



Business Intelligence: Data Analysis and Reporting Techniques



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Introduction:

This business intelligence BI, data analytics, and reporting program is designed to introduce hands-on business intelligence BI to allow you to clean, normalize, and interpret large volumes of data. You can establish historical relationships, analyze the current situation, and predict future strategies. BI's borderless application covers operational, tactical, and strategic business decisions. It spans all departments and cascades down to all users who perform data cleansing, reporting, analysis, modeling, integration, and automation.

Exploring business intelligence reporting techniques is crucial for creating meaningful and practical reports. What is business intelligence reporting? It encompasses preparing and analyzing data visualizations that assist in making informed business decisions. Engaging with business intelligence reporting best practices, participants will learn how to create reports that are not only informative but also actionable and visually compelling. Business intelligence reporting solutions discussed in this unit will cover creating dynamic reports that can adapt to changing data, ensuring participants can build reports that reflect the latest information.

Understanding Business Intelligence and Data Analytics:

Business intelligence and data analytics are integral components of this course, providing you with the foundation to analyze and report vast amounts of data efficiently. Data analysis for business intelligence is instrumental in converting raw data into actionable insights, thus supporting strategic decision-making. Throughout the course, various business intelligence and data analytics tools will empower you with the skills needed for effective data manipulation and reporting.

Business Intelligence BI encompasses a range of tools and strategies used for data analysis and reporting in the business environment. A clear definition of business intelligence BI provides a foundation for building practical skills and insights. As part of the course, participants will be exposed to various business intelligence BI solutions that help to streamline the process of gathering, analyzing, and leveraging data for strategic advantages.

Targeted Groups:

- Business professionals.
- Business analysts.
- Data analysts.
- Research analysts.
- Finance professionals.
- Marketing and sales professionals.
- HR professionals.
- IT professionals.
- Administrative Staff.
- Business professionals and staff from any function must learn and apply state-of-the-art data analysis techniques to their daily business reporting and decision-making.

Course Objectives:

At the end of this business intelligence BI, data analytics, and reporting course, the participants will be able to:

- Boost Excel Business Intelligence BI expertise in data slicing, dicing, massaging, and data aggregation and modeling.
- Perform data normalization, consolidation, report writing, analysis, and reconciliation.
- Link Excel with Access, Web, Text, Internet, SQL, ERPs, and other databases to develop dynamic BI models, dashboards, scorecards, and flash management reports.
- Advance and enhance the look and feel of reports using dynamic visualization techniques
- Acquire numerous tips and tricks that enable them to work efficiently.

Targeted Competencies:

At the end of this business intelligence BI, data analytics, and reporting training, target competencies will:

- Data Analysis Proficiency.
- Reporting and Visualization Skills.
- Critical Thinking and Problem-Solving.
- Data Interpretation and Insight Generation.
- Technical Proficiency in BI Tools.
- Data Quality and Integrity Management.
- Effective Communication of Data Insights.
- Strategic Decision-Making Support.
- Advanced Analytical Techniques.
- Business Process Understanding.

Business Intelligence Reporting Strategy:

At the heart of this business intelligence BI, data analytics, and reporting course lies the business intelligence reporting strategy, which equips participants with the knowledge and tools required to present data that informs decision-making and supports business strategies. Participants will learn how to curate and tailor their reporting to their organization's needs, enhancing their ability to convey vital information through informed business intelligence and data analysis practices.

Course Content:

Unit 1: Data Analysis Tools and Techniques:

- Consolidating data from separate files and sheets.
- Advanced data validation using lists, dates, and custom validation.
- Powerful array functions.
- Cell management tools: left, right, mid, concatenate, value.
- Naming, editing, and managing cells and ranges.
- Subtotal, sumif, sumifs, sum-product, count, countif, countifs.
- Looking up data, texts, and values using vlookup.
- The incredible table-tools technique.
- Slicing dates into day names, weeks, week numbers, month names, years, and quarters.
- Text-to-columns and dynamic trimming using trim and lens.
- Managing texts and numbers using replace, find, and substitute.
- Text change functions.

Unit 2: Mastering Data Reporting: The 20 Must Learn Pivot-Tables Tools:

- Creating pivot tables.
- Number formatting techniques.
- Designing report layout.
- Sorting in ascending, descending, and more sort options.
- Filtering labels and values.
- Expanding and collapsing reports.
- Drill down option.
- Summarize values by sum, average, minimum, maximum, count.
- Show values as % of total and % of.
- Pivot table options.
- Inserting formulas.
- Data analysis.
- Copying pivot tables.
- Creating pivot charts.
- Dynamic chart labeling.
- Mastering the slicer.
- Showing report filter pages.
- Linking pivot tables and pivot graphs with PowerPoint.
- Conditional formatting with pivot tables.
- Designing reports using the get pivot data.

Unit 3: Data Modeling and Integration:

- Spinner.
- Check box data modeling with the if function.
- Option button data modeling with if function.
- List box data modeling with choose function.
- Scenario manager.
- Linking Excel with text files.
- Linking Excel with databases Access.
- Know the Linking Excel with SQL.
- Linking Excel with the Internet.
- Linking Excel with Excel.

Unit 4: Charting and Visualization Techniques:

- Using the camera tool.
- Working with formula-driven visualizations.
- Using fancy fonts.
- Leveraging symbols in formulas.
- Working with sparklines.
- Creating unconventional style charts.

Unit 5: Additional Techniques

- Controlling and protecting your reports, worksheets, and workbooks.
- Data entry form.
- Custom list.
- Text-to-speech.
- Advanced conditional formatting.
- Shortcuts for your daily work.