



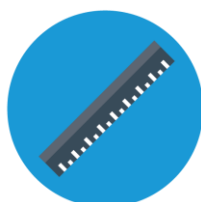
FIRST PERSON  
CONSULTING

## Guide

### Introduction to Qualitative Data Analysis



RESEARCH



EVALUATION



DESIGN

[www.fpconsulting.com.au](http://www.fpconsulting.com.au)

First Person Consulting Pty Ltd

ABN 98 605 466 797

P: 03 9600 1778

E: [admin@fpconsulting.com.au](mailto:admin@fpconsulting.com.au)

W: [www.fpconsulting.com.au](http://www.fpconsulting.com.au)

## Table of Contents

<b>1</b>	<b>Introduction to data analysis</b> .....	<b>1</b>
1.1	Overview .....	1
1.2	Structure of the Guide .....	2
<b>2</b>	<b>Qualitative data analysis</b> .....	<b>3</b>
2.1	Overview .....	3
2.2	Thematic analysis.....	3
2.3	Use of longer comments.....	8
2.4	Next step – into a report.....	9
<b>Appendix 1</b>	<b>Qualitative analysis worksheet</b> .....	<b>10</b>
<b>Appendix 2</b>	<b>Example vignettes</b> .....	<b>12</b>
<b>Appendix 3</b>	<b>Analysed and interpreted qualitative data</b> .....	<b>13</b>

## List of Tables

Table 1:	Example Table results .....	7
Table 2:	What participants thought of the event .....	13

## List of Figures

Figure 1:	Sources of qualitative data .....	1
Figure 2:	Coding of an interview transcript .....	5
Figure 3:	Example themes in Excel.....	5
Figure 4:	Coded data in Excel.....	6
Figure 5:	Example graph .....	8

# 1 Introduction to data analysis

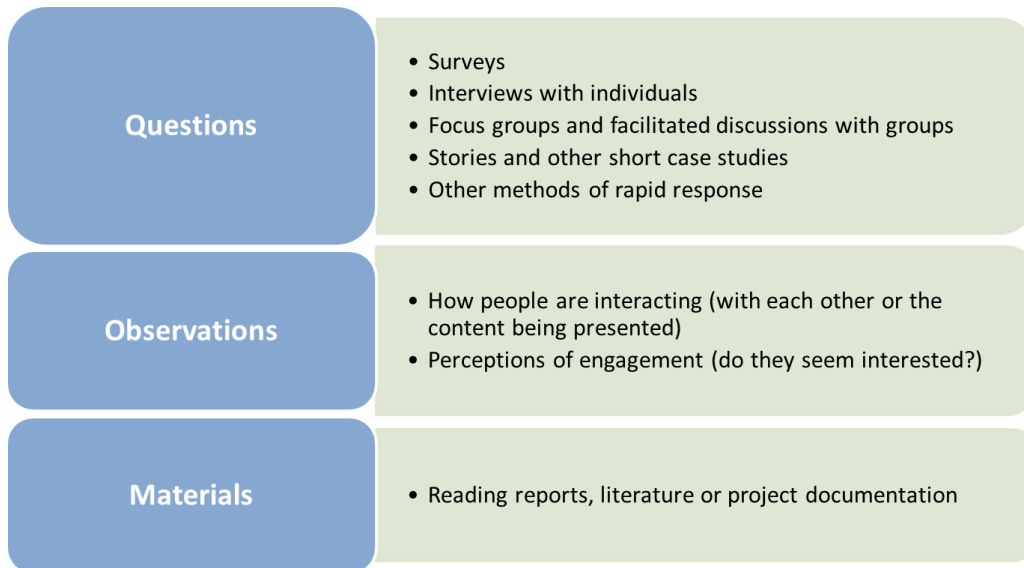
## 1.1 Overview

There are two types of data – qualitative and quantitative. For the purposes of this guide the emphasis is on **qualitative data**, that being – words, pictures, sound and movement. Qualitative data tends to come from people; however, depending on the nature of your work it could also come from the built and natural environment.

Data from people tends to come from three main areas:

1. questions
2. observations
3. materials (i.e. documents and literature)

For more on these see Figure 1 below.



**Figure 1: Sources of qualitative data**

Qualitative data can provide a variety of rich insights and alternative perspectives into your project. Oftentimes these insights can provide ideas on ways that your project can improve or where it has made an impact on participants.

The purpose of this guide is to provide an introduction to **Qualitative Data Analysis** that can be used by individuals and organisations. This is an introductory guide only and contains a selection of approaches that are most likely to be useful to people undertaking relatively simple data analysis.

As we are focused on qualitative data in this guide, we are **not** examining the ‘numbers’ of things that are being captured through your project, that being:

- number of events held or people attending the event
- ‘reach’ data – i.e. people who have been engaged in some way by your project
- survey scaled questions (i.e. the 1-to-5 style questions)

It is anticipated that the qualitative data you gather will be a valuable and worthwhile supplement to these hard figures. Ultimately, the purpose is to help tell the 'story' of your project and this guide will help with that.

## 1.2 Structure of the Guide

The content of this guide is focused on exploring some common qualitative data analysis techniques, followed by ways of representing this analysis. As noted this is not a comprehensive manual, rather just an introductory guide.

The exercises that are undertaken during the meeting are also provided as Appendices.

---

## 2 Qualitative data analysis

### 2.1 Overview

Normally decisions about the analysis method to use are made at the same time as identifying the data sources (i.e. where you are getting your information from) and data collection methods (i.e. how you are going to collect that information). As such, the analysis methods will usually depend on:

- the questions you are looking to answer
- the type of data (qualitative or quantitative)
- the format the data comes in
- how much data is available
- how the results will be used
- staff skills, time and resources available.

As noted, for the purposes of this guide, we are focusing on what we feel are the 'standard' types of qualitative data that funded projects are likely to be gathering. This includes:

- formal and informal interview data (i.e. with participants, stakeholders or other parties)
- observations of participants at events you are holding or facilitating
- project notes and records that have been kept.

Analysing qualitative data involves 'making sense' of the data collected. The processes used are less prescriptive and structured; however, the importance aspect is to be transparent about the approach you have used so that anyone reading your report can understand how you obtained your findings.

### 2.2 Thematic analysis

There are a lot of different ways that qualitative data can be analysed. We envisage that most projects will focus on using **thematic analysis**. There are lots of other analysis approaches, some of which may be relevant to individual projects, but for the sake of this guide we will focus on thematic analysis.

**Thematic analysis** looks at the content of the material – the 'what is said'. There are two approaches to this analysis which are either '**deductive**' or '**inductive**'. Deductive approaches typically work from the top down (i.e. you have a theory or hypothesis to test with specific data). Inductive approaches work from the ground up, whereby you collect your data and look for patterns or themes and out of this develop your theory.

Additionally, when conducting an evaluation of your own project interpretation of your records through a reflective process can also supplement the data you have collected and provide context for your findings. For instance, participants may have been dissatisfied with a component of your workshop; however, there may have been a reason for that component occurring the way it did. By combining these you can arrive at a more holistic picture of the workshop.

This analysis process usually involves the following steps:

- familiarising yourself with the data (i.e. reading through it)

- sorting the data into themes or areas of inquiry sorting into themes
- going back over the data and potentially consolidating into larger themes again
- confirming findings (you might have a colleague review what you have done to see if they agree)

These steps are explored in more detail below.

### 2.2.1 Familiarise yourself with the data

Read the data carefully to become familiar with the range of comments made. During this time, make notes and annotations about common themes that appear to be emerging. This is often easier if you have collected the data yourself. Using other people's data will require some additional time for you to become familiar with its content.

### 2.2.2 Theming the data

Once you are familiar with the range of comments the next step is to start sorting into categories or 'themes'. Initially you may want to sort into broader categories to help reduce the diversity of comments you are faced with. This depends on whether you are trying to answer a specific question or just to get a general idea of what people are saying.

Example broad categories could include:

- negative or positive comments (i.e. they are happy or unhappy about something)
- comments about things they learned or feel
- comments about new skills they have learned
- comments about things they are going to do differently.

These broad categories can then be broken down into more specific themes (for example, the different type of skill learned). Some data will fit into several categories and some into no obvious category.

If you have data that does not fit neatly into a category it could still be presented on its own as a single comment or if there are two or three like this then create an 'other' category.

Depending on the format that the data comes in you might use a couple of different tools. For example, if you conducted interviews with some of your project partners you might like to go through their interview transcripts and colour code responses (Figure 2).

I think they are taking skills back from the group discussion such as pasture consumption, infrastructure and costs involved in supplementary feeding.

It is hard to tell as I don't have much to do with them outside the focus farm, but I think they would pick up on things along the way and it would either reaffirm or challenge their thinking.

By the questions and ideas they are coming up with.

Just from the comments from people I think they are improving and taking things back to do on their property.

They are more vocal and more opinionated as we went along they started putting their two bobs in

From talking to them they are taking things back to their farm production, feed would be one area

Hard to say, but I think they are learning from it

They are observing and they can see how the focus farmer uses information and get to see

Figure 2: Coding of an interview transcript

<b>Yellow - Improvements to farm management</b>
<b>Blue - evidence of learning</b>
<b>Pink - evidence of interaction and communication</b>

This process can be iterative as new themes or categories emerge as you analyse the data. During each iteration you can then double-check the data that you've allocated into a category to see if you still think it fits.

A similar method to the above can apply in Microsoft Excel, where you instead create you categories across the top in a new column (for example, Figure 3).

There are also pieces of software that you can use, though usually these are quite expensive. Most of the time, particularly if you do not have a significant amount of data, Excel is more than enough.

<b>Q. What did you enjoy learning about most on the excursion?</b>	<b>Water testing</b>	<b>Catching animals</b>	<b>Making animals</b>	<b>About river health</b>	<b>Other (animals, grass, ant)</b>	<b>Don't know</b>
--	----------------------	-------------------------	-----------------------	---------------------------	------------------------------------	-------------------

Figure 3: Example themes in Excel

### 2.2.3 Organising your data

Once you feel comfortable with your themes the next step is to determine how many comments were made that fit within each theme. This can be done concurrently with the



previous step and is a good way to make sure your themes are accurate. It also makes your data analysis process more transparent by allowing a colleague to check your theming to see if they agree/disagree.

Using Excel you can simply note a '1' in each cell. This allows you to simply sum up how many comments were made under each theme (Figure 4).

	A	B	C	D	E	F	G
1	<b>Q. What did you enjoy learning about most on the excursion?</b>	<b>Water testing</b>	<b>Catching animals</b>	<b>Making animals</b>	<b>About river health</b>	<b>Other (animals, grass, ant)</b>	<b>Don't know</b>
2	I enjoyed the	1					
3	I enjoyed the animals.						1
4	I liked the star fish,		1				
5	I enjoyed learning how to test water with	1					
6	how we made an animal from clay and I				1		
7	about grass and about						1
8	I enjoy testing water	1					
9	I enjoyed learning	1					
10	I enjoyed last weeks excursion, it was good for us how the kids how to keep the area safe					1	
11	Clay animals				1		
12	Getting dirty making				1		
13	I enjoyed making bugs.				1		
14	learning about river					1	
15	i liked making bugs				1		
16	I enjoy making a bug				1		

Figure 4: Coded data in Excel

### 2.2.4 Representing your themes

The next step is to represent the data that you have coded. Two of the simplest ways are through graphs and tables (these are what will be in the results section of a report). These types of representation help summarise the qualitative data you have gathered by showing the main themes or categories you have found for a question through your analysis.

It is important to always refer to the tables and graphs in the text to explain the contents. Additionally, rather than explaining each component of the table or graph consider asking yourself the question:

*What is the most important or interesting thing (or two things) about these results?*

As an example, participants in a workshop were asked to provide feedback on their experience. As you can see in the example below (Table 1), eight respondents indicated that the workshop was a good use of their time. However, three respondents felt that the speakers were not very engaging.

**Table 1: Example Table results**

Theme	Number of respondents
Good use of time	8
Evidence of learning	4
Speakers not very engaging	3
Inappropriate venue	2
Other	2

This type of broad overview is valuable because it can show very quickly the most important aspects of the feedback received, as well as where potential improvements could be made.

You will also note that there is an ‘other’ comment. Sometimes we will include these in the main body of text, so that anyone reading the report can see what it is. The ‘other’ comments in this instance were:

*The booking system was not very intuitive*

*I was late to the event because the car park was full.*

So, while not about the event specifically, it still relates to the respondent’s overall experience associated with the workshop and may be a useful insight. Sometimes when the comment is not relevant you can just remove it from your analysis – it all depends on the question and the response!

More involved analysis might look at a respondent’s responses to multiple questions (for example, if they didn’t enjoy the speakers, did they make any comments as to why in answer to a different question?).

Graphs can also be used to show the same data (Figure 5).

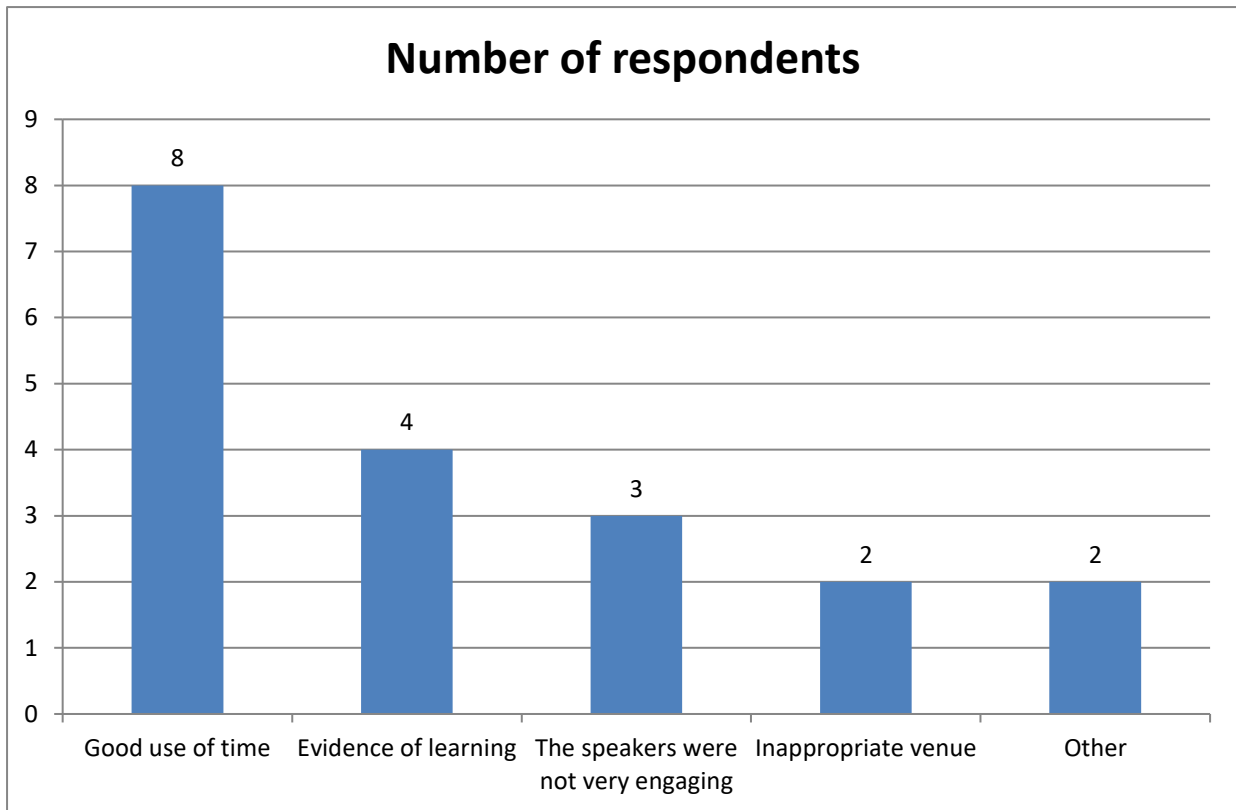


Figure 5: Example graph

Finally, if there are particularly insightful comments that you have used in your themes, you might like to include these as a supplement underneath your graph or table to provide some further insight into your analysis.

Example qualitative data to try a theming exercise is provided in Appendix 1.

## 2.3 Use of longer comments

### 2.3.1 Quotes

As noted above, sometimes respondents may have particularly insightful or powerful comments that you feel illustrate the outcomes or impact of your project. In instances such as this, you can include them in the body of your report (usually as a supplement to a table or graph, but not always).

Usually these would be indented and italicised to indicate they are direct quotes. As we are collecting data anonymously you would not use an individual's name, but might note their role or position. For example:

*I really learned a lot at the workshop. Some of the speakers had some really interesting insights that I think I can apply to some of the work I do – particularly among CALD communities. (Community Development Worker)*

### 2.3.2 Vignettes

Another way to represent longer comments or responses is through a vignette. A vignette is generally a short description (no more than half a page) that illustrates a key finding, lesson or achievement – usually as an example of something ‘significant’.

A vignette is distinct from a quote in that it includes the context or broader story (whereas a quote in a report will usually require context from the report writer).

The format or structure of a vignette consists of:

- **Context** – who, where and what is the story?
- **Situation/problem** – what was the problem or issue that it illustrates
- **Response** – what action was taken / what was the result?
- **Learning/result** – what can be learned from what occurred?

This is just the broad structure, and each component is not a strict requirement. Ultimately a vignette captures an example of ‘something’ and provides the context along with it. Sometimes you’ll see these in reports in a ‘box’ (see Box 1 for an example).

A lack of formal networks was identified as a problem by financial counsellors. A government agency decided to run a series of small group discussions with them to unpack this problem.

It became apparent through this that it was not a lack of ‘networks’, but rather uncertainty over ‘who to talk to’ was actually the problem.

Following these discussions, funding was allocated to implement a biannual forum for financial counsellors to meet and discuss their experiences.

The first forum is organised for December and is already booked out at the time of writing. Members have indicated a chance to share their experience as the most important feature.

#### Box 1: Example vignette from a report

A vignette could also be useful when telling a story or specific instance about an individual or participant in the Program. Again, confidentiality is important, so you can change their name by giving them an alias.

It is also worth asking their permission so that they know their example will be used in this way (as a courtesy to them).

More example vignettes are provided in Appendix 2.

## 2.4 Next step – into a report

Once your qualitative data is analysed the next step is to integrate into your report. Suggestions on how this is done have been provided throughout this guide. We have provided an example of what a final piece of analysed and interpreted qualitative data looks like in Appendix 3.

## Appendix 1      Qualitative analysis worksheet

### **Overview:**

A state government department has funded a pilot Professional Development project for six months for project officer-level staff in community-led organisations. These staff were assigned to small groups along with a Project Mentor. The goal was to build their knowledge and skills in key areas identified by the community organisations. Following completion of the pilot the involved project officers were asked to suggest improvements for future iterations of the project.

### **Steps:**

1. Read through the enclosed comments and become familiar with the range of comments made. During this time make any notes about common themes or categories that you feel are emerging.
2. Once you have an idea of what the common themes might be, sort the data out into broader categories. For instance – are there different types of suggested improvements?
3. Note that some responses can also fit into multiple categories. Often you will find that this is the case with qualitative data. If there is no obvious category or the comment does not fit then keep it by itself at this stage.
4. Often this process can be iterative, particularly when you have lots of data, meaning that you may identify new themes as you go.

Focus more on engaging new organisations to expand the reach of the project - it would be good to know who else is out there.
There needs to be more resourcing focusing on building the skills of the staff involved - at times I felt like I knew more than they did!
Hire more staff to be involved in the project - it seems like their capacity to engage us is quite low at times
Having more staff to help us more with our deliverables would be good
I can't think of anything
None - it's a good project!
The project's given me some good tools that I can take back to my own workplace. The only improvement I can see is to schedule the meetings during more convenient times so that everyone can attend.
I didn't see much value in the group sessions - I preferred the one-on-one interactions with my staff member. The people in my group seemed to know more than I did so it was a bit intimidating to be with them.
I really enjoyed the site visits to other organisations. More of those in the future!
Providing more opportunities to network among the other organisations that are involved would be good.
More of the expert guest speakers - it's great to hear what's 'current' thinking out there!
They need more funding to continue this project - it's been invaluable to me!
It would be good to see the individual skills and experience of each of the project staff more - perhaps rotate the project staff among the groups? My staff member was good but I'd like to hear from the others.
No - I think the project was really well run overall.
Maybe instead of all day meetings splitting it up into half day sessions? Seems like it's too risky and you can easily miss a session.
I don't think it was clear enough the role of the project's staff - were they meant to mentor us or act as a bit of a sounding board? I wasn't too sure at times - particularly at the start.
I'm not sure this was pitched at the right level - most of us are project officers but it seems like it might be more suited to managers?
I had a great time!
N/A
No
Yes - more muffins during the breaks! They kept running out.
The sessions were excellent - the staff really know their stuff!
Not sure it was worth my time - I learned a bit but the staff barely knew more than I did at times.

---

## Appendix 2 Example vignettes

### **Insta-Knowledge: Providing the community with informed choices**

A state government road authority found that community members struggled to identify the best roads to take, particularly during emergencies, but also during times of construction and road maintenance. As a result a real-time web-based map of road closures was developed to provide a near-instant mechanism for information delivery to the community. This allows the community to use the information to make an informed decision on the best, and safest, route to take.

This system was launched in December, 2015 following eight months of development. Website analytics indicate that emergency services are the most frequent users of the website; demonstrating the importance of the information this service provides. The site is also available as a smartphone application – further increasing its accessibility.

The response from the public has been positive indicated by the number of visits to the website. During the most recent floods there were more than 250,000 hits on the website. Further positive feedback on the sites usefulness has been made through comments on the website and phone calls to the road authority control centre.

### **Educating workers in the small group setting**

In response to a lack of information available to community development workers at the time, the Community Development Team in a government agency decided to run a series of low-key, informal (un-advertised) small group discussions on utilising our worker networks. The discussions were held with small groups (5-20) using butcher's paper in worker-friendly environments such as community centres.

At one particular meeting, there were present a number of members of a group who had been quite vocal in their opposition to reform of an existing program. While the presentation did not necessarily sway their opinions, the group acknowledged the work of the Community Development Team and endorsed the new program model. One of their key staff noted that he had "been to 50 meetings on this stuff" and this was the most worker-centric presentation he had seen.

From my (the Program Manager's) point of view, I believe the Team is developing credibility as a lead agency in delivering reform information. Community development workers seem to prefer to have information delivered by local officers with whom there is already a level of trust and rapport. The smaller groups (as opposed to larger seminars) allowed for more interaction from individual participants which were also felt to be very valuable.

## Appendix 3      Analysed and interpreted qualitative data

**Please note this is an example only.**

An event was held with 30 project workers to explore the latest thinking around prevention in communities. Four guest speakers were organised from both the academic and practitioner sectors.

Attendees were asked through a follow-up survey what they thought about the event. The results are provided in Table 2.

**Table 2: What participants thought of the event**

Theme	Number of respondents
Good use of time	8
Evidence of learning	4
Speakers not very engaging	3
Inappropriate venue	2
Other	2

As can be seen, eight out of the 30 respondents felt the event was a good use of their time. Four participants felt they learned something from the event. For example:

*It was great to hear from the two academics on their research – it really highlights that sometimes we don't always know the latest thinking out there. I really learned a lot!*

However, three respondents felt that the speakers were not very engaging. The other comments noted focused on the ineffective booking system and the lack of car parking at the space.