

# Tableau Fundamentals

**Duration:** 2 Days

## Description

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This training aims to help participants learn the fundamental features of Tableau, enhancing their data visualization and analysis skills. Throughout the course, participants will be introduced to the Tableau interface, learn different methods for connecting to various data sources, and apply basic analysis techniques to create effective visualizations through hands-on exercises. By working with real-world scenarios, they will learn to create visual reports and interactive dashboards that support business decision-making.

### Delegates will learn

- Tableau Interface – Using the menu bar, data panel, and workspace.
- Data Connection – Connecting and managing data sources such as Excel, CSV, and SQL in Tableau.
- Data Preparation and Analysis – Working with dimensions and measures, performing basic calculations, and filtering data.
- Visualization Techniques – Creating bar, line, pie charts, and hierarchical visualizations.
- Dashboard and Reporting – Designing interactive dashboards and sharing reports via Tableau Public/Server.
- Hands-on Practice – Conducting analysis and creating reports using real-world datasets

## Outline

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### Introduction and Basic Concepts

- What is Tableau?
- What is data visualization and why does it matter?
- Tableau's key features and advantages
- Differences between Tableau Desktop and Tableau Public
- Overview of the Tableau Interface
  - Menu bar, toolbar, data sources pane
  - Workspace, worksheet, dashboard and report

### Connecting to Data Sources and Loading Data

- Setting Up a Data Connection
  - Connecting to data files (Excel, CSV, etc.)
  - Database connections (SQL, Access, etc.)
- Reviewing and Editing the Data Source
  - Viewing tables and fields in the data source
  - Changing data types and formats
  - Basic data filtering and data cleansing

## **Data Preparation and Basic Analysis**

- Working with Data Fields
  - What are Dimensions and Measures?
  - Adding fields to a view by drag and drop
  - Adding data to rows and columns
- Basic Calculations and Filtering
  - Simple calculations (Sum, Average, etc.)
  - Filtering data (using the filter pane)
  - Grouping and categorizing data

## **Data Visualization**

- Basic Chart Types
  - Creating bar, line and area charts
  - Scatter plots
  - Visualizing with hierarchies (for example, a city and country hierarchy)
- Data Interactions
  - Adding filters (page, column, etc.)
  - Creating interaction between visualizations using Actions
- Alignment and Coloring
  - Options for coloring and aligning data
  - Choosing a color palette based on the data

## **Publishing Dashboards and Visualizations**

- Building a Dashboard
  - Combining multiple visualizations
  - Sizing and arranging a dashboard
  - Enabling interactions within a dashboard (buttons, filters, etc.)
- Sharing and Publishing Reports
  - Publishing reports to Tableau Public
  - Sharing reports with Tableau Server/Online
  - Exporting to PDF