Arabian Institute For Training

Data Visualization

INTRODUCTION

- "Picture is Worth a thousand words", is a common saying. It is focused on the idea that a complex system can be presented in a single still image which can be understood and apprehended by everyone. The force of the data is presented through the means of its visualization, and the visualization represents the medium, a way to explore, present and express meaning of data.
- This Data Visualization training course will teach the participants ways to effectively visualize the data, using different tools and techniques. Using Excel and PowerPoint will be the basis of this training course, but the use of other software will also be discussed in depth through the training. The participants will learn how to incorporate statistics, design and aesthetics of both the data and the final visualization.
- This training course starts with the basic graphs and charts and evolves through dashboards, Infographics and multimedia presentations. The true power of visual presentation of the data will be explored through the examples from different industries, from production, through marketing to graphic design and multimedia.

This training course will highlight:

- What is the Data Visualization?
- How to Successfully Visualize the Data?
- How to Tell the Story through Data Visualization?
- How Visualization Techniques Help us in Determining the Patterns and Trends in Data?
- What are the common misperceptions of Data Visualization?
- How to Apply Visualization in their Industry?

OBJECTIVES

- The objective of this Data Visualization training course is to prepare participants for the use of powerful mediums of visualization to identify trends, patterns and other hidden elements of the data they are working with. Further, the training course aims at enhancing the knowledge of the delegates in the proper process of creating the visual presentation of their data. The differences between good and bad designs will be highlighted, as well as the steps in adequate visualization of the data.

At the end of this training course, you will learn to:

- Select the story for your visual presentation
- Understand the power of the visualization as a medium
- Identify the audience for your visual presentation
- Acquire the knowledge to use Excel and PowerPoint as visual presentation tools
- Get the insight into other software for data visualization
- Understand the story in the data
- Present the story you see in the data to the audience

TRAINING METHODOLOGY

- This Data Visualization training course training course uses a hands-on approach. The participants will themselves use the model data to prepare the visual presentation of the same. Participants will also be able to comment on the already prepared data visualizations and propose enhancements. The participants will walk through the process of data visualization, by identifying the story they want to tell and the audience the story is intended to. This will give participants the possibility to use the data models from their own industry and through the use of Excel and PowerPoint, as well as other software (Adobe Illustrator, 3D Max, etc.) create visualizations of the named data models.
- Examples of highly successful visualizations will also be presented as well as the way to determine the timeline in which the visualization can lose its effect.

ORGANISATIONAL IMPACT

- Whether you are in marketing, research or a production company, you need to present your products, results or achievements to a large audience. Companies have learned that the best way to present your data is through some sort of charts and graphs, however these presentation methods are a bit outdated and companies need to stand out in the crowd if they want their products to be purchased, their research to be notices, or their results to be appreciated, as a result of sending their employees on this training course, organizations can expect to benefit from:
- Acquiring the employees that are adept to visual presentation of the data
- The knowledge of how to identify the audience for the data it wants to present
- Identify the optimal software solution for data visualization
- Understand patterns and relations that were previously hidden

PERSONAL IMPACT

- Participants will learn how to perform the filtering of the data, identification of focused message to present to the audience, use of different visualization techniques for presenting the data; specifically, delegates will acquire:
- The structured way of data visualization
- Knowledge on how to differentiate good data visualization from the rest
- The understanding on how to find hidden patterns within the data
- Step-by-step process of data visualization
- Framework for balancing the statistics, design and media into one focused message
- How to avoid common pitfalls of data visualization?

WHO SHOULD ATTEND?

- This Data Visualization training course has been designed for professionals within marketing, production, business analytics, etc. As most of the people are now required to present their work basically any professional can attend this training.
- Consultants
- Marketing Managers
- Operation Managers
- Project Managers
- Financial Managers
- Data Analysis
- Urban Planners
- Transport and Traffic Engineers
- Supply Chain Managers
- Risk Managers
- Plant Managers
- Production Planners

Course Outline

Telling a Story through Data Visualization

- The Necessity of Data Visualization
- Basis of Visual Grammar
- Creating a Context
- Determining the Users
- Filtering the Data
- Common Visualization Software

Balance between Statistics, Design and Aesthetics

- Bar Charts, Line Charts and Pie Charts
- Advanced Charts (bubble charts, waterfall charts, etc.)
- Combining the Data from Excel with PowerPoint Presentations
- Let the Data Speak for Itself
- Choosing the Volume of the Data
- Color Management

Common Data Visualization Methods

- Maps and Charts
- Dashboards
- Infographics
- Sankey Diagrams
- Spider Charts
- Geographic Referencing
- Multimedia Presentations

Creating the Presentation

- Preparing the Data for the Presentation
- Choosing the Story
- Visual Cues
- Interactive Presentations
- Order Logic
- Adopting the Appropriate Display
- Avoiding Data Chaos
- Voice of the Customer
- Data Visualization Examples

Promoting and Updating the Data Visualization

- The Narrative Structure
- Piñata Principle
- Steal the Attention of the Audience
- When and How to Update the Data Visualization
- Use of Data Visualizations in Different Industries
- Applying the Data Visualization at Your Workplace

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