

Table of Contents: 3-Day Training on Advanced Data Analysis and Presentation Skills (WHO)

Day 1: Fundamentals of Data Analysis in Excel (8 Hours)

Session 1: Introduction to Data Analysis in Excel

¢ Introduction to Data Analysis:

- Difference between raw data and analyzed insights- Importance of data analysis in business decision-making ¢ Getting Started with Excel:

- Overview of Excel's interface- Exploring built-in data analysis tools ¢ Basic Statistics for Data Analysis:

- Mean, Median, Mode
- Variance and Standard Deviation
- Data distribution concepts

¢ Excel Functions for Statistical Analysis:

- AVERAGE, MEDIAN, STDEV, VAR

Session 2: Correlation and Regression Analysis

¢ Understanding Correlation:

- Positive, negative, and no correlation
- Practical examples of correlation ¢ Regression Analysis:
- Simple linear regression for predictive insights
- Interpreting regression results

Session 3: What-If Analysis and Solver ¢

What-If Analysis Techniques:

- Goal Seek for achieving desired results
- Scenario Manager for comparing multiple scenarios
- Data Tables for one and two-variable analysis ¢ Introduction to Solver:
- Using Solver for solving optimization problems

Session 4: Data Visualization Basics

¢ Creating and Customizing Basic Charts:

- Bar Charts, Line Charts, and Pie Charts
- Color coding based on data ranges
 - Advanced Conditional Formatting for Data Analysis:
- Using formulas to create dynamic formatting rules
- Conditional formatting for trend analysis
- Visual indicators for KPIs

Day 2: Advanced Data Analysis and Visualization (8 Hours)

Session 1: Advanced Data Visualization Techniques

- Exploring Advanced Charts in Excel:
- Waterfall Charts for business changes over time
- Funnel Charts for process visualization
- Treemap and Sunburst Charts for hierarchical data
- Map Charts for geographical data insights
- Scatter and Combo Charts for relationships and comparisons
- Customization Tips:
- Formatting charts for better insights and audience understanding

Session 2: Regular and Advanced Analysis Techniques

- Performing Regular Data Analysis:
- Filtering and sorting data
- Summarizing data with Pivot Tables and Pivot Charts
- Qualitative vs. Quantitative Analysis:
 - How to identify and differentiate them
- Advanced Analysis Tools in Excel:
- Using VLOOKUP, HLOOKUP, and INDEX-MATCH for data extraction
- Array formulas: UNIQUE, FILTER, SORT
- Error-handling with IFERROR

Session 3: Using AI Tools and Co-Pilot for Data Analysis

- Introduction to AI in Excel.
- Overview of AI-powered tools - Benefits of automation in data analysis • Excel Co-Pilot Features:
- Generating insights and recommendations - Automating repetitive tasks in Excel
 - Using inbuilt Data Analysis tools in excel
 - Using ChatGPT for data analysis
 - Hands-On Practice:
- Applying AI tools for faster analysis and decision-making

Session 4: Designing Interactive Dashboards

- Dashboard Creation Techniques:
 - Adding slicers and timelines for interactivity
 - Embedding charts and tables Using theme for consistency
- Finalizing Dashboards:
 - Making them stakeholder-ready

Day 3: Advanced PowerPoint for Data Presentation (8 Hours)

Session 1: Creating Effective and Attractive Presentations

- Key Elements of an Attractive Presentation:
 - Balancing content, visuals, and text
- Using Slide Master:
 - Ensuring consistency in design and formatting
- Designing Infographics:
 - Representing data creatively and effectively

Session 2: Interactive PowerPoint Features

- Adding Interactivity
 - Creating clickable links and action buttons
 - Embedding interactive charts and dashboards from Excel
 - Using hyperlinks for seamless navigation
- Multimedia Integration
 - Incorporating videos, images, and audio for engagement

Session 3: Infographics and Visual Storytelling

- Choosing the Right Infographics:
 - Enhancing Communication:
 - • Designing Attention
- Creative cover slide designs and layouts

Session 4: Advanced Presentation Techniques and Delivery

- Working with Animations and Transitions:
- Using animations to emphasize points
- Choosing appropriate transitions for a professional look
 - PowerPoint AI Tools:
 - Utilizing Co-Pilot and Designer for quick enhancements
 - Exploring some other AI tool to create an attractive presentation
 - Practical Exercise:
- Creating and delivering a sample presentation

