

# 5 EXCEL FEATURES YOU SHOULD KNOW



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## 1. DATA TABLE

A great tool for your what-if analysis. A range of cells in which you can change values in some of the cells and come up with different answers to a problem.

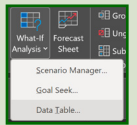
How to create it?

### Instructions

1. Write down input data
2. Calculate the value you want to find out
3. Write down additional input data you want to test
4. Go to Data -> WhatIf Analysis -> Data Table
5. Put in row and column input cell that corresponds to the layout you have created in step #3 and press OK

### Example

1. Write down input data such as Interest rate, number of periods, and starting amount if you want to see how your savings amount would change under different scenarios
2. Calculate the savings amount from the initial input data
3. Insert additional testable input data - changes in interest rate, starting amount.



Interest Rate	7%
Number of Periods	3
Starting Amount	\$ 2,000

4. Row input cell - interest rate from initial input data; Column input cell - starting amount from initial input data

	\$6,430	5.50%	6.00%	6.50%	7.00%	7.50%	8.00%	8.50%
\$ 1,500	\$ 4,752	\$ 4,775	\$4,799	\$4,822	\$ 4,846	\$ 4,870	\$ 4,893	
\$ 1,600	\$ 5,069	\$ 5,094	\$5,119	\$5,144	\$ 5,169	\$ 5,194	\$ 5,220	
\$ 1,700	\$ 5,386	\$ 5,412	\$5,439	\$5,465	\$ 5,492	\$ 5,519	\$ 5,546	
\$ 1,800	\$ 5,702	\$ 5,730	\$5,759	\$5,787	\$ 5,815	\$ 5,844	\$ 5,872	
\$ 1,900	\$ 6,019	\$ 6,049	\$6,079	\$6,108	\$ 6,138	\$ 6,168	\$ 6,198	
\$ 2,000	\$ 6,336	\$ 6,367	\$6,398	\$6,430	\$ 6,461	\$ 6,493	\$ 6,524	
\$ 2,100	\$ 6,653	\$ 6,686	\$6,718	\$6,751	\$ 6,784	\$ 6,817	\$ 6,851	
\$ 2,200	\$ 6,970	\$ 7,004	\$7,038	\$7,073	\$ 7,107	\$ 7,142	\$ 7,177	
\$ 2,300	\$ 7,286	\$ 7,322	\$7,358	\$7,394	\$ 7,430	\$ 7,467	\$ 7,503	
\$ 2,400	\$ 7,603	\$ 7,641	\$7,678	\$7,716	\$ 7,754	\$ 7,791	\$ 7,829	
\$ 2,500	\$ 7,920	\$ 7,959	\$7,998	\$8,037	\$ 8,077	\$ 8,116	\$ 8,156	

5. By changing the initial input data, your data table will update too!

## 2. PIVOT TABLE

A PivotTable is a powerful tool to calculate, summarize, and analyze data that lets you see comparisons, patterns, and trends in your data.

How to create it?

### Instructions

1. Have an Excel table with data
2. Go to Insert -> PivotTable and choose a table or a range you want to analyze
3. Choose fields to summarize the data by
4. Go to PivotTable Analyze or Design tabs to customize the Pivot Table

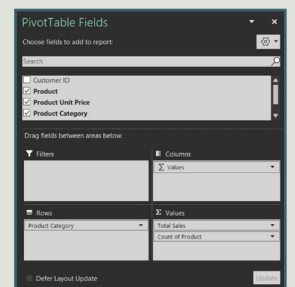
### Example

1. Store order history with customized ID, product ID, product price and product category

Summarized Data		
Product Category	Total Sales	Count of Product
Clothing	\$ 687	3
Furniture	\$ 845	6
Home & Garden	\$ 319	4
Pet Supplies	\$ 174	2
Grand Total	\$ 2,025	15

2. Choose the table from step 1

3. Look at the total sales and count of products bought by product categories. Choose columns, Rows, Filters, Values – everything is customizable and you can play with the report!



4. Add a slicer, insert timeline, add subtotals and other things

## 3. DATA VALIDATION

Use data validation to restrict the type of data or the values that users enter into a cell. One of the most common data validation uses is to create a drop-down list.

How to create it?

### Instructions

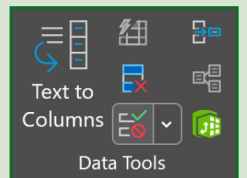
1. Select the cell you want to create a drop-down list in
2. Select Data -> Data Validation
3. Choose what will the users be able to choose (numbers, dates, time, custom text, etc.)
4. Create Input Message so that users know what they are choosing
5. Link other data in your model to this dropdown list, so that values update automatically

### Example

1. On your input data Excel sheet, create a cell where users will be able to choose between different store locations
2. Offer to choose from a list of store locations such as “USA, Spain, UK, Australia, Japan, Germany”

3. “Select Store Location”

4. Link profit and loss statements to geographical location of the stores from the dropdown by using “IF” statements



Store	USA	Year	2021
P&L Projections			
Sales	78,000,000	88,627,500	93,783,659
Domestic Sales	70,000,000	77,847,500	77,666,504
Foreign Sales	8,000,000	10,780,000	16,117,155
Manufacturing Costs	56,500,000	63,240,000	66,585,600
Materials	20,000,000	23,449,000	24,705,500
Direct Labor	25,300,000	28,386,000	29,913,500
Other Direct Costs	8,800,000	9,805,000	10,404,600
Indirect Manufacturing Costs	1,500,000	1,530,000	1,560,000
Gross Profit	21,500,000	25,387,500	27,198,059
SG&A Costs	7,500,000	7,892,500	8,118,073
Marketing Costs	4,500,000	4,772,500	4,873,628

## 4. POWER QUERY

Power Query (known as Get & Transform in Excel) is a great tool for minimizing repetitive daily tasks. You can import or connect to external data and then shape this data. For example, remove a column, change a data type, or merge tables in ways that meet your needs. Then, you can load your query into Excel to create charts and reports.

How to create it?

### Instructions

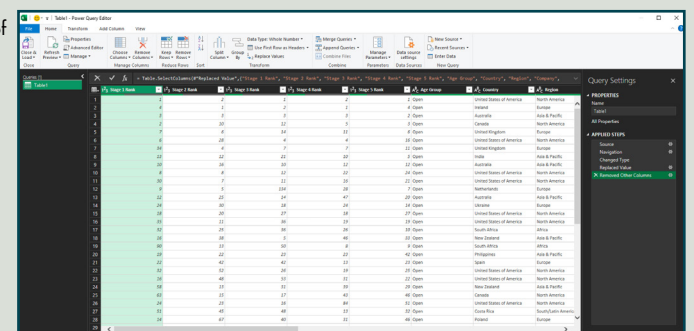
1. Connect to Data: Go to Data -> Get Data
2. Transform Data: Do all kinds of changes to your data while the original dataset stays the same
3. Combine Data: Add other datasets and make connections between them to get more insights
4. Load Data: Load the transformed and combined data to your worksheet and enjoy the clean dataset

### Example

1. Pull in data from a different Excel file that contains participant names and stage points
2. Clean Data - remove unneeded columns, assign data types, rename columns for better understanding, etc.

3. Pull in another data source on the background of the participants - country, company, age group, etc. Append Queries.

4. Load the appended query into the Excel file. After each stage, add information on the points and refresh dataset.



## 5. GROUP DATA

If you have a list of data you want to group and summarize, you can create an outline of up to eight levels. Very important for financial models to switch between different levels of data complexity. Group data instead of hiding rows/columns!

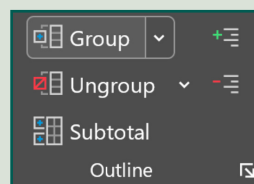
How to create it?

### Instructions

1. Select rows/columns to group
2. Go to Data -> Group -> Group
3. Group again, if you want to go into more detail
4. Press “-” to collapse the groups

### Example

1. Level 1 – for top level management, Level 3 or 4 – for accountant in-depth data review



1	2	3	A	B	C	D	E
1							
2							
3							
4							
5							
6							
7							
8							
46							
74							
101							
135							
136							
330							
331							