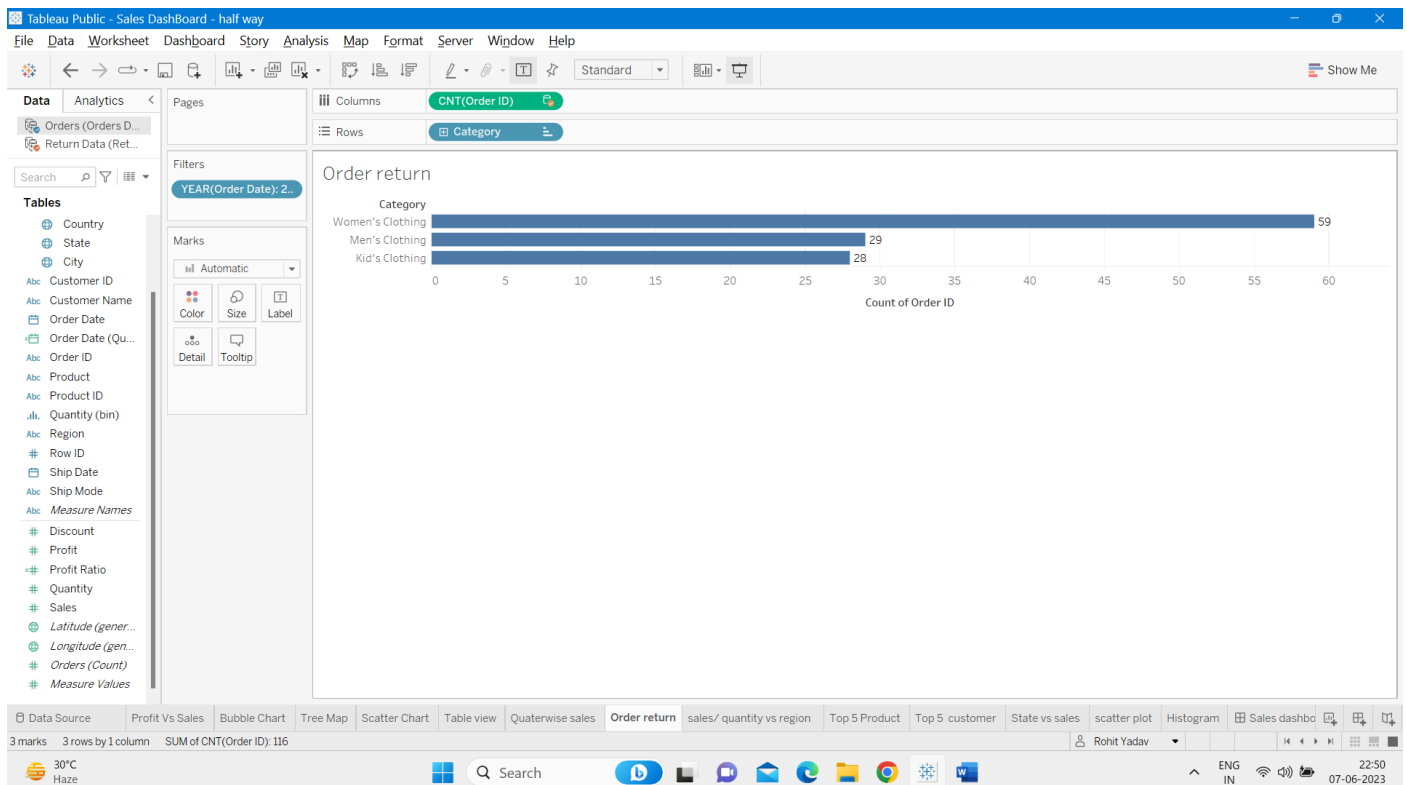
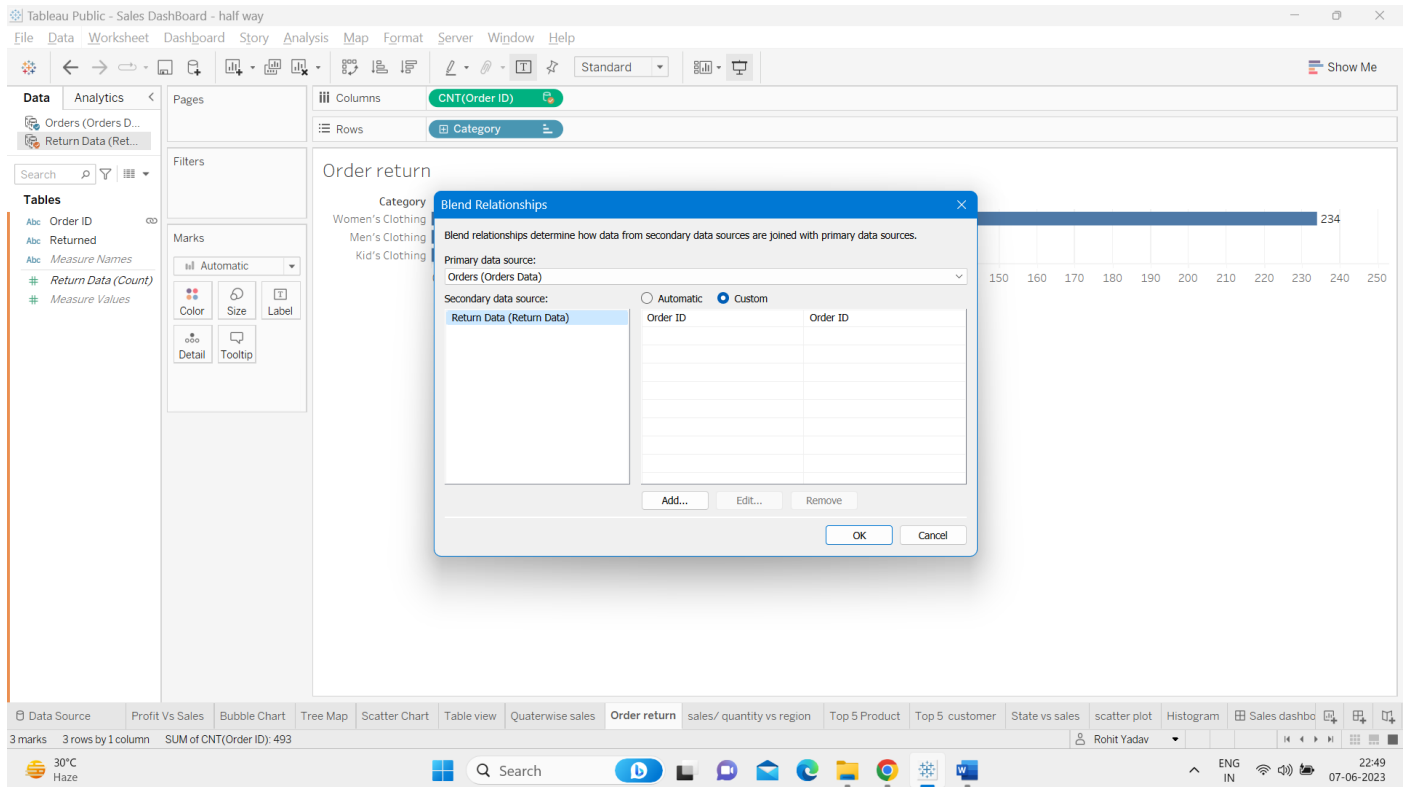
The screenshot shows the final Tableau Public interface with the table view. The columns are Category, Sales, Profit, Profit Ratio, and Avg. Discount. The rows are Kid's Clothing, Men's Clothing, and Women's Clothing. The table displays the aggregated values for each category.

Category	Sales	Profit	Profit Ratio	Avg. Discount
Kid's Clothing	836,154	145,455	0.174	0.132
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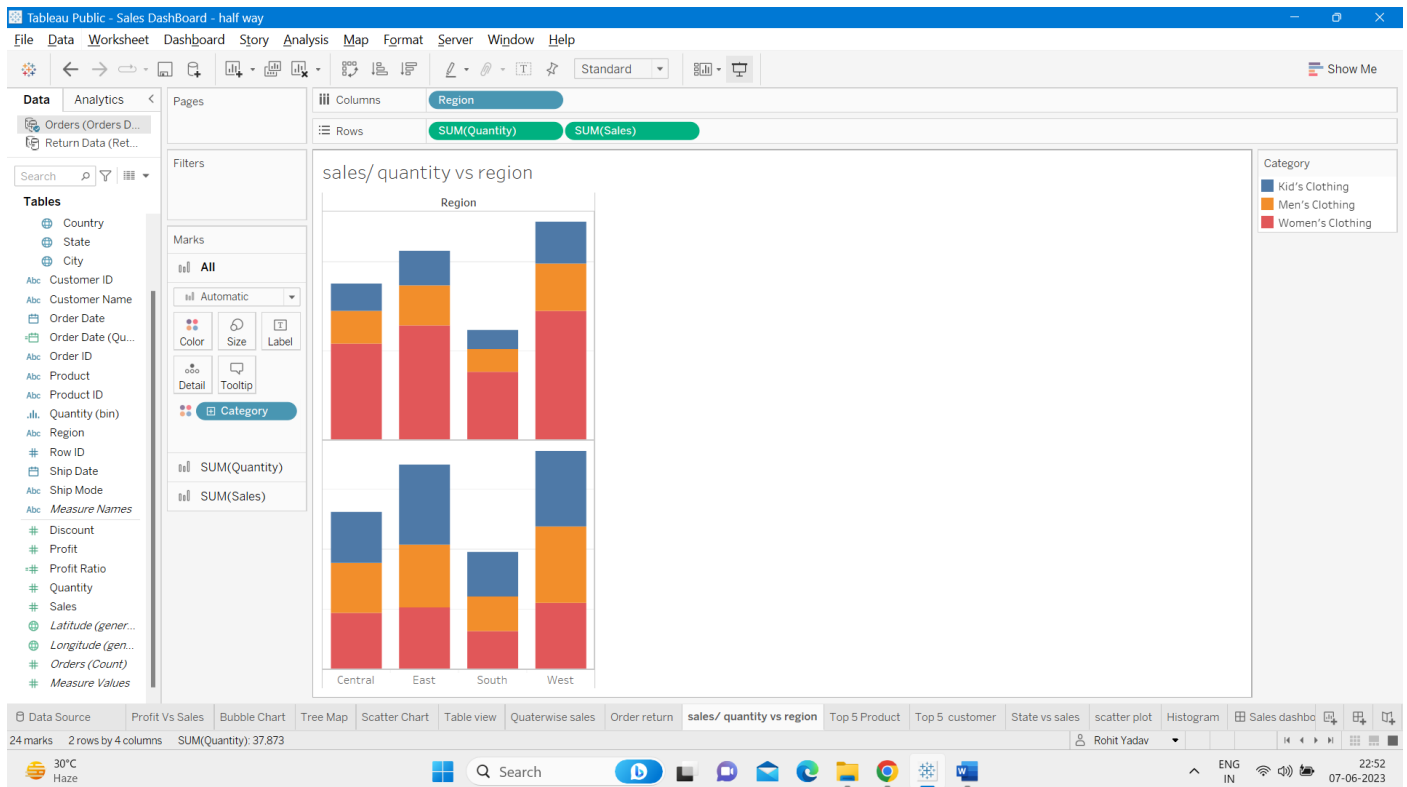
6. Analyse the Sales for all the quarters of all the years across State, and Category as a Highlight Table. Highlight the columns by Profit.



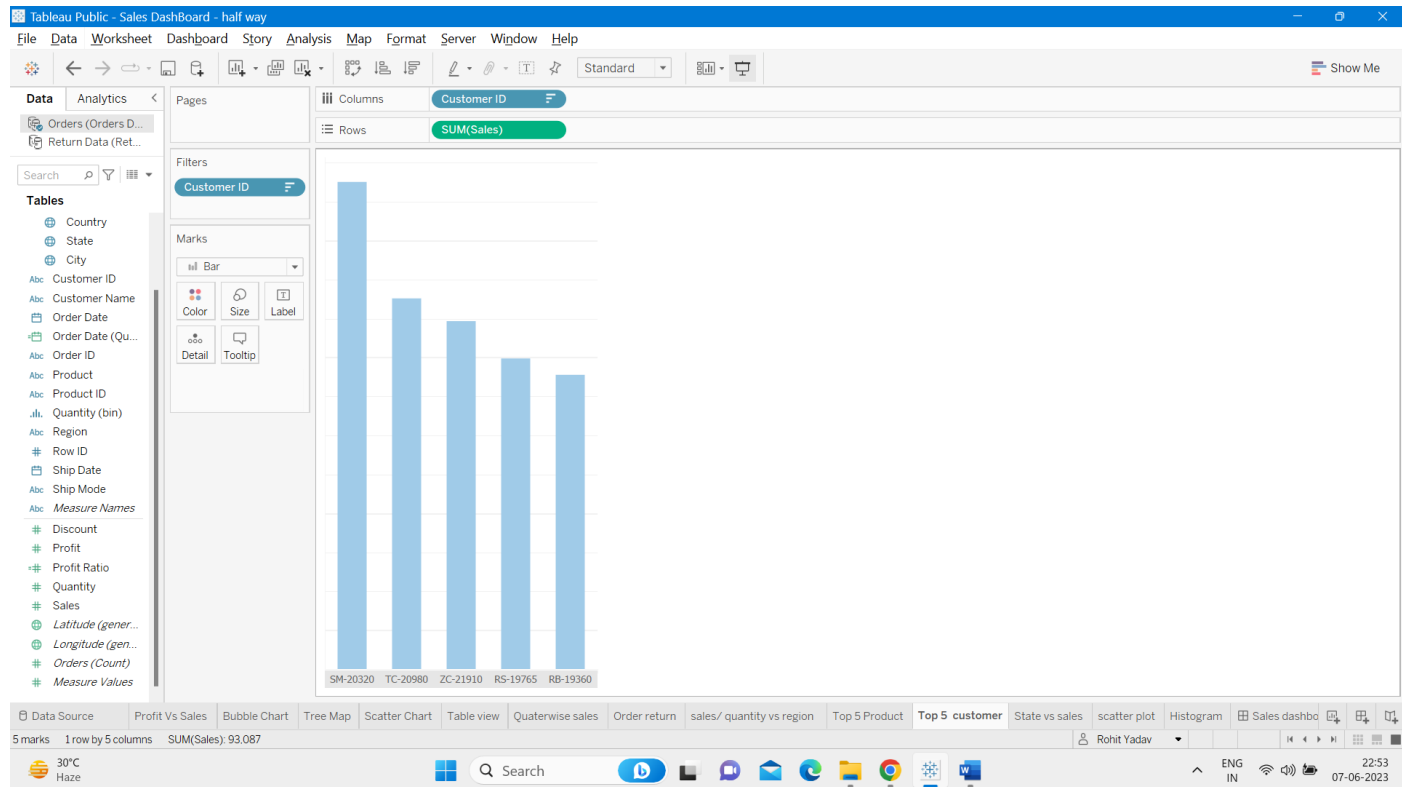
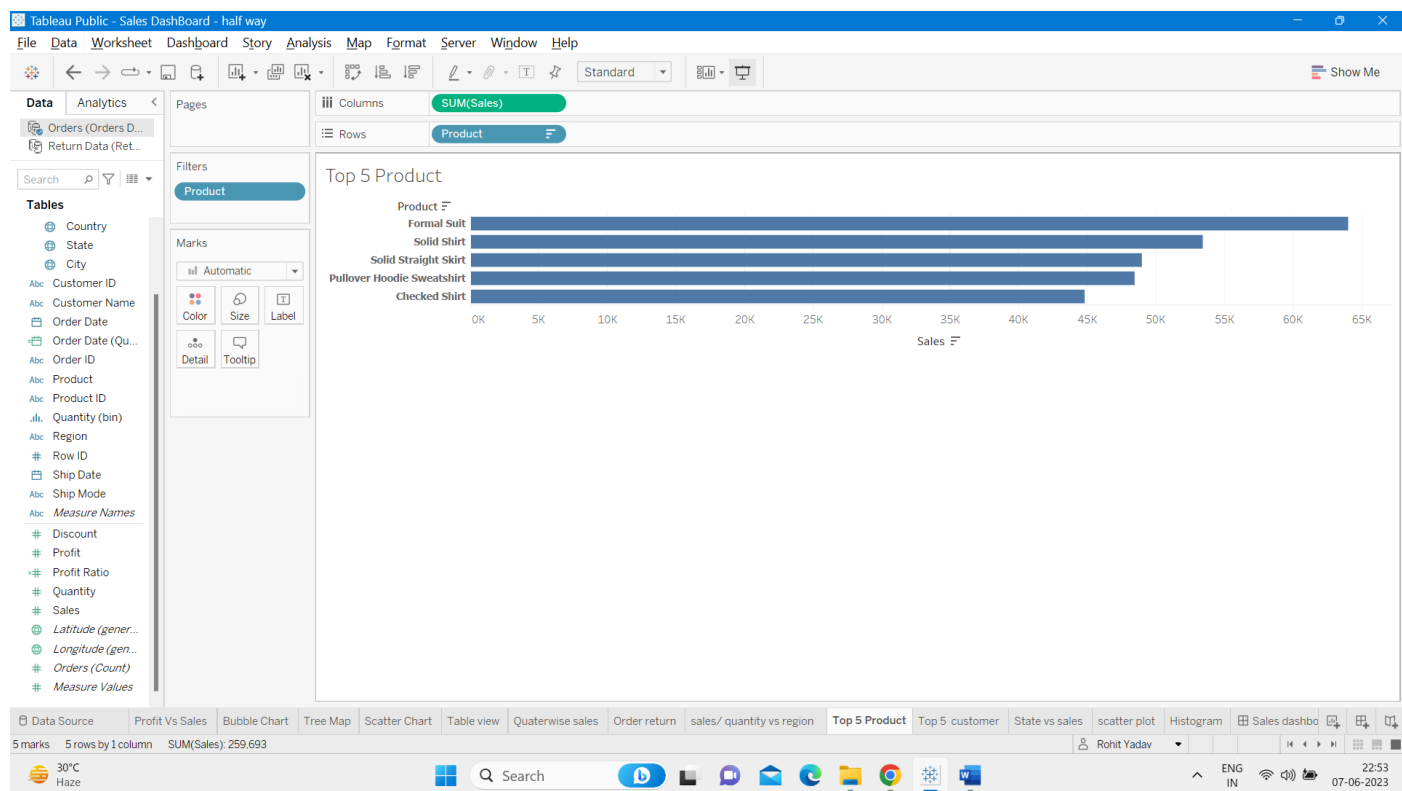
7. Connect to the **Return Data** dataset, and blend it with **Orders** data to compute the *number of orders returned* for each *Product Category* in 2016.



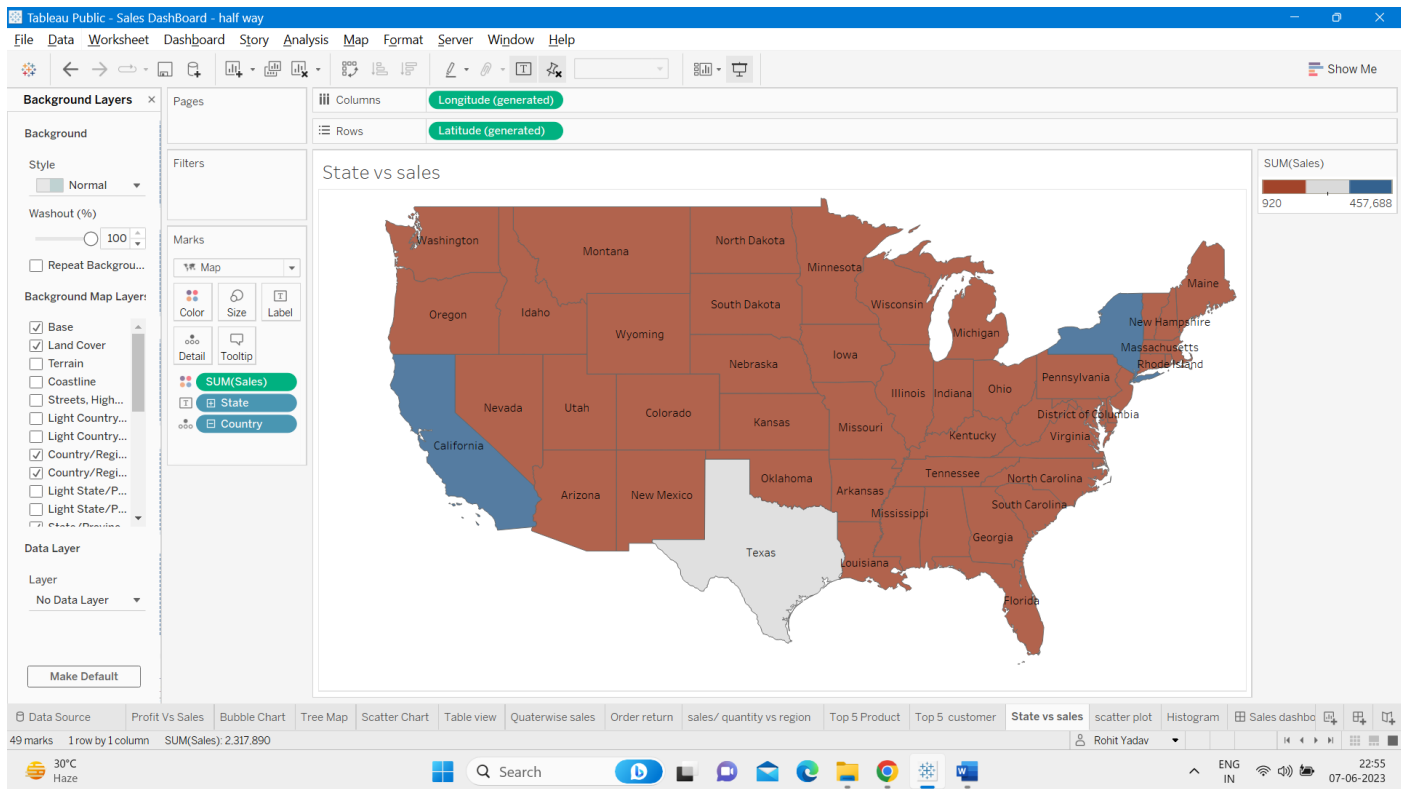
8. Show *Sales/Quantity* of Product *Category* in each *Region* as a Stacked Bar Chart.



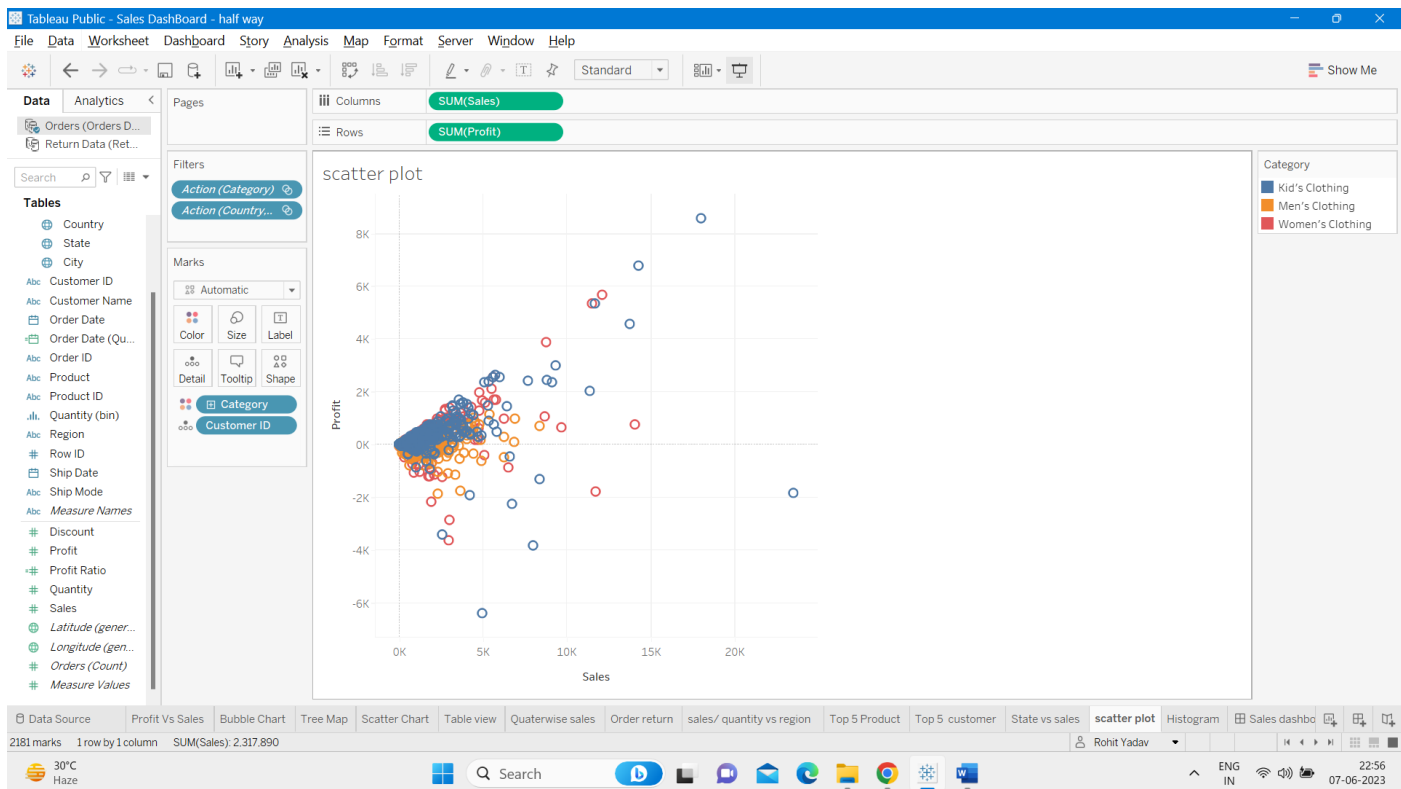
9. Determine the top 5 *products* and top 5 *customers* by *Sales*, i.e., *Products* and *Customers* that are generating the highest revenue as a bar chart.



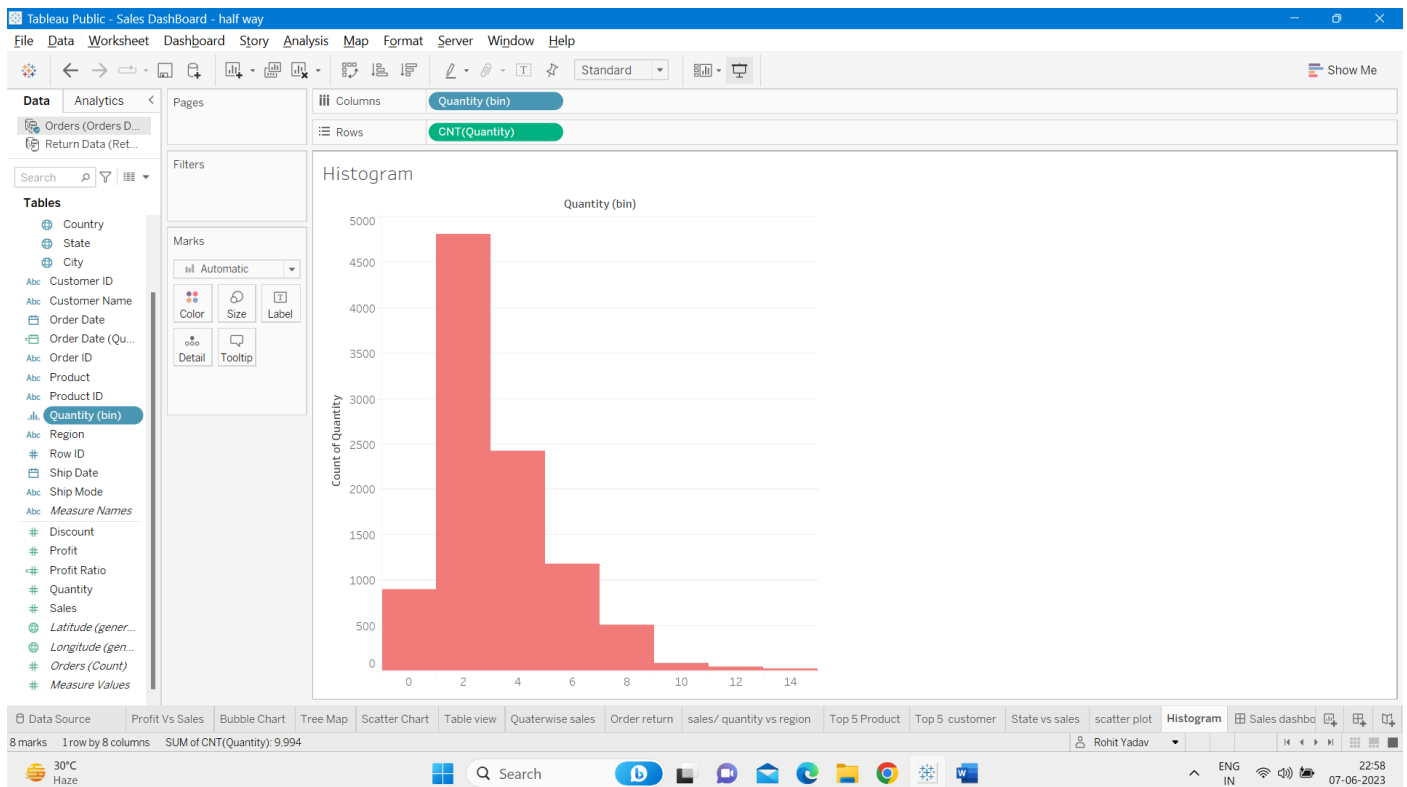
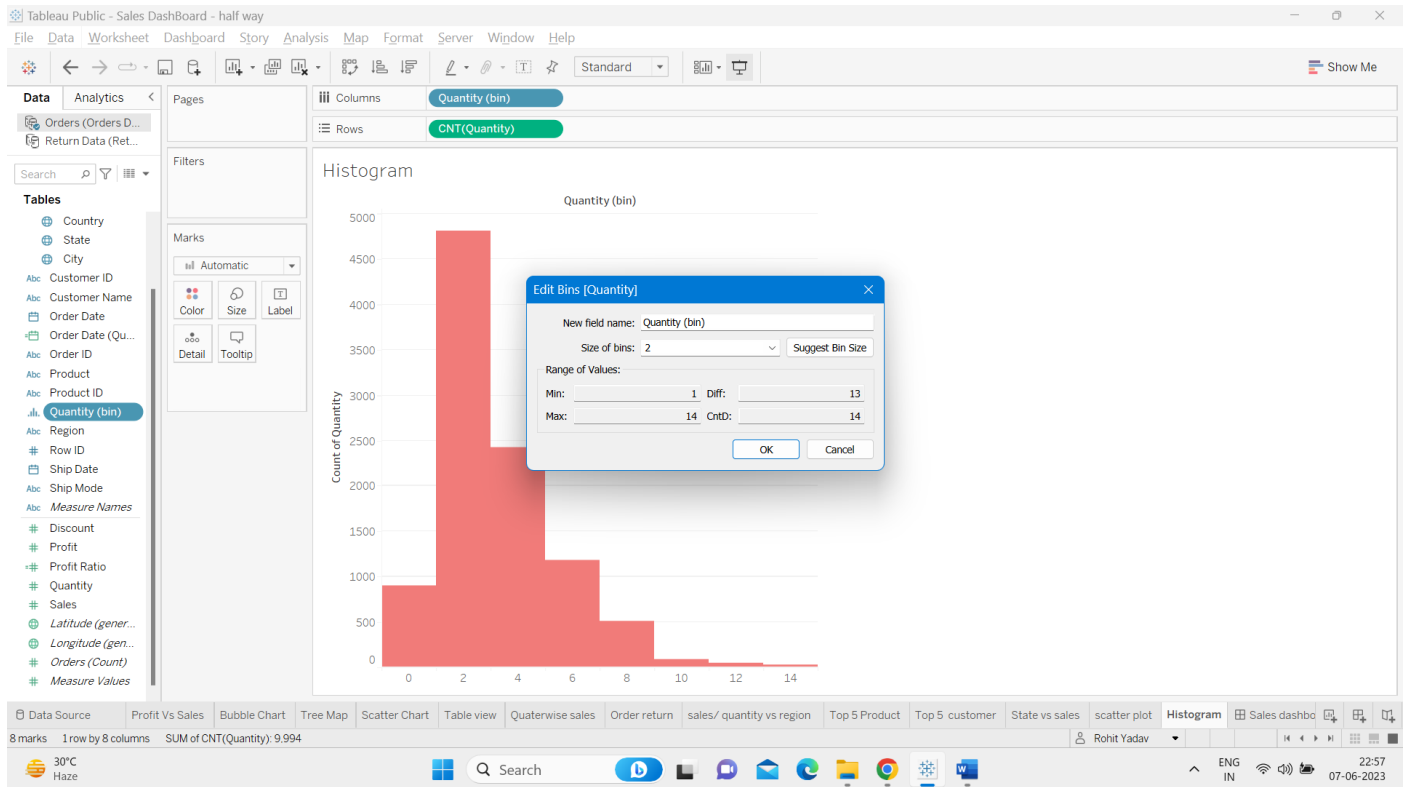
10. Visualize *Sales* by *State* where the sales variation is highlighted by colour as a Map Chart.



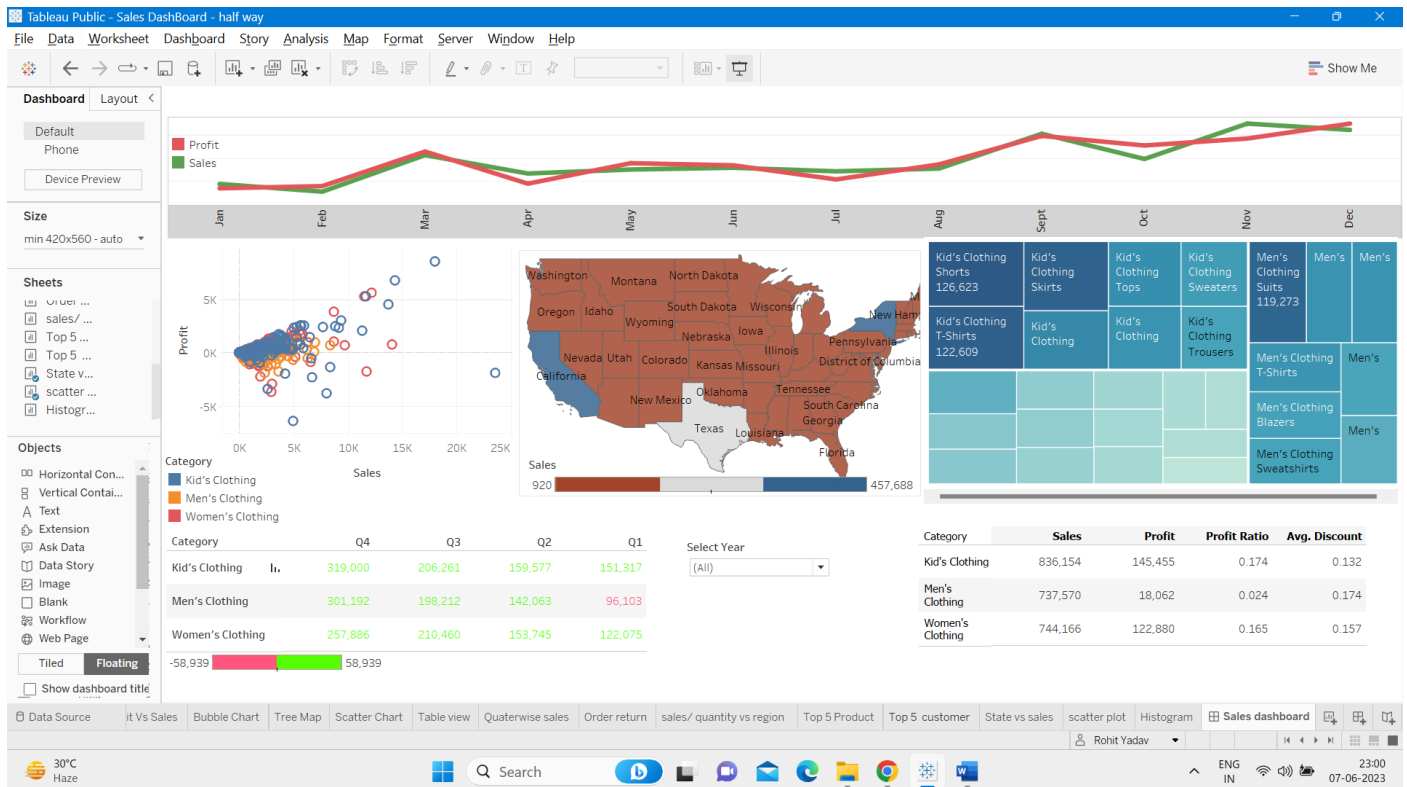
11. Visualize *Sales* & *Profit* analysis by *Customer* on a Scatter Plot.



6. Represent the *Number of orders* received by *Quantity* bins as a Histogram.
 - a. Create Quantity bins.
 - b. Use Measure Count of Quantity as calculation.
 - c. Drag Count of Quantity in Row Shelf and Quantity bins in column shelf



7. Create an interactive fixed size floating layout Dashboard that can be shared with the leaders using the above analysis.



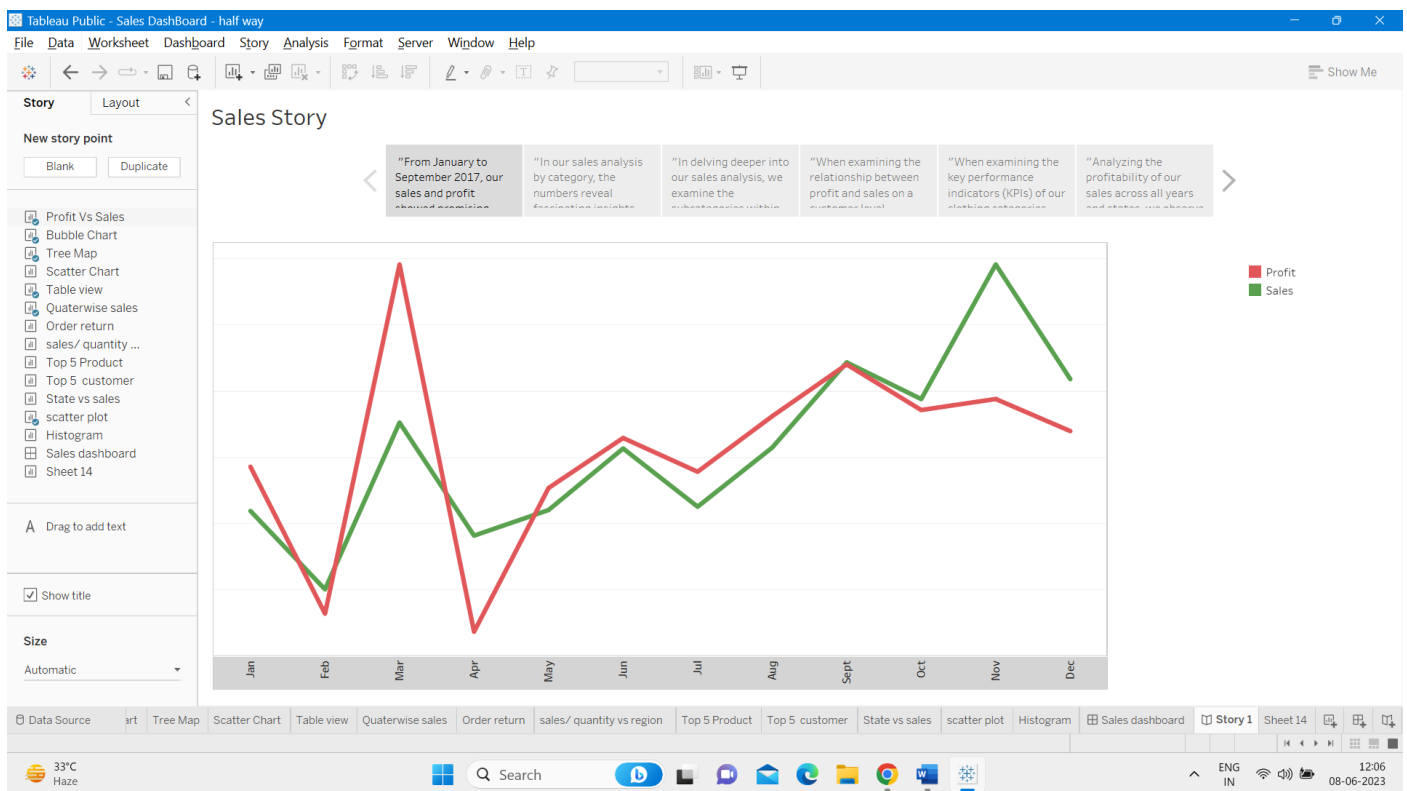
8. Create a story with the following visuals:

**Note: The below-listed visuals are done as part of tasks 1 to 6.*

- Sales/Profit for all the months of 2017*
- Category-wise Sales*
- Sales by Category and Sub-Category.*
- Sales vs Profit*
- Aggregated values for all Sales KPIs and*
- Sales for all the quarters for all the years across State, and Category.*

Sales story:

- Sales/Profit for all the months of 2017*



"From January to September 2017, our sales and profit showed promising growth, indicating a positive trajectory for our business. However, starting from September 2017, an interesting trend emerged. While our sales continued to increase, our profit began to decline."

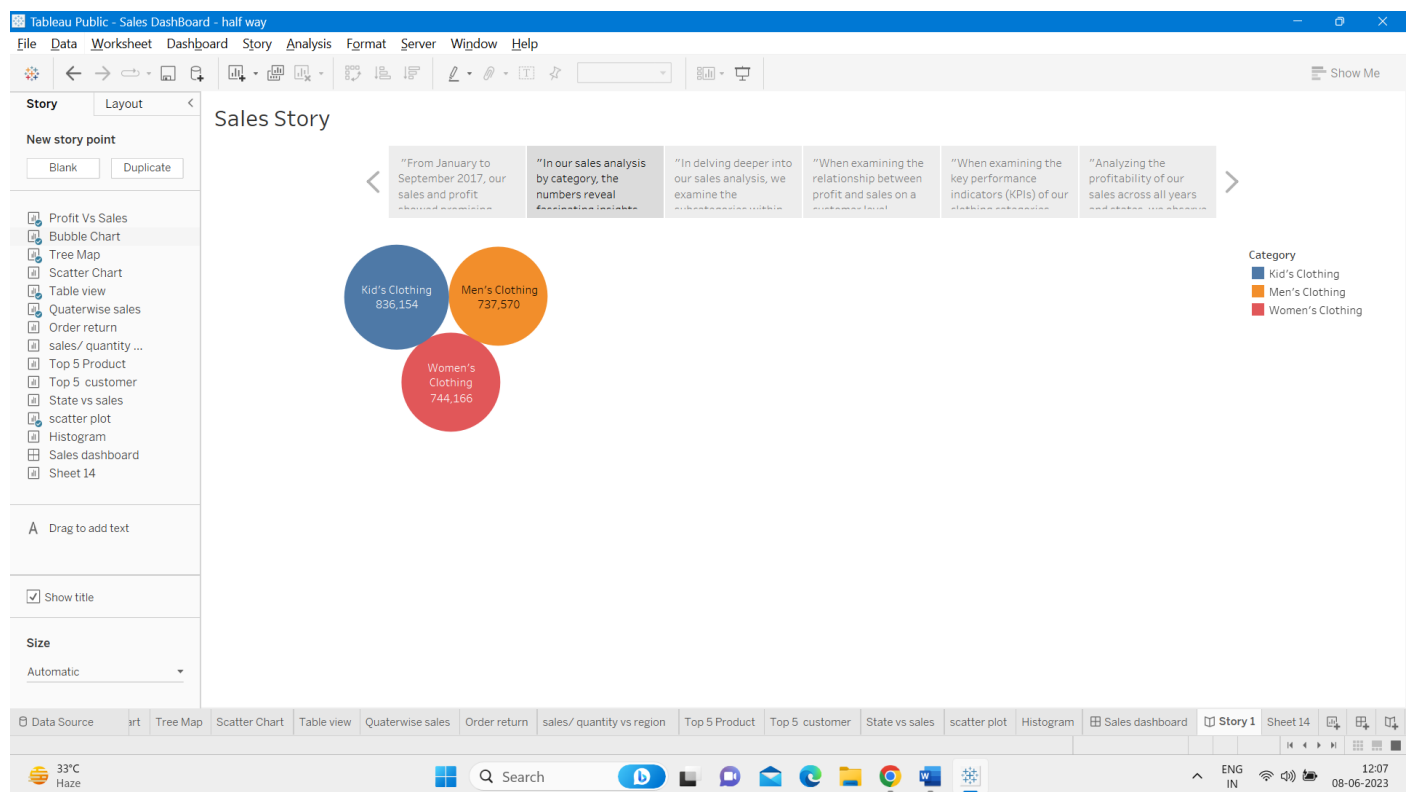
"This divergence between sales and profit raises an important question: What factors contributed to the increase in sales but the decrease in profit? Analysing this period can provide valuable insights into the underlying dynamics of our business."

"It is crucial to understand the drivers behind this trend and identify opportunities for improvement. By examining the contributing factors to the decline in profit, such as rising costs, pricing strategies, or changes in customer behaviour, we can make informed decisions to optimize our profitability."

"Despite the dip in profit, the sustained growth in sales indicates that our products and services are resonating with customers. Leveraging this positive momentum, we can explore strategies to align our sales and profit trajectories, ensuring sustainable growth and maximizing our bottom line."

"Through thorough analysis and strategic actions, we aim to bring our profit back on track, capitalizing on the upward sales trend. By understanding the nuances of our business performance, we can make data-driven decisions to drive profitability and achieve long-term success."

b. Category-wise Sales



"In our sales analysis by category, the numbers reveal fascinating insights. Among our top categories, Kids Clothing stands out with impressive sales of \$271,731, indicating a strong demand for our children's apparel line."

"Additionally, Women's Clothing emerges as a significant revenue driver, generating sales of \$268,786. This showcases the popularity of our fashionable and trendy offerings among our female customer base."

"However, our analysis also highlights the opportunity for growth in the Men's Clothing category, with sales totalling \$215,387. While this category demonstrates potential, there is room for further exploration and optimization to tap into the male consumer market."

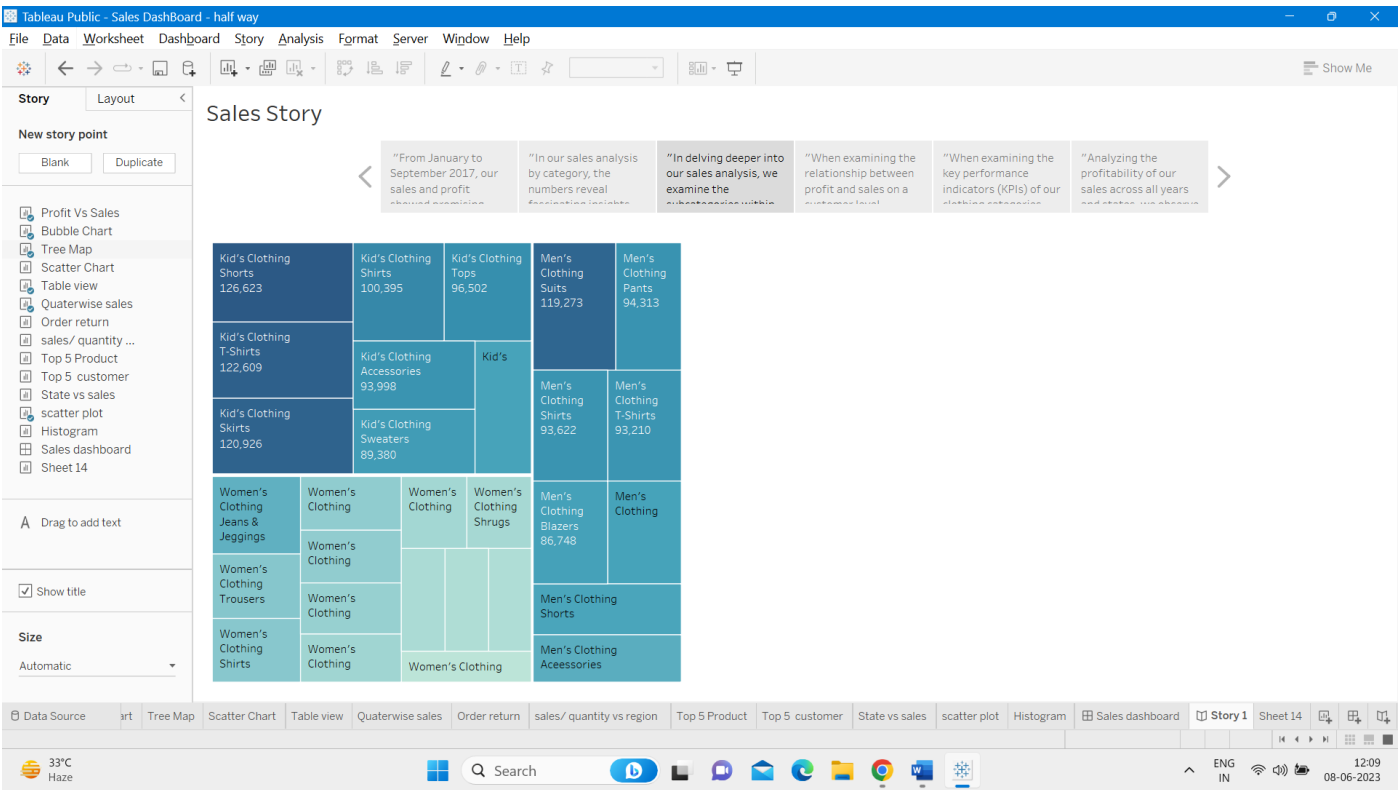
"To capitalize on the success of Kids Clothing and Women's Clothing, we can continue to invest in innovative designs, marketing campaigns, and targeted promotions. By leveraging our existing strengths in these categories, we can solidify our position as a go-to destination for children's and women's fashion."

"To enhance our presence in the Men's Clothing category, we can focus on understanding the unique preferences and needs of our male customers. This may involve expanding our product range, refining our marketing strategies, and tailoring our offerings to cater to their specific tastes."

"By recognizing the distinct sales patterns in each category and strategically aligning our efforts, we can achieve balanced growth across our product lines. Our goal is to establish a comprehensive and diverse clothing brand that caters to customers of all ages and genders, further cementing our position in the market."

"Through continuous analysis, monitoring market trends, and listening to our customers, we can adapt and refine our strategies to ensure sustained success in all categories and drive overall sales growth."

c. Sales by Category and Sub-Category.



"In delving deeper into our sales analysis, we examine the subcategories within each category, revealing fascinating patterns and opportunities for growth."

"Within the Kids Clothing category, the subcategories of Tops, Bottoms, and Accessories showcase strong sales figures, reflecting the diverse needs of parents looking for stylish and comfortable clothing options for their children."

"In the Women's Clothing category, subcategories such as Dresses, Tops, and Bottoms stand out with substantial sales. This highlights the popularity of our fashionable and versatile offerings among women of different age groups and style preferences."

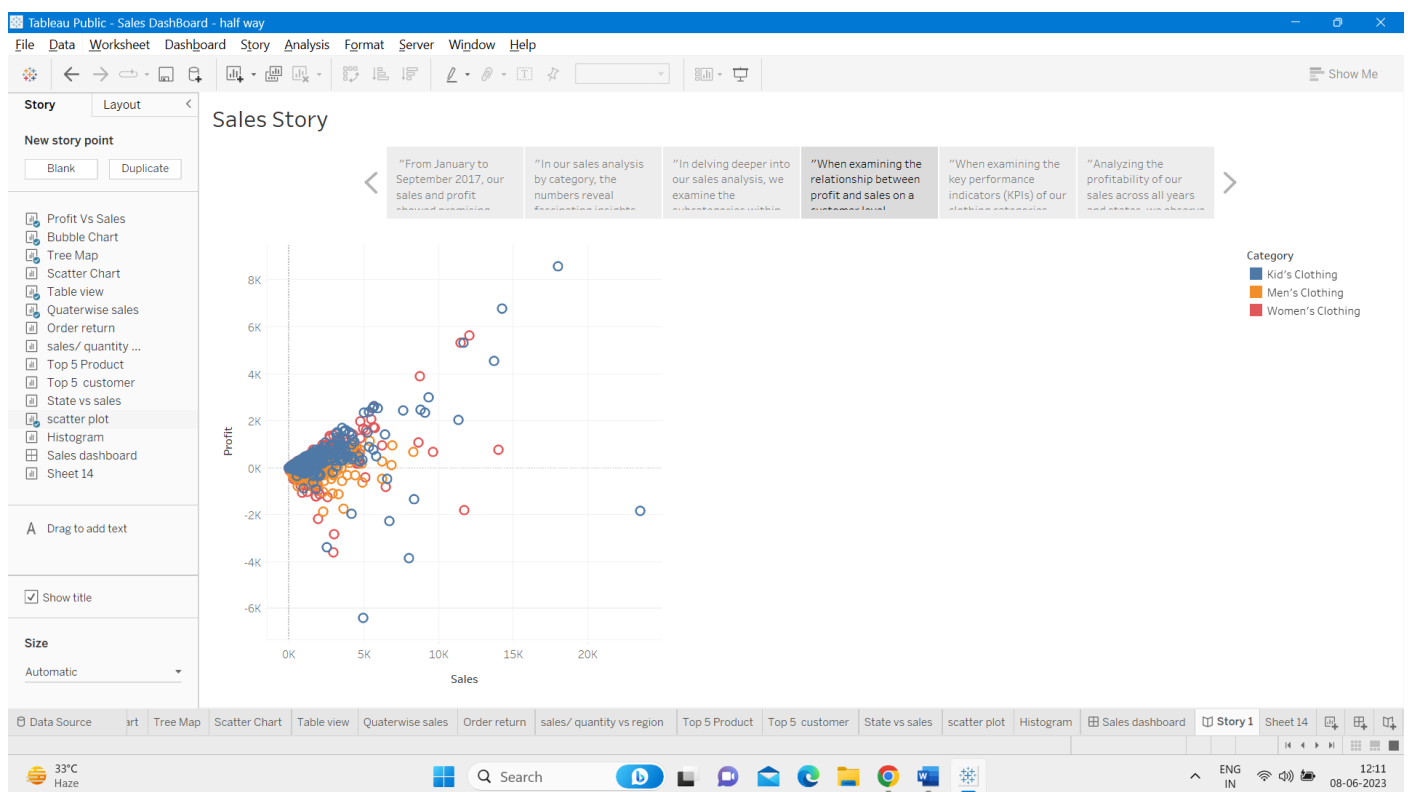
"Similarly, within the Men's Clothing category, subcategories such as Shirts, Pants, and Outerwear demonstrate potential and hint at the evolving fashion choices of our male customers."

"Analysing the sales figures across these subcategories provides valuable insights into consumer preferences and allows us to tailor our product offerings and marketing strategies accordingly. By recognizing the strengths and opportunities within each subcategory, we can refine our assortment, enhance customer satisfaction, and drive increased sales."

"Our focus moving forward is to continue nurturing the growth of our high-performing subcategories while also exploring avenues for expansion and improvement in subcategories that show potential. This holistic approach will enable us to optimize our product mix, meet the diverse needs of our customers, and strengthen our position as a leader in the clothing industry."

"Through strategic investments in product development, marketing, and customer engagement, we aim to maximize sales and profitability across all subcategories, ensuring a comprehensive and satisfying shopping experience for our valued customers."

d. Sales vs Profit



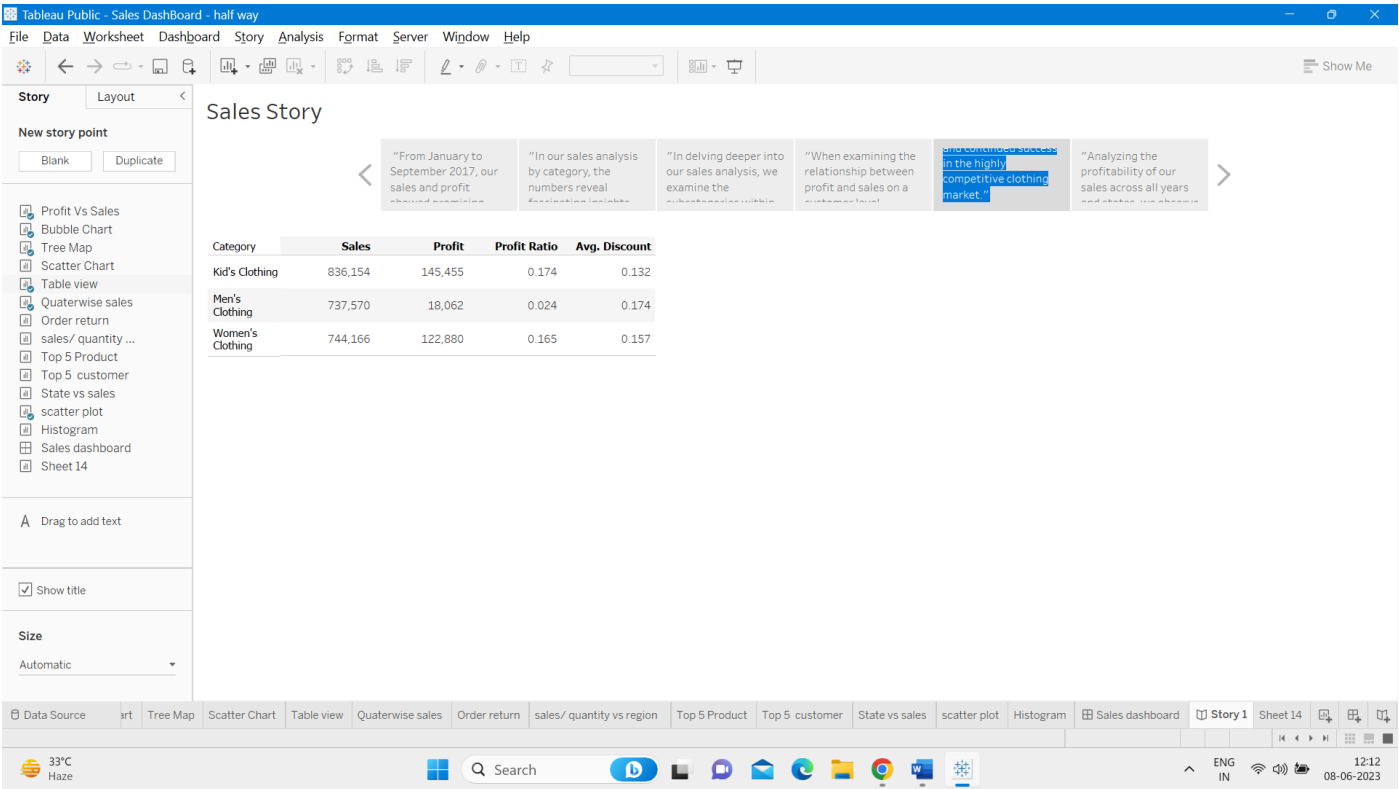
"On the other hand, we notice a cluster of data points within the profit range of 0 to -2K. This suggests that there is a group of customers within the Kids Clothing category who are generating moderate sales but experiencing lower profit margins. It is crucial to examine the underlying factors contributing to this phenomenon, such as high costs or discounting practices, and implement strategies to balance sales volume and profitability within this cluster."

"Similarly, within the Men Clothing category, we observe a cluster of data points with profit values ranging from 0 to 3K. This positive cluster signifies a group of customers who are not only generating significant sales but also achieving healthy profit margins. By studying the characteristics and behaviours of these profitable customers, we can extract valuable insights and apply them to optimize the performance of other customers within the category."

"Analysing the presence of these outliers and clusters in the profit vs. sales scatter plot provides a roadmap for our decision-making process. Our goal is to drive profitability by addressing the challenges posed by negative outliers, leveraging the insights gained from the positive cluster, and implementing targeted strategies to optimize profit margins across the customer base."

"Through a combination of data-driven analysis, customer segmentation, and tailored business strategies, we can navigate the complexities of the Kids and Men Clothing categories, foster growth, and enhance profitability. By understanding the nuances of customer behaviour and profitability drivers, we are poised to unlock new opportunities and elevate our overall business performance." having very few outliers and their trending line is almost linear and we see their few outliers at negative for all the categories which need to be fixed

e. Aggregated values for all Sales KPIs



"When examining the key performance indicators (KPIs) of our clothing categories, namely Kids, Men, and Women, we gain valuable insights into their sales, profit, profit ratio, and discount metrics. These KPIs shed light on the overall performance and profitability of each category, paving the way for strategic decision-making and growth opportunities."

"The Kids Clothing category stands out with impressive sales figures, reaching 271,731 units. This indicates a strong demand for our children's apparel offerings, showcasing our ability to attract and retain customers in this segment."

"In terms of profitability, Kids Clothing generates a commendable profit of 50,684 units, resulting in a profit ratio of 0.187. This signifies that for every unit of sale, we are able to achieve a profit margin of 18.7%. This is an encouraging metric, demonstrating our efficiency in managing costs and generating healthy returns."

"Analysing the discount metric within the Kids Clothing category, we observe an average discount rate of 0.130. This suggests that while we offer competitive pricing and promotional incentives to attract customers, there is room to evaluate and optimize our discounting strategies to further enhance profitability."

"Moving on to the Men's Clothing category, we observe sales of 215,387 units. Although slightly lower than the Kids Clothing category, this signifies a significant market presence and customer demand for our men's apparel offerings."

"Profitability within the Men's Clothing category yields a profit of 3,018 units, resulting in a profit ratio of 0.014. While the profit margin is relatively smaller compared to the other categories, it provides insights into areas where we can focus on optimizing operational efficiencies and cost management to improve profitability."

"Examining the discount metric in the Men's Clothing category, we note an average discount rate of 0.170. This suggests a higher discounting strategy compared to the other categories, indicating a potential opportunity to reevaluate pricing strategies and discounting practices to enhance profitability."

"In the Women's Clothing category, we witness strong sales of 268,786 units, highlighting the popularity of our women's apparel offerings among our customers. This category showcases our ability to cater to the diverse fashion needs of women and our success in capturing their attention and loyalty."

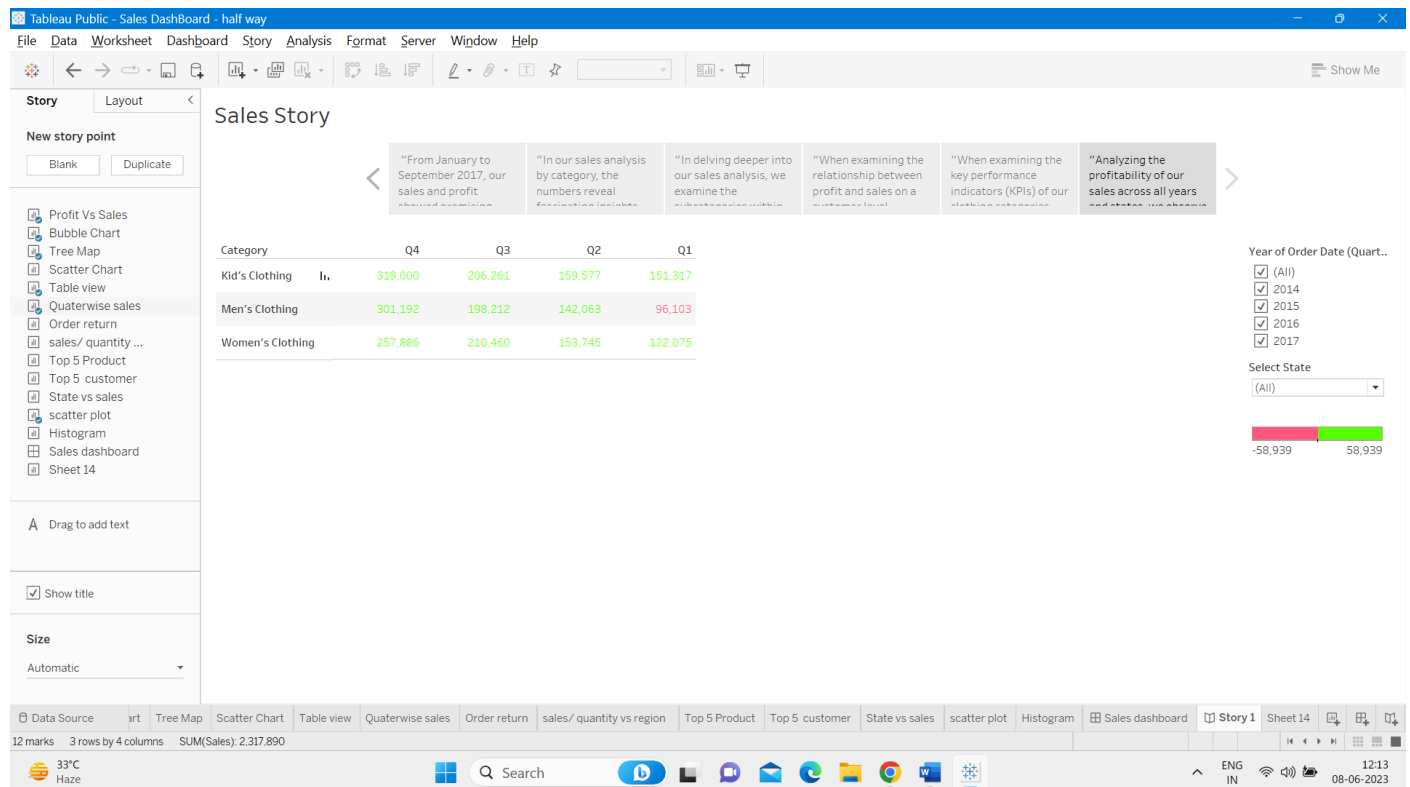
"Profitability within the Women's Clothing category is notable, generating a profit of 39,737 units and a profit ratio of 0.148. This implies that we have been successful in managing costs and achieving healthy profit margins within this category, contributing to overall business growth."

"Examining the discount metric within the Women's Clothing category, we find an average discount rate of 0.160. This indicates a strategic balance between offering competitive pricing and maintaining profitability, showcasing our ability to attract customers while ensuring sustainable financial performance."

"By analysing these KPIs, we gain a comprehensive understanding of each category's performance and profitability. This knowledge allows us to capitalize on our strengths, identify areas for improvement, and implement strategic initiatives to optimize sales, profit margins, and customer satisfaction."

"Through a data-driven approach, we can leverage these insights to refine our pricing strategies, discounting practices, and operational efficiencies, ensuring sustainable growth and continued success in the highly competitive clothing market."

f. Sales for all the quarters for all the years across *State*, and *Category*.



"Analysing the profitability of our sales across all years and states, we observe a wide range of performance. To better understand the profitability trends, we can visualize the data using a color-coded scale, where green represents good profit and red indicates average or poor profit. Let's delve into the profitability story, focusing specifically on the first quarter of each year for the Men's Clothing category."

"In the first quarter, the Men's Clothing sales started off in the red zone, indicating average or below-average profitability. This suggests that there may have been challenges or factors impacting profitability during this period. However, as we progress through the quarters and examine the sales performance for the remaining categories, we see consistent green colours, reflecting good profitability."

"This highlights that while the Men's Clothing category faced some profitability hurdles in the first quarter, the subsequent quarters showed improvement, with all other categories consistently generating good profits. This indicates the resilience and success of our strategies in maximizing profitability across various regions and product categories."

"By focusing on the trends and performance of the different categories throughout the years, we can identify the specific factors that contributed to the fluctuations in profitability. This analysis allows us to gain insights into the potential drivers behind the change in profitability, enabling us to make informed decisions and take appropriate actions to further optimize profitability."

"It is important to recognize that while the Men's Clothing category experienced some challenges in the first quarter, the overall profitability picture remains positive. This signifies the effectiveness of our strategies in adapting to market dynamics, capturing customer demand, and achieving sustainable profitability across our sales regions."

"By leveraging this knowledge and understanding the profitability patterns across different categories and quarters, we can develop targeted strategies to address the specific challenges faced by the Men's Clothing

category in the first quarter. This could involve analysing market trends, refining product offerings, adjusting pricing strategies, or exploring new marketing approaches to drive profitability in this segment."

"Overall, the consistent green colours across the sales data for all other categories and quarters showcase our success in maintaining and improving profitability. This provides us with confidence in our ability to effectively manage our sales operations, optimize profitability, and achieve long-term growth and success in the clothing industry."

_____ THE END _____