



## A Quick Guide **Curvaceous Visual Explorer Best Practice**

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Altremis Ltd are the only UK consultancy working with PPCL Curvaceous® Visual Explorer (CVE) multi-variable analysis software.

The company has successfully implemented the system at leading businesses across the North West, helping them to identify the root causes of chronic issues and drive improvement into key processes. In this article, Management Director George Forrest explains how to get the best out of CVE.

CVE follows an interesting journey inside an organisation. It starts off as a very high profile initiative and hot topic for senior management but gradually ends up as just another tool for the company 'number crunchers'.

The fundamental problem lies with managers who view CVE as having all the answers and solely relying on it to deliver success. In reality CVE is simply one tool to be used within the wider process improvement project or initiative. Moreover CVE doesn't belong just with the statisticians of an organisation. It is the people responsible for solving problems that need to use tools like CVE so they can direct action to where the problems lie.

From my own experience, CVE brings together departments, engineers, operators and maintenance to focus on problems. If used correctly it can encourage communication, debate, learning and development and most importantly teamwork. When I've attended these meetings, people walk away with a better understanding of how a problem appeared to other departments within the business (or if it was even seen as problem at all). Management of change becomes easier when there is a better appreciation of the impact on others.

### CVE & Effective Problem Resolution

Getting the best out of CVE is about involving people, it's not about someone crunching numbers in isolation. Making a real difference to company culture involves getting buy-in and convincing people why they need to change. CVE is one of the best tools on the market to help make this difference. To be successful, I encourage clients to adopt this approach:

1. Select a problem or plant issue. When using CVE have a good, bad and ugly approach to data collection. Remember extremes are better than subtle variations. Gather relevant plant data, graphs, screenshots, operator logs, and maintenance records - prepare all data for CVE in advance of the meeting.
2. Book a room with a projector so everyone can view the graphs and data clearly.
3. Invite all stakeholders:
  - The Shift Manager and/or Senior Operator that last experienced the problem.

- Representatives from other departments and groups such as maintenance, quality, operations and management.
- If you are investigating a complaint, then invite the sales representative or account manager to the event to get their understanding of the customer needs and to understand how the problem manifests itself to the customer.

4. Give an overview of the problem with evidence of the impact on the plant.
5. Ideally, schedule the meeting on a day when you anticipate you will experience the problem (i.e. production of certain product or grade). You will then be able to bring up data in real-time on the projector and observe variables and changes as the product or grade is made. View the CVE display on the projector and work through the variables one by one. It's also a good idea to use the distribution plot function to observe how sensitive variables are to changes.

Depending on what your root cause analysis event shows, and if safe to do so, you can request changes to the plant and watch the effects in real-time. You can also request operators and/or maintenance to go and check things on the plant physically to rule out theories. This saves a considerable amount of time and minimises the list of actions for things to check the next time the product or grade is made.

This approach allows you to solve and potentially fix problems the same day. It gives the people involved a feeling of satisfaction and teamwork. Once you have successfully resolved an issue(s) it's important to communicate effectively to the rest of the business. Use newsletters, site notice boards, meeting minutes and post on the company intranet. Make sure best practice is shared with other plants and offer to help analyse other problems.

Used properly CVE will generate numerous success stories and pay back the investment a company has made many times over. But to get the most from CVE it's important to use the tool as part of regular operations, don't lock it away in the back office. Use it as a tool to promote discussion and debate. CVE can help you to search for answers but it's by involving all the key people that you actually find the answers.

*Altremis Ltd is the only Multi-Variable Analysis consultancy in the UK. We can help your business become more reliable, efficient, consistent, safer and achieve exceptional levels of customer satisfaction. In these tough economic times it pays to stay 'at the top of your game'.*

For further advice please contact George Forrest