

Finding Gold in the Triple Ds?

Digital Disruption in Downstream

BY MICHELLE MEINEKE
Gulf Intelligence

\$275 billion.

That's the potential value for downstream oil and gas companies if the digital and physical worlds are combined between 2015-2016 as per the 4th Industrial Revolution (4IR), according to the World Economic Forum and Accenture. Plus, operating costs in downstream can be cut by up to 3% by using artificial intelligence (AI), blockchain, robotics, sensor technology, machine learning, deep learning and edge computing, detailed McKinsey. These figures should trigger a sigh of relief among stakeholders operating in a world of sub-\$60/bl, compliance for IMO 2020 just days away and rising geopolitical tension. No stakeholder can afford to give digitalization a cold shoulder; even 0.1% of greater economic efficiency is golden.



PROGRESS CLOSE TO HOME?

This certainly applies to the 20,000 ships sailing into the Port of Fujairah every year, not to mention the vast operations and infrastructure at what is the Middle East's biggest port and the world's second largest bunkering hub. Applying the tools of the 4IR – Internet of Things (IoT), predictive analytics to name just a few more – will spur transparency and give the Middle East's downstream ambitions more global credibility. Stakeholders need to know at the click of a button how much storage there is, where the customers and shippers are, when the delivery is and what the likely external triggers to liquidity will be i.e. geopolitics and so on. Operating in a vacuum of guesswork dulls competitive edges and makes business models irrelevant – fast.

“The ultra-efficiency offered by digitalization comes at a cost: cybercrime.”

PARADIGM SHIFT

Two decades ago, little information was transmitted from a ship at sea. Today, every inch of operations and every decision can be monitored and analyzed, no matter the sea or port. This creates a real-time, global picture of where every single asset is at any point in time and accelerates the speed of decision-making, bolstering trade volumes and liquidity. But this real-time looking glass is a two-way street that not all downstream players are travelling on – yet. Failing to gather and transmit data means the digital, real-time maritime ecosystem splutters to a halt.

PROACTIVITY CAN PAY – LITERALLY

Traders, refiners, storage operators and all others in the downstream value chain must keep greasing the conveyor belt of data. Saudi Aramco and ADNOC are among the NOC forerunners who are opening their digital doors without jeopardizing intellectual property (IP). The UAE Government's Open Data policy also heralds a major cultural step change in how the region manages its intel, and NOCs' trading desks are becoming extremely proactive with real-time vessel tracking, tank monitoring and proactive talk of adopting blockchain. The next step is tailoring the data to maximize usefulness. Important information for a trader differs to what a shipper considers dear. Stakeholders must think about how to gather, assimilate and distribute targeted knowledge, avoiding a scattergun approach.

WALK THE WALK

Desire for greater digital adoption is building; the holistic roll-outs less so. Approximately 62% of CEOs have a management initiative or transformation program to

make their business more digital, according to Gartner's 2018 CEO and Senior Business Executive Survey. But executives still tend to neglect a holistic cross company approach, often leaving initiatives to be taken exclusively by their IT business units. In the refining world, a report by Accenture recently revealed that while 60% of refiners intend to spend more on digital this year, just 48% have mature or semi-mature digital technology deployment. This is especially surprising when 80% of the same respondents said digital is, or could, add more than \$50mn to their business. This disconnect needs fixing. Unleashing the economic value of digitalization needs companies to walk the walk, not just talk the talk.

TREAD CAREFULLY

The ultra-efficiency offered by digitalization comes at a cost: cybercrime. Damages from cyberattacks will cost the world \$6trn annually by 2021, up from \$3trn in 2015, reported Cybersecurity Ventures. Such attacks worldwide already cost the world \$600bn in 2017, 0.8% of global GDP, according to McAfee. Downstream operators, vital gateways to global trade, cannot be an easy target. Many proactive steps are being taken – Honeywell opened its first Industrial Cybersecurity Center of Excellence (COE) at its Middle East headquarters in Dubai – but many more are needed to combat the fast-moving digital mafia. Leveraging the 4IR toolbox and building robust digital defenses must be a continual effort to not just fatten profit margins but protect the region's energy security. Digital fluency is no longer a language you can choose to learn tomorrow; it's a must-have today. □

Insights brought to you by: