Introduction to Tableau & Data Storytelling

Course Number: TAB-110

Duration: 2 days

Skills Gained

- 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

Prerequisites

All students should have prior experience working with corporate reporting.

Training Materials

All Tableau training students receive comprehensive courseware.

Software Requirements

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

Course Details

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