



AEROWORLD:

User guide to design PowerBI visuals

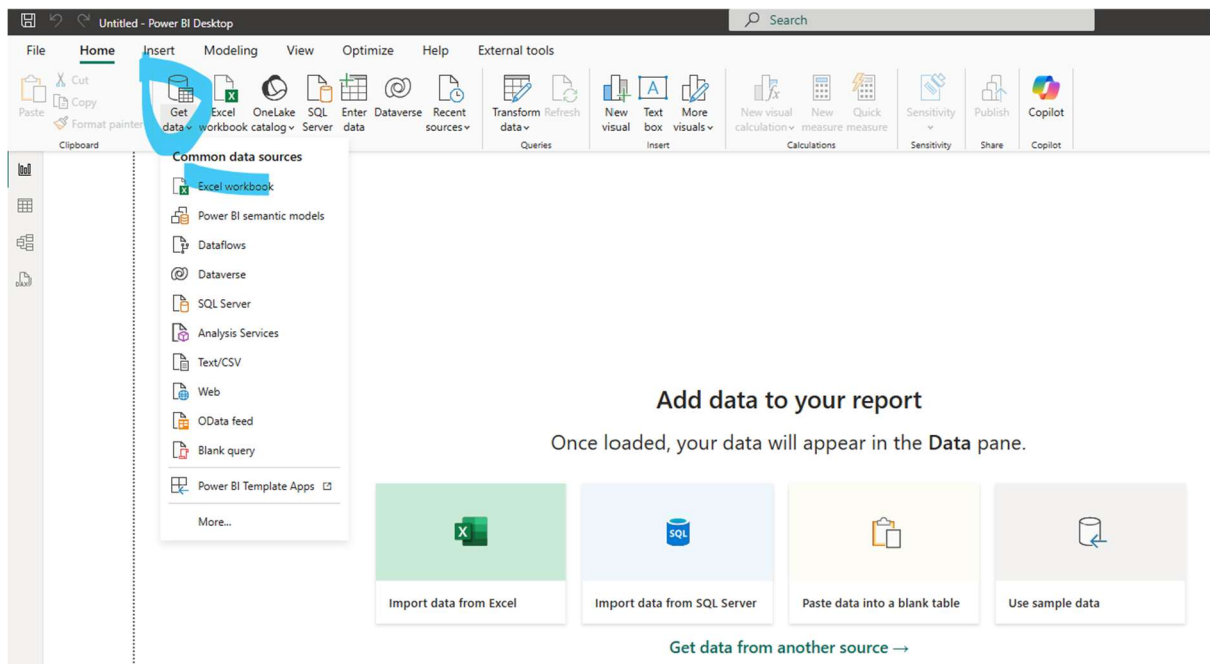
Introduction

Power BI is a powerful data visualization platform that allows you to create interactive charts, dashboards, and analytical reports. In this guide, we will show you how to create different types of visualizations

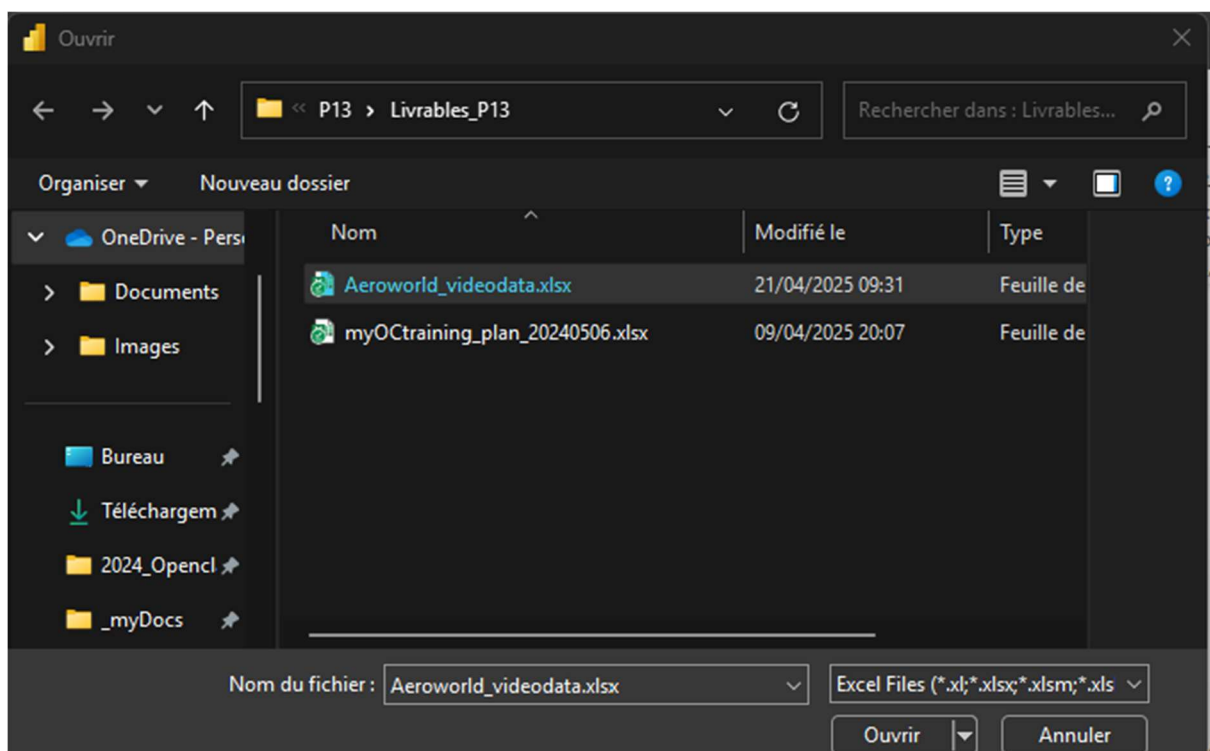


Step 1: Prepare the data

Click “Get Data” > Excel or CSV.



In the **navigator window**, select **Import mode** when prompted.



Load a sample dataset and open Power Query Editor

Navigator

facts_projects

| Project name | Start date | End date | Initial duration | Effective duration (md) |
|---|------------|------------|------------------|-------------------------|
| Ecommerce sales analysis | 06/05/2024 | 24/05/2024 | 15 | 10 |
| Real estate data analysis | 13/06/2024 | 05/07/2024 | 20 | 15 |
| Health study (Food security) | 28/05/2024 | 13/06/2024 | 30 | 20 |
| Wine store sales analysis | 08/07/2024 | 01/08/2024 | 25 | 17 |
| Project management dashboard | 26/08/2024 | 25/09/2024 | 20 | 18 |
| ESG: Gender equality at work | 26/09/2024 | 11/10/2024 | 20 | 15 |
| GoFastDeliveries dashboard | 22/11/2024 | 05/01/2025 | 20 | 15 |
| Book store sales analysis | 28/10/2024 | 21/11/2024 | 20 | 15 |
| Poultry market study with Principal Components Analysis | 06/01/2025 | 31/01/2025 | 20 | 12 |
| Counterfeit bill detection with Machine Learning | 03/02/2025 | 07/03/2025 | 30 | 15 |

Load Transform Data Cancel

Simple actions you might need to perform

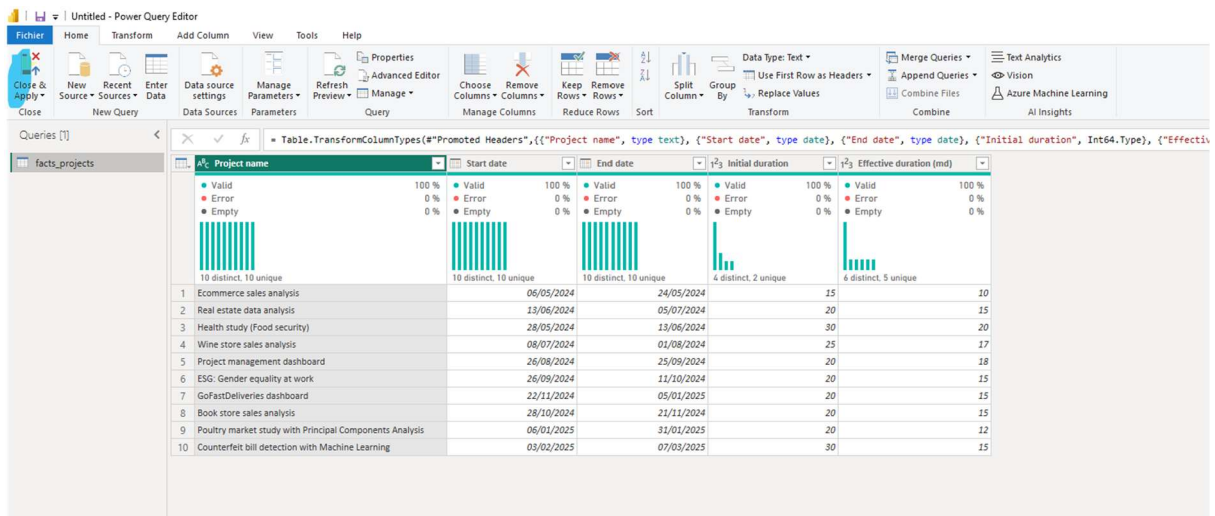
- Use First Row as Headers if needed
- Change data type if needed

Many other transformations can be used: to create new columns, to split / merge columns, etc.

Table.TransformColumnTypes(#"Promoted Headers",{{"Project name", type text}, {"Start date", type date}, {"End date", type date}, {"Initial duration", Int64.Type}, {"Effective duration (md)", Int64.Type}})

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Close and Apply all changes



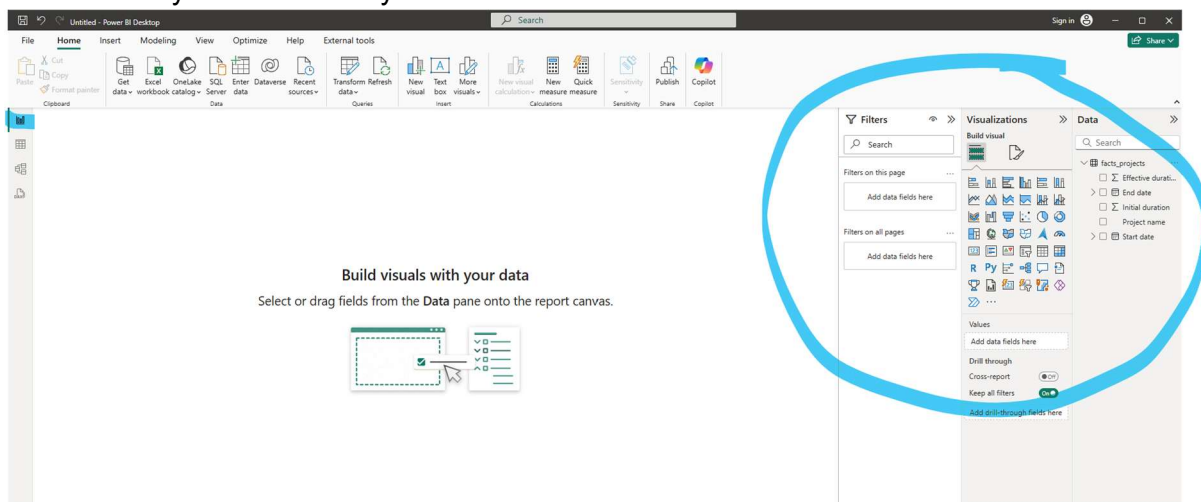
With PowerQuery, you can define the pipeline of all data preparation actions. If updates of initial dataset, you will be able to re-execute all those actions in a automatic way.

Step 2: Create the visuals needed

Back in PowerBI desktop, go to Report View

Here you have 3 important sections on the right

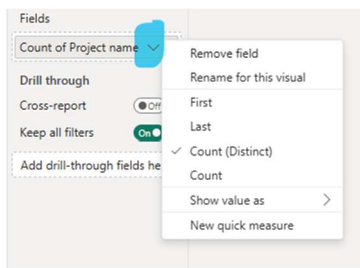
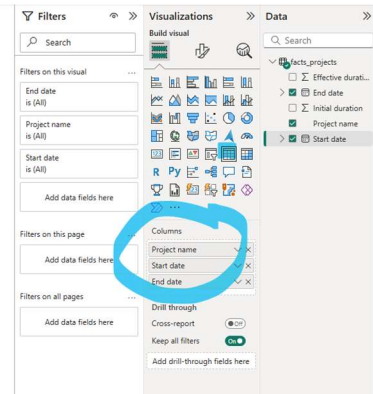
1. Filter you can apply to your visual, your page, or the full report
2. Visuals you can select, and customize
3. Data you can use for your visuals



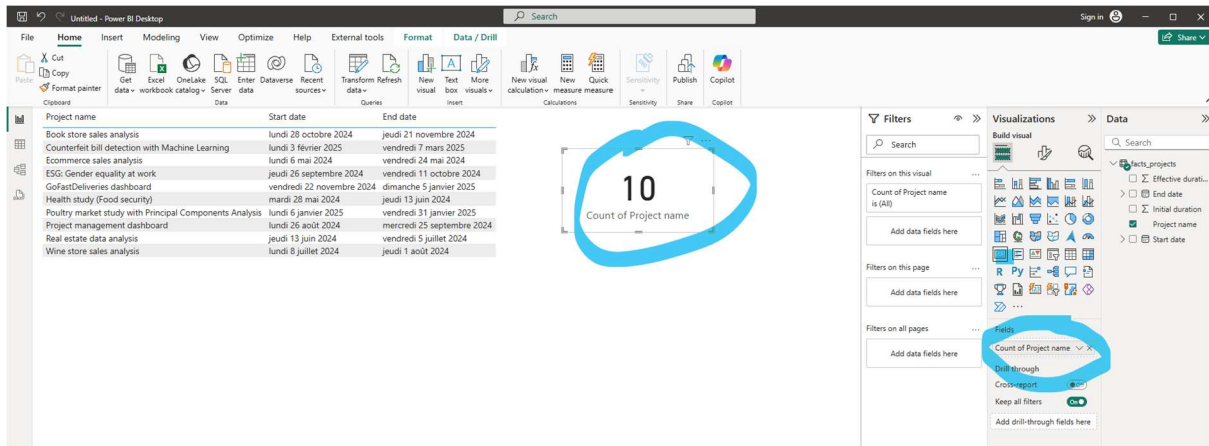
Create a table visual to display 3 columns

- Select the visual “Table”
- Drag and drop data in “Fields”
- Correct data to display: can be renamed for this visual, can be distinct count or else...

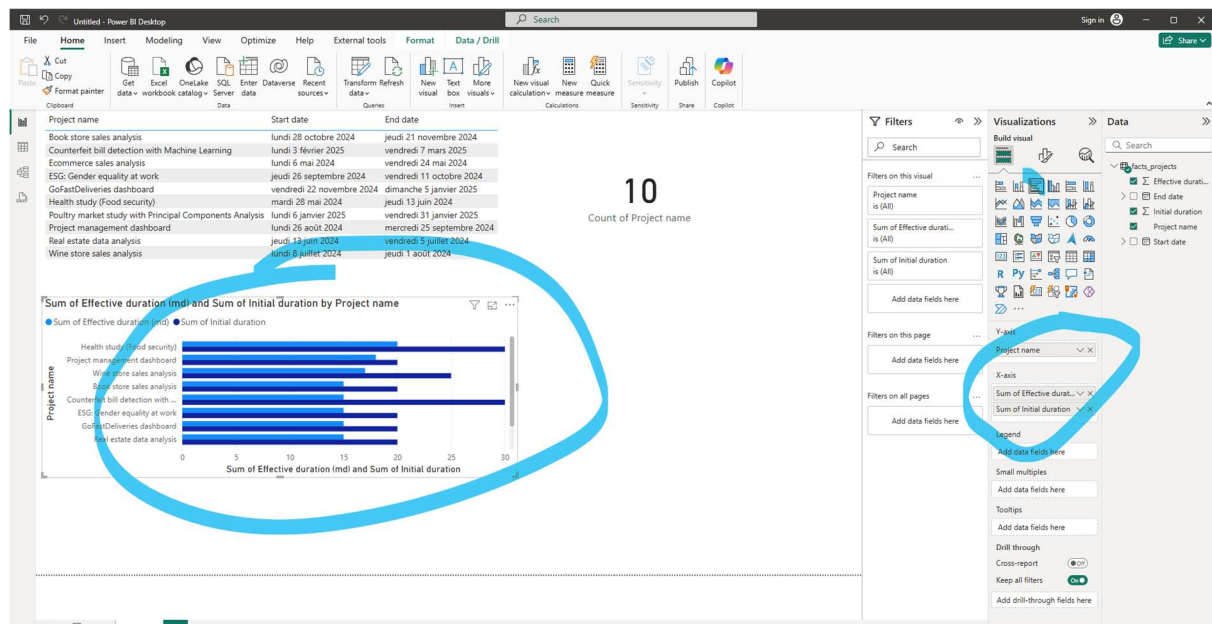
| Project name | Start date | End date |
|---|---------------------------|----------------------------|
| Book store sales analysis | lundi 28 octobre 2024 | jeudi 21 novembre 2024 |
| Counterfeit bill detection with Machine Learning | lundi 3 février 2025 | vendredi 7 mars 2025 |
| Ecommerce sales analysis | lundi 6 mai 2024 | vendredi 24 mai 2024 |
| ESG: Gender equality at work | jeudi 26 septembre 2024 | vendredi 11 octobre 2024 |
| GoFastDeliveries dashboard | vendredi 22 novembre 2024 | dimanche 5 janvier 2025 |
| Health study (Food security) | mardi 28 mai 2024 | jeudi 13 juin 2024 |
| Poultry market study with Principal Components Analysis | lundi 6 janvier 2025 | vendredi 31 janvier 2025 |
| Project management dashboard | lundi 26 août 2024 | mercredi 25 septembre 2024 |
| Real estate data analysis | jeudi 13 juin 2024 | vendredi 5 juillet 2024 |
| Wine store sales analysis | lundi 8 juillet 2024 | jeudi 1 août 2024 |



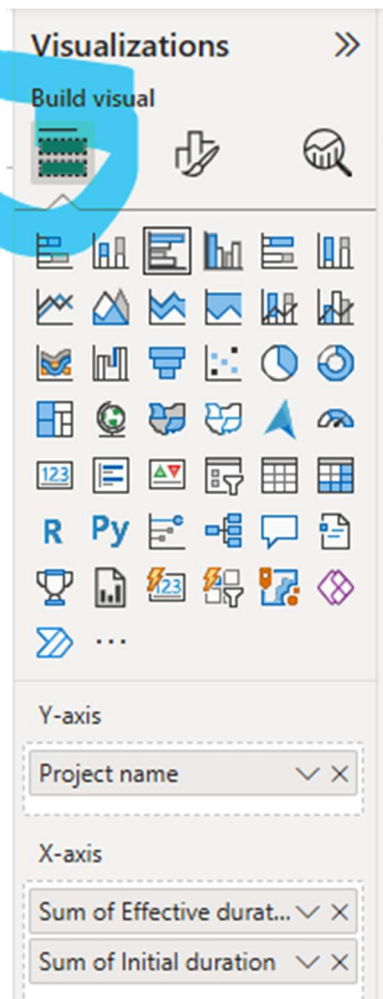
Or create a scorecard to display one unique value



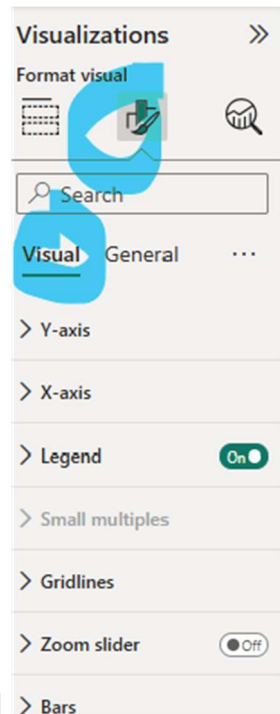
Or create Clustered bar chart



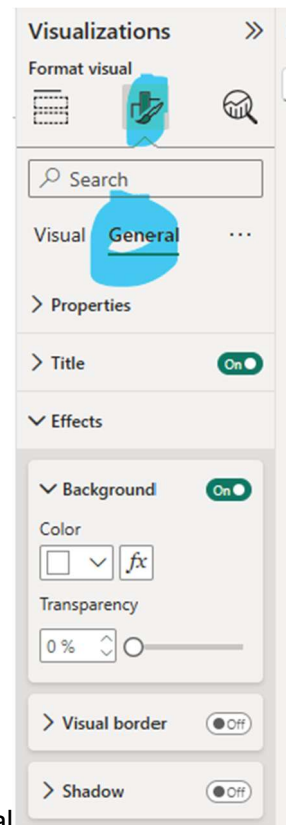
The choice of visuals depends on available data, and story you'd like to tell on those data. In short, PowerBI provides many standard visuals to use. And for each visual, you have different ways to customize them.



- By selecting the right data



- By customizing different settings of the visual



- By customizing the overall display of the visual

Conclusion

Power BI is a powerful yet user-friendly tool that empowers users to transform raw data into meaningful insights through interactive dashboards and reports. Whether you're analyzing sales trends, monitoring KPIs, or presenting data stories, Power BI offers the flexibility and functionality to support your needs.

To truly master Power BI, here are a few key tips:

1. **Prioritize Data Preparation**

Invest time in understanding your data. Clean it efficiently, automate repetitive steps using Power Query, and structure your data using best practices like the **star schema model**. A well-prepared dataset makes everything smoother downstream.

2. **Leverage the Power BI Community**

You're never alone! The Power BI community offers countless tutorials, forums, and YouTube videos. Whatever challenge you face, there's almost always a solution already shared by someone else.

With a bit of practice and curiosity, you'll be building insightful dashboards in no time.

**Empower your
data with Power
BI**

