



# DEVELOPING DATA CAPABILITY IN YOUR NOT-FOR-PROFIT

Our Community Innovation Lab



an enterprise of  
**ourcommunity.com.au**  
Where not-for-profits go for help

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# Finding it hard to get started with data?

## This framework is your ticket out of the maze.

The problem is familiar: a lack of awareness, skills and funding makes it difficult for not-for-profit organisations to embrace opportunities to use data to optimise, automate and personalise aspects of their programs.

Collecting data does not automatically lead to improved organisational efficiency and program effectiveness. To achieve that requires a clearer focus on data quality, analysis and use, along with relevant training.

This framework emerged from Our Community's experience working with thousands of not-for-profits across Australia and New Zealand – from very small local groups to large national organisations, pursuing a range of important social changes.

Now, with the support of Equity Trustees, we're aiming to improve the data capabilities of not-for-profits and share the lessons we learn along the way.

We first identified the six *types* of data that not-for-profit organisations most often work with – such as fundraising data and program data – and then mapped these onto a hierarchy of what organisations can actually *do* with the data.

The resulting matrix can help frame efforts to identify an organisation's existing strengths and weaknesses, as well as shape its longer-term data strategy and goals.

Of course, creating a data culture and capabilities is not like turning on a light switch – it takes time, effort and reflection.

We hope this framework will kickstart the conversation in your organisation.

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# The Framework

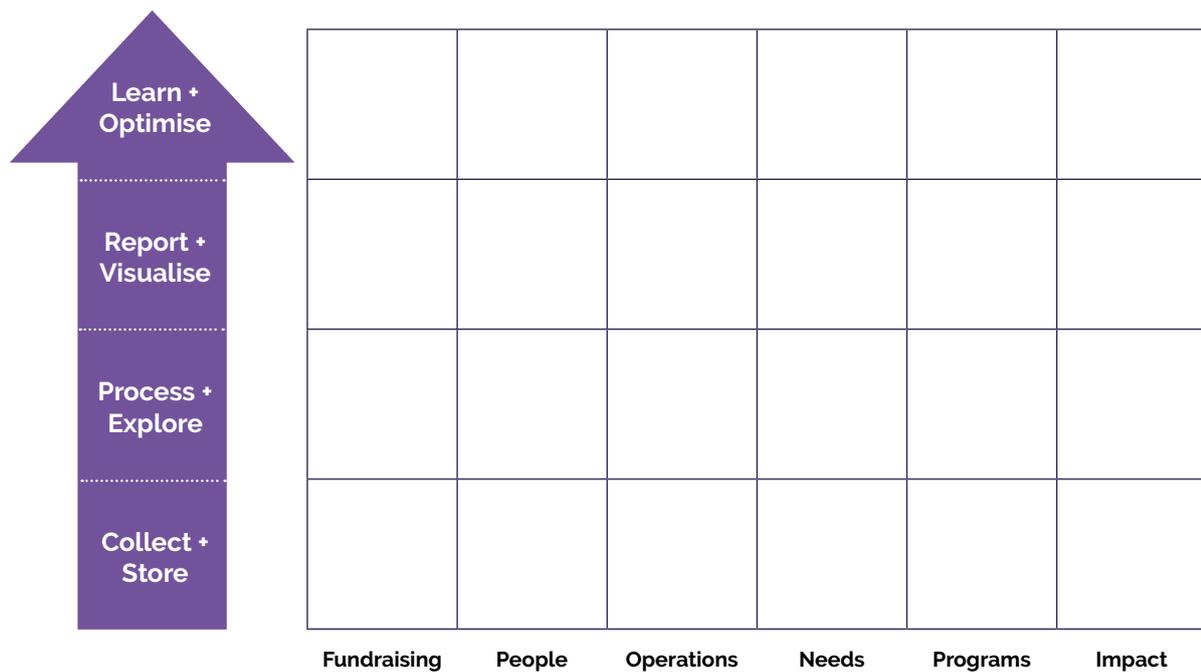
What do we mean when we say data? And what are the implications of its use in your organisation?

Our framework outlines the types of data that are likely to exist in a not-for-profit organisation. It looks at how not-for-profits can maximise their social impact by building the skills and capabilities required to effectively manage their data.

The data not-for-profits most often work with can be grouped into six categories: Fundraising, People, Operations, Needs, Programs and Impact. These six *types* of data are represented in the horizontal axis of the framework below.

With each of these types of data, we've looked at what an organisation can *do* with them. The vertical axis represents these activities: Collect and Store; Process and Explore; Report and Visualise; and Learn and Optimise.

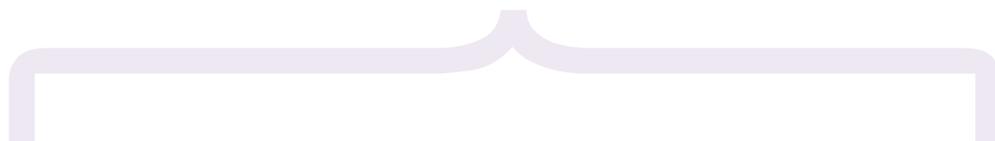
The framework is intended to help frame your thinking and simplify your approaches. In the following pages, we define and describe each aspect of the framework. Later, we explain how the framework can be used in your organisation.



# Common Data Sources

These data sources serve two broad purposes: the first three kinds of data have the potential to make your organisation more *efficient*, while the last three can make your programs more *effective*.

## EFFICIENCY



FUNDRAISING



PEOPLE



OPERATIONS



NEEDS



PROGRAMS



IMPACT



## EFFECTIVENESS

*The six data sources most often used by not-for-profit organisations.*

## EFFICIENCY

### Greasing the wheels

#### FUNDRAISING

This category of data refers to a core consideration in the not-for-profit world. You guessed it: your organisation's fundraising activities. It covers donations and crowdfunding, as well as grant applications, website usage and social media engagement.

#### PEOPLE

Your organisation's data about people extends beyond your staff and volunteers to those who support your organisation – such as members, donors and funders.

#### OPERATIONS

If an organisation were a car, its operations data would be its service logbook. We're talking about data related to contracts, income, expenditure, assets, property, security, privacy, risk and so on.

## EFFECTIVENESS

### Making a difference

#### NEEDS

Why does your organisation exist? This category encompasses contextual data related to your organisation's reason for being – for example, public datasets and demographics relevant to your targeted groups, and market analysis about changemakers doing similar work.

#### PROGRAMS

Programs data pertains to what you are doing and how: the services you provide, interactions with the people you serve, your events and feedback.

#### IMPACT

This refers to data you've gathered to measure and track outcomes and program impact. This might include indicators, surveys, case studies, and evidence showing changes in knowledge, attitudes, or behaviour.

## Battle of the datasets

Quantitative or qualitative data (numbers or words): which is more important?

This is a trick question, of course. Both are valuable ingredients when you're building a holistic representation of your organisation's activities and impact. Some stories are best told through statistics, while others come to life when you include a human narrative.

The field of data science that involves analysing text (as distinct from numbers) has made leaps and bounds in recent times. These advancements have opened up opportunities to analyse qualitative data at scale, for example, by using automatic labelling and thematic analysis.

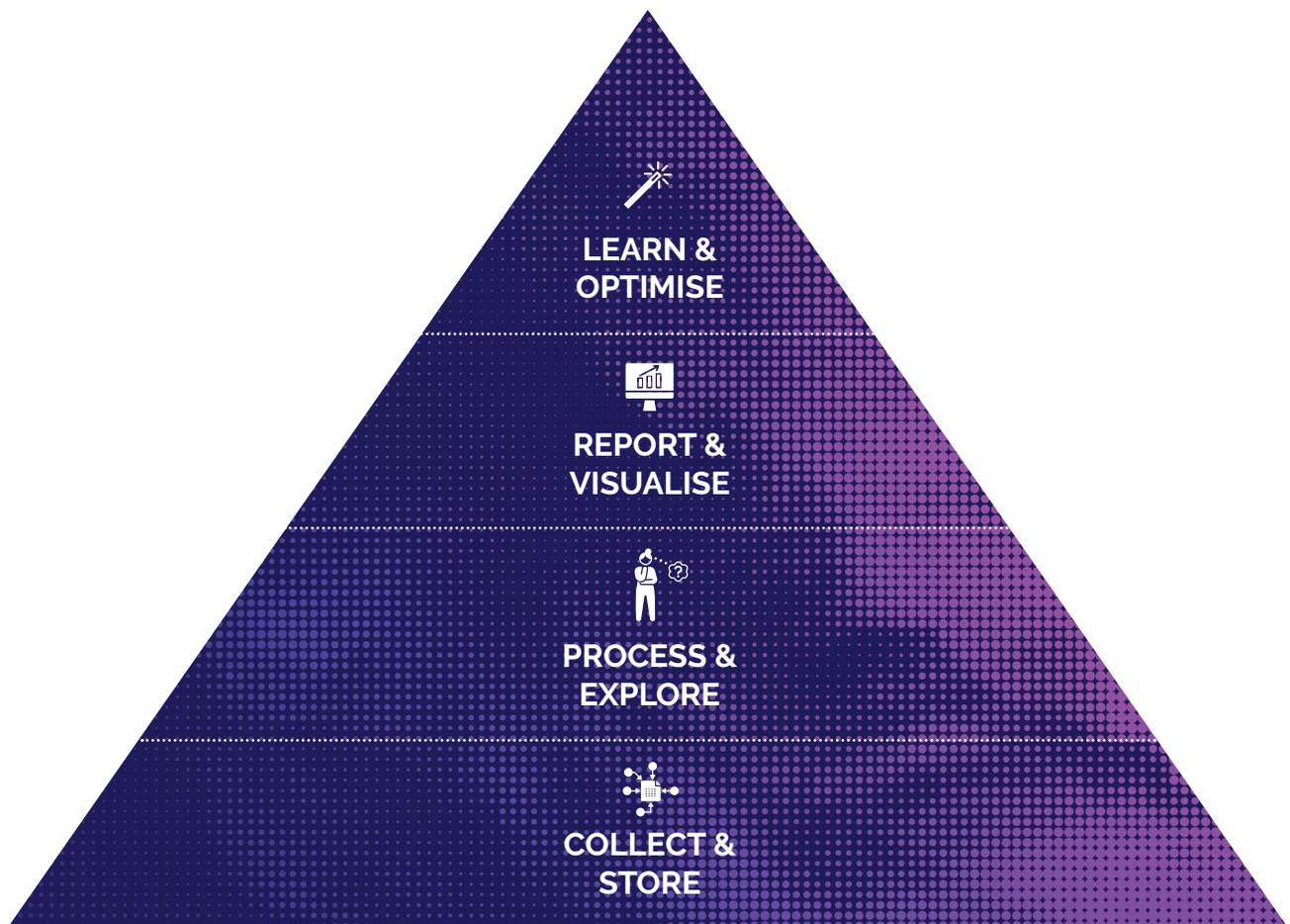
But as with any analysis, it pays to collect the data intelligently. So next time you're designing a survey, seek advice from the person who will later be analysing your data. They can help you to ensure that the qualitative data you collect is in the right format.

## What Can You Do With The Data?

Now that we've described the different types of data your organisation may be working with, we move on to what you can do with the data.

Your data goals will depend on your objectives, activities and skillsets. Maslow famously proposed that humans need food and warmth before they are motivated to achieve self-fulfilment. Our framework's vertical axis, represented below, is based on a hierarchy analogous to Maslow's hierarchy of needs. It's essential that you have good practices in place in the lower rows before you attempt to execute upper-level projects.

What follows are examples of some activities from each level of the pyramid that you might already be doing, and some that you might embark on in the future.



*A hierarchy of data-use goals*



## COLLECT & STORE

As illustrated in the pyramid above, Collect & Store forms the base of any data project. What information is your organisation gathering? Where is it being stored? Is it contained in one central database, or across multiple platforms? If your organisation is large, your data might be siloed. And is it in electronic or hard copy? As you consider each of these aspects, remember that decisions you make at this stage will have flow-on effects through the rest of the process.



## PROCESS & EXPLORE

What does your data look like, and what is it telling you? Are your membership retention rates increasing or decreasing? Does your annual fundraiser bring in more money each year, or less? Do you have a hunch about something, but no data to back it up? This step requires getting the data into a useable state (i.e. processing the data), exploring its main characteristics, extracting basic insights, and identifying patterns you can use to trigger further questions.



## REPORT & VISUALISE

At this level, you're starting to paint pictures with your data, such as reports and visualisations that communicate what the data is telling you. In some situations, these reports might ideally feed into a real-time dashboard rather than a point-in-time document. Don't disregard basic tools that are accessible to you now. The charts tool in Microsoft Excel, for example, can help even fledgling users convert data into useful charts.



## LEARN & OPTIMISE

This is where data science really takes off. Here, well-collected and sensibly processed data can be used to feed statistical models to make predictions about your data, and test theories. Another goal at this level is to optimise your processes by automating some tasks. Having lots of data is helpful here, but quantity is not a panacea: you will need to consider biases in the data, how models will be maintained and how humans will use the models to make decisions.

## SCALING THE PYRAMID

Let's use the example of a survey to explain the process of scaling the pyramid.

Say your organisation hosts a training workshop and decides to gather feedback from attendees. You organise an email mailout requesting feedback via an online form. Half the email recipients complete the survey. Great! This is the first level of the pyramid.

The next step is to process the survey results into something useable. At this stage, you decide what to do about the missing data (the half of recipients who didn't complete the survey), and you explore the responses you've received to see what people are saying.

You might go a step further and generate reports or visualisations to communicate the results. The data might even feed into a live dashboard.

You don't have to stop there. At the apex of the pyramid, if you have the resources and skills available, you could use the survey responses as input to a model – a tool that can process data and return results – that allows you to learn and predict things about clients or supporters. Or you could conduct experiments to see what works best.

You could also look for ways to optimise processes. This might involve automating some tasks – for example, automatically sending an email if a survey response mentions a particular issue.

The techniques at the peak of the pyramid – data science – can help us to develop a deep understanding of what the data is telling us. They offer exciting opportunities, but their effective use relies on good data management practices.

### Developing data capability and finding the right skills

Developing your organisation's data capabilities and projects requires a variety of skills. The Department of the Prime Minister and Cabinet's **Data Skills & Capability Framework**, designed for use by the Australian Public Service, is a good reference point. The framework identifies five roles that have a place on many data projects. They are data analyst, data scientist, data policy and law expert, data infrastructure engineer, and data architect. This isn't to say that every project will require all of these roles – but it can provide vocabulary to find talent when a project calls for it.

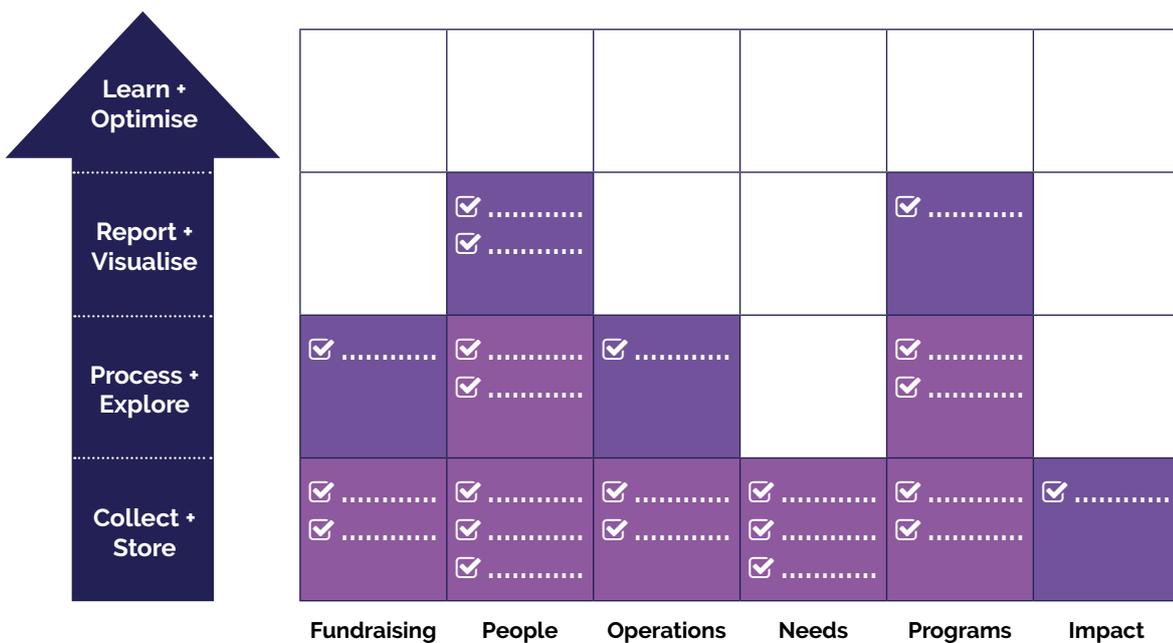
# Piecing It All Together

How's your organisation tracking? Where do you want to end up?

Our framework brings together information about the kinds of data you might be working with and what you can do with that data. The resulting matrix can be used to start conversations within your organisation.

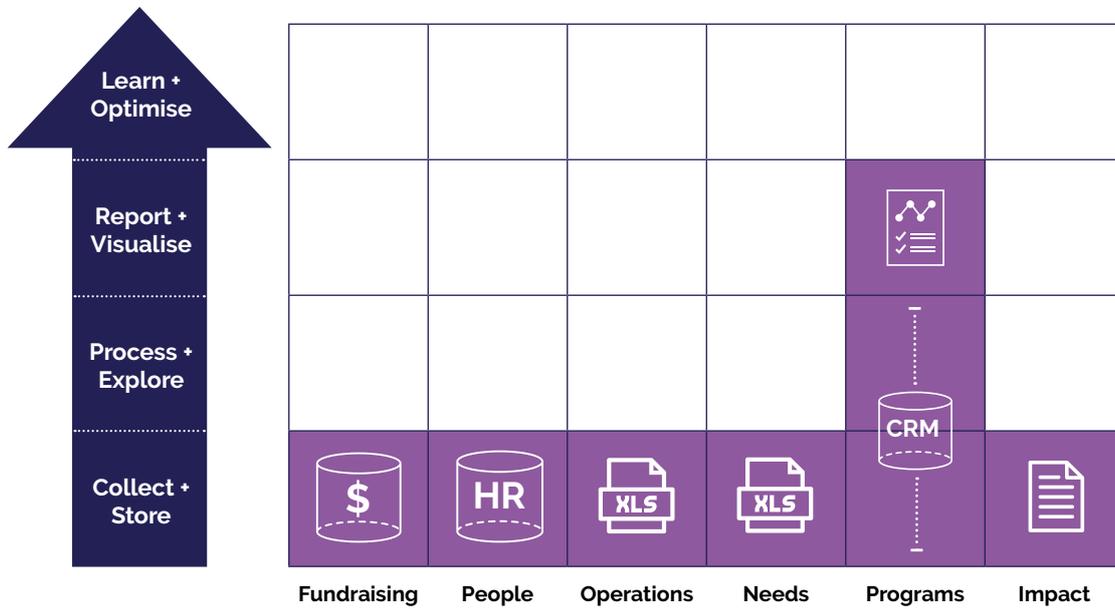
## BUILD A PICTURE

The framework can guide you as you gather information about what your organisation is already doing. These results can form the basis of an assessment of your organisation's maturity respect to data – and help you to set goals for the future.



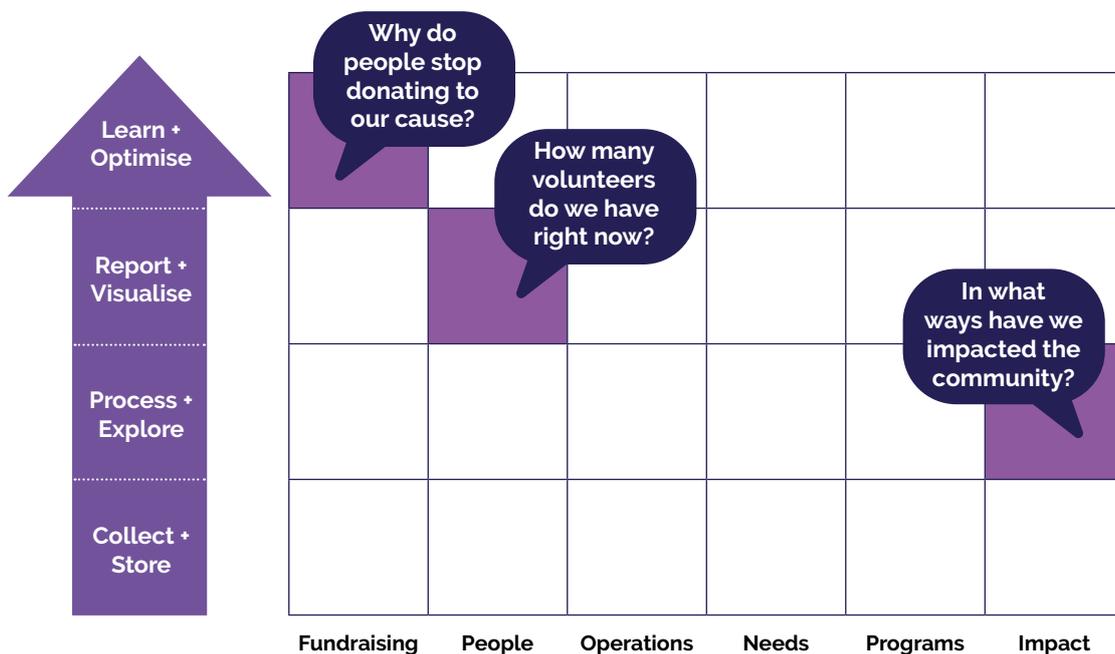
## TAKE A SYSTEMS APPROACH

You can use the framework to start to look at what systems you have in place. How is your data managed? Who has access? What skills might be required for work on data projects for each area? The ease or difficulty of examining your systems will vary according to the size and type of your organisation.



## FRAME YOUR THINKING

You can also map out what questions you'd like to answer, and what data and data capabilities you'll need to do so. Start by asking simple questions – this will make the process less daunting. More questions will arise as you continue the process.



## What's Next?

**At Our Community, we're developing tools and resources to help social sector organisations use data more effectively.**

We plan to use this framework to organise and inspire these tools and resources.

Our tools and resources will range from basic help sheets and case studies for the uninitiated, to project guidance and templates for organisations with some data capability.

We'll also provide help sheets and sample policies on related topics such as data governance (including ethics and cyber security), data handling, and data sharing. By pooling data with other organisations in your sector, you may be able to generate better insights than you could on your own, and benchmark yourself against others. And by teaming up with organisations that hold large stores of information, such as funders or government, you may be able to learn more about what is happening in the community you're working with.

We hope that this framework, and the accompanying resources to come, will de-mystify data concepts for you and your organisation, and help you to wrap your head around how you can use data more effectively.





Our Community's Innovation Lab is where we seed ideas to do old things better or new things first.

The founding aim of Our Community in 2000 was to build stronger communities through stronger community organisations. We've done this by creating useful online tools and capacity-building education and training, much of which is offered free of charge or at a price even the smallest not-for-profit groups can afford.

We've also worked to keep the money moving, creating smarter grantmaking methods and tools, and a commission-free online donations platform. Billions of dollars are moving into the not-for-profit sector more efficiently through our grants administration tool (SmartyGrants), while more than \$14 million per year is flowing from individual donations to good causes through GiveNow.

By forging partnerships with business, government and philanthropy we've accelerated our impact and increased our reach beyond our home zone of Australia. We're now servicing grantmakers in 42 countries around the world.

Now there's a new currency that's powering social reform. Data is reshaping our world. New tools allow us to collect, distil, understand and act on data like never before, hastening the pace of change. We want to make sure the social sector can grasp the possibilities presented by these new tools.

The Our Community Innovation Lab receives support from Equity Trustees, with thanks to the Ella & Mitchell Brazier Fund, Charles Lamond Forrest Estate, James Raymond Hartley Charitable Trust, Charles Frederick William Taylor Estate and Truby & Florence Williams Charitable Trust.



Since 1888, Equity Trustees has helped Australians realise their philanthropic vision.

Equity Trustees' commitment is to be accountable and to strive towards mapping, measuring and communicating how they are deepening impact through their funding.

Equity Trustees aim to build sector capacity that ensures organisations are well informed, better connected (to beneficiaries, government and each other), have strong leadership and management capacity, and are using impact data to inform strategic and operational decisions.

One of the ways they're doing this is by investing their funding back into the for-purpose sector. Commercial organisations have realised the power of data and are using it to shape their strategic plans. The social sector is largely still to fully grasp this opportunity.

Through the generous support of Equity Trustees, Our Community will accelerate the impact of the social purpose sector by improving the data technology attitudes and capacities of social purpose organisations. This will begin with a team of social sector data scientists and communicators to support members of co-working space, Our Community House, and by sharing the learnings that come from this work.