# The Voice of the Experts: How The Dow Chemical Company is Driving Continuous Improvement

An Interview with Julie Thyne, North America Continuous Improvement Leader, **The Dow Chemical Company**

In the lead up to the 2019 **Operational Excellence in Oil & Gas Summit** in Houston, we caught up with Julie Thyne, North America Continuous Improvement Lead at **The Dow Chemical Company.** Julie provides insight into how the company is driving reliability improvements by speaking directly to frontline experts.

**Julie, can you tell us a little bit about your professional background, leading up to and including your current role as North America Continuous Improvement lead at Dow?**

I've spent the last 21 years working at Dow in a variety of manufacturing positions. I have worked in a number of business units, including the Automotive, Pharmaceutical, and Electronic Materials markets.

Prior to joining the Continuous Improvement group, I was a site leader for one of our small electronic materials facilities. When I was there I saw the results that could be realized from using continuous improvement methodology. I really wanted to share my experience with others, and that's how I came to this role.

**You have recently discussed the concept of using the voice of the experts to drive reliability improvements. Can you elaborate on this concept?**

Our voice of the experts process is a structured brainstorming approach that we use to improve plant performance. We've been using it primarily as an improvement tool for operational reliability, but there are other applications as well.

In our case, the experts in this process come from all levels of the plant, from the maintenance craftsperson to the plant leader to the technology expert. We ask leading questions, we collect feedback, and then we help the plant prioritise their ideas into continuous improvement projects. Perhaps most importantly, we help the plant execute the highest value projects first so they can realise the benefits of those improvements right away.

We've been using the process for a number of years, and the improvement projects have a lot of different scopes. Sometimes they fall into a more technical project, and we can bring in an expert to help the plant solve the issue. Sometimes the problems are more of a work process; maybe the plant doesn't have a good meeting structure or metric structure or dashboard, or maybe they don't have good hand-offs between maintenance and operations, and we can help with those things as well.

**When you meet with the experts in the different**

**facilities, what are some of the important questions that you're asking them?**

We do some of our own data mining upfront in order to identify where those improvement opportunities might be in the plant, but of course, we really want to hear from the people who are in that plant every day, who maybe have spent their whole career working in that environment.

We like to ask questions such as, "when the phone rings at 2AM what do you think it's going to be about?" or "where do you think the next failure is going to happen in your plant?" We also like to ask them where they think we're spending too much, or too little, time or money.

We've found that we get some really insightful answers, and people are usually quite open with us. We always ask the leader of that organization to set the stage and let people know that this is an open forum. We want them to share their ideas, even if it's something they've said before that's been rejected, because maybe circumstances are different and it's something we could work on now. This helps to get that open dialogue going within the room.

**How are you logging the results that come out of the sessions and the status of the improvement projects?**

We use short interval control to track our metrics and drive performance within the plant. We choose our short interval control metrics to specifically target areas where the plant has identified that they have some issues, whether that might be in safety, reliability or in meeting deadlines and completing action items. We help the plants choose metrics that they can use to track that performance. For each one of our voice of the experts projects, we have a charter that includes metrics that will show the success of that project.

**Can you give us a specific example of a voice of the experts improvement and how it impacted the operations of that particular plant?**

We had a plant that was underperforming similar plants in their fleet. We we're invited to go to this plant and try to understand why it wasn't able to perform at the same level as the fleet.

We did a voice of the experts workshop with them and helped them execute a number of projects that were generated. These projects included setting up the metrics dashboard for them and the morning meeting, and helping them revitalise their improvement team and several technology projects around their equipment.

The results were phenomenal. The plant had an 11% improvement in production volume due to improved operational reliability. Their equipment wasn't failing because they were maintaining it better, and that translated into a 15% improvement in their conversion cost. In this area, they went from the worst in their fleet to one of the best in their fleet.

Most importantly, in the time that we spent with that plant, we helped them develop a reliability culture that has enabled them to sustain their gains over several years. They continue to be a leader in their fleet as a result of these projects that they worked on.

**What advice would you give other professionals**

**who want to try this approach in their own organizations?**

Our industry is really focused on digital and technology solutions, and those can help us reach new levels of performance. Sometimes, problems can also be solved with a low-tech answer, and that's what voice of the experts is. This is not an overly complex methodology. This is structured brainstorming; it's a simple, but very powerful tool that can be used to identify opportunities to improve performance.

We're using it a lot in the areas of reliability, but it can also be used for safety, process safety, or for productivity within a facility. The key to making it work is getting the right people in the room. Be open to bringing in everybody from the craftsperson to the senior technology leader, and ask them the right questions.

Ask a few leading questions that get them thinking, and then help them follow through and see real results. It doesn't help if you just leave a to-do list because the workers probably already knew what the problems were and how to solve a lot of them. They didn't have the prioritisation and the drive to get those solved because of other competing priorities. Helping them follow through with getting projects completed, seeing the results, and building that reliability culture is key.