Tableau Fundamentals: Assessment Tasks

- Open Tableau and connect to the workbook **Tableau Fundamentals Assessment Data.**
- **Follow the steps on the next page** to create a dataset and basic dashboard.
- Brief overview of the dataset provided:
  - The dataset contains the 5000 fastest growing private companies in the United States
  - The FactTable contains measurements like Revenue, Profit etc.
  - There are two dimension tables – dimCompany and dimLocation. dim Company contains the company name, url and industry. The dimLocation table contains the state where the company operates.

TASK 1: Import the Data

1.Import the Tableau Fundamentals Assement.xlsx file and create a dataset

- Connect to the file using the Microsoft Excel connector and drag the FactTable to the data canvas.
- Inner Join dimLocation and dimCompany to the FactTable on the appropriate ID keys
- After you have joined the dimension tables to the fact table hide all ID columns

TASK 2: Create Calculations

2. Create the following measures

- Profit Ratio
- Revenue Per Worker
- Profit Per Worker
- Number of Companies

TASK 3: Create Visuals

3a. Create a bar chart displaying the top 10 companies by Revenue

- Create a Top N parameter to allow the end user to dynamically change the bar chart. Set the current value to 10.
- Filter the result to only show the number of companies specified in the Top N parameter.
- Add a filter to slice by industry

3b. Create a scatter plot to identify profitable vs unprofitable companies

- Create a calculated field to categorize and colour code profitable vs unprofitable companies.
- Add the profit ratio calculation to the tooltip.

TASK 3: Create Visuals

3c. Create a Treemap by industry

- Size should represent Revenue per Worker
- Color should represent Profit Per Worker

3d. Create a map to display the number of companies per State

- Color should represent number of companies in that state
- Place the measure number of companies on the tooltip and add a quick table calculation % of total.

TASK 4: Dashboard Design

4a. Create a floating dashboard

- Use a floating layout
- Set the size to 1300 x 800
- Place the visuals on the canvas and make sure all the labels and data points are visible.
- Use the position and size settings from the layout pane to make sure everything is properly aligned

TASK 4: Dashboard Design

4b. Add a filter action

- Add interactivity by creating a filter action.
- When a state on the map is selected the treemap and the scatter plot show be filtered to only show values for that state.
- Clearing the selection should show all values.