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Matriculation Number: A0268357N

a. Short Description of the Problem (or Challenge) and Dataset:

The challenge involves creating a stacked bar chart in Tableau based on the Workout Wednesday challenge #WOW2024 Week 12. The dataset provided is Superstore data. The task is to create a visualization (stacked bar chart) filtered to 2024, split by ship mode, and stacked by month, while also adding total month values. Additionally, three different options for creating the visualization are provided: using the analytics pane, using a dual axis, and using dynamic sorting.

The dataset used here is related to sales orders and contains various fields that include order details such as Order ID, Order Date, Ship Date, Ship Mode, Customer Name, Segment, Country/Region, City, State/Province, Postal Code etc.

b. A short description of the visualization and its key elements:

The visualization is a stacked bar chart showing the distribution of sales by ship mode over the months of 2024. Each bar represents a month, with segments stacked on top of each other representing different ship modes.

The key elements of the chart are:

- Stacked bars, tooltips displaying detailed information,
- Three panels options, each labeled with a data visualization technique:
 - o Option 1: The Analytics Pane
 - Option 2: Dual Axis
 - Option 3: Dynamic Stack
- Labels for the x-axis and y-axis:
 - X-axis: Month (Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sept, Oct, Nov, Dec)
 - Y-axis: Sales (\$)
- Colored bars: Each bar segment is colored differently to represent a ship mode (First Class, Same Day, Second Class, Standard Class).
- Values: Total sales for each month are displayed at the top of each bar in the stacked bar chart.
- Drop-down menu(Select by & Sort By):
 - Select By A dropdown menu that allows users to filter the data by ship mode and see the stacked bar chart and line chart for a specific ship mode (First Class, Same Day, Second Class, Standard Class) which will be seen when the second panel option is selected.
 - Sort By A dropdown menu that allows users to dynamically sort the data by ship mode.
- Hover Menu (*Highlight Ship Mode*): A dropdown menu that hovers over a specific ship mode highlighting it.

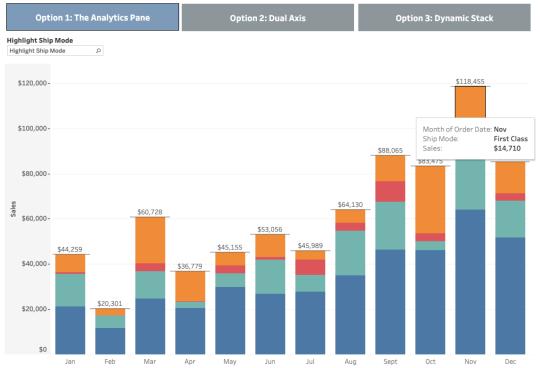
- Line chart (In the second panel option stacked chart): A line plotted on the same axes as the stacked bar chart, showing the trend in total sales for different ship modes selected
- Color Legend (Ship mode) In the visualization for the second and third panel option
 has a legend explaining that the colors correspond to different ship modes (First
 Class, Same Day, Second, Standard) at the top right corner.

c. Screenshot of the Visualization(s) and the Link:

Screenshots

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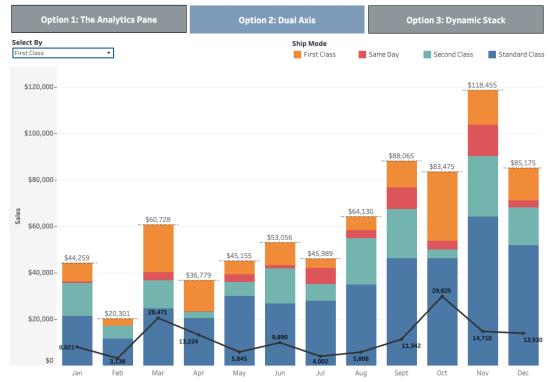
3 ways to make stacked bars more insightful
Challenge by Sean Miller(@HipsterVizNinja) | Data: Superstore | Recreated by Sreelakshmi E C



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3 ways to make stacked bars more insightful

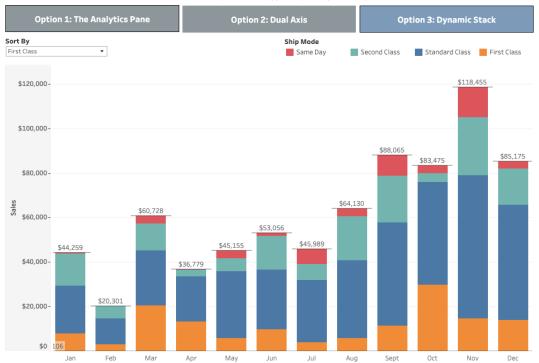
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3 ways to make stacked bars more insightful

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➤ Link: <u>Visualization link</u>

d. Dataset release date and submission date

Dataset release: 19 March 2024Submission Date: 23 March 2024