

 Step 1: Visualise

Step 2: Package

[7] Step 3: Communicate: Present and follow-up

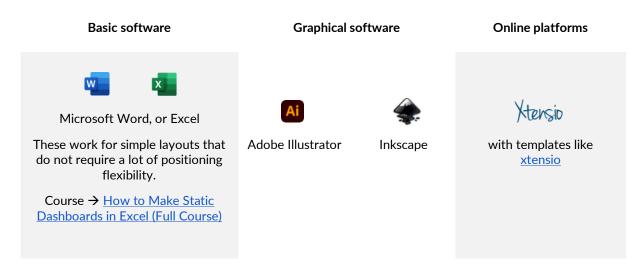
TOOL: Narrative options with tool highlights

1. Dashboards

A. Static Dashboards (Factsheets)

These are brief reports that highlight key findings to a specific audience. A fact sheet should ideally be a single page long, 2 pages maximum, and displayed in a visual format to emphasize key information. A fact sheet lists all the key information, facts, and figures around a particular topic in a brief and concise manner. Since visual information is easy to grasp, a fact sheet should be visually appealing comprising tables, charts, graphs and other images, text and numbers of varied sizes, bullet points and colour.

Fact sheets can be built in several ways:



Note: Charts and infographics created with other tools can be imported into a factsheet.





Fact sheets can take on any format or shape but here are some things to consider as you plan to create a fact sheet.

CESE Excellence for

- **Talk briefly about your sheet's goal.** Explain in a line or two, why what you are doing/have done is important.
- Decide on a focus. There is likely a large amount of data that you could include that is relevant to your findings but you don't want to overwhelm the viewer! Deciding on a focus for the fact sheet can be informed by the audience and the desired outcome of the factsheet.
- **Narrow down** the information aiming at those that give greater insight into the issue/topic.
- **Break it up**: Use headings, colours, borders or margins and bulleted lists to divide content into sections that are easy to understand. I.e. break big chunks of information

into small easy to understanding sections. An example is the image on the left.



Example of fact sheets. Source: Institute for Public Health, Kuala Lumpur, Malaysia

Example fact sheets: <u>Research and development pipeline</u>, <u>Investment in research saves lives and</u> <u>money</u>, <u>IDEA example</u>, <u>focus</u> more examples of brief reports on <u>research America</u>.



TIP: A fact sheet should be self-explanatory and used in cases where the audience will not need to zoom into more detail or zoom out (no need for an interactive dashboard).







B. Dynamic dashboards

Use tools like tableau and flourish to develop web-based dashboards, or organise data visualisations, infographics, text and other information on a web page with interactivity functionality. Below we dive deep into Tableau options.

<u>Tableau Public</u>: A visual analytics platform with capabilities to create interactive data visualisations and design information dashboards. Dashboards give an overall picture of your findings as you are able to display different components on one page. Examples to inspire you: <u>Community Care</u> <u>Programs, US HealthCare Data Breaches, the global effect of tuberculosis, smile please, breathe</u> <u>easier, infectious diseases</u> in Singapore and <u>HIV and Gender Disparities</u>.



Usability: Tableau can easily connect to almost any database and facilitates drag and drop (dataset) to create visualisations.

Here are <u>tutorials</u> to get you started analyzing and/or visualising data. Tableau supports individual data visualisations that can be embedded in websites and slides and can also be downloaded as images. It also supports the development of dashboards and data story layouts that can be shared on your tableau public profile.

Tableau Public is a free, public website (with a Desktop version) in which you can upload your Tableau workbooks and utilize them for free. It is almost exactly like the commercial Desktop software except that you must save your workbooks and data to Tableau's public server. There is a <u>way to hide your viz</u> in case you are working with sensitive data.

Other resources: <u>#projecthealthviz</u>, <u>4 tips for mastering tableau</u>.







Why tableau?

- Huge community of developers use tableau which helps in troubleshooting issues. You probably won't be the first to encounter a certain issue.
- There are several examples and learning resources online.
- Free version has all functionalities of the software (can handle big datasets)

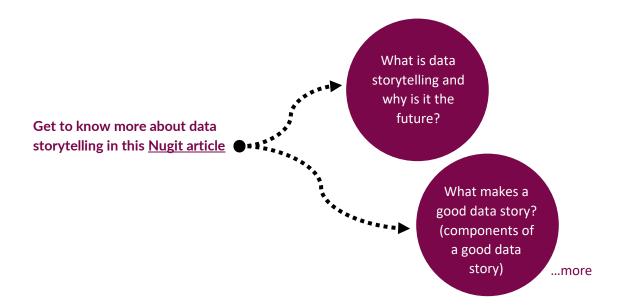
TIP: Dashboards are characterized by interactivity (with the ability to zoom into more detail or zoom out). Dashboards are suitable for presentations to various audiences including people that need to gain deeper insight into the overall findings.

Other tools in this category include: Flourish, Datawrapper, Stata

2. Data Story Telling

A-Data story is a narrative that draws the audience's attention to meaningful patterns and key insights amid all of the pieces of data.

"Help them to see the forest, rather than listing every single tree." – *Hands-on Data visualisation by Jack Dougherty & Ilya Ilyankou*









Seven basic types of data stories by Charlie Rogers

- 1. Narrate change over time how has x changed over the last decade?
- 2. Start big and drill down how much x is there in the world? How much in my zip code?
- 3. Start small and zoom out there is this much x in your zip code. See how much there is in the world
- 4. Highlight contrasts see how far apart the highs and lows of x are
- 5. Explore the intersection of trends what does it mean when x grows to be greater than y?
- 6. Dissect the factors see the how much of x's growth is caused by y and z
- 7. Profile the outliers see how x is not at all like z

These are explained further (with examples) by Martha Kang in this article.

 \rightarrow Here we look at using a video (information videos or animations) to explain findings.

Example videos to inspire

- <u>Will saving poor children lead to overpopulation?</u> | Gapminder
- How Did Babies per Woman Change in Different Regions? | Gapminder
- Hans Rosling's 200 Countries, 200 Years, 4 Minutes The Joy of Stats BBC Four
- More videos from Ted Talks <u>here</u> and short videos <u>here</u>

 \rightarrow it is a <u>list</u> of examples of web data stories to inspire you by Juice analytics. (web-based data stories can contain various visuals resources including videos, narratives, DVs and infographics)

 \rightarrow here are <u>Gapeminder's slide stories</u>

Example tools to design and develop data storytelling products.

Flourish studio – data storytelling

Powtoon – a visual communication platform that gives you the freedom to create professional and fully customised videos for your audience. Several video <u>templates</u> to choose from.

Microsoft PowerPoint and any other presentation software for making slides



TIP: Use data stories to give your data/findings a voice. "Data in dashboards and spreadsheets only tell you what is happening. But, they do not tell you why."

Good read: Storytelling: The Next Step for Visualisation

Also think about the following:

- 1. What platforms work for different audiences?
- 2. Alternative publishing sites (different homes for the research) and how they can be implemented.
- 3. Gaps mapping what does my audience know and what do they not know?

Look up the best practices for customizing communication, channel, and messaging.



