## Training Methodology

This course offers a balanced mix of theory and hands-on practice to help participants master Power BI. The methodology includes:

- Instructor-led demonstrations: Live walkthroughs of Power BI's features and dashboard creation.
- Hands-on exercises: Participants will work on building Power BI reports and dashboards with real-world data.
- Interactive sessions: Discussions, Q&A, and peer learning to enhance understanding of Power BI's capabilities.
- Case studies: Practical application of skills through case studies to address business challenges.
- Continuous feedback: Participants receive feedback on their reports and dashboards to improve their skills in data visualization and analysis.

#### **Course Overview**

The Power BI course is designed to provide participants with a comprehensive understanding of how to use Power BI for data analysis and visualization. Participants will learn how to connect to various data sources, transform data, and create interactive reports and dashboards. By the end of the course, participants will be able to analyze and visualize data to drive business decisions effectively.

#### What You Will Learn

- Data Connection and Transformation: Learn how to connect to various data sources and clean,

transform, and load data into Power BI.

- Data Modeling: Understand how to create relationships between data sets and build a robust data model.
- Visualization Techniques: Use different visualization tools to represent data through charts, graphs, and maps.
- Creating Dashboards: Learn how to design interactive and dynamic dashboards for business reporting.
- Data Analysis Expressions (DAX): Apply DAX formulas to perform advanced calculations and enhance your reports.

#### Who Should Learn

- Data Analysts: Individuals responsible for analyzing and presenting business data in a visual format.
- Business Intelligence Professionals: Professionals looking to enhance their data reporting capabilities.
- Financial Analysts: Those who need to create reports for budgeting, forecasting, and financial analysis.
- Managers and Executives: Decision-makers looking for data-driven insights to make strategic business decisions.
- Students and Researchers: Individuals handling large datasets and needing to visualize findings effectively.

## 5 Training Modules

## Module 1: Getting Started with Power BI

- Overview of Power BI: Introduction to the platform.
- Connecting to data sources (Excel, SQL, web).
- Basic data transformation using Power Query Editor.

#### Module 2: Data Modeling in Power BI

- Creating relationships between tables and managing data models.
- Building hierarchies, calculated columns, and measures.
- Using Data Analysis Expressions (DAX) for calculations.

#### Module 3: Data Visualization and Reporting

- Designing reports with charts, graphs, and maps.
- Customizing visual elements for clearer data presentation.
- Implementing slicers, filters, and drill-downs for interactive reports.

#### Module 4: Creating Dashboards and Sharing Insights

- Building dynamic dashboards with multiple reports.
- Publishing reports and dashboards to Power BI Service.
- Sharing and collaborating on Power BI dashboards with colleagues.

#### Module 5: Advanced Features and Automation

- Implementing row-level security for data access control.
- Automating data refresh and schedule management.
- Integrating Power BI with other tools (Excel, Power Apps).

# Conclusion

By the end of this course, participants will have the skills to create powerful, interactive reports and dashboards using Power BI. They will be able to connect to various data sources, model data, and visualize insights to drive decision-making. This course is ideal for anyone looking to enhance their business intelligence and data visualization skills.