

Unlocking Oil & Gas Digital Transformation



Talent Development: Key to Unlocking Digital Transformation

In the last couple of posts around key themes in Oil & Gas Digital Transformation, we've focused on [technology](#) and [innovation](#). Now let's look at what makes all this work - people. And more specifically, how we attract and develop those people.

The workforce is changing

The skills mix we need to drive the Oil & Gas industry forward, and to take full advantage of the promise that Digital Transformation holds, are different to the

ones we have now. Prof Paul de Leeuw, Director, Oil & Gas Institute, [estimates](#) that by 2035, 90 thousand current workers will have exited the North Sea; we will need to find another 40 thousand to replace them; 10 thousand of those will be in jobs that don't exist today! That implies an enormous rate of change over the next 15 years or so.

The requirement for SME in areas like Geoscience, Reservoir Engineering, Drilling and Production Engineering won't go away. Despite the advances in technology and Artificial Intelligence, Human Intelligence will still be a key part of the mix. SME's resolve complex business issues but new skills are required to support a shrinking SME workforce. This is likely to come through Data Science. The effective integration of the Data Scientist and the SME is critical to support a new way of working.

Does Oil & Gas need an image makeover?

There's a major issue here. The Oil & Gas industry has a terrible image problem. The sharp focus on climate change, allied to investment house decisions to withdraw investment in 'pure' Oil & Gas play companies plus the 'boom & bust' cyclical nature of the sector is having a real impact on talent attraction. Oil & Gas is seen by many as dirty, dull and a sunset industry, in the way the coal industry was viewed in the 80s. Our industry is struggling to attract new people to fill the 'traditional' SME roles, we're not attracting Data Scientists either. Oil & Gas needs to improve communication about its role in the energy transition, highlighting the opportunities to lead the way towards a greener future whilst providing the energy we need now to function.

Britain's Got Talent - but how do we attract it?

Without attracting new talent, the promise of Digital Transformation will never be realised. It's interesting to see that it's the relatively new entrants in to the Oil & Gas tech space that seem to be having most success here, especially in Norway (e.g. Cognite, Earth Science Analytics). The big Cloud platform players are making inroads in to our industry, bringing more innovation and new ways of working. And the Majors are starting to Hoover up talent wherever they can. But

there is much less engagement from the sort of E&P company coming in to the North Sea where the focus is firmly on headcount and cost management. It's telling that out of the 155 or so MSc Data Science students that graduated from Scottish universities last year, less than 10% of those were taken on by Oil & Gas companies (Ian Watt, The Data Lab, DataFest Aberdeen 2019).

Talent engagement is not an issue limited to Data Science, it also impacts graduates from other technical domains. It seems that everyone wants new graduates, at new graduate prices, but with at least 5 years' experience! We need to break the cycle. We need to find a way to accelerate the development of competency in the new workforce much faster than we've done in the past. The bottom line is Oil & Gas companies need to invest in developing new people, especially for those involved in the North Sea where innovation and new ways of working are acutely needed to fulfil the goal of [Maximising Economic Recovery](#).

Venture is changing

We also recognise the same challenge in Venture. The availability of data management resource is tightening. We have to look to new ways of working, to do more with less and to provide faster, better value services to an industry under constant cost pressure. That means applying Data Science approaches and working with other innovative companies to deliver smarter services. As well as re-skilling our current consultants, we're also aware we need to provide an environment that will appeal to the next generation of talent. We're focusing on improving the working environment; expanding internal and external collaboration and providing an environment that fosters continual learning and development. It's not easy, but we know it's vital if we're going to be successful in the future.

Contact us through www.venture.co.uk to find out how we can help you with your Digital Transformation challenges.

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