

QUALITATIVE DATA ANALYSIS

One of the big challenges in evaluation – or any applied social science or consultancy task – is how to help people engage with the results. How do you get them to acknowledge often uncomfortable conclusions? Or maybe it was me that was wrong – and their conclusions were more valid than mine. Would it be better to get them to analyse the results? If people participated in the actual data analysis, then maybe they would accept the conclusions a bit more.

But there were several problems with that idea :

- people are busy, they have hired you to do the work, why should they spend their valuable time doing something they have paid you to do?
- you spent a lot of time collecting the data - you have masses of it. Just how much data is enough to get good quality analysis?
- how do you discourage people from “seeing” only those patterns in the data that reflect primarily their own view of the world?
- if you can get them to step outside their own mental space how do you prevent them from being defensive about their existing ideas and engage in the possibility of actually learning from seeing things from other perspectives?
- and finally how do you do this in a group setting where the pressure tends to be for discussion rather than dialectic?

I puzzled about this for a few years, and then came across some colleagues using ideas drawn from Vygotskyian based psychology and Activity Theory (see below). Essentially, Vygotsky postulated that we learn from two different practices. Patterning (i.e. fitting current events into past events), and puzzling (i.e. seeking explanations why the current event doesn't fit into past events, or even other current events).

I realised at that point that much of our analysis, both qualitative and quantitative, was based essentially on patterning. With relatively few exceptions, “outlying” data was removed from view and thus from the analysis. With that went much of the “puzzling” and potential learning. However, if you approached this outlying data with the possibility of it being there for a reason rather than chance, then maybe by discussing the bulk of the data’s relationship with the outliers you can get a deeper understanding of what is going on. In other words, encourage people to puzzle over the data rather than pattern the data.

From there it was a relatively short step to thinking about applying the same idea to data that were progressively less extreme, until in the end you were forcing puzzles onto apparently consistent data. I can’t claim

credit for this insight – my colleagues at WEB Research (<http://www.webresearch.co.nz>) had got there long before me. All I've done is expanded on their ideas, initially with colleagues at New Zealand Department of Labour who have helped me refine it. I have used variations on many occasions - always successfully. I've used this approach in various forms in all kinds of ways. Here are three :-

1. Taking a group of people who have got lost in the "raw data" to some form of filtering and prioritising of the data.
2. Reporting back to stakeholders in a way that allows them to feel part of the analytical process. You can enhance this by adding a "true", "false" option to the columns. This then allows debate (ie exploration of further contradictions) and further insights.
3. Rapidly debriefing meetings

On one or two occasions people told me it was the best way of analysing data quickly in a group setting they had ever come across.

The Process

Essentially the process is based on identifying and discussing four aspects of the data:

GENERALISATIONS and EXCEPTIONS
(usually ... but ...)

CONTRADICTION
(on the one hand ... on the other hand ...)

SURPRISE
(I'd expected ... but....)
(I didn't expect ... but)

PUZZLE
(Why...?)

Example Use

As an example, let's take a fairly classic situation. Let's say I've done quite an extensive study on the use of public transport in Wellington, New Zealand. In the process, I've interviewed say a dozen or so people who are in a position to do something with the results. Here are the classic steps. It might look a bit ponderous, but I've found various ways of keeping the process moving along at a good clip:

Step One

Decide who you want to invite to help you analyse the results, and invite them.

Step Two

Prepare a summary of the results. It is important that this is relatively short, but rich enough to contain the trickier aspects of the data. If possible, try to avoid drawing any conclusions. Send this out a week or so in advance and tell that we will be asking some questions of the data that will focus on exceptions, contradictions and other puzzles. It helps if you generate some sense of problem solving – such as helping me make sense of the data.

Step Three – Identify Generalisations and Exceptions

When everyone is together, you start by asking people to list generalisations in the data. It is important that you convey to them that you want observations not conclusions. Once you have a list, you then ask people to identify an exception against each generalisation. Then you say you want an explanation for how that generalisation *and* the exception can both exist. You stress that you don't want the exception explained away.

You can then if you want discuss the implications of that explanation (see below)

Step Four – Identify contradictions

In effect, you can explain this as a larger exception. Sufficiently large that it is about equal to the generalisation. Most people get this and are quite willing to list contradictions. You repeat the process as before. If people are stumped you can get them to complete the phrase "on the one hand on the other hand". Usually by this stage people have realised that this process has given them permission to discuss all kinds of things that don't "fit" – and the discussion can get very insightful during this stage.

Step Five - Surprises

Surprises are big exceptions, since you didn't expect them. However, I've found that if you ask people outright for surprises they are reluctant to admit that there are surprises in the data. So I usually phrase this process as follows :

"I'd expected to see in the data but it wasn't there"

"I didn't expect to see ... in the data but ..."

Again you encourage an explanation for this.

Step Six

Almost as an afterthought you ask whether there are any remaining puzzles in the data; and why this would be so. You are often surprised how animated this discussion can get.

Variations

You don't have to plod through the process like this, one thing after another. Some groups get the idea really quickly and start jumping ahead and back. Sometimes you can do things on a thematic basis – looking for exceptions, contradictions and surprises within that theme.

Sometimes it is good to do this process quite quickly, especially if the people involved know the data well. The most successful processes have often gone through very complex data sets in a couple of hours.