

# Data Visualization with Tableau

**Duration: 21 hours**

**[Mode: Online; Minimum duration per day 1.5 hrs, Maximum duration: 3 hrs]**

The course will provide participants **hands on exposure** to visual analytics and problem-solving using Tableau Public. In the course

- the participants will gain knowledge on tools and techniques of Tableau Public
- create impactful visuals using multi domain data sets
- learn problem-solving techniques using visual analytics
- create interactive and shareable dashboards

## Topics Covered

<ol style="list-style-type: none"><li><b>1. Getting started with Tableau</b><ol style="list-style-type: none"><li>a. Tableau products</li><li>b. Installing Tableau Public latest edition</li></ol></li><li><b>2. Connecting to Data Sources and Tableau User Interface</b><ol style="list-style-type: none"><li>a. Connectors on the Connect pane</li><li>b. Using Microsoft Excel Connector</li><li>c. Data Source tab</li><li>d. Menus and Toolbars</li><li>e. Data Window</li><li>f. Analytics Window</li><li>g. Shelves and Cards</li></ol></li><li><b>3. Visualizing data, basic charts and graphs</b><ol style="list-style-type: none"><li>a. Visualize data using bar chart</li><li>b. Introduction to Dimensions and Measures</li><li>c. Simple Calculated field</li><li>d. Color Mark</li><li>e. Label Mark</li><li>f. Formatting Label, Axis</li><li>g. Sorting</li><li>h. Editing Title</li></ol></li><li><b>4. Saving visuals to Tableau Public server</b><ol style="list-style-type: none"><li>a. Creating user profile, settings</li><li>b. Saving visual (workbook) to Tableau Public Server</li><li>c. Sharing and Download options</li></ol></li><li><b>5. Data aggregation and level of detail</b><ol style="list-style-type: none"><li>a. Dimensions and Measures</li><li>b. Aggregation and level of detail</li><li>c. Axis and Headers</li><li>d. Data types and properties</li><li>e. Quick Table Calculations</li></ol></li></ol>	<ol style="list-style-type: none"><li><b>7. Types of calculations</b><ol style="list-style-type: none"><li>a. Add Table calculations</li><li>b. Quick Table calculations</li><li>c. Crosstab calculations</li><li>d. Totals and subtotals</li><li>e. Calculated fields</li><li>f. Conditional calculated field (dynamic color segmentation)</li><li>g. Introduction to Functions (String, Date, Table Calculations, Logical)</li></ol></li><li><b>8. Working with data and connections</b><ol style="list-style-type: none"><li>a. Pivoting data</li><li>b. Splitting data field</li><li>c. Data Join</li><li>d. Relationships</li></ol></li><li><b>9. Data organization and problem solving using visual analytics</b><ol style="list-style-type: none"><li>a. Hierarchies</li><li>b. Filtering</li><li>c. Sorting</li><li>d. Highlighting</li><li>e. Groups</li><li>f. Sets</li></ol></li><li><b>10. Maps and Geographic roles</b><ol style="list-style-type: none"><li>a. Geographic Role</li><li>b. Symbol Map</li><li>c. Filled Map</li><li>d. Correcting errors/editing unknown location data</li><li>e. Map Layers and Map Options</li></ol></li><li><b>11. Creating interactive Dashboards and Actions</b><ol style="list-style-type: none"><li>a. Introduction to Dashboards</li><li>b. Dashboard Interface</li><li>c. Building dashboard</li><li>d. Filter action</li><li>e. Highlighting action</li><li>f. URL action</li></ol></li></ol>
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**6. Understanding Date data type**

- a. Visualize data using bar chart and understand Dimension / Hierarchy Date
- b. Visualize data using line chart and understand Measure / Numeric Date
- c. Using Color and Detail Marks for changing level of detail

**12. Advanced charts**

- a. Dual axis chart
- b. Combined axis chart
- c. Lollipop chart
- d. Donut chart

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