Introduction

Welcome to the comprehensive course on Analyzing and Visualizing Data with Power BI. In today's data-driven world, effectively interpreting and presenting data is essential for businesses to make informed decisions and stay ahead of the competition. Developed by Microsoft, Power BI is a leading tool that allows professionals to analyze, visualize, and share insights from data effortlessly.

This course is designed to guide you through the key features and functionalities of Power BI, whether you are an experienced data analyst or just starting in data visualization. Throughout the course, you'll gain hands-on experience, from importing and transforming data to creating interactive reports and dashboards, ensuring that you are prepared for the Analyzing and Visualizing Data with Power BI certification.

By the end of the course, you'll be equipped to leverage Power BI's full potential and transform raw data into actionable insights that drive success within organizations.

Course Outline

Unit 1: Introduction to Analyzing and Visualizing Data with Power BI

- Overview of Power BI and its role in data analysis.
- Introduction to the Power BI interface and its key features.
- The significance of data visualization in the decision-making process.
- A roadmap of the course structure and objectives.
- Understanding the benefits of using Power BI for data analysis and visualization.

Unit 2: Data Importing and Transformation in Power BI

- Import data from various sources including Excel, SQL Server, and CSV files.
- Leverage Power Query Editor for data transformation.
- Clean and shape data to prepare it for analysis.
- Perform data modeling by creating relationships between tables.
- Understand different data types and formatting options available in Power BI.

Unit 3: Creating Visualizations in Power BI

- Explore a variety of visualizations including bar charts, line charts, and pie charts.
- Customize visualizations with colors, fonts, and formatting options.
- Add interactive elements such as slicers, filters, and drill-throughs to enhance analysis.
- Use built-in and custom visuals to craft engaging reports.

- Learn best practices for creating effective visualizations that communicate insights clearly.

Unit 4: Advanced Analysis Techniques with Power BI

- Introduction to DAX (Data Analysis Expressions) for advanced calculations and measures.
- Create calculated columns and measures for complex calculations.
- Implement time intelligence functions to analyze trends over time.
- Explore statistical analysis techniques such as forecasting and clustering.
- Dive into advanced data visualization techniques for in-depth insights.

Unit 5: Sharing and Collaboration in Power BI

- Publish reports and dashboards to Power BI Service for sharing with stakeholders.
- Configure sharing settings and permissions to control access to reports.
- Collaborate with team members using Power BI workspaces and apps.
- Set up scheduled data refreshes to keep reports up-to-date.
- Learn how to embed Power BI content into other applications and websites.