Why is asset information management so vital for the oil and gas sector?

Ongoing fluctuation of global oil prices continues to challenge owner operators in the oil and gas industry. As one of the ways to answer to competition and improve margins, we can see that owner operators in the oil and gas industry are currently looking for ways to extend the lifecycle of their existing facilities, to reduce turnaround schedule, and get the most value from their facilities while they are operational. There are many benefits when compared to building new facilities: no new capital investment is needed, the entire existing infrastructure is already in place, and plant personnel are already trained.

One of the key resources for extending the initially planned lifetime of an operational facility or reducing turnaround planning include access to up-to-date, correct asset information and the possibility to take action based on this information, in other words, creating a digital twin of the physical asset. Having this can help owner operators to improve operational efficiency, reduce maintenance cost, and drive safety – all key reasons for why ability to efficiently manage asset information has become crucial for any owner operator to succeed.

What are the main challenges and opportunities you face in terms of bringing asset information management services to the Middle East’s oil and gas sector?

The declining oil price has opened the eyes of owner operators to the importance of efficiently running their assets and brought awareness of the losses they face on daily basis if efficiency is not improved. Previously these issues were mitigated by the high price of oil, but this is not the case anymore. Often enough, despite the will to modernise and introduce efficiency, IT budgets are limited while both budgets and staff are being reduced, which in turn negatively affects the ability to move forward with modern asset information management programs.

Moreover, implementing an asset information management solution is not just installing software and pushing a button. It is a sizable effort that requires firstly a quality check of the available asset information, secondly integrating the asset information and the multiple asset related systems, and finally feeding these systems constantly with up-to-date asset information that can be used to make the correct operational decisions.

How can asset information management help to reduce operating costs?

The main objective of asset information management solutions is to create a digital twin of the physical asset that is composed of tag information, asset information, as-built documents and models, all linked together. This will reduce the operating cost as navigating and finding information becomes quicker, smoother and easier. At the same time, initiation and execution of operation workflows directly on the digital twin will be more efficient and better monitored while change management capabilities are improved.

How can asset information management software help maximize productivity and reduce downtime?

Currently owners are spending on average 20-30 per cent of their time just to find the information needed to operate their assets. Imagine the profitability improvements if you could use this time to actually operate, maintain and improve the facility. Working with a digital twin of the physical asset will allow the system to maintain an as-built environment and multiple concurrent project environments. This segregation will encourage an efficient change and inconsistencies management inside the digital project, between digital projects and in the as-built digital twin. This will dramatically improve parallel productivity of projects, operations and consequently reduce downtime.

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