

The **Data Skills Framework** is a tool that anyone can use to understand the skills needed to work with data. It helps you analyse your current approaches to data literacy, identify imbalances of skills, and address gaps in data literacy across your organisation.

## Why use this tool?

Research shows that if organisations focus solely on technology and technical skills, they are less likely to unlock the full value of data.

The Data Skills Framework illustrates how technical data skills must be balanced with other skills – such as service design, data innovation and change leadership – to help ensure data projects are impactful and lead to the best social and economic outcomes for everyone.

You can use the Data Skills Framework to identify and understand the requirement for this balance of skills – by analysing current skills and existing training programmes within your organisation. This helps ensure that skills and capability development plans align with organisational goals and that silos are not created.

## Who is this tool for?

The Data Skills Framework is a tool for anyone who wants to develop an effective balance of data skills within an organisation.

- > **Leaders** wanting to ensure organisations have the right range of skills to execute strategies effectively.
- > **Learning and development specialists** wishing to build capacity and improve current offerings.
- > **Teams** aiming to develop skills and collaborate better.

## Before you get started

### Think about who to involve

We recommend involving a range of people from across the organisation. In particular people who can validate the skills needed to implement strategic goals, and learning and development specialists who understand existing training programmes.

### Materials

You will need a copy of the Data Skills Framework, sticky notes, highlighter pens, and sticky dots. You can download a print-at-home copy from [theodi.org/tools](https://theodi.org/tools).

## How to use this tool

Working as an individual or a group, the framework will help you explore a series of questions that create useful insights; allow you to better identify imbalances in your current approach; and help you create plans to address gaps in data literacy.

### What are your strategic needs?

Using sticky notes or highlighter pens, highlight the areas of the Data Skills Framework that are required to support strategies or projects you are delivering. At an organisational level this is likely to include the entire framework.

### What skills do you currently have?

Assess the current level of capability in your team, department or organisation. Highlight skills on the framework that are inadequately covered.

### What does your current data skills development approach cover?

Analyse any training courses that your organisation currently offers and mark the data skills they target on the framework.

### Where are the gaps?

Compare the skills needed to meet your strategic needs with existing skills within the organisation. Identify gaps in your current skills development plans.

### What could you improve?

Identify existing development initiatives that would benefit from a more balanced approach or from the incorporation of additional skills from across the Data Skills Framework.

## What next?

### Once you have analysed your current situation you will be able to:

- > check if your skills strategy encourages the development of a balanced set of skills
- > identify siloed initiatives and find ways to improve collaboration
- > revisit existing data literacy programmes and analyse how to improve their strategic impact
- > decide where to invest in skills development.

### Get in touch

*We want the Data Skills Framework to help you to develop useful insights and plans. Share your work with us and we can schedule a call to give you feedback and to offer suggestions. Contact us at [training@theodi.org](mailto:training@theodi.org).*

*We also welcome ideas that will improve the Data Skills Framework and guidance.*

## Examples of the ODI's training courses

Data skills courses need to balance technical with non-technical skills to ensure that people can make an impact with data, and help ensure the best social and economic outcomes for everyone. Below are some examples from the ODI.

Find out about courses at:  
[theodi.org/courses-and-training](https://theodi.org/courses-and-training)

### FOUNDATION



- Introducing data
- Classifying data
- Boosting usability
- Creating value

### MANAGEMENT



- Governing access

### ENGINEERING



- Cleaning data

## Open Data in a Day

The ODI's Open Data in a Day course balances technical and non-technical sessions to give people a sense of how open data can deliver value.

We first introduce open data and case studies showing how open data creates value. We then classify data using the ODI's Data Spectrum and show how data exists on a spectrum which ranges from closed to shared to open.

We then explore governing access to data, looking at the law and licensing.

Finally, we look at how we can boost the usability of data and how to clean messy data.

### FOUNDATION



- Introducing data
- Classifying data
- Boosting usability
- Creating value

### ENGINEERING



- Using platforms
- Standardising data
- Cleaning data

### ANALYSIS



- Finding insights
- Applying statistics
- Trend analysis
- Using data analytics
- Visualising data
- Interacting with data

### LEADERSHIP



- Developing policy
- Developing strategy

### MANAGEMENT



- Working ethically
- Governing access
- Managing change/risk

### BUSINESS



- Innovating with data

## Strategic Data Skills

This course was developed to help demystify how data is used to deliver insight.

Participants on the course work to derive insight from data and then find ways to present insights to leaders.

For more experienced data practitioners, storytelling is the challenge; for people with a strategic background the course provides insight into the practical methods needed to derive insights from data.

The course balances hands-on data skills with strategic skills – including how data sharing, data quality and ethics are important domains that support effective data use in an organisation.

- ANALYSIS (thin line)
- LEADERSHIP (double lines)
- FOUNDATION (thick line)
- ENGINEERING (light dots)
- MANAGEMENT (bold dots)
- BUSINESS (dash)

