

PLOTTING A PATH TO A DIGITAL FUTURE*

When the oil price falls, the sector traditionally turned its attention to improving its operational efficiency and managing risk. However, when prices began to rise the focus moves back to how best to invest in capital projects. Over several cycles that attitude has meant that there has never been a focused effort on addressing the underlying inefficiencies in the way that the upstream sector does business.

However, the lower for longer cycle that the industry is enduring this time around, along with the other challenges it is facing may be changing that. "I think in certain cases, like the North Sea where it is an expensive basin, you have got to start asking how you can be more efficient," Phil Murray, CEO of Petrotechnics says. "I think as future demand for oil doesn't inexorably rise oil has got to be digital to remain competitive as a source of energy.

Getting Value from Digitization

Oil and gas have not achieved the radical improvements that other industries have experienced from digitalization. There are many reasons for that but primarily because it is a messy business.

A Slow Journey

The message that comes from oil and gas companies on the road to digitization is that there are five reasons for the slow take-up: silos, dirty data, the long life of assets, lack of standardization and people.

Struggling with Standardization

Without standardization, data can mean a different thing from different sources and give a picture that does not reflect reality. Each facility is designed and engineered differently and to get a common currency many operators talk of making everything Vanilla, where everything is reported in the same way, and everything means the same thing.

Data Overload

An oft-heard comment is that there is too much data in the oil and gas sector to manage, but there is an interesting contradiction there. If you to Data Scientists, they will say that it is not a lot of data that is the problem but the amount of messy data. It is about looking at the data sets and looking at where the meaningful data is and how you can collate that in a way that can provide insight.

A Balancing Act

Within many digital programmes there is a triumvirate of ambitions; to reduce risk, cut costs and improve productivity. However, do these apparently disparate ambitions naturally go hand-in-hand on a digitalization program? “They do for us as a company because we see them inextricably linked,” Murray concludes.