Analyzing Data with Power BI - MOC On Demand (MS-20778)

Modality: On Demand

Duration: 2 Days

SATV Value: 2

This course is for professionals planning to enroll in the 70-778 Exam leading to the 70-778 Certification. The official exam voucher is not included in this course. However, the official exam voucher can be purchased separately on request.

About this Course:

This course is only accessible for 90 days from the enrollment date and is a Microsoft On-Demand Course. Candidates having annual subscriptions or candidates who purchase this course individually will lose access to this course after 90 days.

This intermediate-level course provides a comprehensive insight on Data Analyzing with Power BI Desktop and Mobile Application. It presents an incredible learning opportunity for business owners and users working with data metrics. Professionals get to learn the core concepts of Data Visualization and Analysis and build familiarity with the core features and functionalities of Power BI. On average, a professional Microsoft BI Administrator earns $87,378 annually.

Course Objectives:

The core objective of this course is to help professionals develop a better understanding and sound knowledge of the following key concepts:

- Desktop Modeling and Desktop Visualization in Power BI
- Desktop Data Transformation and Power BI Service Implementation
- Fundamentals of Self-Service Business Intelligence Solutions
- Developing Business Intelligence Reports and Dashboards
- Power BI Data Collaboration Essentials
- Connecting to Data Stores and Excel Data
- Working with Power BI Portal and Report Creation
- Shaping and Combining Power BI Data
- Getting to Know Developer API in Power BI
- Interactive Data Visualization Essentials and Fundamentals
- Direct and Cloud Data Connectivity
- Power BI Mobile Application Fundamentals

Audience:

This course is specifically tailored for SQL Server Report Creators and Professionals interested in learning unique methods of data presentation.

Prerequisites:

Professionals planning to enroll in the Analyzing Data with Power BI – MOC On-Demand (MS-20778) Course must comply with the following prerequisites:

- Conceptual Understanding of Reporting and Relational Databases
- Familiarity with Programming Constructs such as Branching & Looping
- Knowledge of Essential Business Priorities (Profitability, Revenue, & Accounting)
- Basic Understanding of Data Warehouse Schemas such as Snowflake & Star Schema
- Working Knowledge of Microsoft Excel and Office Applications

Course Outline:

Module 1: Introduction to Self-Service BI Solutions

Introduces business intelligence (BI) and how to self-serve with BI.

Lessons

- Introduction to business intelligence
- Introduction to data analysis
- Introduction to data visualization
- Overview of self-service BI
- Considerations for self-service BI
- Microsoft tools for self-service BI

Lab : Exploring an Enterprise BI solution

- Viewing reports
- Creating a Power BI report
- Creating a Power BI dashboard

After completing this module, students will be able to:

- Describe the trends in BI
- Describe the process of data analysis in Power BI.
- Use the key visualizations in Power BI.
- Describe the rationale for self-service BI.
- Describe considerations for self-service BI.
- Understand how you can use Microsoft products to implement a BI solution.

Module 2: Introducing Power BI

This module introduces Power BI desktop, and explores the features that enable the rapid creation and publication of sophisticated data visualizations.

Lessons

- Power BI
- The Power BI service

Lab : Creating a Power BI dashboard

- Connecting to Power BI data
- Create a Power BI dashboard

After completing this module, students will be able to:

- Develop reports using the Power BI Desktop app.
- Use report items to create dashboards on the Power BI portal.
- Understand the components of the Power BI service including licensing and tenant management.

Module 3: Power BI

At the end of this module students will be able to explain the rationale and advantages of using Power BI.

Lessons

- Using Excel as a data source for Power BI
- The Power BI data model
- Using databases as a data source for Power BI
- The Power BI service

Lab : Importing data into Power BI

- Importing Excel files into Power BI
- Viewing reports from Excel files

After completing this module, students will be able to:

- Describe the data model and know how to optimize data within the model.
- Connect to Excel files and import data
- Use on-premises and cloud Microsoft SQL Server databases as a data source, along with the R script data connector
- Take advantage of the features of the Power BI service by using Q&A to ask questions in natural query language, and create content packs and groups.

Module 4: Shaping and Combining Data

With Power BI desktop you can shape and combine data with powerful, buil-in tools. This module introduces the tools that are available for preparing your data, and transforming it into a form ready for reporting.

Lessons

- Power BI desktop queries
- Shaping data
- Combining data

Lab : Shaping and combining data

- Shape power BI data
- Combine Power BI data

After completing this module, students will be able to:

- Perform a range of query editing skills in Power BI
- Shape data, using formatting and transformations.
- Combine data together from tables in your dataset.

Module 5: Modeling data

This module describes how to shape and enhance data.

Lessons

- Relationships
- DAX queries
- Calculations and measures

Lab : Modeling Data

- Create relationships
- Calculations

After completing this module, students will be able to:

- Describe relationships between data tables.
- Understand the DAX syntax, and use DAX functions to enhance your dataset.
- Create calculated columns, calculated tables and measures.

Module 6: Interactive Data Visualizations

This module describes how to create and manage interactive data visualizations.

Lessons

- Creating Power BI reports
- Managing a Power BI solution

Lab : Creating a Power BI report

- Connecting to Power BI data

- Building Power BI reports
- Creating a Power BI dashboard

After completing this module, students will be able to:

- Use Power Bi desktop to create interactive data visualizations.
- Manage a power BI solution.

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:

- Use Power BI direct connectivity to access data in Azure SQL data warehouse, in addition to big data sources such as Hadoop
- Use Power BI with SQL Server Analysis Services data, including Analysis services modles running in multidimentional mode.

Module 8: The 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

- Power BI mobile apps
- 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.