Summary – Day 7

- **Dual Axis**:

  o A dual axis chart is used to present the relationship between two variables. More specifically, these charts are useful for demonstrating the relationship between two or more measures with different amplitude and scale.

  o The dual axis charts help in presenting plenty of information in the limited space present on dashboard and also allows you to understand the trends, you may have missed otherwise.

  o Dual Axis Chart is created only on 2 continuous measures. e.g. SUM(Sales) & SUM(Profit)

  o Dual Axis option appears only on the second measure in the view and not on the first measure.

  o Dual means two. So, in this chart one gets to see two axes i.e. either two X axes or two Y axes

  o One needs to Synchronize the axes after making dual axis so that the scale on the two axes should show same.

  o For example, Sub-category wise SUM(Sales) as bar chart and SUM(Profit) as line chart.

- **Combined Axis**:

  o Combined Axis chart is used in scenarios where one has to show multiple measures in the same chart.

  o For example, if someone has to show month wise sales, profit, cost together in the line chart or area chart then in all such cases dual axis chart can't be used.

  o This scenario can be done using combined axis chart.

  o One needs to show any one measure in rows/columns shelf.

  o Rest of the measures need to be drag and drop on the X/Y axis.

  o Unlike dual axis chart, using which one can select different chart types for each measure, in combined axis chart one can have only one chart type for all the measures.

- **Custom Charts**:
  o In tableau there 24 traditional charts under Show Me pane.

- In real-time scenarios, one may get requirement to create a chart which is not available under Show Me.
- These charts need to be created using the concepts of dual-axis, calculations and marks cards.
- All such charts so created using these concepts are defined as custom charts as in those charts are made to meet the business requirements.
- Below are some examples.
  - Donut Chart
  - Lollipop Chart
  - KPI Cards
  - Funnel Chart / Butterfly Chart
  - Waterfall Chart
  - Word Cloud
  - Gauge Chart
  - Pareto Chart

- **Donut Chart**:

  - A donut chart is a pie chart with a hole in its center thus, looking like a donut. It is used to show the distribution of the each entity with respect to others as a whole.
  - Steps:
    - Double click on rows and type 0 and then enter. Again do it.
    - Change Automatic to Pie in All Marks card.
    - Make dual axis.
    - Synchronize axes.
    - Reduce the size of second SUM(0) and change the colours of both circles.
    - Now enlarge both the circles using size in marks card.
    - In first SUM(0) marks card, drag and drop Sales on angle, drag region on color and text/label. Darg Sales on text/label.
    - Make proper formatting.
    - Donut chart is ready.

- **Lollipop Chart**:
  - The lollipop chart is a composite chart with bars and circles. It is a variant of the bar chart with a circle at the end, to highlight the data value. Like a bar chart, a lollipop chart is used to compare categorical data.
  - Steps:
    - Drag Sub-category in columns and SUM(Sales), 2 times, in rows.
    - Make dual axis and synchronize the Y axis.
    - In first SUM(Sales) marks card, change Automatic to Bar.
    - In second SUM(Sales) marks card, change Automatic to Line.
    - Make proper formatting.
    - Lollipop chart is ready.

- **KPI Cards**:

- KPI (Key Performance Indicator) Cards are used to let one understand about the performance and health of a business so that the critical decisions about the business can be taken later for its betterment in future.
- Steps:
  - ❖ Darg and drop Sales on Text.
  - ❖ Go to text and write Total Sales below <SUM(Sales)>.
  - ❖ Format, align, change the colours.
  - ❖ KPI card is ready.