Tableau 10 **Project Title:** Sales Performance Analysis (Domain: Ecommerce) **Student Name:** Shamali V. Sawant Date: March 07, 2021

LDESCRIPTION:

Background:

Mike Goodman, the head of Product Management of a retail products company, is responsible for determining which products his company should continue to offer for sale and which products should be discontinued from the company's product catalog.

Objective:

To build a dashboard that will present monthly sales performance by product segment and product category to help client identifying the segments and categories that have met or exceeded their sales targets, as well as those that have not met their sales targets.

Domain: Ecommerce

Dataset Description:

Sample–Superstore Dataset Orders data from 2014 – 2017:

Field	Description
Row ID	Observation Index
Order ID	Unique Order ID of a product
Order Date	Order Placement Date
Ship Date	Shipment Date of the placed order
Ship mode	Shipment mode of the placed order
Customer ID	Unique Customer ID
Customer Name	Name of the Customer
Segment	Product Segment (i.e.HomeOffice/Corporate/Consumer etc.)
Country	Unique Country Name
City	Unique City Name
State	Unique State Name
Postal Code	Area wise Postal code
Region	Especially the part of a country
Product ID	Unique Id respective to Product
Category	Product category
Sub-Category	Product Subcategory
Product Name	Unique Product Name
Sales	Sales Amount
Quantity	The amount or number of a material
Discount	A deduction from the usual cost of something
Profit	Obtain a financial advantage or benefit

Sales-Target Dataset:

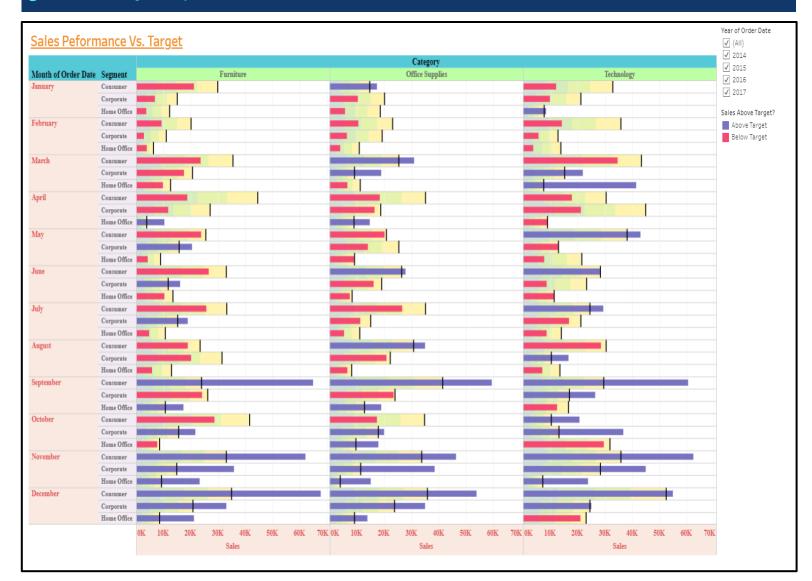
Field	Description
Category	Product category
No. of Records	Unique Record
Order Date	Order Placement Date
Sales Target	Targeted Sales to be achieved
Segment	Product Segment (i.e.HomeOffice/Corporate/Consumer etc.)

Results and Discussion:

We have used two approaches:

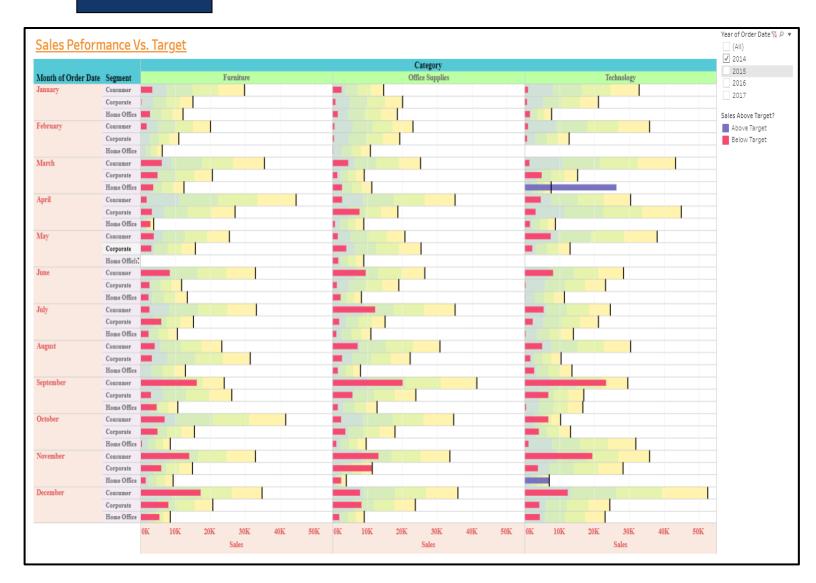
- 1. Comparing sales data of each year with average target data of all the four years(2014-2017)
- 2. Comparing sales data of each year with target data of that year.

Comparing sales data of each year with average target data of all the four years(2014-2017)



The graph specifies sales data for different categories like Furniture, Office Supplies and Technology in various segments like Consumer, Corporate and Home Office from 2014 to 2017. The black reference line indicates average target sales of all the years for each month followed by four filled portions indicating 25%, 50%, 75% and 100% of average target sales. Above graph indicates sales performance for all the years. We will have a look at sales performance for each year using a filter given at the right top corner of the graph.

For 2014:



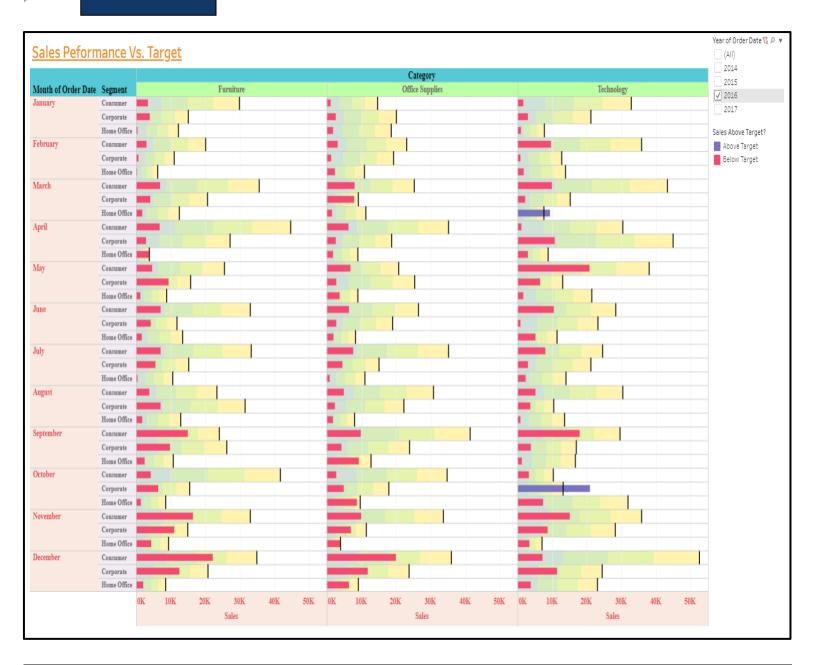
- <u>In 2014, the sales for only **Technology section** for Home Office segment met the target in March and November.</u>
- In case of **Furniture Category**, the sales were between 25-50% of average target sales for Consumer segment in June and Nov-Dec and in between 50-75% in Sept. For Corporate segment, the sales were above 25% of average target sales for every month except Jan, Feb, April, August and Sept.
- For **Office Supplies**, the sales were above 25% of average target sales for Consumer segment from June-December except Oct and too close to average target sales for Corporate segment in November.
- For **Technology** domain, the sales were higher than 50% of average target sales for Consumer segment in October-November and above 75% in September.
- In January and February, the sales were well below the 25% of average target sales. From March onwards, the sales in **Consumer segment** were quite good in comparison to other segments.
- Further, sales in corporate segment were in between 25-50% of average target sales after March except April, August and September and too close to average target sales in Office Supplies Category in November.
- In case of **Home Office** section, we can see a wide range of variation of sales for all the three categories throughout the year. For some period, the sales were too high whereas, for same period the sales were too close to zero.

For 2015:



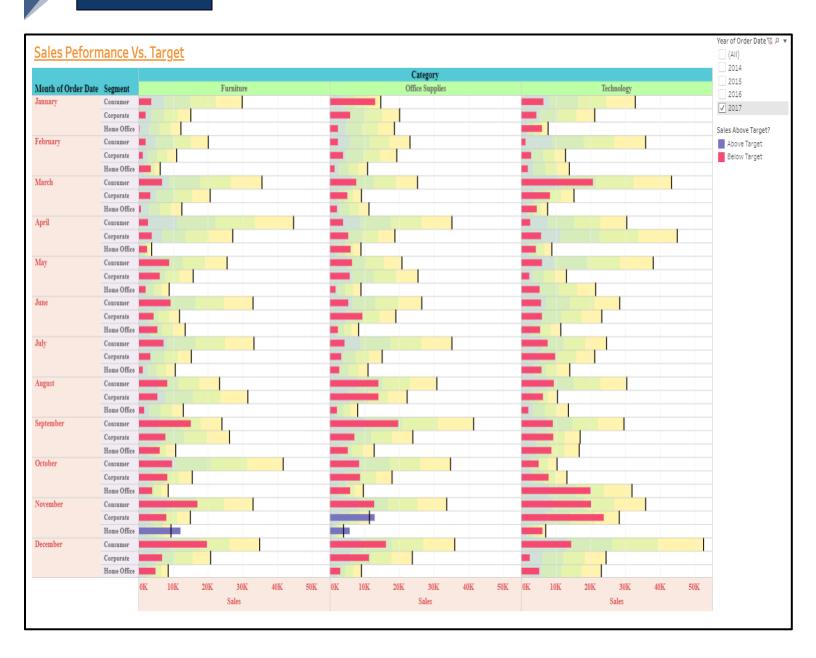
- <u>In 2015</u>, none of the categories was well above the average target sales. <u>Furniture and Technology</u> related sales just met the average target sales in Home office segment in November and December.
- **Furniture and Office Supplies** had sales, in between 25-50% of average target sales in Consumer section. However, these sales were not consistent throughout the year.
- For **Technology** domain, the sales were above 25% of average target sales in April-Dec except June in Consumer segment, from August-Dec in Corporate Segment and in December for Home Office segment.
- Overall, the technology was a safer category to invest to ensure good sales in all the three segments.
- Further, the sales quite improved for all the categories and segments in Fourth quarter in comparison to other 3 quarters.

For 2016:



- <u>In 2016, **Technology category**</u> reached the average target sales for Home Office segment in March and for Corporate segment in October. For Consumer domain, the sales were above 25% in Feb, March, May-July and Sept-Nov. For Corporate domain as well, the sales were above 25% of average target sales in April, May, Aug-Dec i.e. in second to fourth quarter. For Home office domain, the sales were above 25% of average target sales in April, June, Oct and Nov
- Sales in **Furniture** category were quite consistent throughout the year. The sales were too close to average target sales for Home Office segment in April, but after that, the sales for home office segment were well below the average target sales. Corporate segment had good sales, above 25% of average target sales from May onwards. Consumer section had sales in between 25-50% of average target sales in Sept and Nov-Dec.
- For **Office Supplies category**, the sales were above 25% of average target sales for Consumer segment and above 75% of average target sales for corporate segment in March. In addition, the sales were about 25% of average target sales for Home Office segment in April-June, August and were too close to average target sales from Sept-Dec. Sales for corporate segment were in between 25-50% of average target sales in Oct-Dec and above 50% of average target sales for Consumer segment in December

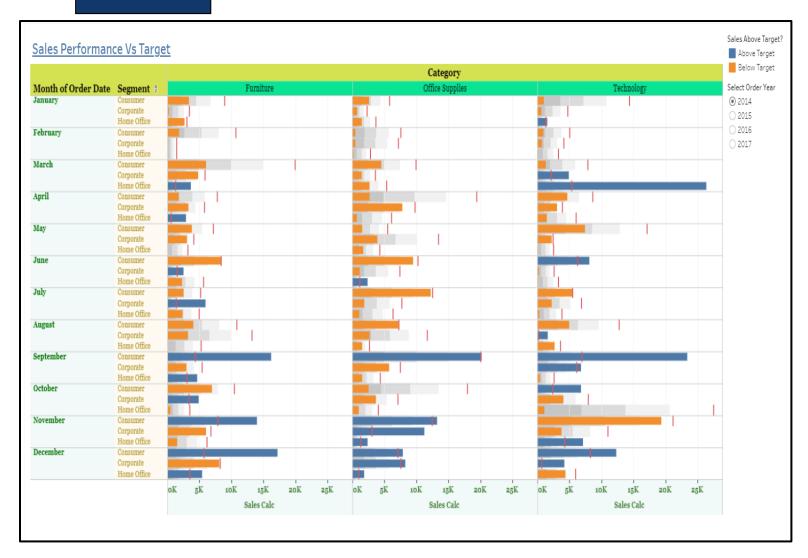
For 2017:



- In 2017, sales for **Office supplies category** reached the average target for Corporate and Home Office segments, in November. In addition, the sales for **Furniture category** reached the target in Home Office segment in the same month.
- In case of Furniture category, the sales were close to average target sales for Home Office segment in February and April and were above 25% of average target sales in fourth quarter. For Corporate domain, the sales were above 25% of average target sales in May-July and in entire fourth quarter. Whereas, for Consumer domain, the sales were above 25% of average target sales from May onwards. We can say that Furniture category had good sales in fourth quarter.
- It seems from the graph that for **Office Supplies and Technology category**, the sales were either near or above 25% of average target sales for all the segments throughout the year except in February.
- This is quite suspicious as compared to previous year's data. If we investigate more into the data itself,
 then we can find that the target data for the year of 2017 is only available for January, and is incomplete.
- In such case, the average target sales and our conclusions will get affected severely. To avoid this, we have used alternate way and compared the sales of each year with target sales of that year only.

Comparing sales data of each year with target data of that year.

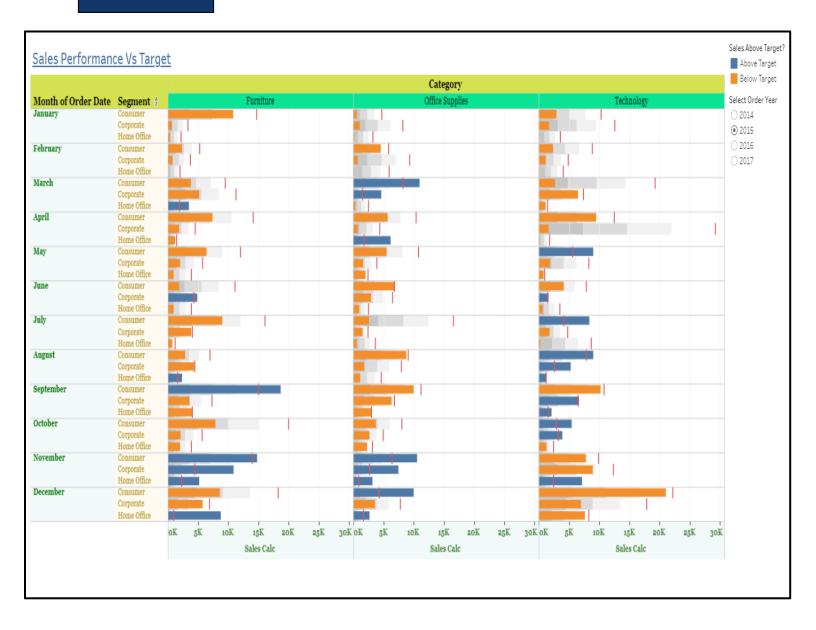
For 2014:



In above graph, black reference line indicates target sales for each month followed by three filled portions indicating 25%, 50% and 75% of target sales.

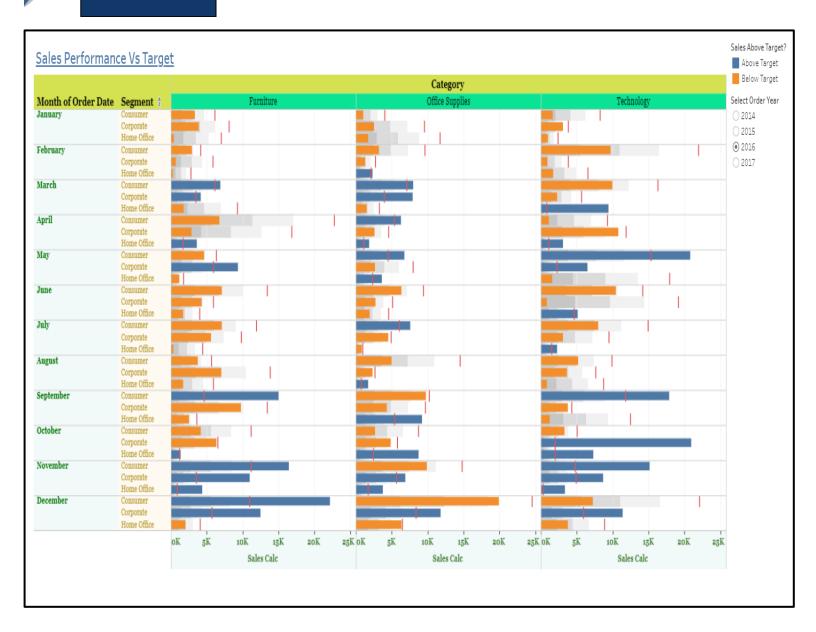
- <u>In 2014,</u> for **Furniture category**, sales for Home Office segment exceeded the target in March, April and December. For Corporate segment, the target was achieved in June, July and Oct and close to target in Nov and Dec. Further, for Consumer segment the sales were quite high above the target in Sept, Nov and December and very close to target in June.
- In case of Office Supplies, sales in November and December met the target for all the three segments.
 Apart from this, sales in Consumer section in September and Home Office in June were above the target. In addition, the sales for Consumer segment in June, July and August were well close to the target.
- Sales for **Technology** domain, exceeded the target for Home Office segment in January, March and November, Corporate Segment in March, August, September and December, Consumer segment in June, September, October and December. Apart from this, the sales were about to reach target for Corporate section in May and Consumer section in July.

For 2015:



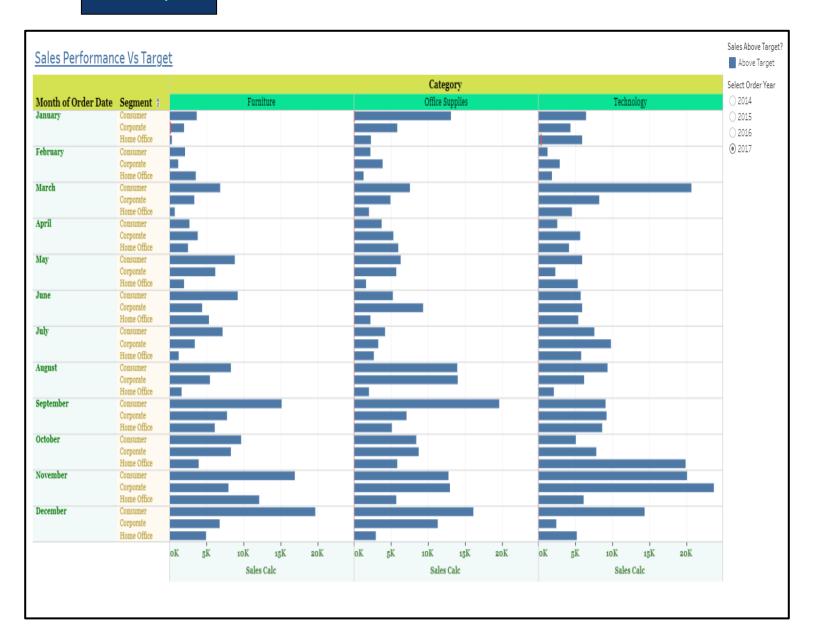
- <u>In 2015</u>, the sales for **Furniture Category** achieved target for Home Office domain in March, August November and December, for Corporate domain in June and November and for Consumer domain in September and November. Sales for Home Office domain in December were very high as compared to the target sales. In addition, the sales for Home Office domain were very close to target in April, July and September.
- For **Office Supplies**, the sales performed above the target for Consumer segment in March, November and December, for Corporate segment in March and November and for Home Office segment in April, November and December. Further, the sales were quite close to the target for Consumer segment in June and August, for Corporate segment in September and for Home Office segment in May and September.
- Sales for **Technology** domain achieved the target for Consumer segment in May, July, August and October, for Corporate segment in June, August, September and October and for Home Office segment in August, September and November. Apart from this, the sales for Consumer domain in September and for Home Office domain in March, May and December were just below the target.

For 2016:



- <u>In 2016</u>, for **Furniture Category**, the sales for Consumer segment in March, September, November and December, also, for Corporate segment in March, May, November and December and for Home Office domain in April, October and November met the target sales. Additionally, the sales in November for all the three segments and in December for Consumer and Corporate segments exceeded the target. Further, the sales for Corporate segment were just about to reach the target in Oct.
- In case of Office Supplies, the target sales were achieved for Consumer segment in March, April, May and July, for Corporate segment in March, November and December and for Home Office segment in February, April, May and August-November. Further, sales for Consumer segment in September, for Corporate segment in July and August and Home Office segment in July and December were very close to the target.
- For **Technology** domain, the sales were above the target for Consumer segment in May, September and November, for Corporate segment in May and Oct-Dec. and for Home Office segment in March, April, June, July, October and November. Moreover, the sales for Corporate domain in September were quite close to the target.

For 2017:



As discussed above, the target data for 2017 is not available in the given dataset. Because of this, all the sales were showing above the target.

Conclusion:

In conclusion, we built a dashboard that represent monthly sales performance by product segment and product category to help client identify the segments and categories that have met or exceeded their sales targets, as well as those that have not met their sales targets.