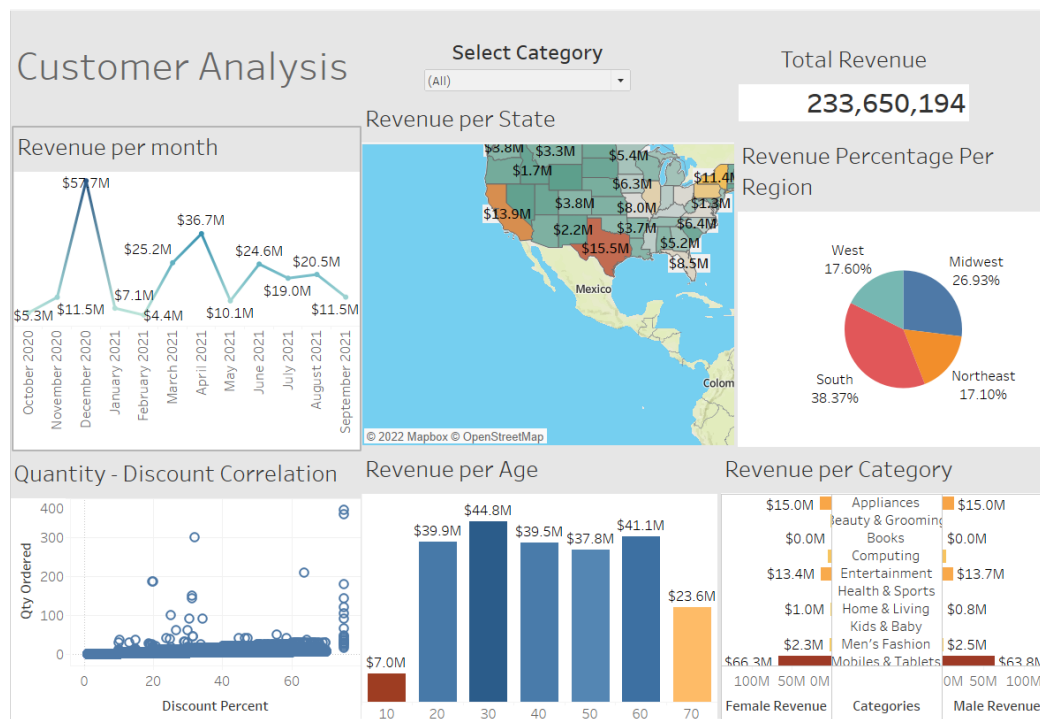


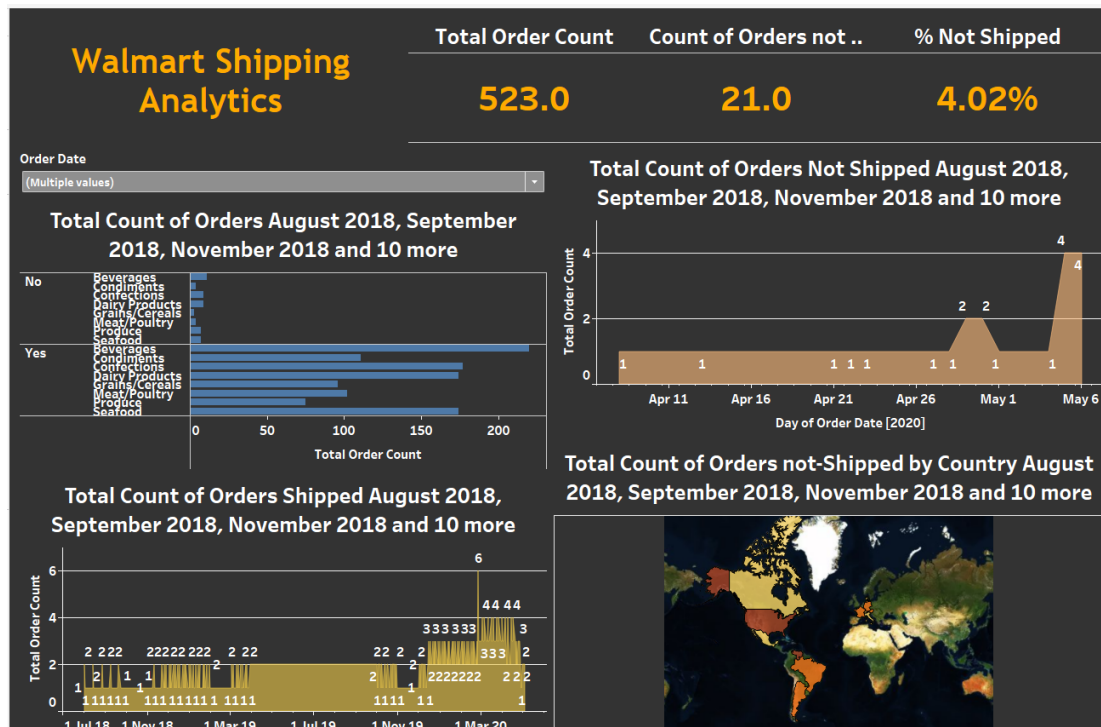
Visualization-1



The given dashboard depicts the customer analysis of the country USA. There is a line graph here which connects with each state that shows the swings in revenue per month per state. The key rationale for adopting a line graph is that it has realistic curves based on its ups and downs and, more importantly, it depicts small changes over time. A bar graph is an alternative to a line graph, but I cannot use it in this situation since bar graphs are only effective when the changes are big. The map in the dashboard displays revenue generated earned by each state. The map utilised here is a choropleth style of graph in which colours are used to help depict the different ranges of revenue. An alternative way to represent the same situation is the dot distribution graph. The reason behind not using the dot distribution graph is it random generates points which may differ from one iteration to other. If shown without border, we do not know where and what this points represent. The given pie chart gives the percentage description of each region such as west, south, Mideast, Midwest. The reason behind using the pie chart is it shows fractional part of data as a whole. It allows audience to see a data comparison at a glance to make an immediate analysis or to understand information quickly. The need for readers to examine or measure underline numbers themselves can be removed using this chart. An alternative way to represent this particular graph was donut chart. Donut chart holds this disadvantages such as if too many slices or arcs happen to be a part of same chart, it becomes messier to read. It is hard to determine the size and length of an arc unless they are near each other. Negative data cannot be identified unless marked. The scattered plot in the dashboard gives the correlation between quantity ordered by the customers and discounted percent according to that. This graph is used to display two variables for a set of data. This could be the relationship between the two variables such as cause and an effect because one causes another. The bar chart here shows the revenue distribution based on the particular age group. Now, the reason behind using a bar graph is it is easy to understand for segregated and largely divided data. In this case, we are comparing data between different groups to track changes over time. Helpful when changes are larger. Alternative way is line graph, it is not

recommended in this case because we are dealing with large data changes, line graph are particularly accurate in showing changes over same period of time (small changes). In this I have used a butterfly graph in which we can categorize certain elements into two categories as the two wings of butterfly. It is easy to differentiate between different entities of a dataset in butterfly dataset. In this graph, we have an advantage to compare 2 datasets at the same instance of time which is a complicated process but easy for audience to understand the picture.

Visualization-2



Here the given visualization is an interactive dashboard which provides detailed analysis of a company named Walmart. The horizontal chart in the visualization provides a basic idea related to the count of total orders in the respective months according to the particular country. The reason behind using this type of chart because this chart enables you to display those values in a natural way, whereas a vertical chart of the same data does not have enough horizontal space between bars. There are ways to rotate the text, but, in most cases, the horizontal layout is both simpler to construct and easier to read. Here are two graphs which give us information regarding the total number of ordered which were shipped and not shipped during the respective months. To analyse this type of visualization stacked area graph is used. A stacked area chart is useful when you wish to track not just the overall value, but also the breakdown of that total by groups. By comparing the heights of each segment of the curve, we can gain a sense of how each subgroup compares to the others in terms of their contributions to the overall. The map presented in the dashboard gives a visual idea regarding the orders that were not shipped according to the particular country. It's useful for displaying distribution and density patterns of items using map, but it needs you to gather or geocode location data exactly so that each site can be identified precisely on the map. The point approach might be challenging to apply to large-scale maps because points may overlap at different magnification settings.