Innovation is No Longer a Crime (But It Is a Challenge!)

Following on from my last post, [Oil & Gas IM: A Perfect Storm](#), I'll take a closer at some of the key themes, starting with innovation.

Oil & Gas in the noughties – the near-death of innovation

Before the noughties and $12 oil, I worked with some great companies such as BG, Enterprise Oil, Kerr-McGee and Wintershall Noordzee, who we're happy to experiment, take a chance and try something new. Sometimes it didn't work, sometimes it did. But when it did, the sum of the successes far outweighed the cost of the failures. For many years since, many Oil & Gas companies seemed to forget how to take a risk in the world of IT and IM. These were cost centres to be controlled and squeezed constantly. It often seemed $1,000 IT decisions were agonised over more than $60 million drilling decisions. They looked to the major software vendors for any innovation, but with some notable exceptions this was often incremental at best, and just encouraged more proprietary lock-in.

A new day dawns

Things have changed recently, and fast. There's been a wave of innovation sweeping through the industry over the past couple of years following the downturn. Companies are realising that they've pretty much exhausted the marginal gains that supplier and internal cost control provides and need to look at new ways to create value in their businesses. Many of the majors have established internal Data Science groups and are generating a torrent of proof of concepts. We're doing some great stuff with clients in the subsurface domain using Data Science, AI and ML that wouldn't have been possible just a few years ago. As well as this, many innovative companies are appearing out of the rubble of the downturn (e.g. [Earth Science Analytics](), [TapeArk](), [Osokey](), [AEON](), [Loxodrome](), [Solution Seeker](to name but a few). We're also seeing examples of internal innovation from larger companies starting to go public (e.g. [Cognite](), [Open Subsurface Data Universe]()). The big IT and cloud providers such as [Amazon](), [Google]()and[Microsoft]()are pitching in to support (exploit) this and the major vendors are also starting to re-tool the next generation of workflow transformation (e.g. [Schlumberger's DELFI]()).These are exciting times.

Innovation is challenging

Despite all of this, there's still a major challenge and that's how to operationalise all this innovation and move it in to the 'business as usual' environment. Time and again you see presentations from the Oil & Gas companies talking about the challenges of moving proof of concepts in to operations. And as [a recent article in HBR]()discusses, 'creativity can be messy, it needs discipline and management'. This is probably in short supply in these heady early days of experimentation but is vital to the longer-term success of any innovative venture. And the industry has yet to fully grasp the nettle; many still expect 'bits 'n pieces' digitalisation to change their business and are often disappointed by the results. The emerging consensus is that for this to work, you must go all-in.

Innovation is changing market dynamics

The whole service industry ecosystem is changing. There is a shift away from relying on the service company behemoths to drive change, to smaller, more agile organisations, working with open standards technology and who are also attracting the brightest and best talent. This is likely to be the engine for future

transformation; with Oil & Gas companies forming collaborative partnerships with innovative tech providers to move ideas from the lab and in to their business. But managing this shift to a more fragmented, best of breed partnership model is itself challenging. Attitudes will need to change to working with smaller, innovative companies. As anyone who has wrestled with large company procurement departments will tell you, that is often a major issue.

Venture is embracing innovation

Here at Venture, we're addressing the innovation challenge too. We're re-working our internal innovation framework to incorporate tools such as the Business Model Canvas, Design Thinking and Agile approaches to quickly assess and prototype new solutions. We're developing an internal 'Innovation Hub' to provide us with a platform to test and develop new solutions and drive internal and external collaboration with likeminded companies. Rather than just talk about how the whole IM landscape is transforming, we want to experience it, lead it and demonstrate it to our customers, but not in PowerPoint!

We'd love to hear about the challenges you face and talk about how we are doing more with data. Contact us at www.venture.co.uk

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