



# Introduction to Excel for Data Organization

Excel is a powerful tool for organizing and analyzing data. It's commonly used in various industries and professions, from business to research and personal finances.

**Presented by**  
**Ms. Keerthana S**  
**Assistant Professor**





# Spreadsheet Basics: Rows, Columns, and Cells

## Rows

Rows run horizontally and are identified by numbers. Each row represents a single entry or record.

## Columns

Columns run vertically and are identified by letters. Each column represents a specific category or field of data.

## Cells

Cells are the intersection of rows and columns. Each cell holds a single piece of data, such as a number, text, or formula.



# Formatting Data for Clarity and Readability

## 1 Font Style

Change the font, size, and color of your data to make it easier to read and distinguish important information.

## 3 Borders and Shading

Add borders and shading to cells to highlight specific areas of data or create visual separation.

## 2 Alignment

Align text and numbers properly to create a neat and organized appearance.

## 4 Number Formatting

Apply number formats like currency, percentages, and dates to display data consistently and accurately.

This cell has used the function 'Wrap Text' to display the text over multiple rows.

These cells have been merged and centered.				
These cells have been merged - the text centered and oriented +90 degrees.	Name <sup>1</sup>	Target	Actual	Variance
	John	\$ 250	\$ 75	\$ (175)
	Simon	\$ 200	\$ 800	\$ 600
	Peter	\$ 150	\$ 200	\$ 50
	Sandra	\$ 65	\$ 150	\$ 85
	Meghan	\$ 125	\$ 116	\$ (9)
	Thomas	\$ 125	\$ 130	\$ 5
	Phillipe	\$ 130	\$ 145	\$ 15
	Lane	\$ 160	\$ 115	\$ (45)
	Kelly	\$ 180	\$ 109	\$ (71)
Paul	\$ 190	\$ 225	\$ 35	
Matthew	\$ 750	\$ 625	\$ (125)	

1: Use superscript format on the '1'



Date	Amount	Balance
1/1/2018	1000	1000
2/1/2018	2000	3000
3/1/2018	1500	1500
4/1/2018	500	1000
5/1/2018	1000	2000
6/1/2018	1500	500
7/1/2018	2000	2500
8/1/2018	1000	1500
9/1/2018	500	1000
10/1/2018	1000	2000
11/1/2018	1500	500
12/1/2018	2000	2500
1/1/2019	1000	1500
2/1/2019	500	1000
3/1/2019	1000	2000
4/1/2019	1500	500
5/1/2019	2000	2500
6/1/2019	1000	1500
7/1/2019	500	1000
8/1/2019	1000	2000
9/1/2019	1500	500
10/1/2019	2000	2500

# Sorting and Filtering Data

1

## Sorting

Organize your data in ascending or descending order based on specific criteria.

2

## Filtering

Select specific data rows based on certain conditions to view only the relevant information.

3

## Advanced Filtering

Apply multiple criteria to filter data based on complex conditions.



# Using Formulas and Functions

## Basic Formulas

Use simple arithmetic operators like addition, subtraction, multiplication, and division to perform calculations.

## Functions

Use pre-built functions like SUM, AVERAGE, and COUNT to perform complex calculations without writing complex formulas.

## Logical Functions

Use functions like IF, AND, and OR to create conditional statements that evaluate data and return specific results.

Downloadable Practice Workbooks • New Formulas in Excel 2019 & Office 365

Insert Function | AutoSum | Recently Used | Financial | Logical | Text | Date & Time | Lookup & Reference | Math & Trig | More Functions

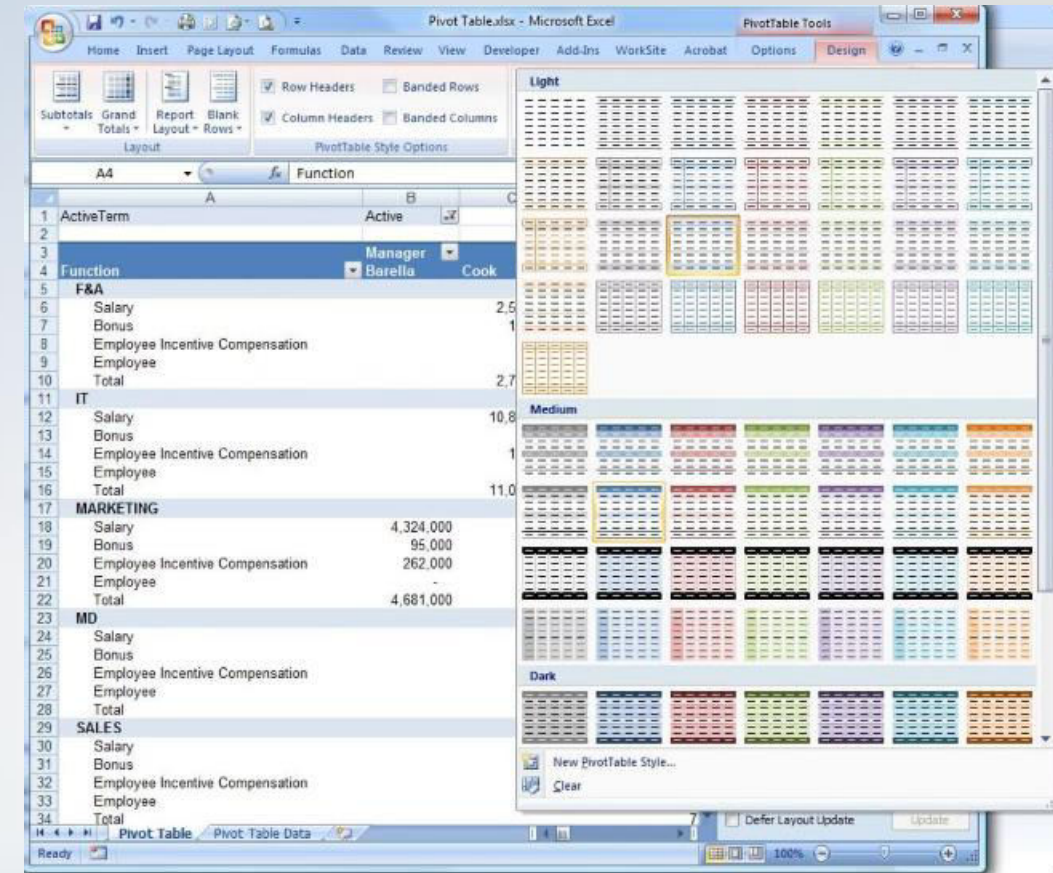
AND	COUNTIF	FORECAST.ETS	LOOKUP	REPT
ARRAY FORMULAS	COUNTIFS	FV	LOWER	RIGHT
<b>101 MOST POPULAR EXCEL FORMULAS</b>	GETPIVOTDATA	MATCH	ROUND	
	HLOOKUP	MAX	SEARCH	
	HOUR	MAXIFS	SEQUENCE	
	HYPERLINK	MEDIAN	SMALL	
	IF	MID	SORT	
	IFERROR	MIN	SORTBY	
	IFS	MINIFS	SUBSTITUTE	
		SUBTOTAL		
		SUMIF		
		SUMIFS		
	SUMPRODUCT			
	SWITCH			
	TEXT			
	TEXTJOIN			
	TIME			
	TODAY			
	TRANSPOSE			
	TRIM			
AVERAGE	DATE	INDEX	MOD	TYPE
BETWEEN	DATEDIF	INDEX-MATCH	MONTH	UNIQUE
CHOOSE	DATEVALUE	INDIRECT	NETWORKDAYS	UPPER
CLEAN	DAY	ISBLANK	OR	VALUE
CONCAT	DAY360	ISERROR	PERCENTAGE	VLOOKUP
CONCATENATE	DAYS	ISNUMBER	PROPER	WEEKDAY
CONVERT	ENDOFMONTH	ISTEXT	RAND	WEEKNUM
COUNT	EXACT	LARGE	RANDARRAY	WORKDAY
COUNTA	FILTER	LEFT	RANDBETWEEN	YEAR
COUNTBLANK	FIND	LEN	REPLACE	3D FORMULAS

John Michaloudis | Bryan Hong | myexcelonline.com



# Pivot Tables and Data Analysis

Data Source	Field	Function
Sales Data	Product Name	Sum
Customer Data	City	Count
Inventory Data	Item Type	Average





# Visualizing Data with Charts and Graphs



## Bar Charts

Compare values across different categories using vertical or horizontal bars.



## Pie Charts

Show proportions of a whole by dividing a circle into slices representing different categories.



## Line Graphs

Show trends and patterns over time using lines to connect data points.



## Scatter Plots

Show relationships between two variables by plotting data points on a graph.



# Best Practices for Maintaining and Sharing Excel Files

## SHARED WORKBOOK COLLABORATIVE WORK AND ENHANCED PRODUCTIVITY

Column 1	Column 2	Column 3	Column 4
Name	Age	Gender	Occupation
John	25	Male	Engineer
Emily	32	Female	Doctor
David	41	Male	Lawyer
Emma	28	Female	Architect
Michael	35	Male	Teacher
Column 5	Column 6	Column 7	Column 8
City	Nationality	Education	Income
New York	American	Ph.D.	\$80,000
London	British	M.D.	\$120,000
Sydney	Australian	LLB	\$100,000
Paris	French	M.Arch	\$90,000
Berlin	German	B.Ed.	\$70,000

1

### File Organization

Use clear file names and consistent folder structures to keep your files organized and easily accessible.

2

### Data Integrity

Ensure data accuracy by verifying entries and checking for inconsistencies. Consider data validation rules.

3

### Version Control

Create backups and save multiple versions of your files to prevent accidental data loss.

4

### Collaboration

Use features like shared workbooks or cloud storage to allow multiple users to access and edit files simultaneously.