

**empower** 

# Powerful PowerPoint charts

Easy instructions for creating  
and editing Gantt-, world map-  
and more charts

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**The Ultimate Guide**

# Visualize your data with PowerPoint charts

This ultimate guide to PowerPoint charts includes a list of the most popular chart types, and instructions on how to create a Gantt chart and a world map chart in PowerPoint. We also show you how to keep your chart data up-to-date by linking charts to Excel spreadsheets. Finally, you learn some tips on how to design and format your charts.

We hope to give you powerful know-how about PowerPoint charts to make daily work a little easier.



# Our Mission

We at empower® know Office like the back of our hand. We've spent years, day and night, learning the Office apps' strengths and weaknesses. That's why we started to revolutionize daily life with MS Office in 2005. We develop solutions that enable people worldwide to work with Office more easily, consistently, and efficiently. Our mission is to help users get the best results quickly so they have time to focus on their professions and to be their best at work.

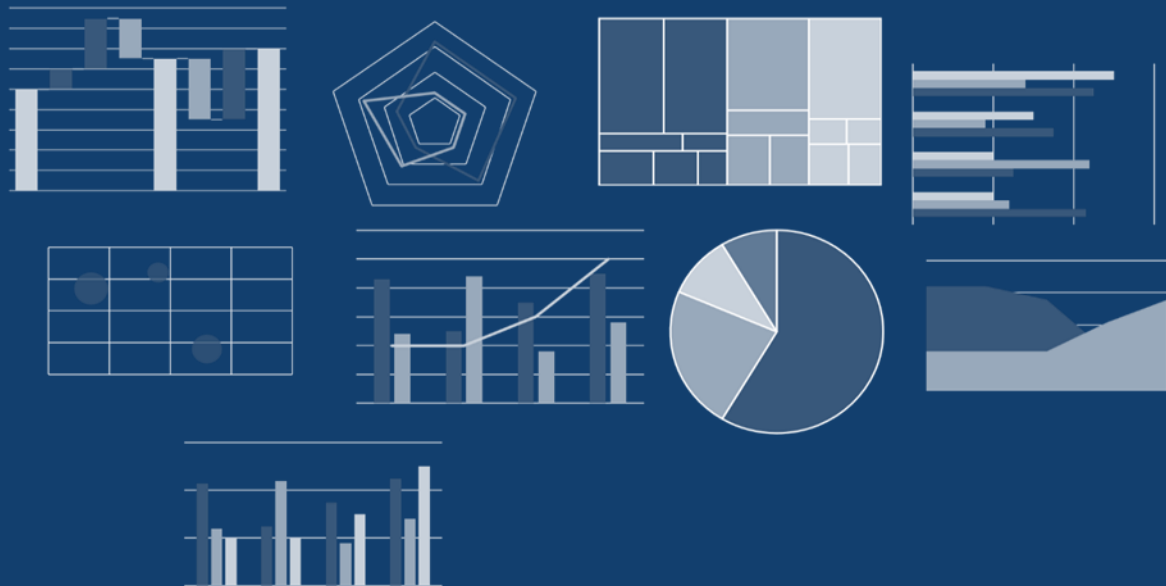
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# A List of the most useful PowerPoint charts



Do you wonder which PowerPoint chart is most suitable for your purpose? There are a variety of chart types, such as Gantt charts, Mekko charts, waterfall charts, area charts, etc. With the right representation, you can support the meaning of your data and communicate it successfully. Here we list the most useful charts and explain what purposes they suit.

# Not every PowerPoint chart is suitable for every data set

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The challenge: integrate complex, dry figures into the narrative so your audience can follow the story. If you only project unprocessed reports on the wall, you will inevitably lose the reader's interest. Therefore, make sure you use the right chart. Choose a chart that clearly and accurately explains your information.

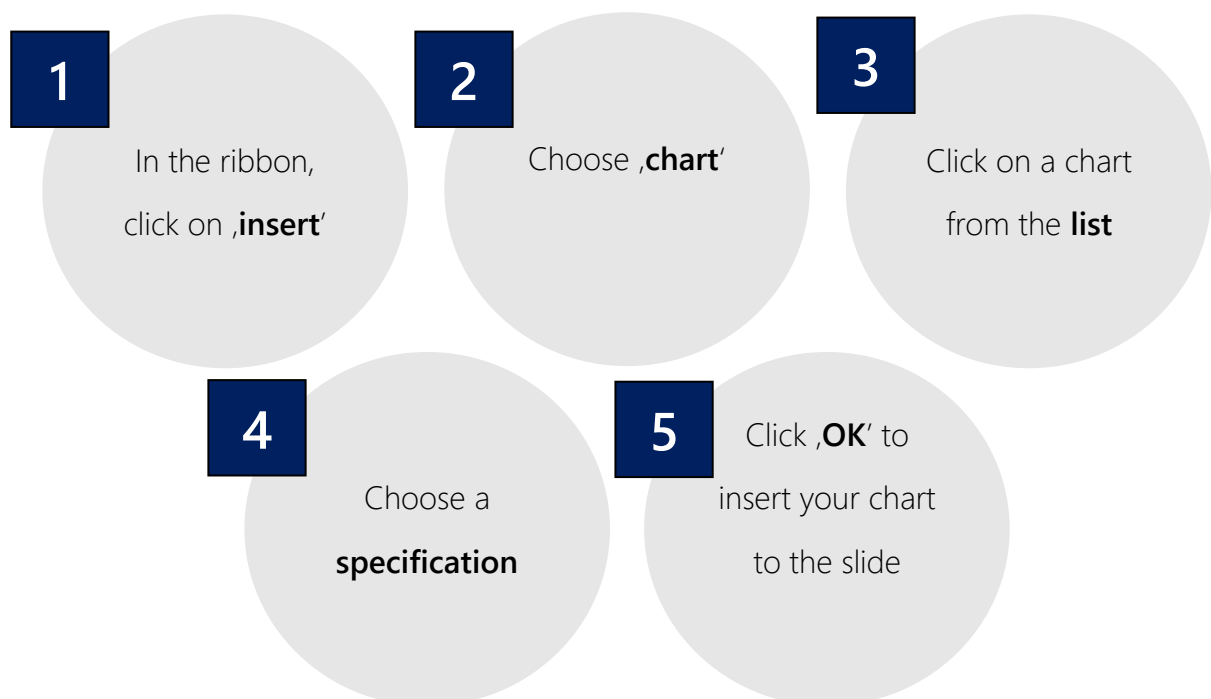
**Ask yourself the following questions:**

- What message do you want to convey?
- What kind of data are you talking about?
- Am I presenting correlations or developments?
- How many variables are needed?
- How many data points should be presented?

# Create PowerPoint charts in one minute

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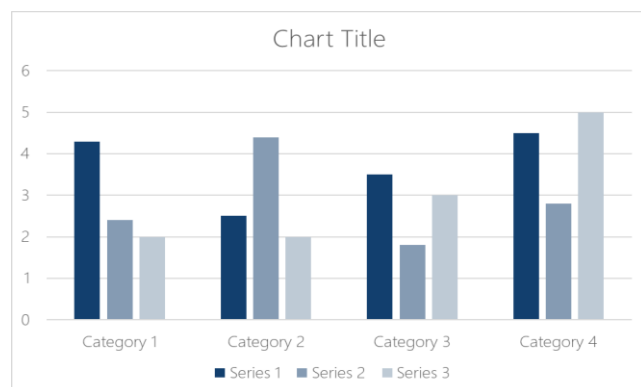
The following 5 steps will show you how to create every chart that is in the native Power-Point version – in less than a minute.



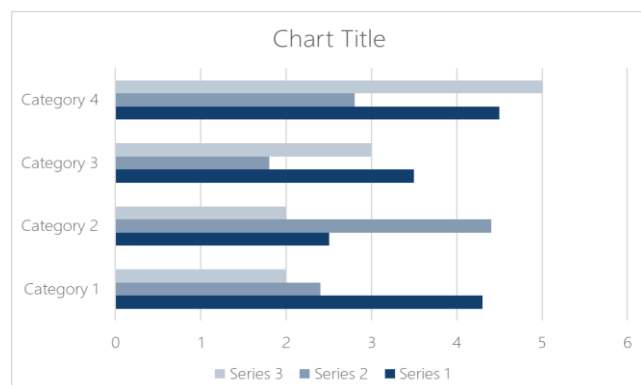
# Bar and column charts

Bar or column charts are suitable for showing fluctuations and trends over a period of time. Size ratios in particular are best compared with bars or columns. Present multiple data series as either stacked or clustered columns/bars. With empower®, you can decide whether to display sum labels, connecting lines, and percentages. If needed, you can insert arrows or breaks to highlight key points in your data.

**Example:**  
This diagram type is especially suitable for evaluations, or statistics.



**Example:**  
Bar charts are frequently used in surveys. Percentages and rankings are best visualized with bars.



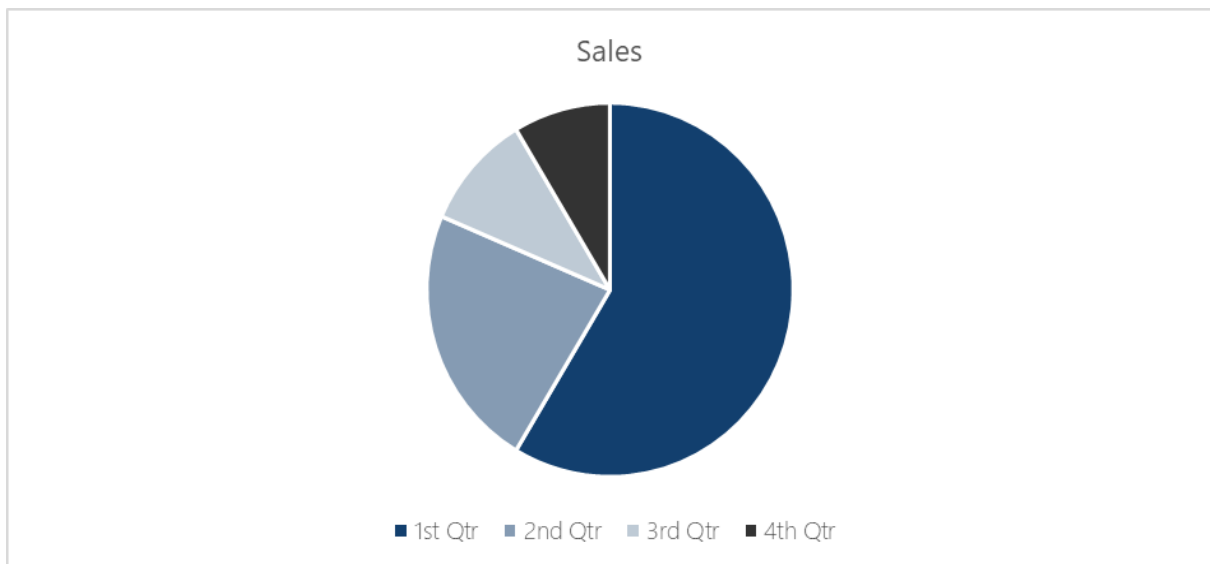
With empower® charts you can decide whether to display sum labels, connecting lines and percentages. If needed, you can insert arrows or breaks to highlight the key points of your data.



# Pie chart

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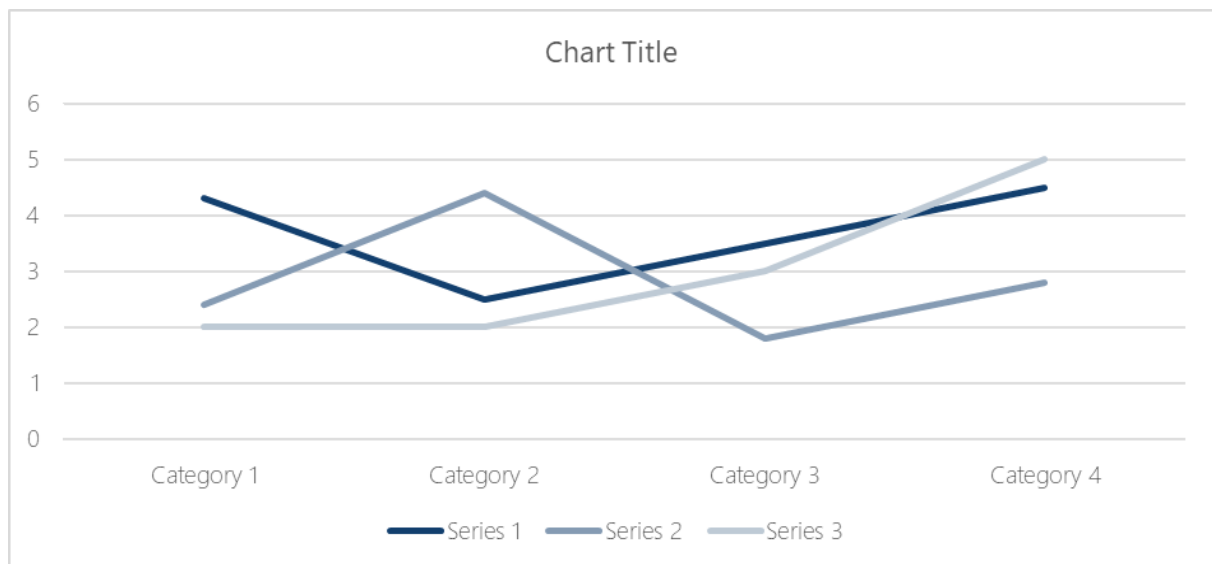
Pie charts show proportions of a whole. You can show absolute numbers, percentages, or labels in a pie chart. Time sequences are not suitable for pie charts.



**Example:** This chart type is mainly suitable for election results, market shares, etc.

# Line chart

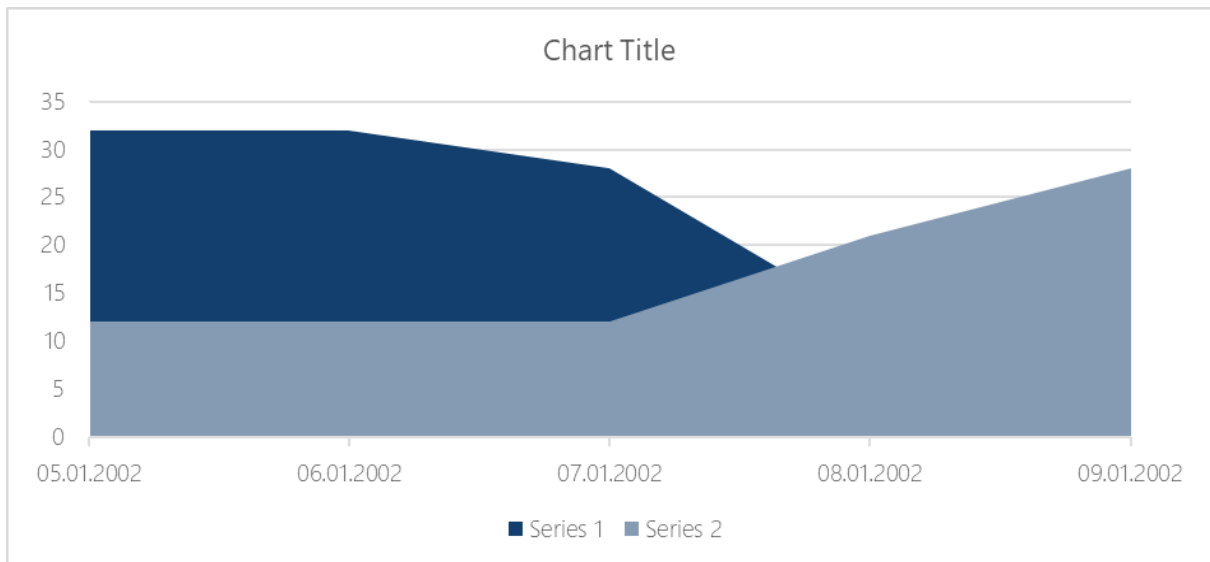
Line charts (also curve charts) present events and values over time. They also illustrate developments and trends. Several graphs can be compared directly with each other. The axis scale can be defined and the lines formatted.



**Example: This chart type is suitable for example for stock prices.**

# Area diagram

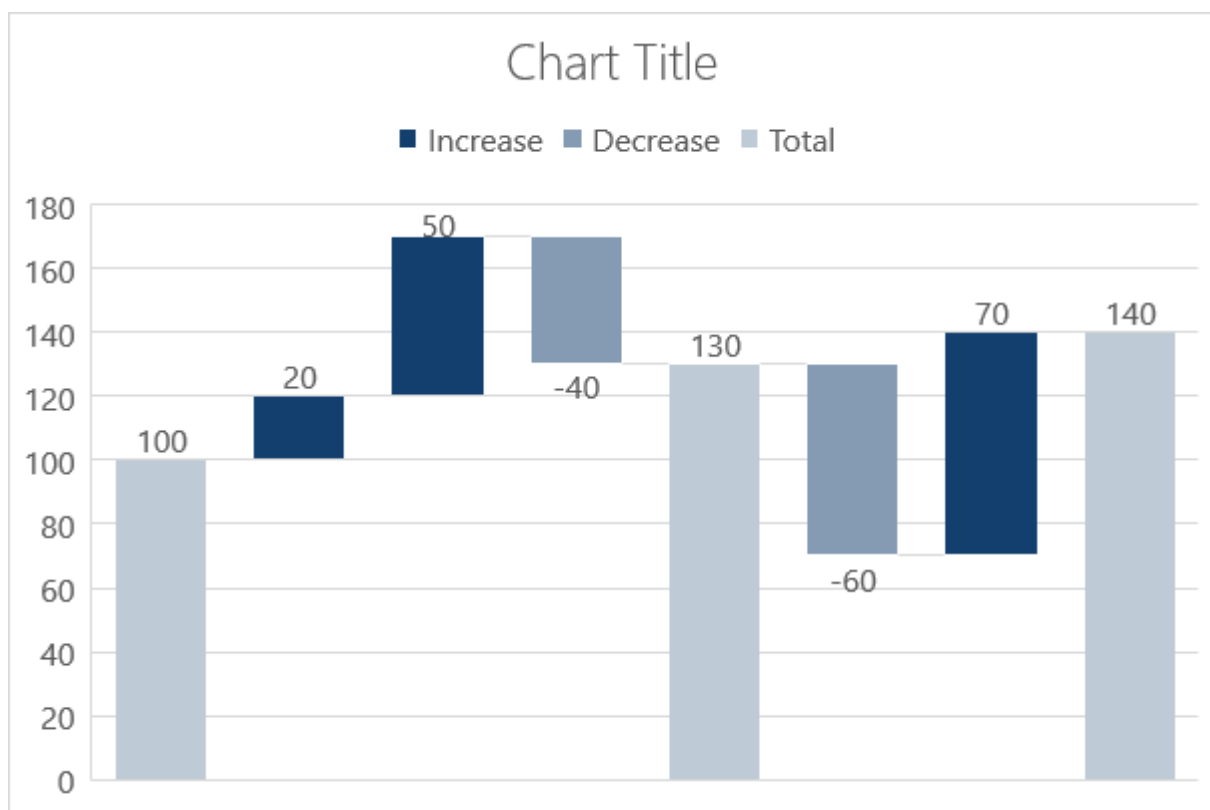
With an area chart, you can visually represent relative references of two quantities and how they change over time. This PowerPoint chart is especially good for visualizing operational and strategic gaps.



**Example: This chart type is mainly suitable for sales and profit lineup.**

# Waterfall diagram

In a waterfall diagram, growth factors or possible cost savings can be clearly visualized in step form. Waterfall diagrams are helpful if you want to visualize single steps of an increase or decrease during a process.



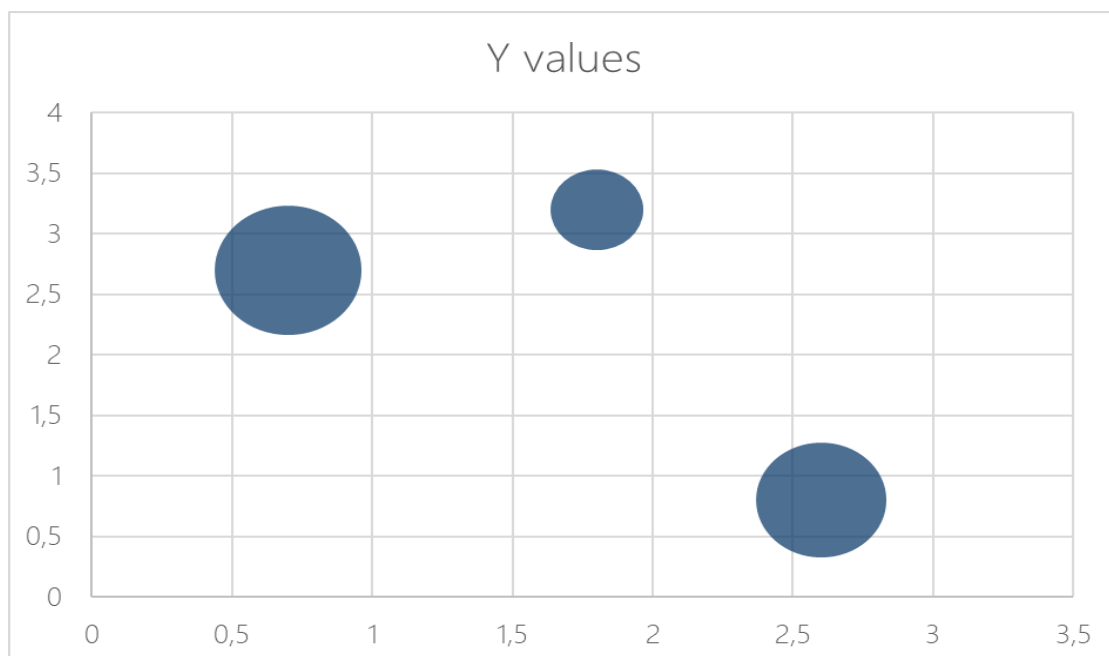
Example: This chart type is mainly suitable for total costs divided into individual costs.

With empower® charts you can easily create waterfall charts. For example, you can easily insert subtotals per data series and display multiple waterfalls in a single chart. You can also create waterfall charts backwards.

# Scatter diagram

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Scatter plots are useful when you want to visualize a large amount of data. They help show correlation and distribution analysis to reveal exceptions or outliers. Plot points with two dimensions in a scatter plot or add a third dimension using a bubble plot.



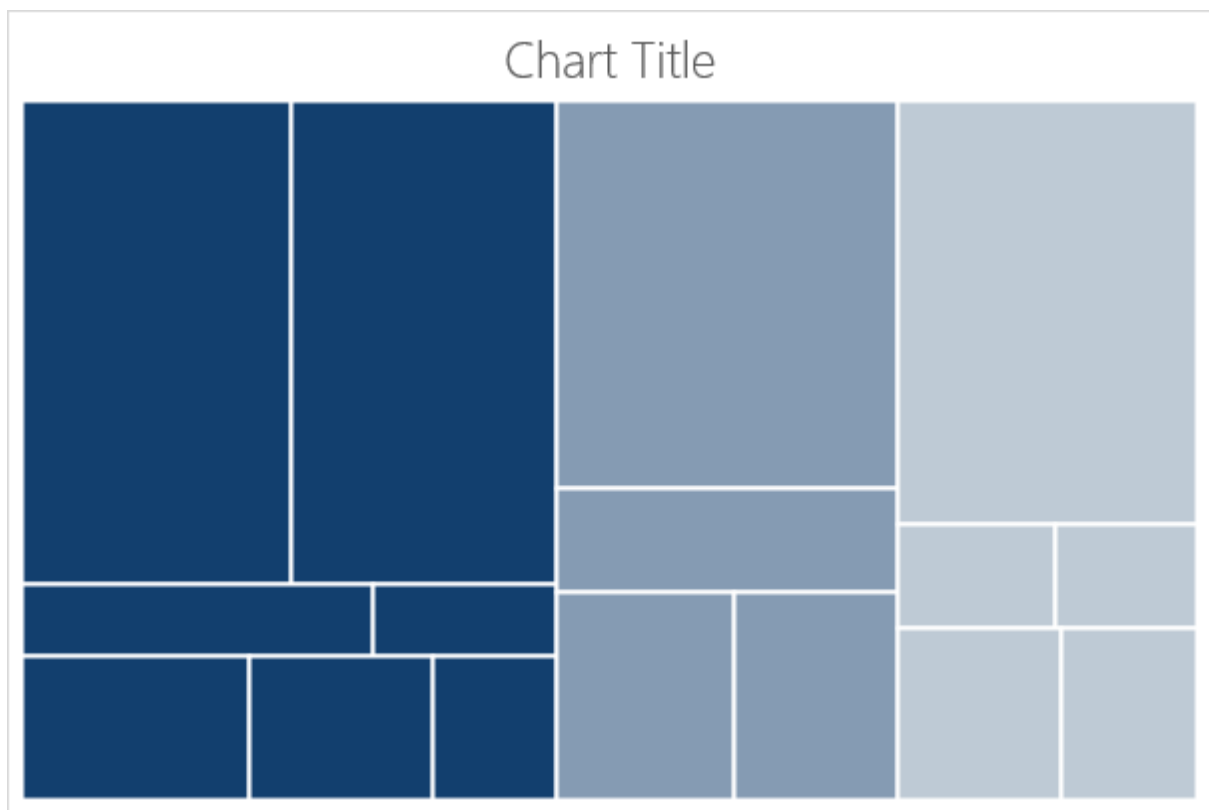
**Example: This diagram type is mainly suitable for visualization of a data collection (for instance, speed of a car and braking distance).**

# Mekko diagramm

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Mekko charts (Marimekko and Column Mekko) are also suitable for displaying a large amount of data. Let's say you want to show how your company's sales distributed by segment and region in percentage terms. A simple chart would not show the relationship of the regions to each other. For this you need the Mekko chart.

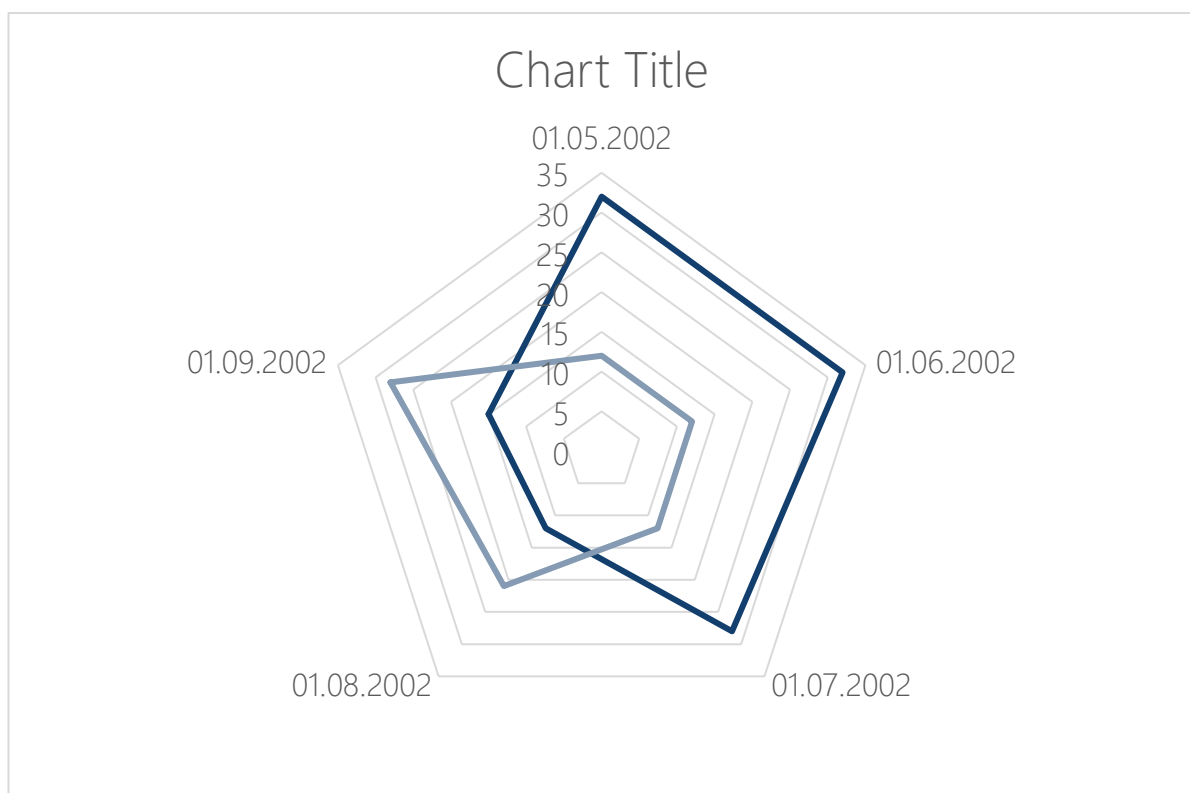
The mekko diagram is named **'Treemap'** in native PowerPoint.



Example: This chart type is mainly suitable for a snapshot of several market segments in a single chart.

# Radar chart

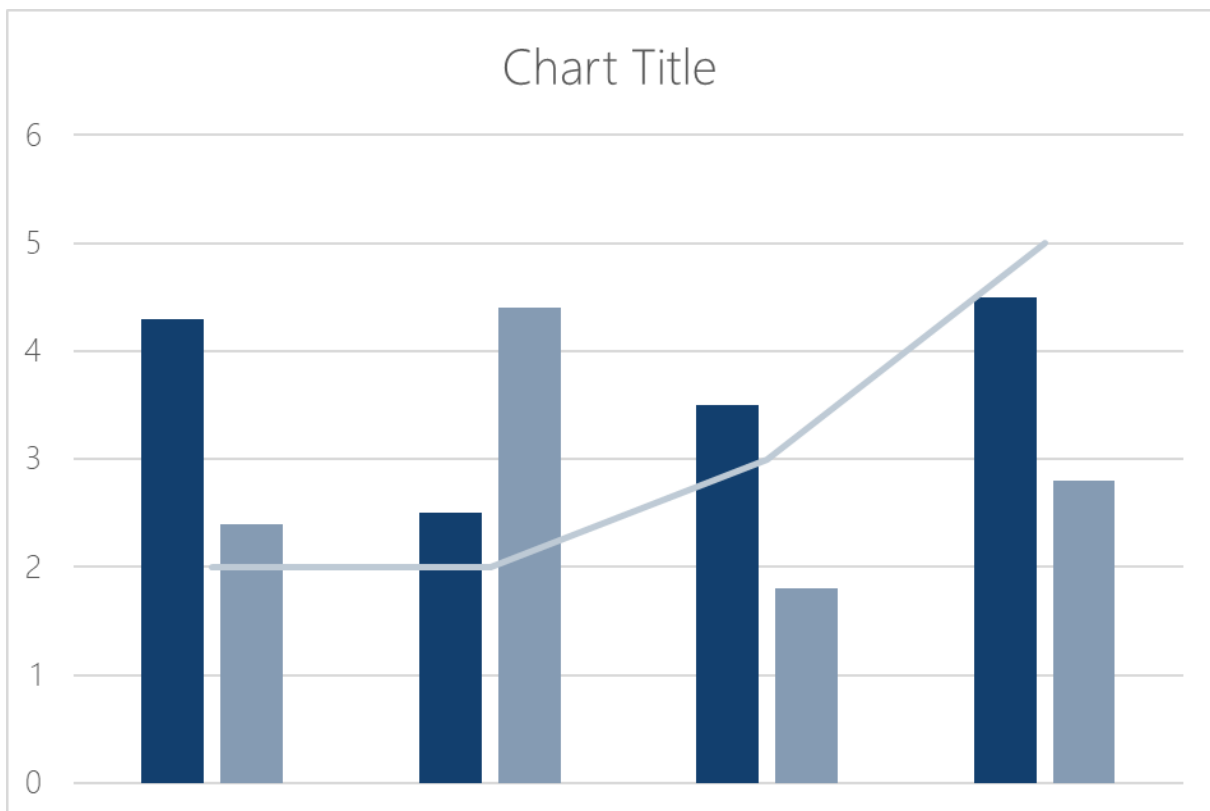
The network diagram (also known as radar diagram) is particularly suitable for displaying the relative strength or expression of predefined criteria. Each criterion has its own axis, the zero point of which lies in the center.



**Example: This chart type is especially suitable for comparing two companies or departments based on several criteria.**

# Combined diagram

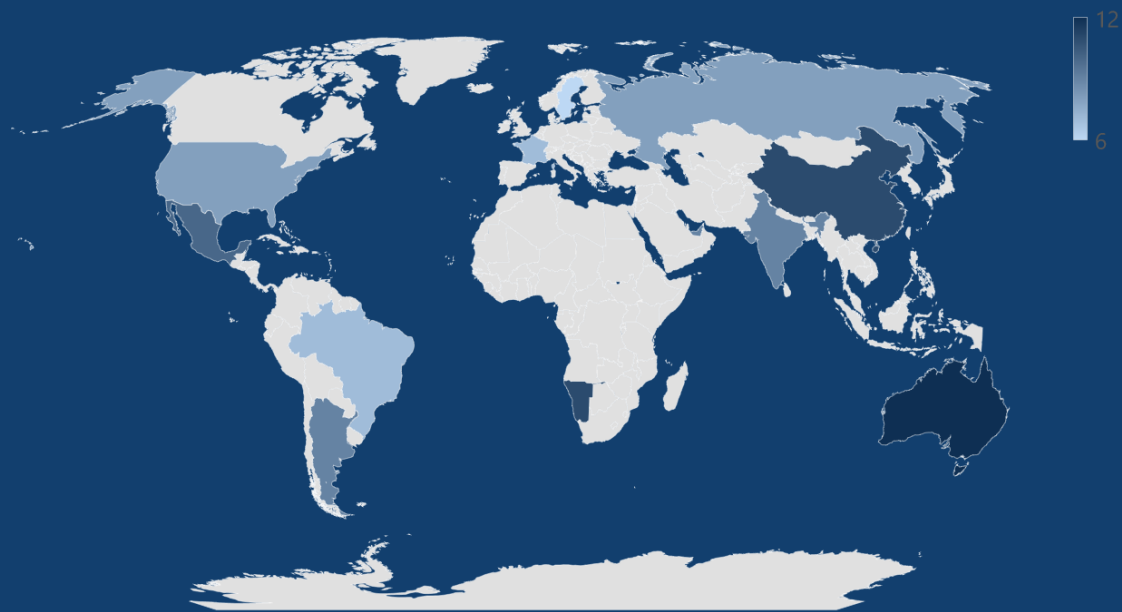
Combined diagrams include two different chart types such as column chart and curve chart. This type of diagram is great for presenting the relationship between two data series with different scales. You can also use two value axes to combine differently scaled data series in one chart.



**Example:** This chart type is mainly suitable for sales, costs, and profit over time.



# Creating a world map in PowerPoint



Would you like to create a world map in PowerPoint? Unfortunately, external map templates are usually inconsistent, difficult to format, and costly to buy from stock suppliers. We'll show you how to insert and customize a world map in PowerPoint easily and free of charge.

# PowerPoint contains an integrated world map

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Many people don't know that PowerPoint already contains an integrated world map function. The world map is available as a free PowerPoint chart in Office 2019 / Office 365. You can use PowerPoint maps to visually illustrate data by coloring, highlighting, and formatting individual countries or the entire world. You can even focus on specific regions / states, cities, and post-codes.

## What can the PowerPoint Maps do?

Do you need to highlight or compare a country or district color? A PowerPoint **"filled map"** (a combination of a chart/diagram and a map) can illustrate geographic data at a glance. Whether the expansion of your company into new countries or your products' trade routes, a PowerPoint world map clearly and engagingly conveys information quickly.

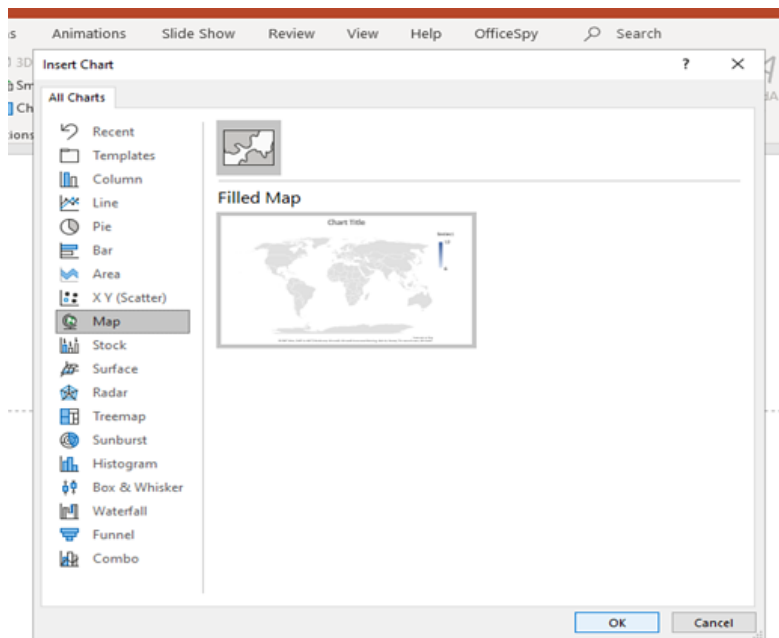
## Microsoft Office requirement:

PowerPoint mapping requires at least Windows 10 and Office 2019 or Office 365. In addition, an Internet connection is required to create or update maps. However, simply viewing a map works without a connection.

# How to add a world map to your slide:

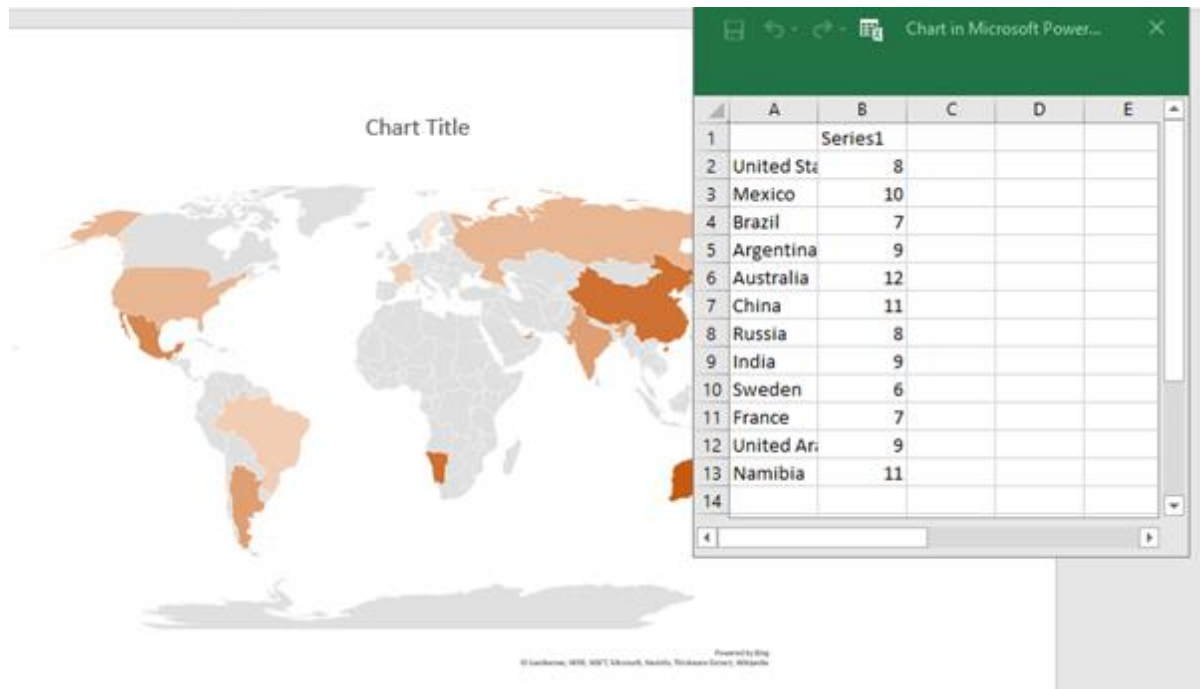
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Where do you find the PowerPoint world map feature? It's not obvious – PowerPoint considers maps to be charts:



1. On the PowerPoint Ribbon click on the "**Insert**" tab.
2. Click "**Chart**" to open the Insert Chart dialog.
3. Click on "**Map**" in the All Charts list.
4. Click **OK** to insert a general world map into your PowerPoint presentation.

## Enter your values in the Excel table:



As soon as you have inserted the world map, a diagram and a default Excel table with different countries and example values appears automatically. Use the Excel table to insert, change, and delete countries and values. You can view and adjust the corresponding values in the Excel column **"Series 1"**. Your world map automatically changes the color shading of individual countries as soon as you change values in the Excel table.

Click on the X in the upper right corner of the Excel table to close it.

You can reopen the Excel table any time by right-clicking the map and choosing **"Edit Data"**. Or you can choose **"Edit Data"** from the Chart Tools > Design tab on the PowerPoint Ribbon.

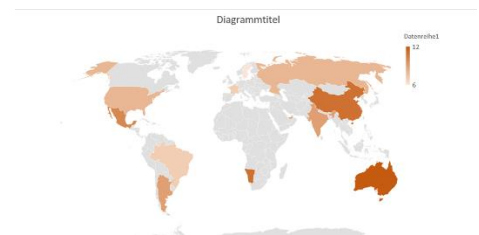
# Map variations

You can choose different types of maps, for example you can focus on Germany or any other country in the world. If you select a specific country, you can highlight large cities, regions, or areas by postcodes, e.g. Great Britain, New York State, Manhattan etc. or Los Angeles, London etc. Cities and regions can only be mapped on the same level. You can simultaneously map the cities London and Glasgow, for example, but not London and Wales.

The following is an overview of the different display options of your PowerPoint map.

## View: World Map

- Countries
- Regions
- Large cities



## View: Country

- Regions / federal states
- Large cities
- Postalcodes



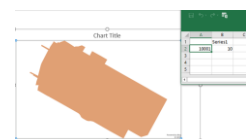
## View: Regions / Federal States

- Postalcodes



## View: Postalcodes

No further subdivisions are possible



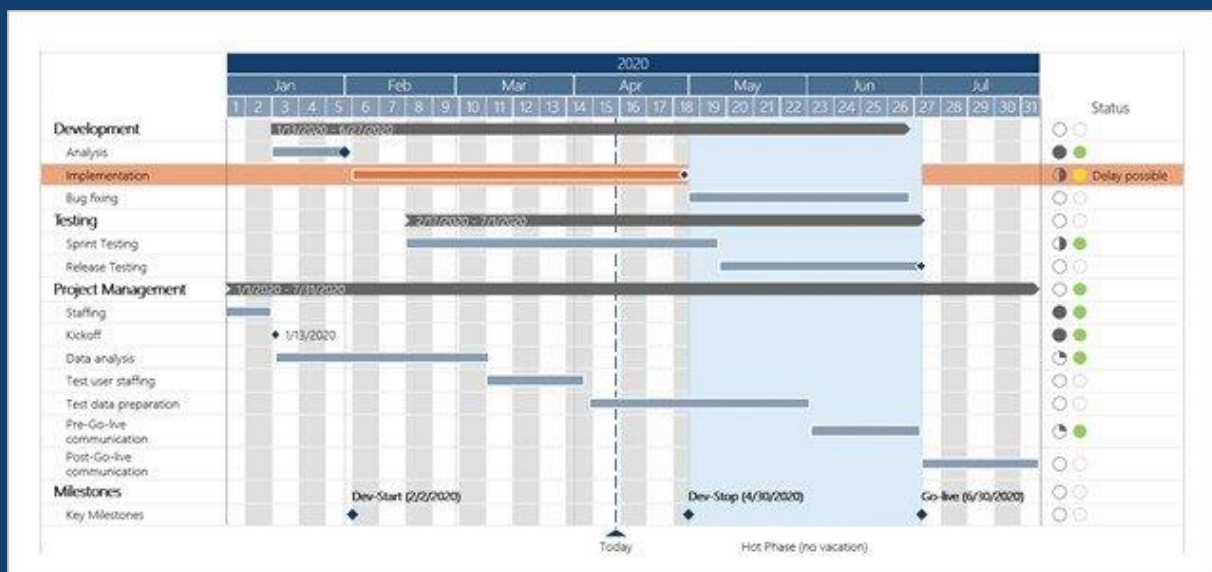
# Limitations:

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As the world map function is still relatively new, there are still some limitations and room for improvement:

- You can only choose a total of twelve countries per map diagram that you want to display. The value table only takes up twelve lines. Tip – Excel's map function can record more than twelve values and can easily be inserted into PowerPoint as a map.
- Specifying postal codes only works in a few countries (USA, Great Britain, France, and Germany). However, when using postal codes the whole country is displayed, so highlighting individual post codes will be much too small to see properly. The exception to this is the USA, where the 50-state PowerPoint map allows you to format things at the state level, which are then clearly visible.
- Geographic data like cities can sometimes cause an error message. Try replacing all city data with postal codes to resolve this problem.
- You can only create maps when connected online. But once a map has been created, you can view and edit it offline. However, if you are offline, you can't add new countries.
- PowerPoint maps can hang or crash PowerPoint. Stability issues arise mostly when there's a slow Internet connection, or you click around too much to highlight different countries. PowerPoint maps are far from unusable, but make sure you save regularly.

# In 8 steps to a Gantt chart

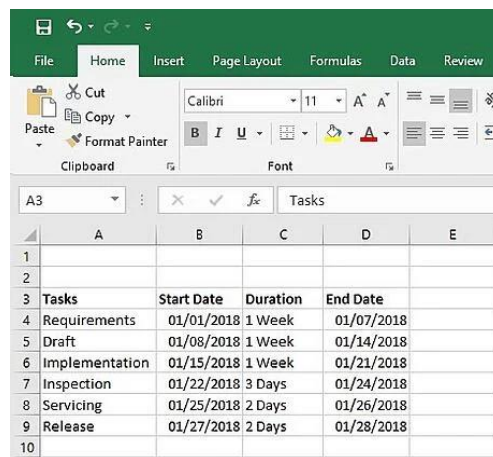


A Gantt chart displays a chronological order of activities. This method is especially suited to plan projects and to generate a visual timeline. In this Office tip we want to show you how to create a Gantt chart in Excel in 8 steps.

# Gantt chart guide

## 1. step:

Create a table that displays the exact outline of your project. We recommend that you enter all task stages of your project incl. start date, duration and end date.

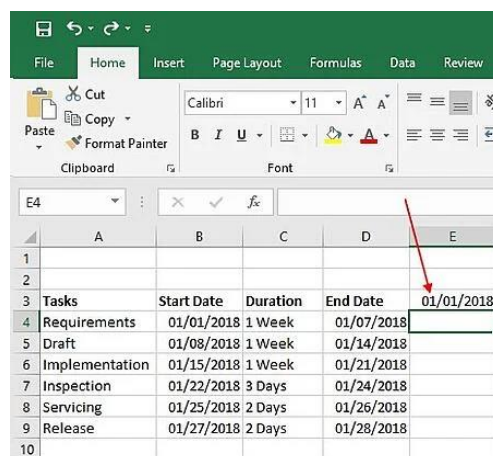


The screenshot shows the Microsoft Excel interface with the 'Home' tab selected. A table is inserted into the worksheet, starting at cell A3. The table has five columns: 'Tasks', 'Start Date', 'Duration', and 'End Date'. The data rows are as follows:

Tasks	Start Date	Duration	End Date
Requirements	01/01/2018	1 Week	01/07/2018
Draft	01/08/2018	1 Week	01/14/2018
Implementation	01/15/2018	1 Week	01/21/2018
Inspection	01/22/2018	3 Days	01/24/2018
Servicing	01/25/2018	2 Days	01/26/2018
Release	01/27/2018	2 Days	01/28/2018

## 2. step:

Add the complete time span of your project to this table. To do so, enter the individual dates as table headers.



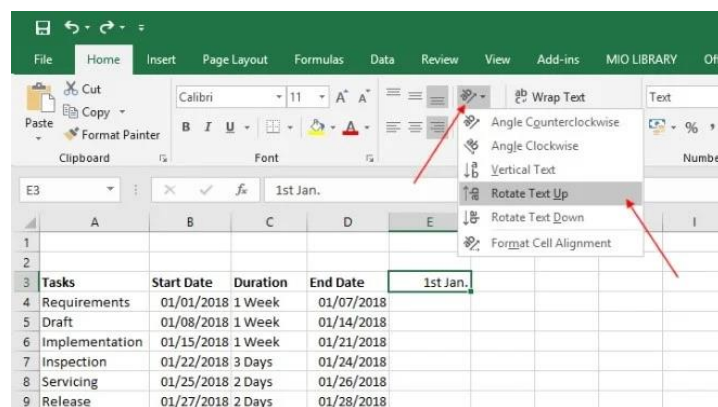
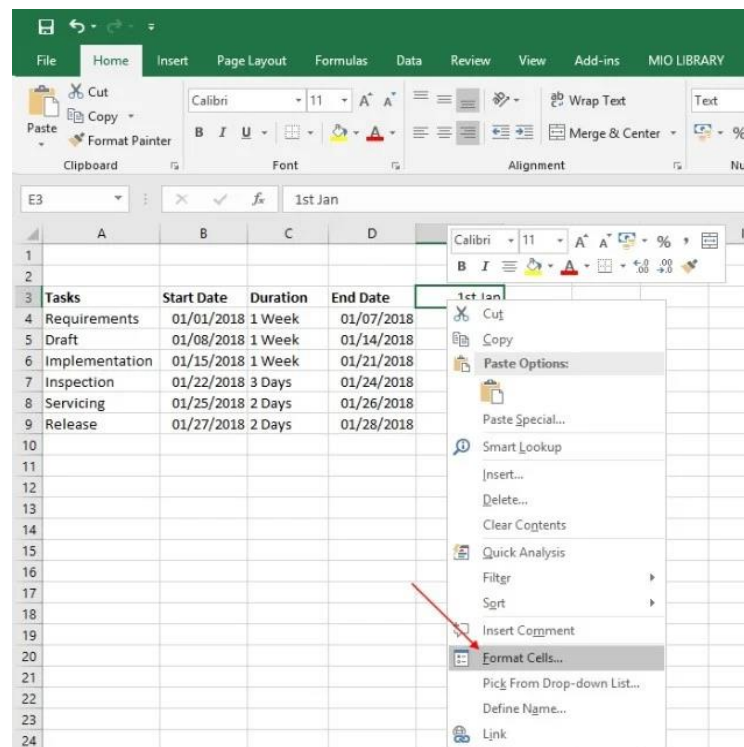
The screenshot shows the same Excel worksheet as before, but with an additional date header added to the 'End Date' column. A red arrow points to the cell E4, which contains the date '01/01/2018'. The table structure is now as follows:

Tasks	Start Date	Duration	End Date	01/01/2018
Requirements	01/01/2018	1 Week	01/07/2018	
Draft	01/08/2018	1 Week	01/14/2018	
Implementation	01/15/2018	1 Week	01/21/2018	
Inspection	01/22/2018	3 Days	01/24/2018	
Servicing	01/25/2018	2 Days	01/26/2018	
Release	01/27/2018	2 Days	01/28/2018	



### 3. step:

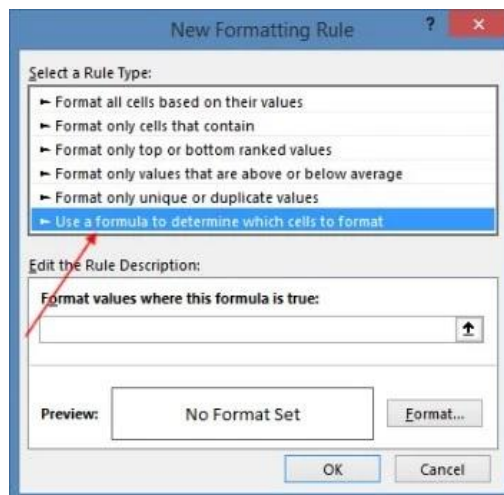
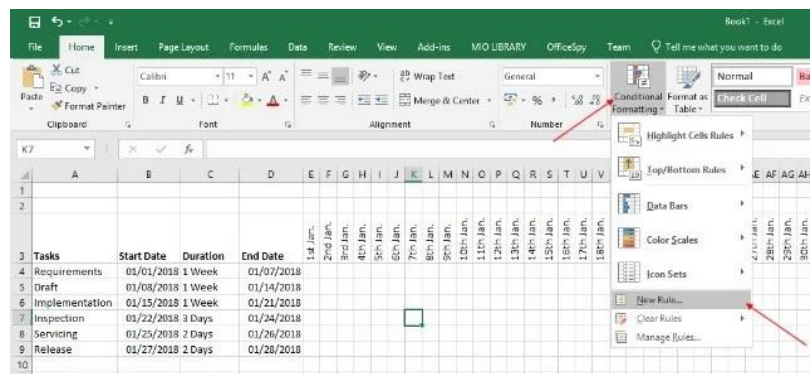
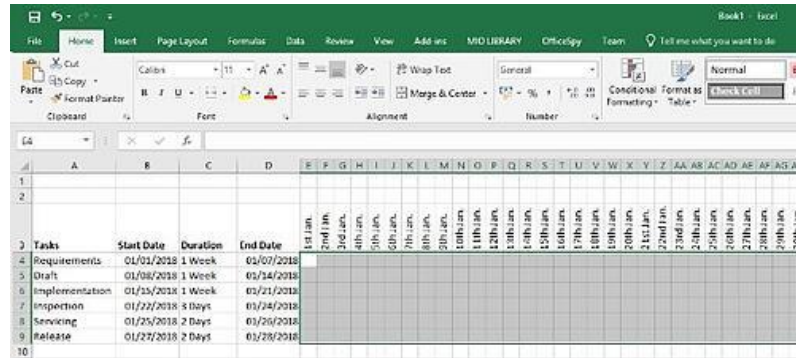
Format your data. Right-click that date and select **"Format cell"**. In **"Numbers"** select the desired option in the date section. Next, change the order by clicking on **"Home"** and then in **"AB"** select the option to rotate the text up.





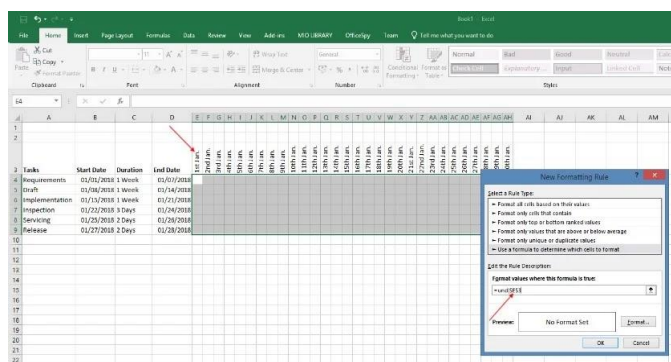
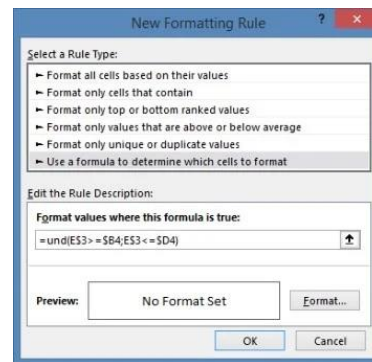
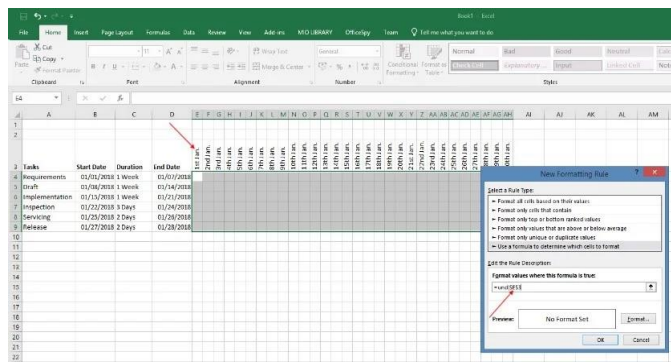
## 6. step:

Add conditional formatting. Select the relevant cells that are to receive this formatting. In **"Home"** click on **"Conditional formatting"** and on **"New rule"**. Select an customized formula as your rule type.



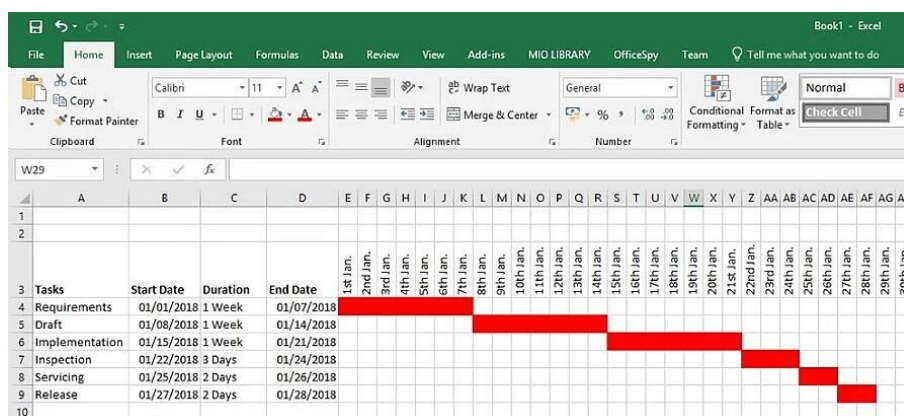
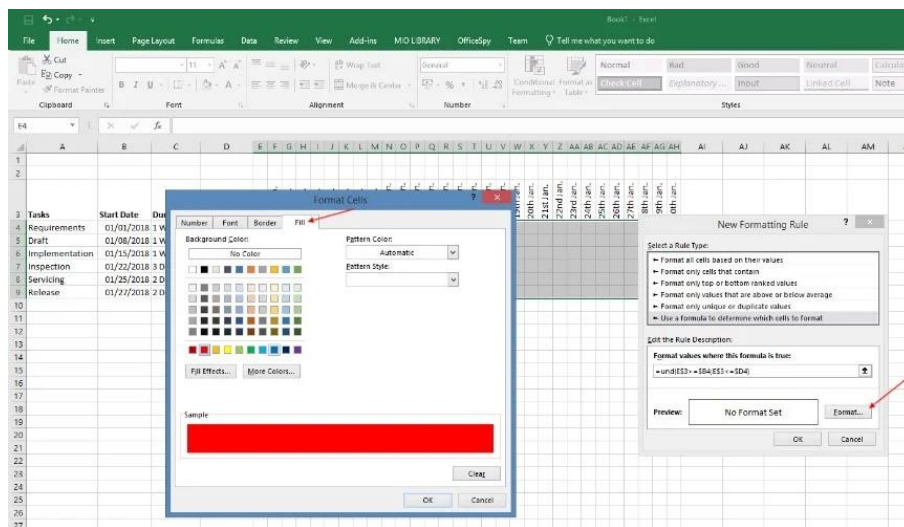
## 7. step:

Enter an **"AND formula"** with two conditions. Begin with **"=and( "**. Now click on the cell containing the first date of your headers. The formula will appear in the editing bar. For example, for Cell D3 (**=D\$3**). This value in this cell has to be equal to or higher than the start date. Therefore, enter **">="** and then click on the cell that contains the start date. The formula of this cell will now be entered. Now enter **";"** and repeat the procedure for the end date. Click on the cell containing the first date of the headers. The formula of this cell should appear. It will have to be smaller than the end date. Therefore, enter **"<="** in the formula and click on the cell containing the end date. To complete the formula, close the bracket and delete the first, fourth, fifth and eighth dollar symbol (**"\$"**) from this formula.



## 8. step:

Set a format that reflects the formula by clicking on "**Format**" and selecting a color you wish to display the bars of your Gantt chart. You have now created a Gantt chart following simple steps. It also has the ability to dynamically adapt to changes and additions automatically.




## Insert Gantt chart in PowerPoint

Then copy the entire Excel table into your desired PowerPoint presentation: Select the table, open the context menu with a right click and click "**Copy**". In your PowerPoint presentation, select the desired slide, select a content placeholder and choose "**Insert**" from the context menu.

# Does this sound too complicated?

## Create Gantt charts directly in PowerPoint

Want to create a Gantt charts easier and faster? With our product empower® charts, we at Made in Office have made it possible to create elegant Gantt charts directly in PowerPoint, via drag & drop and in your corporate design. Make sure to read more about our powerful charting and layout software. Manually creating Gantt charts for project plans and timelines in PowerPoint is time-consuming and tedious. With empower® charts you can create your Gantt charts in a few minutes and with a few clicks, automatically. For example, you can show school vacations or structure your tasks in phases and collapse them when needed.

 Gantt Chart

### Gantt Chart

#### Timeline

From  To

#### Header Settings

Use recommended Header Settings ☒ On

☐ Year

☐ Quarter

☒ Month

☒ Week

☐ Day

2016

Q4

Nov December

48 49 50 51 52

28 29 30 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 1 2

Maximum header font size

Regional settings (headers and date format):

#### Items

Show Phases ☒ On

Phases  Rows per phase

#### Notes Area

Show first column ☐ Off

Show second column ☐ Off

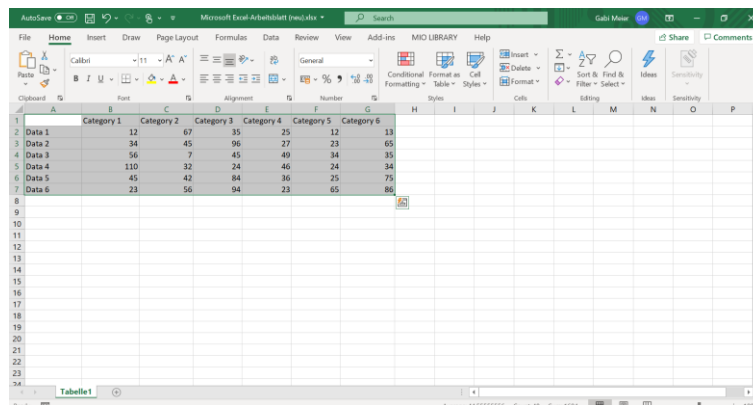


# Link PPT charts with Excel & automatically update PowerPoint Excel links

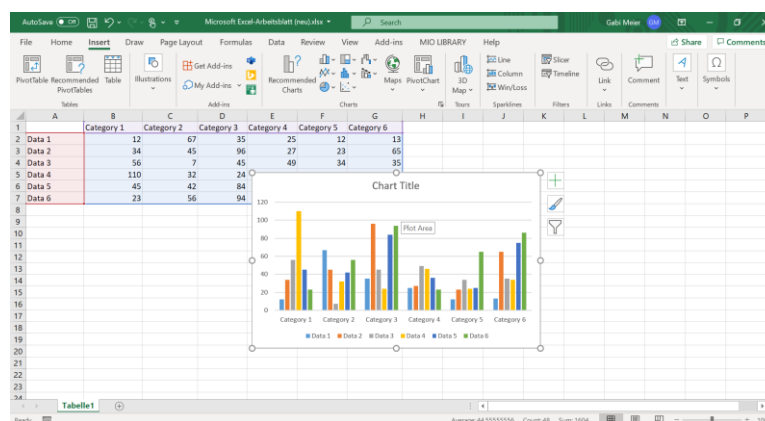
Do you need to link Excel tables to your PowerPoint charts in your next report or do you need to update the links? Our short video tutorial will show you how to insert an Excel chart into PowerPoint. We will also show you how to automatically update chart values e.g. for quarterly figures. For example, with 50 charts in PowerPoint, manual updates can be very labor-intensive. Using our instructions, updating a PowerPoint Excel link automatically will no longer be a problem.

# Guide: Insert Excel table in PowerPoint presentation

1. Open Excel Data.
2. Select table and click insert and then chart.

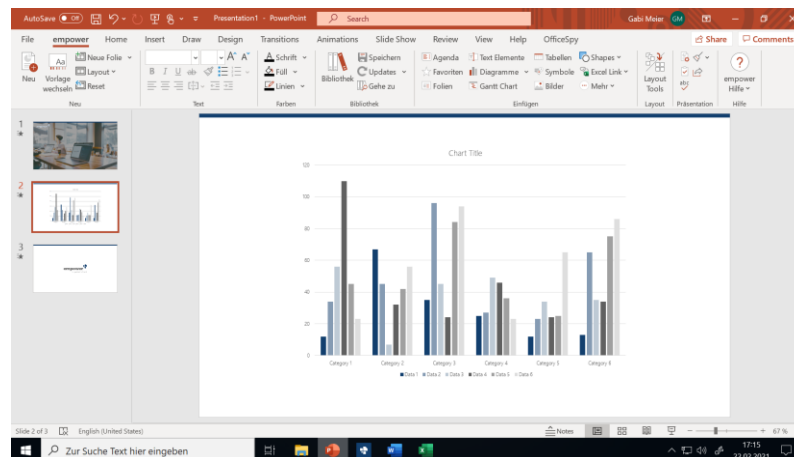


3. Copy the Excel chart.





4. Open PowerPoint presentation.
5. In the Home Ribbon, click on paste.
6. Choose option Use destination Theme and link Data.



# Updates for PowerPoint Excel links

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If the data in your Excel file has changed, you have the ability to update your chart in PowerPoint with a single click. So there is the possibility to link the diagrams with Excel and thus make work easier.

**Under File / Information / Edit Links to Files (PPT 2016) you can also set an automatic update of the diagrams in PowerPoint.**

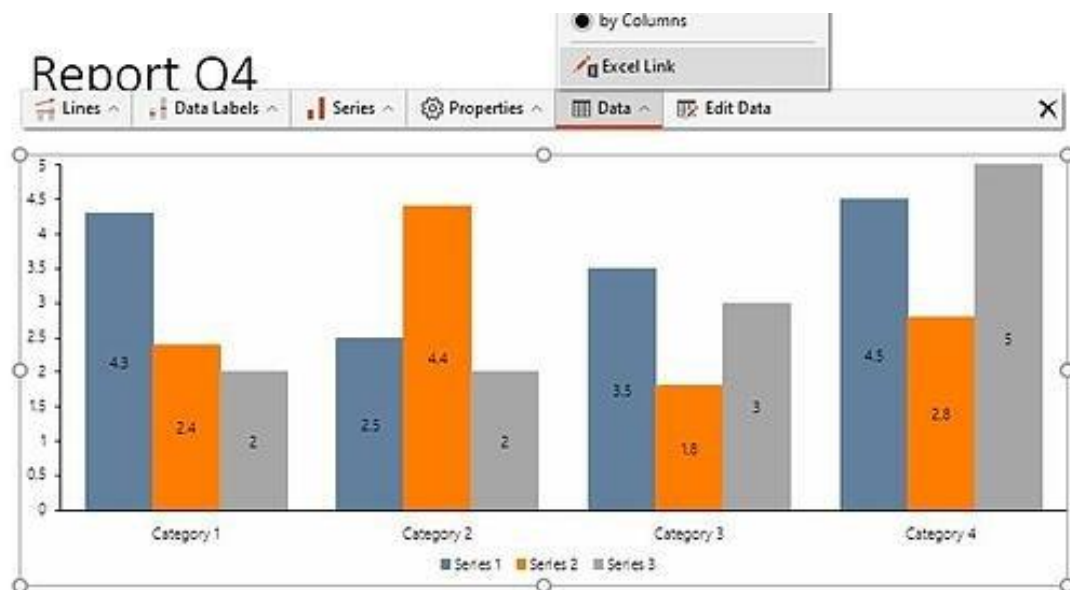
## Please note: Drawbacks at native version

- Links can only be corrected individually
- There are no relative file paths possible
- When you open the presentation, the charts are not updated automatically by default
- Automatic updating is not always reliable in Office 2016 (for example, when a link needed to be repaired)
- Existing charts in PowerPoint can not be linked (you must always copy an Excel chart).
- No possibility for clean separation of data management and visualization (all diagrams must be additionally available in Excel)
- In older versions of Office, native joins are generally not always stable

# Save resources through automatic updates for PowerPoint Excel links

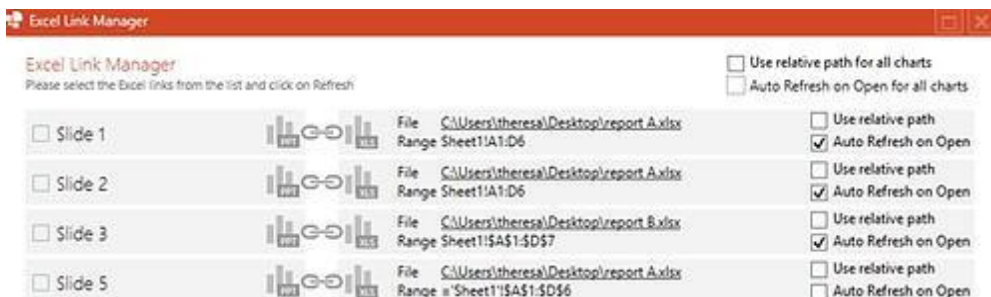
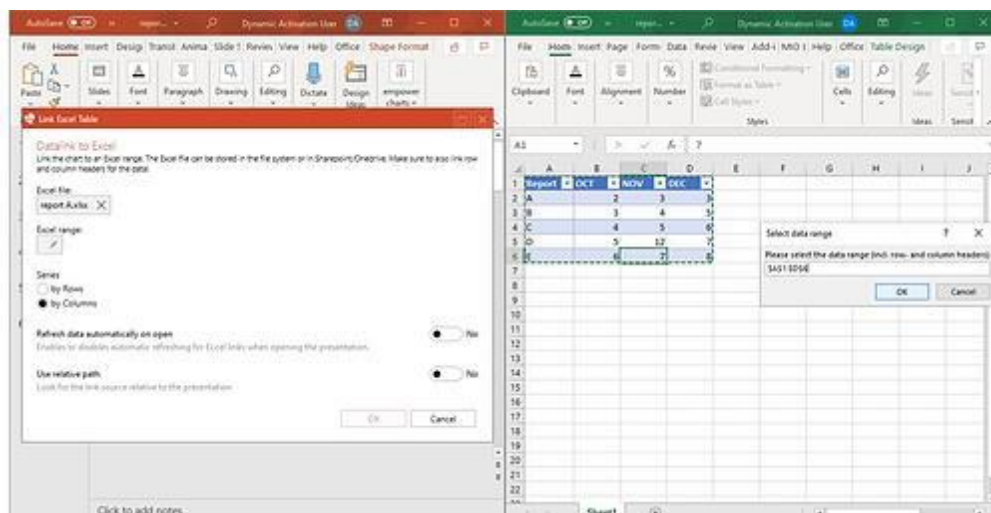
All quarterly figures that you have created in Excel can be inserted and automatically updated in PowerPoint. These dynamic reports save you time and thus money. You do not have to insert Excel values each time, and you avoid errors when manually editing PowerPoint charts.

These instructions for automatic chart link updating require the empower® charts add-in for PowerPoint.



# Advantages of empower® when linking PPT and Excel:

- Update data automatically - changes do not have to be manually transferred from Excel to PowerPoint
- Intuitive and easy creation of simple links



# Professional formatting for your PowerPoint charts

Some chart layouts just look better than others. You are probably wondering why this is so and how you can create a professional chart format yourself. In the following, you'll learn the basic settings for editing a PowerPoint diagram. Among other things, you will learn about labeling, the right color scheme and exciting chart animations.

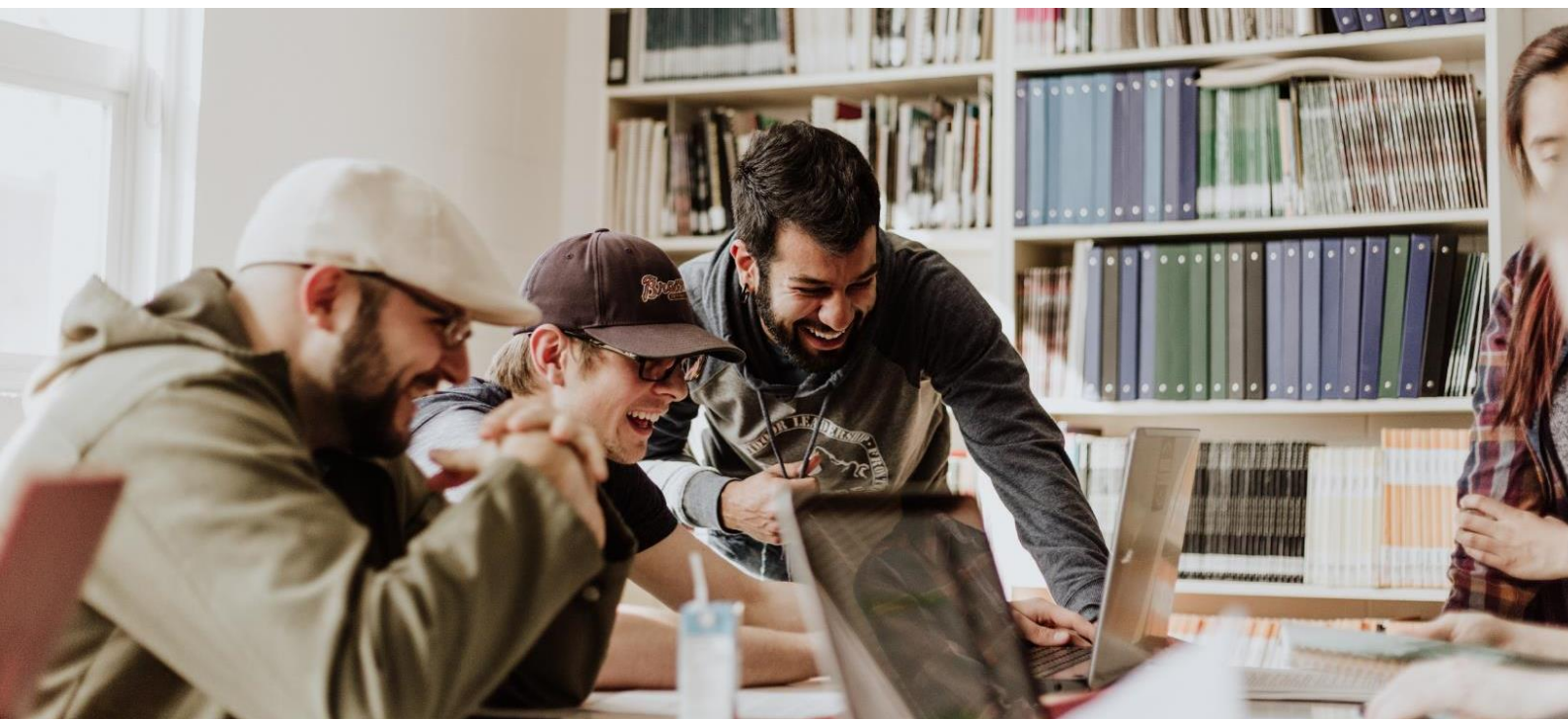
# Formatting and editing your chart elements:

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Once you have created your chart, you can customize its format and how it's displayed.

One way to customize your map is to use the Design and Format tabs in the PowerPoint Ribbon Chart Tools group.

Alternatively, double-clicking on the chart opens the formatting task pane on the right side of the PowerPoint window. Pay attention to which part of the map you click on, as the formatting task pane only refers to the selected map element, such as Format Chart Area, Format Plot Area, or Format Data Series.



# Chart title

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You have several options for changing and positioning your title. To change the position of your title or remove it completely:

1. Click on **"Add Chart Element"** on the Chart Tools > Design tab.
2. Choose **"Chart Title"** in the Add Diagram Element menu.
3. Select **"None"** to remove the title from the map, **"Above Diagram"** to position it above the map, or **"Center Overlay"** to position the title on top of and centered on the chart.

If you click on **"More Title Options..."**, the Format Chart Title task pane opens. That task pane also opens when you double-click on the chart title.

You can also click on the large plus (+) symbol next to your map to adjust the Chart Title.

# Data labels:

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Would you like country data to appear on the chart? Here's how:

1. Click on **"Add Chart Element"** on the Chart Tools > Design tab.
2. Danach Choose **"Data Labels"**.
3. Select **"None"** to hide data labels or **"Show"** to show them.

If you select **"More Data Label Options..."**, the Format Data Labels task pane opens with additional data label configuration options. You can also click on the large plus (+) symbol next to your map to adjust Data Labels.

## More options for data labels

- **"Label Options"**: Name, Category, Value, and what separator to use between them.
- **"Number"**: Category (Number, Currency, Percent, etc.) or a custom format.



# Color scheme of charts:

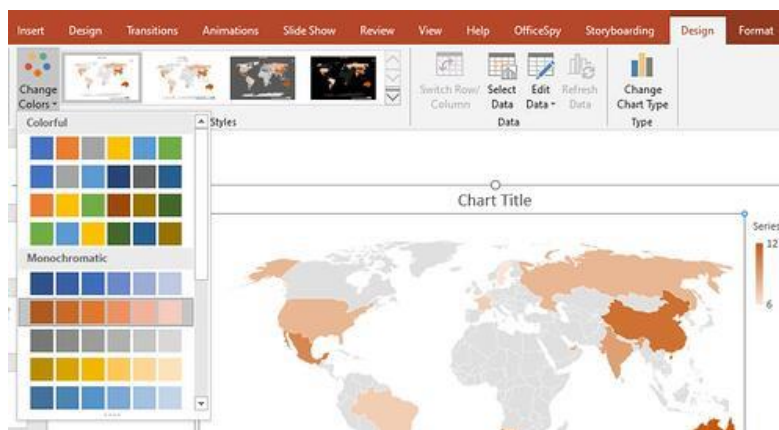
Before you change colors, consider carefully what color scheme to use, so that your map harmonizes with the entire presentation.

You can adjust your map's colors in several ways:

- On the Chart Tools > Design tab, click the **"Change Colors"** button.
- On the Format Data Series task pane, choose Series Options > Series Color.

- elect individual countries, right-click and choose "Fill" and optionally "Outline".

You can define a color scheme for all regions that you enter in your Excel table. Remember, when adjusting individual countries' colors, use colors that fit your overall color scheme and complement the rest of your map. To color your map's background, click on the outer edge of the map to open the Format Chart Area task pane to adjust **"Fill"** and **"Line"**. You can also right-click on the map edge to open a popup menu with the same options.



# Text color, size, and effects:

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You can change title and label text formatting by:

- double-clicking on the title, or
- right-clicking on the title or legend, or in the task panel

Right-click or double-click on the title and label to change fonts, sizes, colors. Right-clicking gives you the most options. The task pane controls special effects like text fill, outline, shadows, and more.

# How to be special: Create animations in PowerPoint

You can animate your map. Animation might be suitable if you want to demonstrate the evolution of different values.

Here is how:

1. Insert the video into a slide. Click "**Insert**" and select "**chart**".



2. PowerPoint animations can only be inserted from the "**Input**" area. If an animation is to disappear after a certain time, then you must insert a new animation from the "**Output**" area. This is explained in more detail below for the case of the speech bubble.
3. Click the speech bubble to place it where you want it in the chart.
4. You want the speech bubble to fly into the chart. Click the speech bubble and select "**Entrance**" under Animations and then "**Fly in**". Now the effect appears in the Animation panel.

# empower your brand & productivity in PowerPoint

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PowerPoint offers you much more than you knew before. Why not take a look at empower® charts - the PowerPoint add-in that facilitates chart creation far beyond standard PowerPoint functions. With empower® charts you can create meaningful PowerPoint charts in no time - not only bar charts and line charts, but also elegant Gantt charts and easy-to-understand waterfall or Marimekko charts.

## Do you want to be efficient and save time when creating diagrams?

The PowerPoint add-in empower® has already helped companies such as Continental AG or Bayer to achieve more efficiency creating meaningful diagrams.



### easy

Creating complex charts is one of the biggest time wasters in PowerPoint. With empower® charts, you can almost automatically create charts like Gantt charts and Waterfalls.

[Learn More →](#)



### efficient

40% of your time working with PowerPoint is spent formatting. With empower® productivity tools you can format charts in no time, link them with Excel files, and add Arrows and Lines.

[Learn More →](#)



### brand compliant

Most charts in presentations don't comply with brand-design guidelines. With predefined charts and custom Color Pickers, you can ensure every chart is brand compliant.

[Learn More →](#)

You can get all information by contacting us. We can present empower® charts to you in an online demo or provide a test version of empower®.



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