

Comprehensive Mastery of Power BI from Basics to Advanced





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Introduction:

This training program is crafted to equip participants with a profound understanding of Microsoft Power BI, from basic functionalities to advanced data analytics and visualization techniques. It is designed to empower professionals to harness the full potential of Power BI, transforming complex data into actionable insights.

Program Objectives:

By the end of this program, participants will be able to:

- Master the Power BI interface and its comprehensive capabilities.
- · Connect, transform, and visualize data effectively.
- Implement advanced analytical techniques using DAX.
- Create and share interactive dashboards and reports.
- Integrate Power BI with other data sources and services for enhanced business intelligence.

Targeted Audience:

- Data Analysts
- Business Intelligence Professionals
- IT Professionals
- Project Managers
- Professionals involved in data handling and reporting.

Program Outline:

Unit 1:

Introduction to Power BI:

- Overview of Power BI and its components within the business intelligence landscape.
- · Setting up and navigating the Power BI environment.
- Basic data importation and the initial setup of data models.



- Exploration of the data transformation capabilities within Power Query.
- Introduction to creating basic visualizations and reports.

Unit 2:

Data Modeling Essentials:

- Understanding and creating relationships between different data tables.
- Utilizing DAX to create calculated columns, measures, and tables.
- Introduction to key DAX functions for basic data calculations.
- Strategies for organizing data models to enhance report performance.
- Best practices in data modeling to support scalable solutions.

Unit 3:

Advanced Data Analysis and Visualization:

- Developing complex DAX expressions to solve real-world analytical problems.
- · Advanced visualization techniques for more compelling data stories.
- Utilizing time intelligence functions to create dynamic reports.
- Incorporation of parameters and what-if analysis features.
- Techniques for optimizing report interactivity and responsiveness.

Unit 4:

Publishing and Administration:

- Detailed process for publishing reports and dashboards to the Power BI service.
- Configuring dashboards with real-time updates and data alerts.
- Understanding the administration of workspaces in Power BI Service.
- Security and access management practices for reports and dashboards.
- Best practices for maintaining and troubleshooting published reports.

Unit 5:



Integrations and Advanced Configurations:

- Integrating Power BI with various data sources like SQL databases, Excel, and web APIs.
- Automating data refreshes and managing on-premises data gateways.
- Custom visualizations and the use of R and Python scripts within Power BI.
- Enterprise-level deployment strategies and performance considerations.
- Exploring advanced analytics capabilities through AI insights.