



Australian Bureau of Statistics

Statistical Language - Data Visualisation



Statistical Language



Data Visualisation

What is data visualisation?

Data visualisation involves the visual presentation of data to communicate the stories contained in the dataset.

Data visualisation can communicate complex information in a way that is easier to interpret by turning data into visually engaging images and 'stories'.

How can data be visualised?

Data can be communicated visually through:

Static visualisation - the use of graphs and charts which provides a visual snapshot of the data.

Dynamic visualisation - the use of animations which emphasise key information and show movements in the data.

Interactive visualisation - data users are able to change the graphics so as to view different variables. This provides opportunities for users to become active data explorers with the freedom to customise what they see, look deeper into specific areas of the data, or use motion to track patterns over time and space.

How can data visualisation be used?

Data visualisation not only communicates data in an easy to understand way, it can also be used as a tool for data analysis as patterns, trends, relationships between variables, and the distribution of the dataset can be more apparent than when presented as numbers in a table.

The use of data visualisation for analysis can assist with exploring the data and guiding the direction of further data investigation. It is also possible to reduce complex datasets (or integrate multiple datasets) to reveal specific characteristics of interest, explore changes over time, or investigate relationships between variables.

When is data visualisation suitable?

Data visualisation is beneficial when the user needs an overview of a dataset rather than the specific values contained in the dataset. The visualisation will highlight the stories in the data, or focus on selected data from within the dataset for a specific purpose.

Data visualisation links:

ABS:

Visit [Interact](#) with our data on the ABS website to explore the visualisation of ABS data.

External links:

[TED](#) (Technology, Entertainment, Design)

[Gapminder](#)

[Statistics Netherlands interactive info graphs](#)

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