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PivotChart



Interactive Dashboards

Data Model

DAX

Power Pivot

Power Query

Power BI



Excel Online



Q32

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Interactive Dashboards



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Dashboards– The All-Encompassing Skills

A customizable course according to your company's requirements.

Duration

8 hours

Objectives

1. Introduction to Excel Dashboards
2. Data Preparation for Dashboards
3. Essential Excel Functions for Dashboards
4. Basic Visualization Techniques
5. Intermediate Visualization Techniques
6. Dashboard Layout and Composition
7. Dashboard Interactivity and Navigation
8. Advanced Dashboard Features
9. Dashboard Performance Optimization
10. Real-world Applications and Case Studies

This a completely hand-on lecture! No PowerPoint- students will be practicing on SharePoint and excel throughout the lecture.



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Interactive Dashboards



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Outline of Excel Dashboards Course

1. Introduction to Excel Dashboards

1.1 Understanding Dashboards

- Definition and purpose of dashboards
- Key components and characteristics

1.2 Excel as a Dashboard Tool

- Overview of Excel's capabilities for dashboard creation
- Introduction to data visualization principles

1.3 Examples of Effective Dashboards

- Analyzing real-world dashboard examples
- Identifying key design elements for success

2. Data Preparation for Dashboards

2.1 Data Structure and Organization

- Structuring data for efficient dashboard usage
- Data cleaning and transformation techniques

2.2 Importing External Data

- Connecting Excel to external data sources
- Utilizing Power Query for data transformation

2.3 Data Validation and Quality Checks

- Implementing data validation rules
- Ensuring data accuracy and completeness



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Interactive Dashboards



3. Essential Excel Functions for Dashboards

3.1 Advanced Lookup Functions

- Utilizing VLOOKUP, HLOOKUP, and INDEX-MATCH
- Creating dynamic data relationships

3.2 Statistical Functions for Analysis

- Implementing statistical functions (AVERAGE, COUNT, etc.)
- Calculating key metrics for dashboards

3.3 Date and Time Functions

- Managing date and time data effectively
- Building dynamic time-based analyses

4. Basic Visualization Techniques

4.1 Creating Basic Charts

- Building common charts (bar, line, pie) in Excel
- Formatting and customizing chart elements

4.2 Adaptive Cards for Approvals

- Using conditional formatting for data visualization
- Highlighting trends and outliers

4.3 Handling Approval Responses

- Implementing sparklines for compact data visualizations
- Incorporating mini-charts for quick insights

5. Intermediate Visualization Techniques

5.1 Advanced Chart Types

- Exploring radar charts, bubble charts, and waterfall charts
- Choosing the right chart for specific data scenarios



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5.2 Dynamic Charts and Interactive Elements

- Creating dynamic charts with dropdowns and slicers
- Enhancing user interactivity in dashboards

5.3 Advanced Formatting and Design

- Applying custom themes and styles
- Designing visually appealing dashboards

6. Dashboard Layout and Composition

6.1 Design Principles for Dashboards

- Understanding principles of effective dashboard design
- Balancing aesthetics with functionality

6.2 Layout and Alignment Techniques

- Structuring dashboard elements for clarity
- Using grids and guides for precision

6.3 Storytelling with Data

- Creating a narrative flow in dashboards
- Incorporating storytelling elements for impact

7. Dashboard Interactivity and Navigation

7.1 Hyperlinks and Drilldowns

- Implementing hyperlinks for navigation
- Enabling drilldown features for detailed analysis

7.2 Interactive Controls

- Adding form controls (buttons, sliders) for interactivity
- Creating user-friendly navigation

7.3 Dynamic Dashboards with Power Query

- Using Power Query for dynamic data updates
- Building dashboards that adapt to changing data



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8. Advanced Dashboard Features

8.1 Advanced Data Visualization Techniques

- Incorporating heat maps, gauges, and advanced visualizations
- Enhancing insights with complex data representations

8.2 Dashboard Automation with Macros

- Introduction to recording and using macros in dashboards
- Automating repetitive tasks for efficiency

8.3 Exporting and Sharing Dashboards

- Strategies for sharing dashboards internally and externally
- Exporting dashboards to different formats for presentation

9. Dashboard Performance Optimization

9.1 Managing Large Datasets

- Techniques for handling and optimizing performance with extensive data
- Data aggregation and summarization strategies

9.2 Excel Calculation and Workbook Optimization

- Optimizing Excel calculations for faster dashboard performance
- Strategies for efficient workbook design

9.3 Troubleshooting and Debugging

- Identifying and resolving common issues in dashboard creation
- Debugging techniques for errors and performance bottlenecks

10. Real-world Applications and Case Studies

10.1 Building Industry-specific Dashboards

- Applying dashboard principles to industry-specific scenarios
- Analyzing case studies for inspiration



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Interactive Dashboards



10.2 Integrating External Data Sources

- Connecting dashboards to external databases, APIs, and cloud services
- Handling real-time data updates for dynamic dashboards

10.3 Expert Panel Discussion and Q&A

- Engaging with experts to discuss advanced dashboard applications
- Addressing participant questions and providing insights



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