



Detailed Workshop Schedule Power BI

Split into 3 core parts: **Data Preparation, Visualization, and Analysis**

Session 1 – Introduction to Power BI & Data Loading (2 Hours)

Concepts Covered:

- What is Business Intelligence (BI)?
- Introduction to Power BI ecosystem: Desktop, Service, Mobile
- Power BI Interface Overview
- Connecting to different data sources: Excel, CSV, SQL
- Data types, importing vs direct query
- Data cleaning using Power Query Editor:
 - Removing nulls, renaming columns
 - Changing data types
 - Filtering rows and handling duplicates

Hands-on:

- Load a sales dataset into Power BI
- Clean and transform data using Power Query

Session 2 – Data Modeling & Visualizations (2 Hours)

Concepts Covered:

- Introduction to Data Models
- Relationships: One-to-Many, Many-to-One
- Creating calculated columns and measures using **DAX**
- Common DAX functions: SUM, AVERAGE, IF, CALCULATE, FILTER
- Creating Visuals:
 - Bar, Line, Pie, Card, Table, Matrix
 - Slicers and Filters
 - Custom Visuals

Hands-on:

- Create relationship between Sales and Region tables
- Build basic visuals to analyze product/category-wise sales
- Add slicers for filtering by region/date

Session 3 – Interactive Dashboards & Publishing (2 Hours)

Concepts Covered:

- Creating Interactive Dashboards
- Drill-downs, Tooltips, Bookmarks
- Sorting, formatting, and customizing visuals
- Page-level vs Report-level filters
- Power BI Service:
 - Publishing reports to the cloud
 - Sharing dashboards with others
 - Scheduled refresh & workspace overview
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Hands-on:

- Create a fully interactive Sales Dashboard
- Add buttons, tooltips, and drill-through pages
- Publish the report to Power BI Service and share the link



Learning Outcomes

Participants will:

- Understand the Power BI ecosystem
- Clean and transform raw data into usable formats
- Create insightful dashboards and reports
- Use DAX to perform calculations and aggregations
- Share insights with decision-makers through interactive reports



Deliverables

- Power BI dashboard file (.pbix)
- Sample dataset + practice files
- Power BI Cheat Sheet (DAX & visuals)
- Certificate of Participation
- Dashboard Publishing Guide (PDF)

