# BOURNEMOUTH BRIEFING PAPER

## A Six Step Guide to Using Recursive Abstraction
## Applied to the Qualitative Analysis of Interview Data

Recursive Abstraction is a qualitative data analysis technique that is very useful when analysing interview data. There are 6 primary steps for using Recursive Abstraction and this briefing paper will consider each step to help the researcher to understand the principles of the process.

By compacting the data using themes and codes, it becomes possible to identify patterns within the data that otherwise are not apparent. However, it must also be remembered that the final data becomes quite distant from the original data and a final validity check is required to ensure sense.

**STEP 1:** A set of interview questions are developed. The same interview questions are applied to each interviewee with their answers being recorded and written up into a transcript (one transcript per interviewee). Everything of interest is highlighted (this is normally either partial sentences or phrases.

**Example:**

**Do you believe that implementing green practices is costly?**
Yes it is expensive, we have just finished bringing in a new fleet of lorries. I am concerned those things that will be beneficial without breaking the bank, such as driver training courses, are going to be implemented by us and those things that just aren't cost effective we can't even consider.

**Are there any other issues that drive your company into implementing these greener practices?**
There is nothing at the moment that is driving us to implement green practices. Obviously I am concerned about the effect that the logistics industry is having on the environment and we are trying to do our bit but there is nothing that is really making me think 'Yes' I am going to be greener.

**Do you perceive there to be any other barriers to implementing green practices?**
The main issue for me is the cost of implementing the practices and customers demands for a cheap efficient service.

**STEP 2:** Transfer the highlighted data into a table with the question topics on the left (vertical axis) and a column per interviewee across the top (horizontal axis). At this stage the data is grouped by question. Make sure each individual point is separate, i.e. avoid multiple points in the same sentence together.

**Example:**

| Questions | Interviewees | | |
|---|---|---|---|
| | A | B | C |
| Do you believe that implementing green practices is costly? | • Yes it is expensive<br>• those things that will be beneficial without breaking the bank, such as driver training courses, are going to be implemented by us<br>• those things that just aren't cost effective we can't even consider | | |
| Are there any other issues that drive your company into implementing these greener practices? | • nothing at the moment<br>• concerned about the effect that the logistics industry is having on the environment<br>• nothing that is really making me think 'Yes' I am going to be greener | | |
| Do you perceive there to be any other barriers to implementing green practices? | • cost of implementing the practices<br>• customers demands for a cheap efficient service | | |

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**STEP 3:** Paraphrase the data to make it more concise and manageable. Be careful not to change the meaning of the data. Try to keep a sense of the interviewee's original comment.

**Example:**

| Questions | Interviewees | | |
|---|---|---|---|
| | A | B | C |
| **Do you believe that implementing green practices is costly?** | • Expensive to implement<br>• Implement affordable actions, e.g. driver training courses<br>• Ignore non-cost effective actions | | |
| **Are there any other issues that drive your company into implementing these greener practices?** | • No current drivers for change<br>• Concerned about industry effect on environment<br>• ~~No current drivers for change~~ (delete repeats) | | |
| **Do you perceive there to be any other barriers to implementing green practices?** | • High cost of implementing practices<br>• Customers demand for low cost service | | |

**STEP 4:** Where possible combine questions on similar topics to form themes. These themes are created by the researcher and although driven by the questions may not relate exactly to any question.

**Example:**

| Themes | Interviewees | | |
|---|---|---|---|
| | A | B | C |
| **Cost for implementing green practices** | • Expensive to implement<br>• Implement affordable actions, e.g. driver training courses<br>• Ignore non-cost effective actions<br>• ~~High cost of implementing practices~~ (delete repeats) | | |
| **Issues to implementing green practices** | • No current drivers for change<br>• Concerned about industry effect on environment<br>• Customers demand for low cost service | | |

**STEP 5:** Code the remaining responses for each interviewee. Codes can be easily compared to each other and may be a single word or multiple words.

**Example:**

| Themes | Interviewees | | |
|---|---|---|---|
| | A | B | C |
| **Cost for implementing green practices** | • Expensive<br>• Affordable actions only | | |
| **Issues to implementing green practices** | • No drivers<br>• Environment<br>• Low cost demands | | |

Repeat Steps 4 and 5, combining themes and condensing the data as much as possible. Look for common links. Moving responses between themes is acceptable as part of this process.

**STEP 6:** During the interview certain control data will have been collected, e.g. company size, company sector, gender, age, etc. Rearrange the order of the columns using each of the control data variables to look for patterns in the responses. For this example the columns will be sorted so that all of the small companies are together and all of the large companies are together. This is then repeated based upon sector, location etc. Look each time for patterns in the responses, e.g. all of the small companies might say that implementing green policies is too expensive whereas all of the large companies considered the cost to be acceptable. When patterns are spotted, return to the original transcript to validate meaning has not been changed.