

TFL Bus Safety

Steps:

1)

- Drag the 'Borough' field to the columns shelf.
- Drag 'Measure Values' to the rows.
- Select 'Bar Chart' under 'Show me' section.
- Sort the Bar Chart in descending order with Sort By as 'Field'.

2)

- Drag the 'Date of incident' field to the column field.
- Drag the 'Date of incident' field to the column field it automatically selects quarter.
- Drag 'Sheet1(Count)' field to the rows.

3)

- Create a line chart by following the previous sub-question.
- Right click on 'Date of incident' field in column & select 'Month'.
- Now, right click on any one label in X-axis, then go to format.
- Under header, go to default, then select dates.
- Select first letter under dates.

4)

- Drag Date to rows & Year to columns.
- Click on 'Show Me' and select the treemaps chart.
- Customize the treemaps by adding labels, adjusting colors, and arranging the fields as desired.

5)

- Click on 'New Dashboard' button in the bottom left corner of the Tableau window.
- Drag the sheets and drop in the dashboard, select floating windows under Objects, in Dashboard.
- Rearrange all the sheets, once all the sheets are added.

Sales Revenue Dataset

Steps:

1)

- Drag state to columns and select map under Show Me.
- Click on map tab and edit map location, change to US.
- Drag total to label and Drag total to label
- Select Sum(total), right click, format, then under pane, go to default, under numbers, go to currency(custom), decimal place to 1, display units in Millions.

2)

- Drag and drop total to rows.
- Convert month from string to date, by right click, then change data type and drag to column.
- Under marks, select sum(total), right click, format, then under pane, go to default, under numbers, go to currency(custom), decimal place to 1, display units in Millions.
- Right Click on Month in columns Select Month.

3)

- Drag age to columns, total to rows.
- Right click age in tables, create, bin, then size of bin to 10.
- Drag Age(bin) to columns and remove age.
- Then under each bar, below the axis, right click, go to edit alias, then change each alias from >10, 10-20, 20-30, 30-40, 40-50, 50-60, 60-70 respectively.
- Drag total to label, format, then currency, then unit is millions then drag total to color.

4)

- Drag Region to column, total to rows.
- Make a pie chart, selecting under 'Show Me'.
- Drag region & total to label.
- In label, sum(total) right click, quick table calculation, percent of total.
- Create calculated field, rename to Zero Axis, write code as 0, then ok.

- Drag Zero Axis twice to rows.
- Then under marks, two fields of Zero Axis will be there, go to second, remove all fields, then increase size in 1st, decrease in 2nd.
- Right click on second Zero Axis in rows, then click dual axis and select Entire View in Fit tab.

5)

- Drag Gender, Total and Category to rows.
- Create 2 calculated fields.
- For female revenue, Code is – if [Gender] = 'F' then [Total]end - Create same for male revenue.
- Drag female and male to columns, remove total and gender.
- Drag zero axis between female and male revenue in columns.
- Select Zero Axis under Marks Section, Select Text in place of automatic and Drag Category to text.
- Edit the Female Axis and select reversed.
- Sort the Category and select entire view in fit tab, then disable show header in Y axis.
- Rename the Zero Axis as Category by editing, and remove 0 in (tick tab) edit, select none.

6)

- Create calculated field to calculate average revenue per state, code – avg({include[State] : sum([Total])}) name it Average Profit
- Create a calculated field for profitable & non profitable states, code - if([Average Revenue Per State]) >= 8000000 then "Profitable State" else "Non Profitable State" end.
- Drag Average Revenue Per State to columns, State to rows.
- Drag Average Profit to Colour and Label and select entire view in fit and sort the sheet.

7)

- Click on the Create new Dashboard button located at bottom left corner of Tableau Window.
- Increase the width of the dashboard.
- Select floating windows under objects in the dashboard.
- Drag and drop all sheets and arrange them properly.

Sample Superstore

Analysis of sample superstore

Create a horizontal bar chart to visualize the profit by category

Create a map to visualize the profit by state

Create a bar chart to show top 20 negative profit(loss) with respect to quantity for the manufacturer

Build an interactive dashboard

Steps:

1)

- Drag the category field to rows and add sub category also
- Drag the profit to text under marks section
- Select Horizontal bars under show me
- Drag the profit to colour under marks section

2)

- Drag the State/Province field to Details under marks section
- Drag profit to size under marks section
- Select maps under show me to get a proper map view

3)

- Drag manufacturer and profit to columns and rows respectively
- Sort the manufacturer in ascending order with sort by field
- To obtain top 20 negative profit, filter the manufacturer by selecting use all
- Under top section select By Field select Bottom and 20
- Drag profit to color under marks section
- Drag quantity field into rows and place before profit
- Under marks section Sum(Quantity) remove the fields

4)

- Click on the create new dashboard button located at bottom left corner of Tableau Window.
- Increase the width of the dashboard.
- Select floating windows under objects in the dashboard.
- Drag and drop all sheets and arrange them properly.

HR Dataset

Steps:

1)

- Drag Measure Names to columns tab
- Create calculated field:
 - (i) Attrition Count: Create a calculated field Attrition Count with the formula:
IF [Attrition] = 'Yes' THEN 1 ELSE 0 END.
 - (ii) Attrition Rate: Create a calculated field Attrition Rate with the formula: $\text{SUM}([\text{Attrition Count}]) / \text{SUM}([\text{Employee Count}])$.
Format it as a percentage with 2 decimal places.
 - (iii) Active Employees: $\text{SUM}([\text{Employee Count}]) - \text{SUM}([\text{Attrition Count}])$.
 - (iv) Average Age: Right-click on the Age field, change measure from SUM to AVG. Format all numbers as decimal places with 0.
- Drag Measure Names to filters tab if not exists.
- Drag Education to Filters tab
- Remove all the tabs from the Measure Values tab and only place $\text{SUM}(\text{Employee Count}), \text{SUM}(\text{Attrition Count}), \text{AGG}(\text{Active Employees}), \text{AGG}(\text{Attrition Rate}), \text{AVG}(\text{Age})$.
- Under Marks dropdown change the shape to Text and drag and drop Measure Values to Text
- Rename the worksheet to KPI

2)

- Drag and drop Gender tab to columns
- Drag and drop $\text{SUM}(\text{Attrition count})$ twice to rows
- Right click on the $\text{SUM}(\text{Attrition count})$ present on the right and select Dual Axis
- Open the 2nd $\text{SUM}(\text{Attrition count})$ and remove all the tabs under it and change the shape to circle.
- Open the 1st $\text{SUM}(\text{Attrition count})$ and Reduce the size of the circle chart to create the lollipop effect.
- Rename the Worksheet to Lollipop Chart

3)

- Drag Department to Colors shelf under Marks dropdown
- Change the shape to Pie.
- Drag and drop the Attrition Count to size
- Drag and drop Attrition Count on Angle
- Drag and drop Department, SUM(Attrition Count) to Label
- Right click on the SUM(Attrition count) and select Quick Table calculation and select Percent of Total in it.
- Rename the worksheet to Pie Chart

4)

- Right click on the Age tab and select Create and select “Bins” in it
- Rename it to Age(bin) and change the bin size to 3 and save it
- Drag Age(bin) to Columns and drag the Employee Count to Rows.
- Drag the Employee Count on the label option under the Marks dropdown
- Rename the worksheet to Bar chart

5)

- Drag Job Role to Rows.
- Drag Sum of Job Satisfaction to the Columns shelf
- Under the Show Me change the chart type to Highlight Table.
- Drag and drop Employee Count to Color and Label
- Rename the worksheet to Highlight Table

6)

- Drag Education Field to Rows.
- Drag Sum of Attrition Count to Columns.
- Drag and drop Attrition count to label option under marks dropdown
- Rename the worksheet to Horizontal Bar chart

7)

- Drag Age Group to Columns.
- Create a pie chart by changing the mark type to Pie and selecting entire view.
- Double click on the empty space in row tab and type 0 and press enter
- Hold ctrl and drag and drop the SUM(0) beside it in the row tab
- Change the shape to pie under marks dropdown
- Drag Gender to Color.

8)

- Drag Attrition Count to Angle.
- Remove all the tabs under the SUM(0)((2) dropdown
- Change the color to white
- Vary the size of both the circles to make it look like donut.
- Rename the worksheet to Donut chart

9)

- Click on the create new dashboard button located at bottom left corner of Tableau Window.
- Increase the width of the dashboard.
- Select floating windows under objects in the dashboard.
- Drag and drop all sheets and arrange them properly.

Amazon Prime Dataset

Steps:

1)

- Drag and drop 'Type' to Color.
- In the "Marks" section, select Pie from the drop-down list in place of automatic.
- Drag and drop 'Title' to Size.
- Right click on 'Title' in Marks shelf, click on measure select Count and Percent of total under Quick table calculation.
- Drag Type and Title from marks section using control and drop to label.
- Create calculated field called Zero Axis.
- Drag it twice to rows shelf.
- Then under Marks, two fields of Zero Axis exist go to second one - remove all fields, change colour to white and decrease its size and also increase the size of first one.
- Right click on the second Zero Axis and select dual axis.

2)

- Drag and drop 'Release year' and "Show ID" to Columns and rows shelf respectively.
- Right click on 'Show ID' in rows shelf, click on measure select Count (distinct)
- In the "Marks" section, select area from the drop-down list in place of automatic.
- Drag and drop 'Type' to colour.
- Drag and drop 'Type' to Label.

3)

- Drag "Listed In" and "Show ID" to rows and Column shelf respectively.
- Right click on "Show ID" then go to Measure → Count (distinct)
- Drag 'Listed In' to filter and edit it Accordingly to get top 10 Genres and sort them.
- Drag and drop "Listed In" to colour.
- Drag and drop "Measure Values" to label.

4)

- Double Click on country.
- Drag "Country" to filters and remove null values.
- Drag Show Id to Text.
- Right click on "Show ID" then go to Measure → Count (distinct)

5)

- Drag and drop Title to rows.
- Select "Text" in place of automatic in the Marks section.
- Drag "Type" to filter and select Movies only.
- Drag and drop Description to Text.

6)

- Click on the Create new Dashboard button located at bottom left corner of Tableau Window.
- Increase the width of the dashboard.
- Select floating windows under objects in the dashboard.
- Drag and drop all sheets and arrange them properly.