

MS 20778 B: Analyzing Data

With Power BI



Days: 3

Prerequisites: Before attending this course, students must have:

Some basic knowledge of data warehouse schema topology (including star and snowflake schemas)

Some exposure to basic programming constructs (such as looping and branching)

An awareness of key business priorities such as revenue, profitability, and financial accounting is desirable.

Familiarity with Microsoft Office applications – particularly Excel

Audience: The course will likely be attended by SQL Server report creators who are interested in alternative methods of presenting data.

Description: The main purpose of the course is to give students a good understanding of data analysis with Power BI. The course includes creating visualizations, the Power BI Service, and the Power BI Mobile App.

OUTLINE:

MODULE 1: POWER BI DESKTOP DATA TRANSFORMATIONS

This module describes how to import data into Power BI.

LESSONS

- What is Power BI?
- Power BI data
- Transformations

LAB: IMPORT DATA TO POWER BI

- Import data to Power BI desktop
- Import data from CSV files
- Import data from a less structured file

AFTER COMPLETING THIS MODULE, STUDENTS WILL BE ABLE TO:

- Describe what Power BI is and what it does.
- Describe the types of data.
- Perform data transformations.

MODULE 2: POWER BI DESKTOP MODELING

This module introduces Power BI desktop modeling.

LESSONS

- Optimizing data models
- Calculations
- Hierarchies

LAB: MANAGE POWER BI DATA

- Manage table relationships
- Last year comparison
- Year to date
- Market share
- Optimize the data model

AFTER COMPLETING THIS MODULE, STUDENTS WILL BE ABLE TO:

- Optimize data models.
- Perform calculations with Power BI data.
- Describe and create hierarchies.

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MODULE 3: POWER BI DESKTOP VISUALIZATION

At the end of this module students will be able to create a Power BI desktop visualization.

LESSONS

- Visualizing your data
- Working with multiple visualizations

LAB: CREATE REPORTS WITH VISUALIZATIONS

- Cross-tabular reports
- Part-to-Whole reports
- Relationship reports
- Trend reports
- Rank reports

AFTER COMPLETING THIS MODULE, STUDENTS WILL BE ABLE TO:

- Visualize data using Power BI
- Work with multiple visualizations.

MODULE 4: POWER BI SERVICE

This module describes how to implement the Power BI service.

LESSONS

- Working with the Power BI service
- Configuring a dashboard
- Viewing a Power BI Dashboard

LAB: IMPLEMENTING THE POWER BI SERVICE

- Upload a Power BI report
- Share a Power BI dashboard
- Configure data refresh

AFTER COMPLETING THIS MODULE, STUDENTS WILL BE ABLE TO:

- Work with the Power BI service.
- Configure a Power BI dashboard.
- View a Power BI dashboard.

MODULE 5: WORKING WITH EXCEL

This module describes how to connect to Excel as a source of data.

LESSONS

- Importing data from excel
- Analyzing data in Excel

LAB: WORKING WITH EXCEL

- Uploading an Excel file with an Excel table
- Uploading an Excel file with a data model

AFTER COMPLETING THIS MODULE, STUDENTS WILL BE ABLE TO:

- Import data from excel.
- Analyze data in Excel.

MODULE 6: ORGANIZATION CONTENT PACKS, SECURITY, AND GROUPS

This module describes how to collaborate with Power BI data.

LESSONS

- Collaboration
- Content packs

LAB: WORKING WITH ORGANIZATION CONTENT PACKS

- Create a content pack
- Edit a content pack
- Share a content pack

AFTER COMPLETING THIS MODULE, STUDENTS WILL BE ABLE TO:

- Share data for collaborative purposes.
- Create, edit, and share content packs.

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MODULE 7: DIRECT CONNECTIVITY

This module describes various connectivity options using Power BI.

LESSONS

- Cloud data
- Connecting to analysis services

LAB: DIRECT CONNECTIVITY

- Direct connectivity from Power BI desktop
- Direct connectivity from the Power BI service

AFTER COMPLETING THIS MODULE, STUDENTS WILL BE ABLE TO:

- Access data in SQL Azure.
- Connect to SQL Server Analysis Services.

MODULE 8: DEVELOPER API

This module describes the developer API within Power BI.

LESSONS

- The developer API
- Custom visuals

LAB: USING THE DEVELOPER API

- Using custom visuals

AFTER COMPLETING THIS MODULE, STUDENTS WILL BE ABLE TO:

- Describe the developer API.
- Use the developer API to create custom visuals.

MODULE 9: POWER BI MOBILE APP

This module describes the Power BI mobile app.

LESSONS

- The Power BI mobile app
- Using the Power BI mobile app
- Power BI embedded

AFTER COMPLETING THIS MODULE, STUDENTS WILL BE ABLE TO:

- Describe the Power BI mobile app.
- Download and use the Power BI mobile app.
- Describe Power BI embedded and when you would want to use it.