



## **Applied Data Visualization with Excel and Tableau**

2.5-Day Workshop  
February 27-March 1, 2018  
Arlington, VA

Translating and analyzing big data using charts, graphics, and images is becoming more and more necessary for decision-making. The art of making compelling visuals is something that all professionals should learn. The purpose of this workshop is to introduce some basic concepts to help guide the selection of the right visualization to represent your data and to make those graphics impactful. You will also learn the mechanics of making the best graphics using two powerful and widely available software tools: Excel and Tableau. Receive hands-on help in learning how to use basic charts and graphs more effectively and learn powerful ways to present data that will forever change how you will present data to your audience.

### **Training pre-requisites**

**Skills:** Familiarity with creating workbooks, worksheets, basic menus & toolbars

**Tools:** Laptop, wired mouse, Microsoft Excel 2013, Tableau Desktop (personal or professional)

### **Day One – DATA VISUALISATION THEORY**

#### **8:30 - 8:45 Introduction and Overview of Today's Agenda**

##### **SECTION 1:**

#### **8:45 – 10:00 Overview of effective data visualization**

*Theory/discussion*

Why is this important? How can we achieve it? Develop strategies for deciding what type of visual to use and when.

#### **10:00 - 10:15 Break**

##### **SECTION 2:**

#### **10:15 – 12:00 Story telling with data**

*Theory/discussion*

Recognize the importance of context in creating visuals. Gain insights about techniques for effective communication. Participate in hands-on exercises.

#### **12:00 - 1:30 Lunch**

##### **SECTION 3:**

#### **1:30 – 4:30 (with 15-minute break) Data visualization with Excel**

*Discussion/exercises*

Learn practical tips to prepare your data. Use PivotTable analysis to improve the way you organize. Explore ways to create stunning visualizations in Excel through exercises.

## **Day Two - TABLEAU AS A DATA VISUALISATION TOOL**

### **8:30 - 8:45 Overview of Today's Agenda**

#### **SECTION 4:**

##### **8:45 – 10:00 Data visualization with Tableau**

###### *Discussion/exercises*

Learn more about Tableau, its best uses, how it complements Excel or other graphics tools, and terminology related to dynamic graphics design tools. Begin working with the tool through hands-on exercises.

##### **10:00 - 10:15 Break**

##### **10:15 – 12:00 Data visualization with basic charts**

###### *Discussion/exercises*

Learn how to manage data sources, worksheets and workbooks, sort and filter Tableau data. Explore ways to create stunning visualizations with basic charts such as column and stacked column charts, line and area fill charts, pie charts, scatter plots, histograms, highlight tables, and heat maps.

##### **12:00 - 1:30 Lunch**

#### **SECTION 5:**

##### **1:30 – 4:30 (with 15-minute break) Data visualization with advanced chart types**

###### *Discussion/exercises*

Learn more advanced chart types such as blended axes charts, side by side bar charts, symbol and filled maps. Analyze data using statistical tools and create complex calculations with string, arithmetic, logical, and conditional statements. Learn how to effectively create and use parameters in calculations.

## **Day Three – DASHBOARD APPLICATION**

### **8:30 - 8:45 Overview of Today's Agenda**

#### **SECTION 6:**

##### **8:45 – 10:00 Creating Interactive Dashboards**

###### *Discussion/exercises*

Learn more about interactive dashboard design within Tableau. See best practices in visual designs and explore how to produce dashboards of your own through hands-on exercises.

##### **10:00 – 12:00 Formatting Interactive Dashboards**

###### *Discussion/exercises*

Learn how to create filter and highlight actions and continue exercises on arranging and formatting dashboard elements in data visualization development.