File Home Insert Draw Page Layout Formulas Data Review View Developer Help Power BI Power Pivot My Macros

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The Modern Excel
Power BI Expert

Table Slicer PivotTable PivotChart Interactive Dashboards

Data Model DAX Power Pivot Power Query Power BI Excel Online

Table of Contents

Power BI Expert – The Mastery Skills

A customizable course according to your company's requirements.

Duration

16 hours

Objectives

The course aims to transform your experience and engagement with Excel.

1) Power BI Fundamentals Recap

2) Advanced Data Modeling Strategies

3) Expert-Level DAX Mastery

4) Advanced Power Query Scripting

5) Advanced Data Visualization Techniques

6) Enterprise-level Power BI Deployment

7) Complex Analytics and AI Integration

8) Case Studies and Real-world Challenges

The course is totally hands-on. No theory! No PowerPoint presentation. Throughout the course you practice the skills on a file. The exercises are based on real life data scenarios.

Pre-requisite

You must have worked on Excel for at least 2 years.
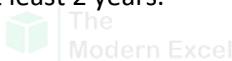
Outline of Power BI Advanced course:

1. Power BI Fundamentals Recap

1.1 Advanced Power BI Ecosystem Overview

- Reviewing the entire Power BI ecosystem, including Power BI Desktop, Service, Dataflows, and Paginated Reports.

1.2 Advanced Power Query Techniques

- Delving into advanced M language functions and performance optimization in Power Query.

1.3 Mastering Basic Data Modeling and DAX

- A quick review of fundamental data modeling concepts and DAX calculations.

2. Advanced Data Modeling Strategies

2.1 Relationships and Aggregations

- Mastery of advanced relationships, many-to-many, and bidirectional filtering.
- Implementing complex aggregations for optimal performance.

2.2 Hierarchies Beyond Basics

- Advanced techniques for handling intricate hierarchies and parent-child relationships.

Advanced Data Modeling Best Practices

- Optimizing models for large datasets.
- Advanced techniques for handling complex business logic.

3. Expert-Level DAX Mastery

3.1 DAX Optimization Techniques

- Understanding query and formula engine optimizations.
- Advanced DAX performance tuning strategies.

3.2 Advanced Time Intelligence in DAX

- Mastering complex time-based calculations and custom calendar scenarios.

4

3.3 Statistical Analysis and Machine Learning in DAX

- Leveraging advanced statistical functions and integrating machine learning models.

4. Advanced Power Query Scripting

4.1 M Language Mastery

- In-depth exploration of the M language, creating custom functions and queries.

4.2 Advanced Data Transformation

- Advanced scripting for complex data transformations.
- Enhancing query folding for optimal performance.

4.3 Real-world Parameterized Queries

- Implementing parameterized queries for dynamic data loading in complex scenarios.

5. Advanced Data Visualization Techniques

5.1 Custom Visual Development

- Building custom visuals using advanced development tools.
- Integration of custom visuals into reports and dashboards.

5.2 Advanced Formatting and Theming

- Creating intricate and consistent report themes.
- Advanced formatting for pixel-perfect design.

5.3 Advanced Drillthrough and AI-powered Visualizations

- Implementing sophisticated drillthrough actions.
- Exploring AI-driven visuals and insights.

6. Enterprise-level Power BI Deployment

6.1 Advanced Power BI Service Features

- Harnessing advanced collaboration features, managing workspaces, and sharing insights securely.

6.2 Enterprise Governance and Security

- Implementing row-level security (RLS) at an expert level.
- Advanced governance strategies for large-scale deployments.

6.3 AI and Machine Learning Integration

- Scaling Power BI solutions for enterprise-level deployment.
- Advanced monitoring and managing reports in Power BI Service.

7. Complex Analytics and AI Integration

7.1 Advanced Statistical Analysis

- Implementing advanced statistical models and analyses using DAX.

7.2 Advanced AI Integration

- Integrating external machine learning models and AI services into Power BI.

7.3 Real-time Analytics and Streaming

- Leveraging real-time data for advanced analytics.
- Implementing streaming datasets for live dashboards.

8. Case Studies and Real-world Challenges

8.1 Industry-specific Super Expert Case Studies

- Analyzing and solving super-expert level real-world scenarios across various industries.

8.2 Complex Dashboard and Report Building

- Building complex dashboards incorporating all advanced features.
- Addressing intricate storytelling and user engagement.

8.3 Super Expert Q&A and Panel Discussion

- An opportunity for participants to engage in detailed discussions with experts.
- Leveraging the expertise of guest speakers for advanced problem-solving.