



Speaker interview with **Shahrul Rashid**, Principal Engineer - Instrument and Control, **Petronas Penapisan Terengganu (PPTSB)**, Malaysia.

He will be presenting a case study on how digital technologies can impact on key oil and gas processes on 25th October and participating in a panel discussion on *“Processes which makes a plant tick – Monitoring asset management for improved performance & asset life”* on 26th October.

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

We tied-in various process safety related data which are critical to plant process safety, into our web-based nagios monitoring system. Eg of process-safety related data are status of gas detectors fault alarms, status of safeguarding bad transmitter alarm, status of safeguarding power supply alarm and status of Maintenance Override Switch (MOS) alarm

We make use of the web-based Advanced Alarm Management application software as part of the monitoring of the nos of alarms per operator per panel meeting the EEMUA standard.

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

- Extending usage of Big data analytics by making use of the existing PI data collection from DCS. The extended use includes smart programming of the PI data to deliver management dashboard which capable of providing green, yellow or red status of the plant based on the profile of the data during plant running, upset or tripped.
- Wireless technologies extending from pressure/temperature transmitters to gas detectors, CCTV as well as steam trap monitoring system versus the conventional hardwired system
- Fieldbus technologies with HART pass-through, versus the conventional 4-20 mA with HART

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?

With the global connectivity, Asia’s rate of digitalisation is equally at par with other continent.

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?

- Improve plant efficiency and optimization.

- Reduced manpower
- Immediate access to the plant data from anywhere to enable remote monitoring and control

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

- Early warning system utilized by PP(T)SB including but not limited to the Nagios-based software, PLC System and Hydraulics PI-system monitoring, Advanced Alarm Management Software capability, Instrument Asset Management application, wireless system for Pressure, temperature, gas detectors and CCTV
- Rejuvenated Offsite Automation System for tank farms to improve plant safety and efficiency