Skills International for Training & Consulting

Training Course

Advanced Data Visualization,

Analysis, and Reporting





Course Plan

Introduction

In the era of big data and digital transformation, the ability to visualize, analyze, and report data effectively has become a critical skill for professionals across all industries. This training course is designed to equip participants with advanced techniques in data visualization and analysis, enabling them to transform raw data into meaningful insights and communicate results through compelling, data-driven reports. The course combines theory with hands-on practice using industry-standard tools and visualization platforms.

Course Objectives:

- Understand the principles and best practices of advanced data visualization.
- ✓ Apply analytical techniques to interpret complex data sets.
- Select appropriate visualizations based on data types and reporting objectives.
- ✓ Use tools such as Power BI, Tableau, or Excel for advanced visualization.
- Design interactive dashboards and visual reports that drive decision-making.
- Avoid common visualization pitfalls and enhance clarity and accuracy.





- Communicate data findings to technical and non-technical audiences.
- Integrate multiple data sources for dynamic and real-time reporting.

Who Should Attend?

- Data analysts and business intelligence professionals
- Reporting and performance monitoring specialists
- Project managers and decision-makers
- IT professionals involved in analytics
- Anyone interested in advancing their skills in data storytelling and reporting

Training Methods:

- ✓ Online Video material.
- ✓ Presentation.
- ✓ Live Interactive sessions.
- ✓ Course presenter will make extensive use of all tools that will be needed for the virtual environment.
- ✓ Questions & Answers





Course Outline:

Day One

- Introduction to advanced data visualization
- Data types and their impact on visualization choices
- Storytelling with data: from insight to impact
- Best practices in designing clear and effective charts
- Exploring trends, patterns, and outliers visually

Day Two

- Choosing the right chart: comparison, composition, distribution, and relationship
- Color theory and visual perception in dashboards
- Designing dashboards for different audiences
- Data cleansing and preparation for visualization
- Hands-on with Excel advanced charting features





Day Three

- Using PivotTables and PivotCharts for dynamic reporting
- Introduction to Power BI: Interface and basic concepts
- Building interactive reports and dashboards in Power BI
- Introduction to Tableau: Navigation and visualization options
- Using filters, slicers, and drill-downs effectively

Day Four

- Combining multiple data sources in one report
- KPIs and metrics visualization
- Geographic data visualization and map charts
- Real-time dashboards and streaming datasets
- Exporting and sharing reports with stakeholders

Day Five

- Data ethics and integrity in reporting
- Avoiding misleading or biased visualizations
- Automation of data reporting processes
- Measuring the impact of data visualizations
- Final project: Designing a complete interactive dashboard





Training Details



