

Analyze and Visualize Data

Find trends, build charts and reports in Excel and with the Analyst agent.

~25 MIN · Excel · Copilot in Excel · Analyst agent

Scenario. You work in the finance team at **Harbor & Co. Coffee Roasters**. Leadership wants to know which branch and product performs best, what customers say, and where sales are slipping between Q1 and Q2.

OBJECTIVES

By the end of this workshop you will be able to:

- Identify trends and generate charts with **Copilot in Excel**.
- Analyze a text column for themes and sentiment.
- Create a formula from a plain-language request.
- Produce a leadership-ready report with the **Analyst agent**.

BEFORE YOU START

- Microsoft 365 account with a Copilot license; Excel (web or desktop) at m365.cloud.microsoft.
- Microsoft Copilot app at copilot.cloud.microsoft.
- Dataset from your trainer: **harbor-coffee-sales.csv** (columns: Branch, Product, Quarter, UnitsSold, Revenue, CustomerFeedback).

Setup (5 min)

1. Create a blank Excel workbook. Go to **Data > Get Data > From Text/CSV** and import the CSV.
2. In the **Power Query** window, load the data as an Excel **table** (Copilot needs table format).
3. Save the workbook to **OneDrive** as **Harbor Coffee Analysis** (Copilot in Excel requires OneDrive).
4. Open the **Copilot** pane and set the mode to **Allow editing**.

Excel modes: **Allow editing** = Copilot modifies the workbook; **Plan** = it proposes changes for your review first; **Chat only** = answers in the pane, no changes.

YOUR TASKS

1 Analyze trends

Where: Excel > **Copilot** pane.

1. Send Prompt A and read the summary table Copilot adds.
2. Send Prompt B and check whether the result matches what you see in the data.

PROMPT A

Summarize total revenue by branch and highlight the top-performing branch for leadership review.

PROMPT B

Compare units sold between Q1 and Q2 for each product and point out the biggest change.

Checkpoint: You can name the top branch and the product with the biggest Q1-to-Q2 change.

2 Analyze customer feedback

Where: Excel > **Copilot** pane.

1. Send Prompt C to surface the main themes.
2. Send Prompt D to add a sentiment label to every row in a new column.

PROMPT C

Review the CustomerFeedback column and identify the major themes.

PROMPT D

Analyze the CustomerFeedback column and label each row as positive, neutral or negative in a new column.

Checkpoint: A new sentiment column exists and you spot-checked three labels yourself.

3 Build a chart

Where: Excel > Copilot pane.

1. Send Prompt E to create the chart, then Prompt F to improve it.

PROMPT E

Create a bar chart showing total revenue by branch.

PROMPT F

Add data labels and sort the branches from highest to lowest revenue.

Checkpoint: The chart is sorted and labeled.

4 Create a formula

Where: Excel > Copilot pane.

1. Send Prompt G, then click into the new column to read the formula Copilot wrote.

PROMPT G

Add a column that calculates the average revenue per unit sold for each row.

Checkpoint: You can explain in one sentence what the formula does.

5 Build a report with the Analyst agent

Where: Microsoft Copilot app > **Analyst** (left navigation) or the **Agents** list in Copilot Chat.

1. Open the **Analyst** agent and **attach your workbook first**.
2. Send Prompt H, then use Prompts I and J to dig deeper and reformat.

PROMPT H

Highlight key revenue and unit trends by branch and quarter from the attached file.

PROMPT I

Which products or branches show declining performance, and what might explain it?

PROMPT J

Summarize these results in three bullets for a leadership slide.

Tip: Use Copilot in Excel for quick exploration; use the Analyst agent for deeper, cited, shareable reports (it also accepts CSV, JSON, PDF and Word files).

Checkpoint: You have a report with charts and a three-bullet summary.

FINAL CHECKLIST

- Data was in a table, saved on OneDrive, and Copilot ran in Allow editing mode.
- At least one number from Copilot was verified manually (for example with a SUM or a filter).
- You can explain when to choose Copilot in Excel versus the Analyst agent.

REFLECT

Did the Analyst agent find anything Copilot in Excel missed? Which result would you challenge before presenting it?