

Optimizing efficiency through digitalization in chemicals, petrochemicals and refining  
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## Exclusive Speaker Interview



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**1. What does the subject of digital transformation and IoT mean to you?**

To me, digital transformation and IoT make it much more convenient for people to manage their work easily. For the same amount of tasks, it requires fewer manpower to do those tasks.

**2. What's the greatest impact IoT, data analytics and AI will have on the industry? What lies ahead of operators and how will they adapt?**

The greatest impact of IoT, data analytics and AI is that it requires lesser involvement from the team to do routine works that include quality improvement, collaboration which leads to faster turnaround period.

**3. How will this paradigm shift affect the classic production process and manufacturing value chain?**

This paradigm shift will affect the market in terms of processing and manufacturing new products at a quicker pace.

**4. What are the latest technology adoptions by downstream operators in Asia? Are there any success stories that other operators can learn from?**

Currently, SCG Chemicals is using *SMOC* and *Exapilot* that help in reducing human errors that are caused from a big group of operators who are doing the same tasks at the same time. We are also adopting *ANSYS Fluent* which helps in predicting failure scenario during

process operations and understanding the phenomena of fluid transportation in order to provide effective safety measures.

**5. Will Artificial Intelligence replace humans working in oil and gas?**

Currently, AI may not be able to fully replace humans working in oil and gas. However, it could be a possible situation in the future as automation systems allow plants to be operated with fewer people involvement.

**6. What impact does Big Data have on operational efficiency and how is Big Data changing the industry?**

The positive impacts that Big Data have on operational efficiency are cost reductions, time reductions, and new product developments and optimised offerings. Not only that, it allows the management to make better and smart decisions.

In terms of safety and reliability, Big Data will be able to determine the root causes of failures, issues and defects in near-real time before incidents could actually happen.

**7. With these radical changes looming what opportunities lie ahead for manufacturers?**

The opportunity that they can look forward to is that the manufacturing processes will be much faster, smarter and safer.

**8. What will the future workforce look like in the digital age? How well equipped is your organization to handle the challenges? (for operators)**

In the digital age, the future workforce will be reduced due to the new technology developments that do not require human work.

**9. What will be the highlight of your presentation at Asian Downstream Summit?**

The highlight of my presentation at Asian Downstream Summit this year is focusing on the strategies on how to better to utilise digital technology, big data and Artificial Intelligence for future process safety works.