



# FUNDAMENTALS OF DATA VISUALISATION

## CLASSROOM TRAINING

### FUNDAMENTALS | 1 x full day

#### TRAINING OBJECTIVES

The **Fundamentals of Data Visualisation** is a one-day classroom training course providing attendees with a sophisticated understanding of how to effectively communicate data visually. The training aims to facilitate this understanding by de-constructing this contemporary, multi-disciplinary craft.

The training agenda is structured around a proven design process that helps you to organise and optimise your critical thinking, irrespective of the data-driven communication challenges you are facing.

Attendees will build up, stage-by-stage, the knowledge and capability required to make the best creative, analytical, editorial, and contextual decisions. To fulfil this there are four key learning objectives:

To *challenge* your existing approaches towards creating and consuming visualisation and infographics, helping to clarify the capabilities required to enhance your competence and confidence.

To *enlighten* you about the wide range of visual communication design options including a gallery of chart types, interactive techniques, methods for annotating, features of colour, and choices around composition.

To *equip* you with an efficient workflow process and robust principles of effectiveness so you have a critical framework to make excellent choices.

To *inspire* you to elevate your ambitions by broadening your visual vocabulary and exposing you to the best examples and case studies.

This is not a technical course and will not be delivered through tutorial-based instruction explaining how to use certain tools or applications. The emphasis is on learning the underlying craft. However, during the course there will be profiles of the most common visualisation technologies.

Materials will be issued digitally, covering all teaching content, exercise files and useful resources. Attendees are required to bring fully-charged laptops to facilitate certain course activities, with the only software requirements being Excel, a modern browser and pdf reader.

#### WHO SHOULD ATTEND?

Over 7,300 attendees have participated in Andy Kirk's classroom and online training events, representing all backgrounds, all types of roles and talents, and every organisation category and industry. They are designed for and relevant to anybody who needs to communicate with data.

You might be an analyst, statistician, or researcher looking to enhance the creativity and impact of your communications. Perhaps you possess creative flair, as a designer or developer, but you're seeking to enhance the rigour of your data-driven thinking.

In our contemporary digital and data rich society we cannot avoid encountering visual communications in our workplace, through the media and beyond. A key dimension of this training is to enhance critical visual literacy as consumers, interpreters and evaluators of visual displays.

There are no technical pre-requisites for this course. You should have an instinct for and interest in sharing insights from data, and demonstrate an appetite for embracing fresh approaches to communicating data. You should be willing to contribute to and learn from discussions with fellow attendees during exercise activities, doing so in a respectful and constructive manner. The course will be richer and more fun as a result.

#### TRAINING AGENDA

The Fundamentals course will be delivered over a single full day of training. Though not listed, there will be many exercises and spot challenges spread across all stages of the course content to help delegates practice and embed their learning. The timings shown are indicative and may change on the day. The coloured icons are to aid orientation with the materials.

##### MORNING SESSION, 9:30am to 12:30pm

- 9:30 START
  - 0 Welcome and introduction to the course
    - Aims, expectations, and practicalities
- 9:45 1 SUBJECT INTRODUCTION
  - What is data visualisation
  - The importance of making good decisions
- 10:20 2 FORMULATING YOUR BRIEF
  - What are the drivers behind and factors shaping your work?
- 10:45 [Break]
- 11:00 3 WORKING WITH DATA
  - What is the nature, state, and potential of your data?
- 11:45 4 ESTABLISHING YOUR EDITORIAL THINKING
  - Given all you could say, what you will say?
- 12:30 LUNCH

##### AFTERNOON SESSION, 1:30pm to 5:00pm

- 1:30 DEVELOPING YOUR DESIGN SOLUTION
  - 5 DATA REPRESENTATION
    - How to show what it is you are wanting to say?
- 2:30 6 INTERACTIVITY | ANNOTATION
  - 7 What interactivity and assistance will enhance the experience?
- 3:30 [Break]
- 3:45 8 COLOUR | COMPOSITION
  - 9 How should you colour and arrange your visualisation?
- 4:45 Course review, further resources
  - Final Q&A
- 5:00 FINISH

#### TRAINER PROFILE

Andy Kirk is a UK-based data visualisation expert: a design consultant, trainer, lecturer, author, speaker, and researcher. He is the editor of [visualisingdata.com](http://visualisingdata.com) and host of the 'Explore Explain' video and podcast series. Since founding Visualising Data Ltd. in 2010, Andy has worked with a wide range of clients, including Apple, S&P Global, Arsenal FC, Google, EU Council, and Pfizer. He has conducted around 350 public and private training courses in 27 different countries as well as virtually.

Andy has previously delivered post-graduate teaching with MICA (USA) and Imperial College (UK), and is now an adjunct lecturer at UCL (UK), teaching a data visualisation module on the MSc Business Analytics programme. He has authored three books, with the most recent published by Sage in August 2019 and titled 'Visualising Data: A Handbook for Data Driven Design (2nd edition)'.