



Speaker interview with **Satyajit Dwivedi, Principal Industry Consultant, Global Process, Sensors and Smart Practice, APAC, SAS.**

He will be giving a first-hand look into **Digital transformation & automation in oil & gas for better business outcomes** on our Keynote panel with other industry leaders.

1. At SAS, what are some of the work you are doing that will interest downstream operators? Is there any new findings which is worthy of mention?

Modernization and Transformation in Oil & Gas will see the adoption of **Edge to Enterprise Analytics for IoT Platform** for establishing Connected Plant, Connected Supply Chain and Connected Customer to deliver Connected Intelligence across the organization.

The role of edge to enterprise analytics for IoT Platform in the Connected Plant is to deliver an omnibus data flow channel integrating multiple systems such as Historian, SAP, MES etc coupling with the RTO, APC and PLC's and providing data lake on which big data analytics can be run and deployed at the edge delivering new values to the Refineries, Petchem Complexes and Gas Separation Plants. Currently we have close to 50 Realized Analytics Source of Values for Refineries and Petrochemical Complexes.

Nozzle to Crude optimization is possible with the digitalisation of the retail-outs, integrating the dispensing unit with the supply planning thru the terminal automation system. Similarly with the Customer 360 framework, organisation can integrate connected vehicle with the customer buying behaviour and coupled with locational intelligence can provide new values / services to the customer impacting the sales performance of the organisation.

SAS has the only validated Edge to Enterprise Analytics Platform for IoT that powers the delivery of Connected Intelligence across industries.

2. What is the latest adoption of advanced analytics by downstream operators? Are there any success stories that other operators can learn from?

Machine Learning, Artificial Intelligence and Streaming Analytics are some of the key frameworks / technologies that we see being adopted by leaders. These are in the areas of profit maximization, enhancing equipment performance, integrating supply chain and making it more responsive and delivering new services to the customer. At the upcoming Asian Downstream Summit, we would be covering some cases around Connected Plant, Connected Supply Chain and Connected Customer.

3. What are your views on Asia's downstream industries rate of digitalisation as compared to counterparts in other regions i.e. America, Europe and the Middle East markets?

Investment opportunities has been good in Asia Pacific O&G Downstream with growing human and vehicle population and favourable crude prices. Under this scenario, with early adoption of Industry 4.0 and the decreasing cost of IoT infrastructure, on an average the rate of digitalization of Asia's downstream industries seems to be greater in Asia Pacific than other regions. However there will be leaders and laggards in all the regions. Being personally personally involved with leading Oil & Gas Companies in the Downstream sector within both Middle East and Europe, I would say Leader takes it all. The opportunity would be for companies to leverage analytics to modernize and transform their capabilities, and turn them into competitive advantages.

4. 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 would be to make engineers move towards data driven decisioning. This will lead to lot of innovation that would deliver values in the areas of maintenance, process optimization and HSE issues. I see lot of intellectual property being developed with the use of Artificial Intelligence and possible business model for the organisation.

As the window of opportunity is getting shorter, Operators needs to go fast track the digitalization process within their company and adopt the edge to enterprise analytics platform to bring in new values to the organisation.

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

My presentation would be to highlight global trends in Oil & Gas specifically addressing Asia Pacific Downstream, the dawn of analytics economy and how the future state of connected intelligence in Oil & Gas sector will look like in form of Connected Plant, Connected Supply Chain and Connected Customer. Also my presentation would highlight the need of organisation moving towards becoming an algorithm business with engineering analytics – combination of cloud computing and edge to enterprise analytics.