

Scenario 3 - City Bikes Rental · DS2 Business Digital Artifact

1 · Why I picked this scenario

I chose Scenario 3 because I understood it straight away.

The manager told me what she wanted to know. She wants to know which bike gets hired the most and also gave me all the numbers I needed.

I did not have to make anything up.

That made the task easier to start and progress.

2 · Why I used Excel

I been using Excel for years that is why I am more productive with it.

As the manager would get new numbers every week, for this situation using PowerPoint I would have to do the sums again and make a new slide each time for example.

- In Excel, the sums do themselves and I have to change the number and the answer changes too (Microsoft, 2026c). I also had to make a chart.
- In Excel, the chart is joined to the table. When the table changes the chart changes as well.

3 · The information I used

I only used three things.

- The memo from the manager, L. Smith. This gave me the rental numbers (Smith, 2026).
- The task page on Moodle. This told me what the artifact had to show (University of Wales Trinity Saint David, 2026).
- The Department for Transport cycling statistics. I used this to check that asking about bike types makes sense for a real rental company (Department for Transport, 2024).

The numbers from the manager were:

Standard Bike 42, Electric Bike 28, Mountain Bike 31, and Children's Bike 15.

I used these numbers exactly as they were. I did not make up any extra numbers.

4 · What I did, step by step

Step 1. I put the data in a table

I put the bike types in one column and the numbers next to them. Excel needs the data in this shape before it can add it up or make a chart.

Step 2. I added up the numbers

I did not add them up in my head. I used a SUM formula (Microsoft, 2026a). The total is 116. If a number changes, the total changes too immediately.

Step 3. I worked out the percentage for each bike

I divided each number by the total. This shows which bike is used a lot and which one is not.

Step 4. I found the most popular bike

I could have looked at the table and typed the answer. I did not do that. I used INDEX and MATCH (Microsoft, 2026b; Microsoft, 2026d).

This means the sheet finds the answer for me. If the numbers change; the answer changes too.

Step 5. I made a summary page

I put the important answers on their own page. This means the manager can read the answer first and look at the table after.

Step 6. I made the chart

I made a bar chart, and the bike types are along the bottom, and the number of rentals is up the side (Microsoft, 2026c).

5 · What I changed and why

My first try was not good enough. It was just a list of bikes and numbers.

It did not answer the manager's question. She asked which bike are used the most. My first try did not tell her that. So, I changed it.

Change 1.

I stopped typing the answers in. At first, I typed the total in myself.

Then I changed it to a formula. Now the total is right even when the numbers change.

Change 2.

I added the percentage column. The plain numbers did not show me the gap between the bikes.

The percentage makes it clear. Standard Bike and Mountain Bike are close together.

Change 3.

I moved the answer to its own page. At first the answer was hidden in the middle of the table. Now the manager sees it first.

Change 4.

I made it look better. I made the top row bold. I froze it so it stays on the screen.

I set the percentages to one decimal place. I made the first column clear, so no words were cut off.

I also took out anything that was not needed. A table should show the numbers clearly and nothing extra.

6 · What the sheet shows

There are 116 rentals in the week from the manager's memo (Smith, 2026).

The most popular bike is the Standard Bike. It had 42 rentals.

That is about 36% of all the rentals.

- Mountain Bike is next with 31.
- Then Electric Bike with 28.
- Then Children's Bike with 15.

This result shows with what the government statistics say about cycling in England.

Bicycle use is common but not everyone owns a bike, so a rental company would expect steady demand

(Department for Transport, 2024).

So, the manager should think about getting more Standard Bikes showed on the analysis.

The Children's Bike is used the least. It might be worth checking different strategies for them.

7 · What I would do better next time

- Use more than one week of numbers. One week only shows one week.
- Add the money from each bike type. A bike that is used less could still make some money.
- Check the chart on a phone because the manager will read it on her phone.

Reference list:

Department for Transport (2024) National Travel Attitudes Study (NTAS) Wave 9: Cycling. Available at: <https://www.gov.uk/government/statistics/national-travel-attitudes-study-wave-9/national-travel-attitudes-study-ntas-wave-9-cycling>

Microsoft (2026a) SUM function. Available at: <https://support.microsoft.com/en-us/excel/functions/sum-function>

Microsoft (2026b) INDEX function. Available at: <https://support.microsoft.com/en-us/excel/functions/index-function>

Microsoft (2026c) Create a chart from start to finish. Available at: <https://support.microsoft.com/en-us/excel/get-started/create-a-chart-from-start-to-finish>

Microsoft (2026d) MATCH function. Available at: <https://support.microsoft.com/en-us/excel/functions/match-function>

Smith, L. (2026) Rental summary needed. Internal memo to Junior Assistant, City Bikes Rental.

University of Wales Trinity Saint David (2026) DS2: Business digital artifact - interactive book.