

1. Create a visualization

https://public.tableau.com/app/profile/ynyigm/viz/SuperstoreSalesPerformance_16285589135620/Dashboard

2. Answer your managers' questions

- How does your visualization leverage at least one “pop-out effect” or “pre-attentive attribute?” Which one(s) was (were) chosen and why?

I have chosen to leverage Size to bring the audience's focus to the three sub-categories with worst performance in overall. As soon as they open my visualization, the large table on the top with names of sub-categories in large font is meant to catch their eyes and let them know the first thing which sub-categories performed worst across all the regions. Color is also being reflected in my visualization as the bars in red indicate negative profit ratio i.e., loss as opposed to bars in light grey, which indicate positive profit ratio. The bars in red pop out among other bars in light grey and bring the user's attention to the sub-categories that are making losses.

- How does your visualization utilize at least one Gestalt principle? Which principle(s) is (are) being reflected, and how?

The two bar graphs reflect Continuity, since they still work without any axis because the bars are lined up on the invisible axis. The audience has the perception that the bars are lined up so it is not necessary to show the axis, and this reflects Continuity.

- How does your design reflect an understanding of cognitive load and clutter?

My design minimizes cognitive load and reduces clutter as it explicitly states the three worst performing sub-categories on the top of the visualization as demanded by the manager. The amount of effort needed to process the information is minimized. As they hover over the sub-categories, they can learn about the additional details on each sub-category at their own pace.

The manager also wanted information on sub-categories' performance in each region so I have designed my visualization to show sub-categories' performance by region on user's click. Visualization on each region is shown this way as to provide users with control over the amount of information to take in at a time.

- Is your visualization static or interactive? Why did you choose that format?

My visualization is part static and part interactive. It is partly static because the manager has limited time with executives so it is important for them to be informed directly regarding the overall performance, hence the simplified table on the upper part of the visualization. It is partly interactive because it would minimize cognitive load and reduce clutter for them to take in as minimal information as possible at one time and give them the control to see the next or desired part of the visualization at their own pace when they want it. As the manager sometimes finds it hard to tell which is the most meaningful data, all the meaningful data is laid out beautifully by region, they just have to click to view it.

- What need does this visualization address that words or numbers alone cannot fill?

The Sales bar graph highlights sub-categories with negative profit ratios sorted in order of descending Sales performance. This is something that words or numbers alone cannot present, which is to capture the audiences' instant attention and bring it to sub-categories that are making losses as opposed to other sub-categories making profit.