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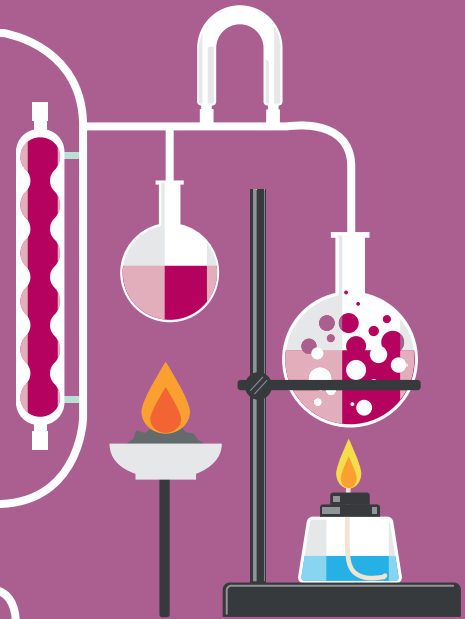
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# Comments and code

Thorough, scientific analysis of qualitative stakeholder feedback is possible thanks to specialist software. **Susan Lattanzio** explains the benefits.



**E**ngaging with stakeholders gives organisations the opportunity to gather large amounts of feedback and comment. While this is a potentially valuable source of information, the nature of the data – words rather than numbers – can sometimes make that value difficult to extract.

Specialist software has been shown to improve the transparency, efficiency, and multiplicity of qualitative data.

The importance of stakeholder engagement is widely acknowledged within the asset management community. It is an explicit requirement of ISO55000 and is often a condition imposed by regulators. As a consequence, stakeholder engagement is a common undertaking for asset-owning organisations.

But the results of stakeholder engagement are often qualitative – consisting of transcripts, videos, images, and so on. This makes the results more challenging to analyse than a purely numerical data set.

A typical approach is to sit down with paper print-outs and highlighter pens and manually attempt to find trends, correlations and other meaning within the words. Although this manual form of analysis is possible, it is not always practical or desirable. It can be time-consuming, especially if there is a high volume of data, and it is difficult to demonstrate that the method used is rigorous.

One possible solution to this problem is computer-assisted qualitative data-analysis

software (CAQDAS). A piece of research looking at the advantages of CAQDAS over manual analysis<sup>1</sup> found benefits in three areas:

- **Transparency:** CAQDAS allows you to demonstrate what data was collected and how it was interpreted.
- **Efficiency:** CAQDAS is far more efficient than manual coding or digital processing using Microsoft Word or Excel.
- **Multiplicity:** CAQDAS provides a single location for all data sources and formats – transcripts, video, memos, and so on.

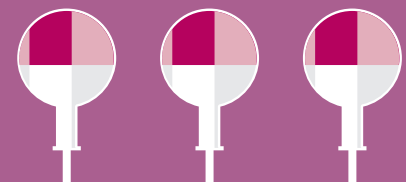
This type of software analyses qualitative data – in a variety of formats, including text, images and video – for themes and patterns, using a “code and retrieve” system and advanced search functions.

The “code and retrieve” function allows the user to code snippets of the data to different theme headings. These can then be retrieved and viewed separately – effectively organising the data so it is easier to access. And while this is useful, the real benefit is that you can then use the software to test for different associations between the codes – for example, snippets of data that fall under multiple theme headings. This process is quick, requires little effort, and greatly opens up the number of relationships that can be explored.

Although the research demonstrates that there is value in CAQDAS, it also warns that the flexibility and adaptability of the software can be overwhelming to the novice. With enough

time for experimentation and trial and error, however, this can be overcome.

The message to take away is that CAQDAS can offer benefits, especially if there is a need to demonstrate a rigorous method has been used to analyse stakeholder input. However, use of the software will require some degree of training, which has the potential to add to the overall cost of the stakeholder engagement exercise.



1. Hoover, RS and AL Koerber, *Using NVivo to answer the challenges of qualitative research in professional communication: benefits and best practices*. IEEE Transactions on Professional Communication, 2011. 54(1).

## Author's biography

**Susan Lattanzio is a doctorate researcher at the University of Bath. She is part of a cross-disciplined team working in the field of physical asset management. Her current research looks at performance decay of decision support tools and is in collaboration with The Engineering and Physical Sciences Research Council (EPSRC), National Grid and the University of Bath. The project is supervised by Prof Linda Newnes and Dr Marcelle McManus (University of Bath) and Derrick Dunkley (National Grid).**