

## **Tableau Beginner**

Length: 2 Days / 4 Half Days



Overview: This is for students who are new to Tableau or who have limited experience with the software. Students will learn the fundamentals of the tool and how to use all the basic functionality to visualize their data. Students will learn how to connect to various data sources, build a variety of basic charts, and combine those insights into a usable dashboard. Students will also learn about sharing and publishing options.

- **Objectives**: Apply the fundamentals and functionality of Tableau to visualize data
  - Connect to various data sources
  - Build a variety of basic charts
  - Combine insights on one usable dashboard for an end-user, team, organization, or shareholder
  - Garner new insights using table calculations
  - Understand how and when to apply filters for better command of the data and user interactivity
  - · Apply Tableau's mapping features for spatial analysis
  - Share and publish visualizations
  - Use advanced interactivity features to enhance user engagement in dashboards.

### **Tableau Fundamentals**

- Simple Data Connections and the Data Connection Interface
- Understanding the Main Tableau Interface
- Building Simple Visualizations
- Saving Options
- Understanding and Utilizing "Show Me"
- Dimensions vs. Measures and How They Affect a Viz
  - What if We Wanted to Convert a Measure to a Dimension? How Would the Viz Change?
- Continuous vs. Discrete Variables
- Basic Dates
- Setting the Fiscal Year
- Basic Aggregations
- Hierarchies
- Sorting
- Grouping

- Formatting
- Color
- Size
- Labels
- Detail
- Formatting Individual Elements vs. the Entire Sheet vs. the Entire Workbook
- Building Your First Dashboard
- Labeling, Annotations, Tooltips and Data Highlighting
  - Axis Labels
  - Annotations
- Tooltips
- Using the Data Highlighter
- Quick Filters
- Adding download and navigation buttons for users
- Publishing and Sharing

continued



# Visual Best Practices and Visual Analytics

- Connecting to Different Databases and Data Formats
- · Live vs. Extract Connections The Basics
- Reshaping and Formatting Data for Tableau
- Managing Multiple Data Connections in a Single Workbook
- Cross Database Filters
- Intro to Calculated Fields
  - Basic expressions SUM, MIN, MAX, COUNT, COUNTD
  - IF THEN ELSE END statements
  - Math on Measures/Dimensions
  - Date Calcs
  - CASE Statements
- Understanding the Navigation Menu
- Showing Trends or Change Over Time
  - Trends
- Rate of Change and Moving Average

- Part to Whole and Ranking Analysis
- The Standard Bar Chart
- The Stacked Bar Chart
- The Side-by-Side Bar
- Pie Charts
- Percent of Total and Running Sum
- Using the Index and Ranking Calculated Fields
- Creating Dual Axis Charts and Combo Charts
- Using Measure Names and Measure Values to
- Build a Data Table
- Totals and Subtotals
- Using Maps and Spatial Analysis
  - Map Zooming
- · Showing Relationships between Numbers
  - Scatter Plots
- Trend Lines and Statistical Features
- Reference Lines
- Distributions
- Heatmaps and Highlight Tables
- Histograms

### **Prerequisites**

None

#### **Materials**

- All students will receive slides with lecture material, data and labs.
- · Software needed on each student PC:
  - Microsoft Excel 2010 or later (2013 or later recommended)
  - Internet access
  - Tableau Desktop
- · Related data and lab files will be provided

Other Tableau Courses Available: Tableau Beginner