At the School of

OPENCOHESION

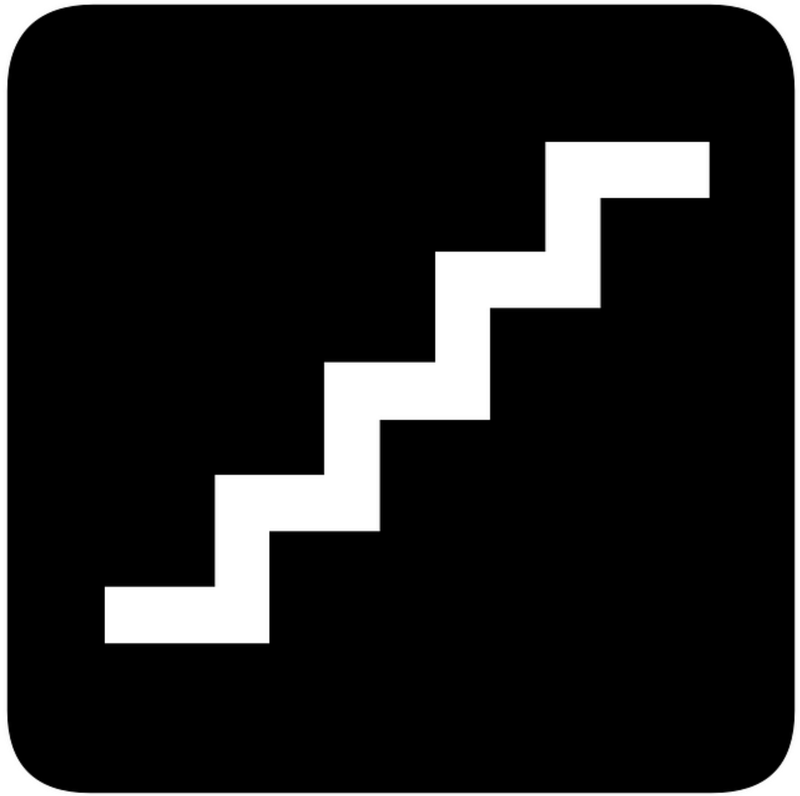
DATA ANALYSIS

ACTIONS FOR ANALYSING YOUR DATA

ANALYSE THE DATA

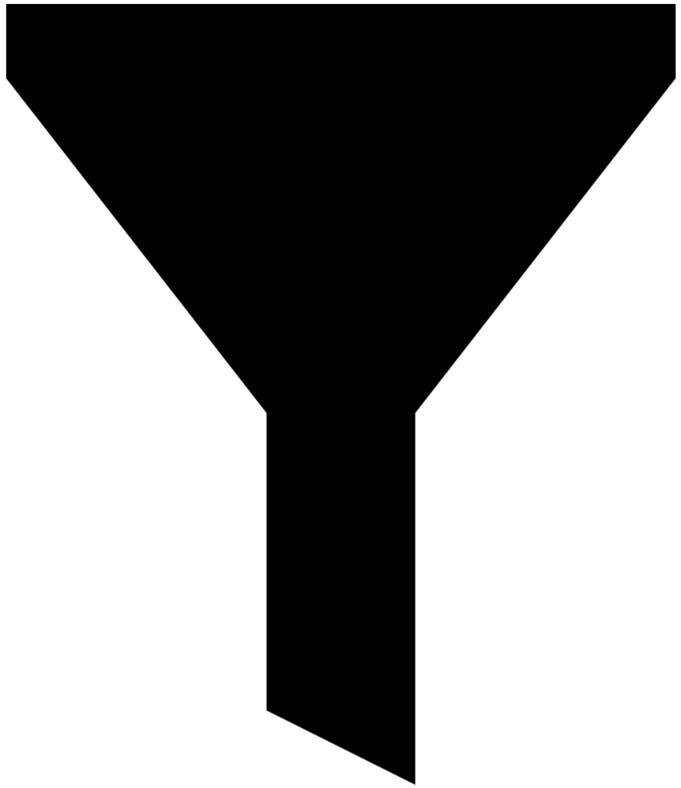
Looking at the data and understanding the meaning can be very simple. Use methods and tricks that facilitate understanding and quickly highlight the meaning

ANALYSE THE DATA: SORT



If your data include a series of values of scale, sort them from the largest to smallest. Select the column and activate the option for sorting (generally under Data > Sort)

ANALYSE THE DATA: FILTER



You could have a set of a hundred rows, analysing it may not be that simple. So filter the data to **show only** those of interest, hiding the others. Use the **Filter** option (under Data > Filter)

ANALYSE THE DATA: GROUPING/1

Grouping data can give excellent results for measuring quantity
(use when data have homogeneous characteristics that allow it).

ANALYSE THE DATA: GROUPING/2

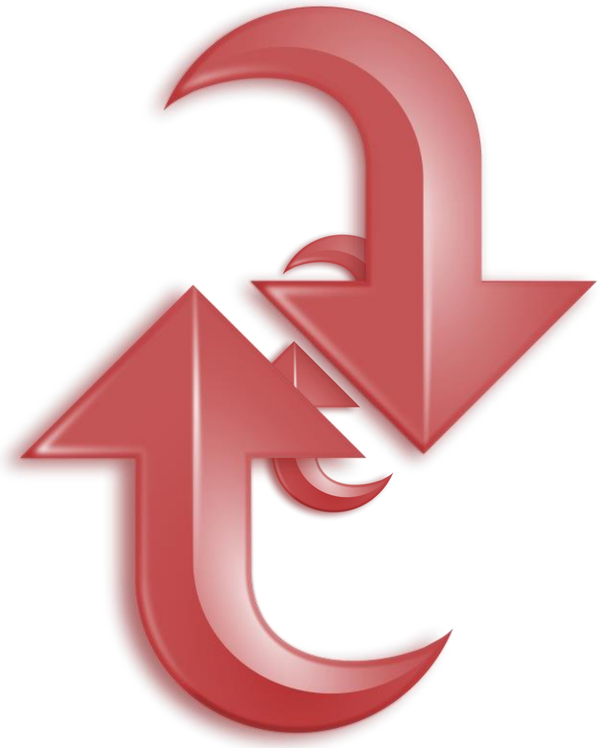
For example...

The list of all projects financed by cohesion policies in your territory: there are hundreds or thousands, but can they be distributed by theme? How many refer to Environment, Transport, Culture and Tourism...?

ANALYSE THE DATA: GROUPING/3

To count individual projects divided by theme, they can be grouped using a **Pivot Table**. To do so, select the entire table opened in the worksheet and use the relevant option (Data > PivotTable): enter Theme in the Rows area, and the Count of Theme option in the Values box.

ANALYSE THE DATA: COMBINE STRATEGIES

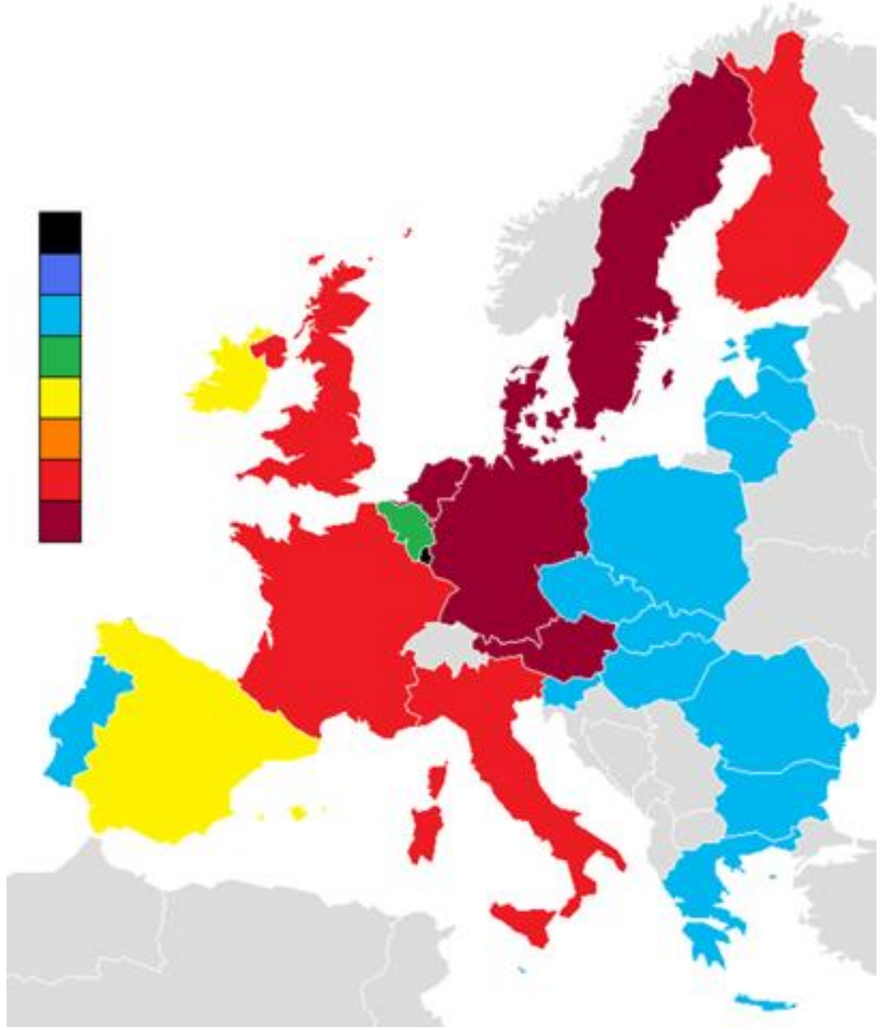


Using one of these methods will not necessarily be sufficient: you may need to use **two or three together**.

- Having grouped the data by Theme, maybe sort them from largest to smallest…
- It could also be helpful to filter before grouping them, to focus on a subset of the data…

CORRELATE THE DATA

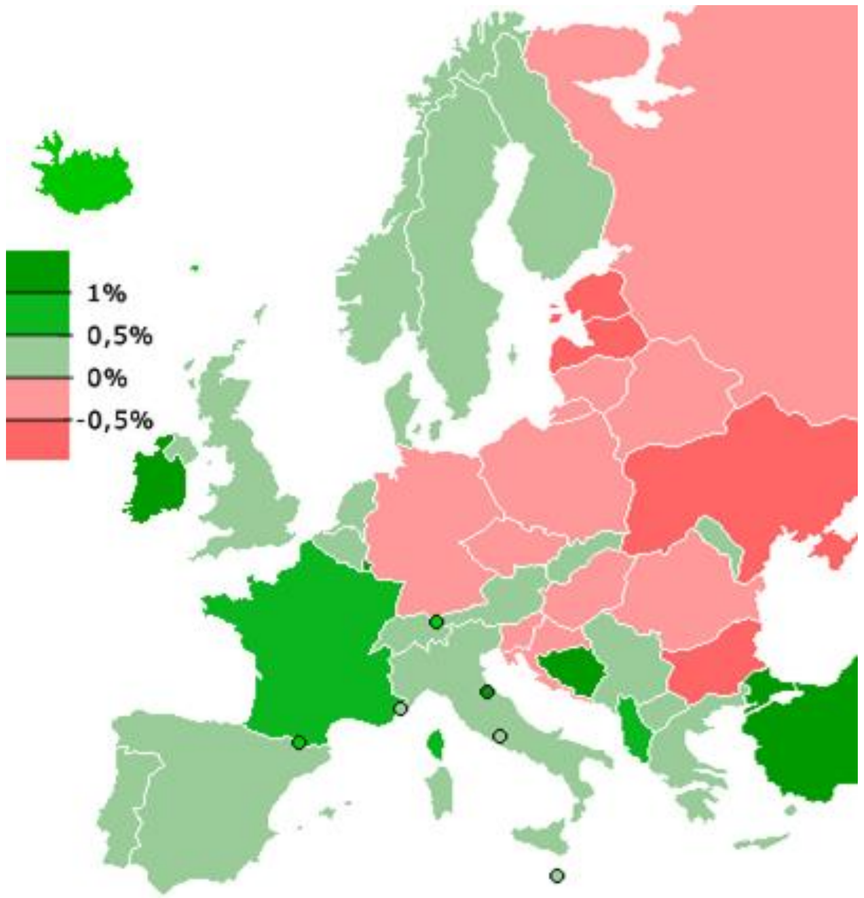
COMPARISON BETWEEN TERRITORIES: NORMALISE



Comparing territories is possible but you need to consider the differences arising from population or context.

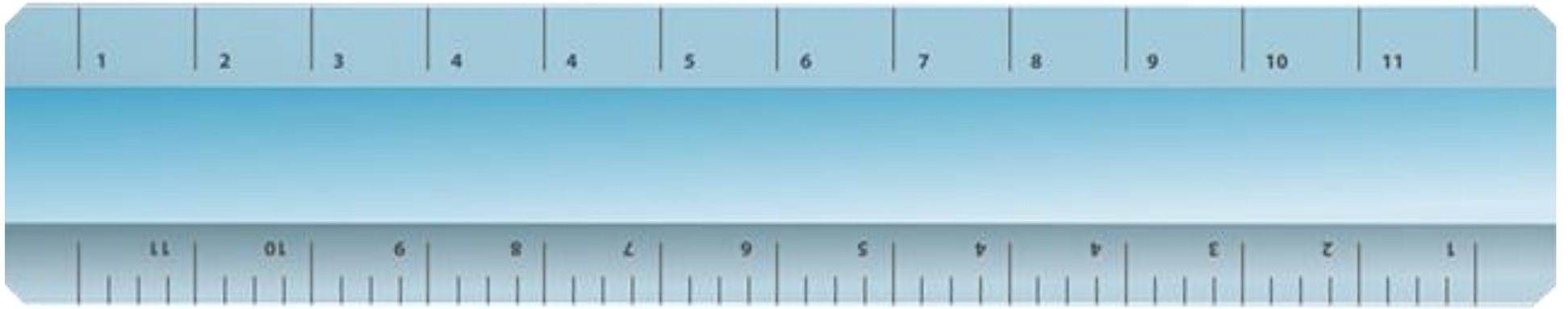
Normalisation involves putting our comparison in proportion with this information.

PLACING IN PROPORTION WITH THE POPULATION



Measuring in relation to the population is the most used method. For example, to answer the question: How many bins of differentiated waste by number of inhabitants per neighbourhood. This could be one way to calculate waste generation.

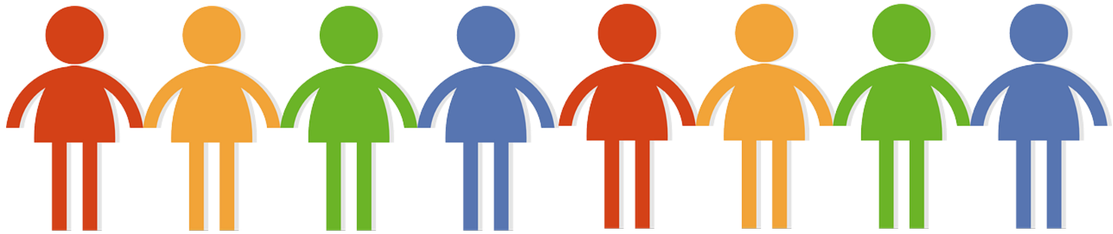
CREATE AN INDICATOR



When our data are a subset of a larger group of data with the same characteristics, they can be normalised by creating an **indicator**.

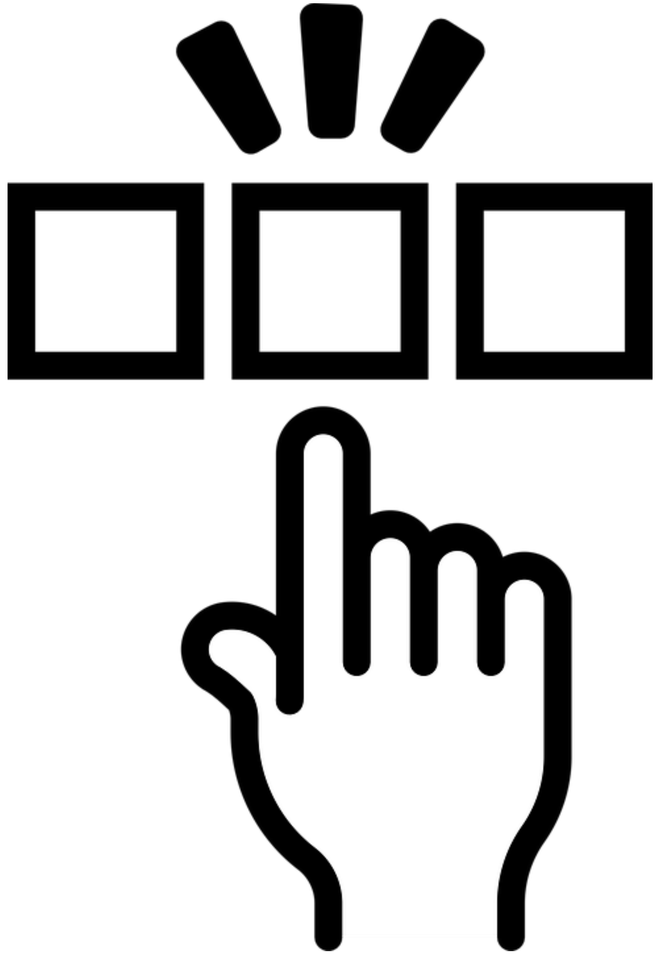
CREATE AN INDICATOR

Example: if you are interested in measuring female employment and comparing it, the ideal would be to create an indicator and divide by overall employment.



Result: we have the percentage of women employed compared to total workers. By not comparing them with the population (which already has an indicator: the employment rate) but with workers, we are focusing on a subset of the population, i.e. employed people.

POSSIBLE TESTS OF INDICATORS



Thoroughly analyse the data that you are collecting for your research, and **construct new indicators** to compare them...

for example with data from other territories, with other data subsets, with historical series...

ANALYSE THE DATA: 5 PRACTICAL TIPS

ASOC

1. KNOW YOUR DATA

1

The best place to start: there is no standard recipe for deciding which method to use.

You should **know your data well** first of all.

2. SET A CLEAR AIM

Start from your objective and ask yourself:

why might it be helpful to sort, filter, group, correlate and compare the data?

What will the results tell me?

3. LIGHTEN THE DATA

Lighten the data: remove those that are not helpful for your research and try to focus on smaller datasets.

4. MAKE MULTIPLE ATTEMPTS

4

Try, try and try again: if possible, it’s better to analyse the data by assessing all possible methods described above.

5. LOOK FOR ANOMALOUS VALUES

Look for the outliers, i.e. values that are anomalous with respect to the other table values.

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COESIONE ITALIA

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