



Speaker Interview with **Dr Oktem, President and Co-Founder, Near-Miss Management LLC**

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**1. What are downstream operators doing to improve productivity and efficiency? What more can they do?**

In this era of data abundance, most downstream operators are looking into different ways to utilize process data to improve their productivity and efficiency. However, to be successful in data based process management, teams must select the right tools that match their needs and capabilities – including their people’s skillsets. Also, management must set the proper improvement targets and provide training when necessary, to ensure seamless integration of the new tools into the operations management fabric.

**2. What are your views on Asia’s downstream industry’s competitiveness compared to counterparts in other regions i.e. America, Europe and the Middle-East markets?**

Each market has its own strength. Asia’s downstream industry is very competitive. Companies here are not only willing to embrace new technologies but also are thinking creatively to adapt them to their culture and operations - more so than the long established markets with set practices.

**3. As a service partner, how do you add value to their effort in becoming more lean and efficient?**

We provide a unique capability - identifying process problems as they start forming and point them out to the operating team. At their early development stages, we refer to process issues ‘hidden near-misses’<sup>TM</sup>. They are difficult to recognize without specific analytics designed for this purpose. Our software, called Dynamic Risk Analyzer, uncovers ‘hidden near-misses’ and brings to the attention of operating team members. Our tool also provides peripheral vision to detect process problems developing on the side-lines. These are critical functions, because early detection of problems makes a big difference in improving operability, reliability, and safety by enabling operating teams to take timely corrective actions and avoid big problems.

**4. The collection of data is not new within the refining and petrochemical industry – how is data analytics changing the way information and data is being used?**

There is a lot of misunderstanding here, because data alone has only partial utility due to systems and staff limitations in processing it. What is important is extracting the key information from the large volume of data and building a knowledge base so the plant gets actionable insight that points to problems. This is where data analytics plays a critical role and brings new capabilities to how continuously collected data is looked at and used.

**5. How is analytics assisting asset management?**

Analytics assist asset management in different ways, depending on the tool being used. In some cases, you can identify the process conditions that will potentially reduce the life of the asset unless you make a change. In other cases, you can calculate when to schedule the next maintenance to ensure reliable operation. So, different tools provide different capabilities.

**6. In your opinion, how are IoT, big data, and virtualisation transforming the industry? What are the challenges you foresee for the operators to adapt? What are the first steps ahead?**

There is a lot of complexity right now. This industry that has been very traditional is now trying to figure out how to combine new and different tools in the fast growing technology landscape to effectively manage processes. Some tools are designed as platforms with the intention of providing basic analytics and acting as a conduit of information flow from different pieces. Some others are designed to focus on specific targets, such as identifying process issues. The key challenge is how to merge into this transitional state in such a way that your operators can adapt easily as the new systems are developing. I think the first step should be to focus on function specific tools, such as data analytics targeted to address specific process problems, to pick up the low hanging fruit and to start evaluating the new, digital development environment.

**7. What will be the highlight of your panel at Asian Downstream Week?**

Our panel discussion will centre on the role of proactive risk management in achieving ultimate operational excellence. To be proactive you need to know what risks are developing and where. We will discuss the concept, the tools that provide peripheral vision one needs to be proactive, and present examples of successfully achieving high level of operational excellence.