

# Infographics & Data Analytics for Oil & Gas Reporting

## INTRODUCTION

- The abundance of data makes it difficult to stand out in today's world, and to make your message seen, understood and accepted by the people therefore all the sophisticated data and analytics in the world won't matter, if it can't be consumed by an end user or a decision maker, client or colleague. Once you gather the data and perform your analysis, you need to be able to present that data in a way that makes sense to your end user. In other words, you have to visualize the data.
- Information graphics or infographics are graphic visual representations of information, data or knowledge intended to present complex information quickly and clearly.
- The presentation of data through Infographics makes a combination of graphs and charts that are focused on the main story that you want to tell to the audience.
- Recently, Oil and Gas companies began using infographics, which integrate graphics into data presentations. This Infographics & Data Analytics for Oil & Gas Reporting training course is aimed to equip the delegates with necessary skills to analyse numerical data, reporting and using graphics to present the data.

This training course will highlight:

- What is the Infographic, what makes them a great tool for the presentation?
- How to plan the design of Infographic?
- How to tell a focused story?
- How to use data to support your presentation?
- Using effective combination of graphs and charts to create Infographic
- Visualizing the information
- How to combine presentation tools?
- Use of the different software for creating infographics

## OBJECTIVES

- This Infographics & Data Analytics for Oil & Gas Reporting training course aims to provide professionals and analysts' in Oil and Gas companies, the necessary tools needed to present the abundance of data in one effective infographic, using available software like Tableau Public app. They will enhance their skills of using infographics to present the data in a way that can be readily communicated to others in the organization.
- Common analytical techniques and representation methods using Infographics
- The ability to recognize the types of analysis are best suited to Oil and Gas companies
- Understand what is important in designing Infographics
- Learn how to plan the Infographic
- Develop their skills in using presentation software
- Learn the steps in creating Infographic
- Create graphs from the data
- Combine graphs and charts to effectively support the storyline
- Understand the best ways to test and promote their Infographic

## TRAINING METHODOLOGY

- This Infographics & Data Analytics for Oil & Gas Reporting training course adopts a problem-based learning approach, in which delegates are presented with a series of examples from Oil and Gas and other sectors like Supply Chain and Logistics to quality control.
- Delegates will spend almost all the time exploring Excel's data analysis and representation functionality, the concept of Infographics and its application in practice, as well as Tableau Public app, as well as other apps available.

## ORGANISATIONAL IMPACT

- Individuals exposed to this Infographics & Data Analytics for Oil & Gas Reporting training program will develop new insights into the use of Excel and the field of data analysis, and they will learn why data analysis technique is essential to delivering the right quality products and services at the lowest costs. They will improve their report writing skills and integrate graphics into data presentation.
- The organization will acquire structured and effective method to present and promote their solutions, activities, ideas, and in general messages they would like to present to the clients or stakeholders.
- Benefiting from clarifying and summarizing the complex information
- Train the workforce to adopt effective and concise method for presenting information
- Adopt organized and planned way of analysis and presentation of data
- Reveal the hidden relationship between the data analyzed
- Improve the comprehension of the complex processes
- Provide a clear, focused, and data supported messages to the clients and stakeholders

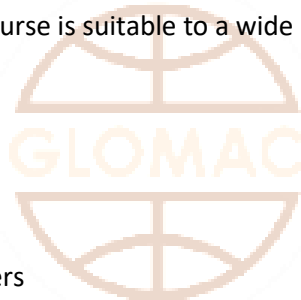
## PERSONAL IMPACT

This training course teaches the competencies that enable participants to:

- Learn how to recognize the patterns in the data
- Develop an image dominant presentation to present the required message
- Learn the steps of creating the effective Infographic
- Acquire the knowledge how to work on the Infographic alone, or as a member of the team
- Learn how to combine different presentation software
- Learn how to eliminate the unnecessary so that the important data can be emphasized
- Use the positive critique to improve your presentation skills

## WHO SHOULD ATTEND?

- This Infographics & Data Analytics for Oil & Gas Reporting training course has been designed for Oil and Gas professionals whose jobs involve the manipulation, representation, interpretation and/or analysis of data. Familiarity with a PC and in particular with Microsoft Excel is assumed.
- This training course involves extensive computer-based data analysis using Excel 2010 and therefore delegates will be expected to be numerate and to enjoy working with numerical data on a computer. This training course is suitable to a wide range of professionals but will greatly benefit:
  - Marketing Specialist
  - Project Managers
  - Public Relations Specialists
  - Marketing Managers
  - Campaign Managers
  - Business Development Managers
  - Operational Managers involved in the data analysis
  - Financial Managers
  - Risk Managers
  - Board Level Executives and Non-executives



## Course Outline

Amongst a wide range of interesting topics, the following will be prioritised:

- Fundamental Statistics
- Infographics Techniques using Excel
- Basic of Oil and Gas Data Mining and Representation
- Frequency Analysis
- The Importance of Regression Analysis in Oil and Gas Companies
- Confidence Interval
- Hypothesis Testing

## Introduction and Descriptive Statistics

- What is Data Analysis?
- A reminder of elementary statistics and compensations for small sample sizes
- A Quick-start Tutorial for Excel
- Describing Data Sets using Statistics
- Representing Data Sets Graphically
- How to create Info-graphic in Excel
- How Info-graphics Data Presentation compares to the Traditional Methods

## Frequency and Time Series Analysis

- Frequency of Occurrence
- Histograms
- Pareto Analysis
- Pivot Tables and Pivot Charts
- How Excel Dashboard is Different from Infographics
- How to combine Excel and Power Point for Creating Infographics
- Time Series Analysis
- Trending Data
- Estimation Theory and Its Relevant to Oil and Gas Data

## Scenario Analysis, Confidence and Six Sigma

- Modelling Scenario and their Application in Oil and Gas Companies
- Interactive Spreadsheets
- Confidence Intervals
- Usefulness of Control Chart for Oil and Gas Companies
- An Introduction to Six Sigma
- Error Bars
- Tools for Creating Infographics
- Practical Creation of Infographic based on Model Data

## Regression Analysis Equations and System Modeling

- Simple Regression Analysis / Maximum likelihood Estimations
- Polynomial Curve Fits
- Describing Data Using Equations
- Prediction
- The Applications of Regression to Oil and Gas Companies
- Analysis Of Variance (ANOVA)
- Comparing Different Types of Infographics

## The Infographics Creation and Critique

- Presenting Data Using Appropriate Reporting Style
- Practice Creating the Infographics and Its Presentation