

**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