

**Data Storytelling with Tableau**

**Course Number:** TAB-110  
**Duration:** 2 days

**Overview**

Accelebrate's Data Storytelling with Tableau training course teaches participants how to effectively find and communicate insights in data with a focus on context, design, communication, and automation. This class includes time for workshopping with your own data to make improvements and create more impactful data-driven narratives.

**Prerequisites**

All students should have prior experience working with corporate reporting.

**Materials**

All Tableau training students receive comprehensive courseware.

**Software Needed on Each Student PC**

* Data Visualization tools, like Tableau or Power BI
* Microsoft Excel 2016 or later
* Internet access
* Related data and lab files that Accelebrate would provide

**Objectives**

* Understand the difference between exploratory and explanatory analysis
* Distinguish between data visualization and data storytelling
* Learn the data storytelling process
* Learn which charts to use to appropriately analyze data for insights
* Build advanced charts for immediate insights
* Ask the right questions to impact business decisions
* Determine which metrics are important and how to analyze, visualize them appropriately
* Choose the appropriate story type for the data story
* Construct the data story
* Identify common pitfalls of data analysis and visualization
* Apply best practices of data visualization and storytelling
* Communicate insights in a clear, simple way that tells a story to drive action

**Outline**

* Understanding the difference between data visualization and data storytelling
* The data storytelling process overview
* Starting in Tableau
  + Simple Data Connections and the Data Connection Interface
  + The Main Tableau Interface and Navigation Menu
  + Building Simple Visualizations
  + Saving Options
* 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
* Context and Logistics
  + Obtaining context
    - Focus on the why (why -> root cause)
    - Challenging assumptions
    - Identifying key metrics
  + Logistics
    - Does the data exist for what's being asked?
    - Do you need permission to access the data set?
* Five Types of Analyses Overview
  + 1 – Distributions of Data, Rankings, Part-to-Whole
    - The Standard Bar Chart
    - The Side-by-Side Bar
    - Pie Charts with Percent of Total
    - Bar Chart with Max Color Calculated Field
  + 2 – Relationships between variables
    - Using Measure Names and Measure Values to Build a Data Table
    - Highlight Tables
    - Scatterplots
    - Creating Dual Axis Charts and Combo Charts
  + 3 – Trends and patterns over time
    - Advanced Time Series Analytics
  + 4 – Geographical and spatial relationships
    - Filled Map
    - Symbol Map
    - Dual Axis Map
  + 5 – Outlier Analysis
    - Box Plots
* Secondary Characters That Help the Protagonist (The Analysis)
  + Advanced Tooltips
  + Annotations
  + Dynamic titles
  + Sets/Combined Sets
  + Conditional Filter (if needed)
  + Top/Bottom N Filter (if needed)
* Select Your Data Story
  + Narrate Change over Time.
  + Start Big and Drill Down.
  + Start Small and Zoom Out.
  + Highlight Contrasts.
  + Explore the Intersection.
  + Dissect the Factors.
  + Profile the Outliers.
* Tableau/Data Secondary Characters
  + Using KPIs and BANS
  + KPI Indicators with YTD vs. Prev YTD (or similar types of time periods)
* Sketch
  + Story Mountain, translated for data
  + How will this be visually represented? (Sketch it out)
* Dashboard
  + Advanced Formatting & Dashboard Best Practices
    - Layout Containers
    - Floating Elements
    - When to Use Which
    - Effective Dashboard Layouts
    - Layout Best Practices
  + Dashboard filters for end-user use
  + Labeling, Annotations, Tooltips, and Data Highlighting
    - Axis Labels
    - Annotations
    - Tooltips
  + Storypoints
* Conclusion