Course Content

Course Description:

The Storytelling with Data course teaches you the fundamentals of data visualization and how to communicate effectively with data. You'll discover the power of storytelling and the way to make data a pivotal point in your story. The lessons in this illuminative text are grounded in theory, but made accessible through numerous real-world examples—ready for immediate application to your next graph or presentation.

Storytelling is not an inherent skill, especially when it comes to data visualization, and the tools at our disposal don't make it any easier. This book demonstrates how to go beyond conventional tools to reach the root of your data, and how to use your data to create an engaging, informative, compelling story.

Specifically, you'll learn how to:
- Understand the importance of context
- Determine the appropriate type of graph
- Recognize and eliminate the clutter
- Direct your audience's attention
- Think like a designer when visualizing data
- Leverage the power of storytelling to help your message resonate with your audience

Target Student:

For any student who needs to communicate something to someone using data. This includes, but is not limited to, analysts sharing the results of their work, students visualizing thesis data, managers needing to communicate in a data-driven way, philanthropists proving their impact, and leaders informing their board. Anyone can improve their ability to communicate effectively with data through the lessons in this course.

Prerequisites:

N/A

Storytelling with Data

Course ID#: 0360-700-00-W

Hours: 7

Topics:

Module 1: The Importance of Context
- Exploratory vs. Analysis
- Who, What, and How
- Consulting for Context: Questions to Ask
- The 3-Minute Story & Big Idea
- Storyboarding

Module 2: Choosing an Effective Visual
- Simple Text
- Tables
- Graphs
- Points
- Scatterplot
- Lines
- Line Graph
- Slopegraph
- Bars
- Vertical Bar Chart
- Stacked Vertical Bar Chart
- Waterfall Chart
- Horizontal Bar Chart
- Stacked Horizontal Bar Chart
- Area
- More Graphs
- What to Avoid

Module 3: Clutter is Your Enemy!
- Cognitive Load
- Clutter
- Gestalt Principles of Visual Perception
- Lack of Visual Order
- White Space
- Non-Strategic Use of Contrast
- Decluttering: Step-by –Step

Module 4: Focus Your Audience's Attention
- You See with Your Brain
- A Brief Lesson on Memory

- Iconic Memory
- Short-Term Memory
- Long-Term Memory
- Preattentive Attributes Signal Where to Look
- Preattentive Attributes in Text
- Preattentive Attributes in Graphs
- Size & Color

Module 5: Think like a Designer
- Affordances
- Accessibility
- Aesthetics
- Acceptance

Module 6: Dissecting Model Visuals
- Line Graph
- Annotated Line Graph with Forecast
- 100% Stacked Bars
- Leveraging Positive and Negative Stacked Bars

Module 7: Lessons in Storytelling
- The Magic of Story
- Constructing the Story
- The Narrative Structure
- The Power of Repetition
- Tactics for a Clear Story

Module 8: Pulling it All Together
- Understand the Context
- Choose an Appropriate Display
- Eliminate Clutter
- Draw the Right Attention
- Think Like a Designer
- Tell a Story

Module 9: Case Studies

Module 10: Final Thoughts