

Excel Dashboard and Data Analysis Masterclass Using AI

Duration : 5 Days (8 hours each)

Introduction

- Course Structure, Resources & Important Notes for New Students
- What is a dashboard?

Dashboard Design Principles

- Design Principles & Tips
- Dashboard Creation Process
- Color Tips & Layouts
- Building an Effective Data Model

Using Shortcuts for Speed and Accuracy

- Create A Dates Table
- Dates Method
- Creating Number Patterns
- Summing Data Through Shortcuts
- Create A Chart Through Shortcuts Keys
- Isolate Any Part Of A Chart & Chart Templates
- Manipulate Filter Data And Paste
- Icon Sets With Words
- Camera Tool
- Pivot Tables Creation Shortcuts
- The Advanced Filter
- Tables and Charts

Charting Techniques

- Introducing Excel Charts
- Introducing Charting Techniques
- Advanced Chart Formatting Options
- Advanced Charting Techniques
- Trend-based Conditional Formats
- Value-based Conditional Formats

Function Toolbox

- Introduction
- Relative vs Absolute reference
- Range Names in Formulas
- VLOOKUP Function

- INDEX and MATCH Functions
- OFFSET Function
- SUMIFS Function
- SUMPRODUCT Function
- SMALL and LARGE Functions (& INDEX-MATCH Example)
- ROWS and COLUMNS Functions (& INDEX Combination)
- IF and NESTED IF Formulas
- INT and MOD Functions
- Text Functions: LEFT, RIGHT, MID, LEN, TEXT, TRIM, LOWER, UPPER,
- Advanced Custom Number Formatting
- CHOOSE Function
- ROUND, ROUNDUP and ROUNDDOWN

Importing External Data into Dashboard

- Introduction
- Importing External Data from Text File
- Importing Data From Excel Spreadsheet
- Importing Data from Microsoft Access
- Loading Data with Power Query (Get & Transform)
- Useful Sources of Data

Data Analysis With Pivot Tables & Pivot Charts

- Introducing Pivot Tables
- Customizing Pivot Table Reports
- Creating Useful Pivot-Driven Views
- Adding Interactivity with Pivot Slicers
- Building Pivot Charts
- GETPIVOTDATA function
- PROJECT: Social Media Dashboard (Introduction)
- ANSWER of PROJECT: Social Media Dashboard

Pivot / Slicer Dashboard

- Introduction
- Part 1: Prepare the data
- Part 2: Set up the Relationships
- Part 3: Creating Pivot Tables
- Part 4: Creating Pivot Charts
- Part 5: Adding the Slicers & Final steps
- Part 6: Putting Everything Together

Interactive Charts with Form Controls

- Introduction

- Combo Box Drop-Down Lists (+ EXAMPLE with Dynamic Chart)
- Option Buttons (+ EXAMPLE with Dynamic Chart)
- Check Box (+ EXAMPLE with Dynamic Combo Chart)
- List Box (+ EXAMPLE with Interactive Column Chart)
- Scroll Bar (+ EXAMPLE with Dynamic Line Chart)

Useful Charts For Dashboards

- Progress Doughnut Chart
- (NEW 2024) Pies and Doughnuts
- (NEW 2024) Geospatial Charts
- Excel Infographics: People Graph
- Waffle Charts for KPIs (Better than Pie Charts)
- Funnel Chart
- Sparklines and Win/Loss Charts
- Bullet Graph
- Lollipop, Dot Plot or Dumbbell Chart
- Emphasizing & Mark Significant Events
- Line Graph: Multiple Lines

PRO Dashboard Components

- Dynamic Heat Map using Scroll Bar & Formulas
- Representing trends with Icon Sets, Data Bars and Symbols
- Display Symbols in Charts (+IFERROR Function)
- In-Cell Charts (with REPT function)
- TOP and BOTTOM Ranking Chart
- Comparisons and Data Bars (with Conditional Formatting)
- Dynamic Line Chart with MAX and MIN Dots
- Dynamic Chart with Drop-Down Lists and Filters
- Side-by-Side Time Comparisons (Panel Chart)
- (NEW 2024) Interactive Visualizations & Maps using Macros
- (ADVANCED) Scroll and Sort Table
- (ADVANCED) Rollover Method
- DASHBOARDS COMPONENTS

Financial KPI Dashboard

- Introduction
- Input (Raw) Data of the Dashboard
- Presenting the Calculations and Dashboard Worksheets
- Building the Calculations Part:1
- Building the Calculations (SUMIFS & VLOOKUP) Part:2
- Building the Calculations (SUMPRODUCT) Part:3
- Creating a Trending Column Chart

- Creating a Line chart with Markers
- Creating a Bullet Chart with Performance Targets
- Creating a Combo Chart & Setting Up the Option Buttons
- Creating Stacked Bars with Positive & Negative Values
- Creating a Four-Segment Line Chart
- Finalizing our Dashboard

Balanced Scorecard Dashboard

- Introduction
- Input (Raw) Data of the Dashboard
- Building the Calculations Part:1
- Building the Calculations Part:2
- Building the Calculations Part:3
- Building the Calculations - Final Part
- Create the Sales Chart
- Number of Customers Chart
- Create the Donut Charts
- Completing the tables on our Dashboard
- Creating Mini Charts for the Balanced Scorecard
- Finalizing the Dashboard with Option Buttons

(NEW 2024) Company Dashboard

- Company Dashboard - Introduction
- The Worksheets of the Dashboard
- Starting the Calculations
- Calculations Part:2
- Final Calculations
- Creating the Dashboard Part:1
- Finishing the Dashboard

Business Sales Dashboard

- Part 1: Introduction (+Mock-up)
- Part 2: Setup of Calculation Worksheet
- Part 3: Complex Lookup Calculations with SUMPRODUCT Function
- Part 4: Preparing Data for Bullet and Clustered Stacked Chart
- Part 5: Create Metrics with Sparklines & Conditional Formatting
- Part 6: Starting to Build your Dashboard
- Part 7: Final Touches
- Part 8: Enhance your Dashboard with Beautiful Background & Design

KPI Dashboard

- Part 1: Preparation of the KPI Dashboard

- Part 2: Set Up a Sorting Procedure for KPI's
- Part 3: Get The Data Sorted with the help of FORMULAS
- Part 4: Add Visualizations & In-Cell Charts
- Part 5: Final Touches
- Part 6: Protecting & Sharing your Dashboard with the Outside World
- Part 7: Protect your Excel Dashboard
- Part 8: Linking Your Excel Dashboards to PowerPoint
- Part 9: Saving your Dashboard to One Drive

MILESTONE PROJECT: Autoparts Dashboard

- Introduction
- Part 1: Start designing the dashboard
- Part 2: Adding Multiple Pivot Tables to a Single Workbook
- Part 3: Calculated Fields
- Part 4: Calculated Field Limitations
- Part 5: Adding Sparklines, Chart & Timeline
- Part 6: Finishing the Design of the Dashboard
- Part 7: Refreshing Data & Protecting the Dashboard

BONUS: Traffic Lights Dashboard (RAG Indicator)

- Part 1: Start designing our dashboard
- Part 2: Using Nested IF & AVERAGE for Calculations
- Part 3: Designing the traffic lights (Camera Tool)
- Part 4: Final Touches

ADVANCED: Macro-Charged Dashboarding

- Introduction
- Compatibility & Macros Security
- What are macros (and some examples)
- Ways of Recording a Macro
- Ways of Running a Macro
- Assign a Macro to Ribbon Icons and Create your Ribbon
- Use Navigation Buttons to Change Chart Type
- (ADVANCED) Animated Chart using VBA Code
- Macros & VBA

Bonus Lectures

- SPECIAL BONUS: Discover Exciting Offers!
- BONUS TUTORIAL: Introduction to Excel 2019
- Common Error Values in Microsoft Excel