



The Modern Excel DAX Advanced



Table



Slicer



PivotTable



PivotChart



Interactive Dashboards

Data Model

DAX

Power Pivot

Power Query

Power BI



Excel Online



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DAX Advanced – The Expert Skills

A customizable course according to your company's requirements.

Duration

16 hours

Objectives

1. Review of DAX Fundamentals
2. Context in DAX
3. Advanced Data Modeling Techniques
4. Advanced Time Intelligence in DAX
5. Performance Optimization and Best Practices
6. Advanced Variables and Error Handling
7. Advanced Real-world Applications and Case Studies

Pre-requisite

You must have worked on Excel for at least 2 years.



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Outline of Transformative Skills

1. Review of DAX Fundamentals

1.1 Recap of DAX Basics

- Quick review of DAX syntax and data types
- Revisiting calculated columns and measures

1.2 Advanced Calculations

- Complex expressions and formula nesting
- Leveraging multiple DAX functions within calculations

2. Context in DAX

2.1 Understanding Filter and Row Context

- Deep dive into how context influences DAX calculations
- Working with RELATEDTABLE and RELATED functions

2.2 Advanced CALCULATE Function Usage

- Modifying filter context dynamically
- Using CALCULATE with time intelligence and statistical functions

3. Advanced Data Modeling Techniques

3.1 Aggregations and Summarization

- Creating advanced aggregations for complex reporting
- Utilizing iterators for customized summarization

3.2 Advanced Relationships

- Handling complex relationships, including many-to-many
- Implementing bidirectional relationships for enhanced analysis



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Interactive Dashboards



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3.3 Working with Advanced Hierarchies

- Building custom hierarchies for intricate data structures
- Managing and optimizing hierarchical data

4. Advanced Time Intelligence in DAX

4.1 Beyond the Basics of Time Intelligence

- Advanced time-based calculations
- Implementing custom calendars and fiscal years

4.2 Handling Multiple Date Tables

- Strategies for managing multiple date dimensions
- Solving challenges with complex date scenarios

5. Performance Optimization and Best Practices

5.1 DAX Query Performance Optimization

- Techniques for optimizing DAX queries
- Reducing formula evaluation time

5.2 Advanced DAX Studio Usage

- Profiling and analyzing DAX queries
- Utilizing DAX Studio for performance tuning

6. Advanced Variables and Error Handling

6.1 Mastering Variables in DAX

- Complex scenarios using variables for optimization
- Debugging and troubleshooting with variables

6.2 Error Handling in DAX

- Strategies for handling errors in calculations
- Implementing robust error-checking mechanisms



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7. Advanced Real-world Applications and Case Studies

7.1 Complex Business Scenarios

- Applying DAX in intricate business analysis
- Solving complex data modeling challenges

7.2 Building Advanced Dashboards

- Designing sophisticated dashboards using DAX in Power BI
- Integrating Excel and Power BI for advanced reporting

7.3 Q&A and Expert Panel Discussion

- Addressing participant questions and engaging in in-depth discussions
- Leveraging the expertise of the instructor and guest speakers