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 consistancy
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- 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