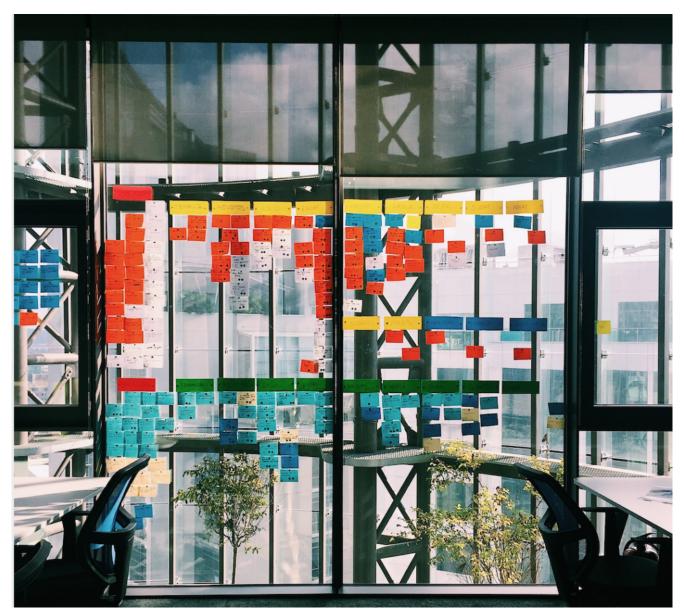# Is the UK Oil & Gas industry ready for agile data management?

Gareth Smith, Head of Consulting at Sword Venture, delves into the detail of data management as an agile approach versus the more traditional waterfall project delivery commonly adopted in the UK Oil & Gas industry.

Oil & Gas: An Industry Struggling to Change

I sat in a fascinating session run by the [Society of Petroleum Data Managers](#) (SPDM), where Dan Brown, Executive Director at Common Data Access (CDA), talked about the challenges we face digitalising the Oil & Gas industry in the UK. Despite the many billions of IT spend over the years, apparently we still sit at the

bottom of most 'digital maturity' league tables. One of the key questions raised was are we 'agile' enough in the way we work to reach the goal of delivering a digitalised basin on the UKCS? Does the long-term, physical asset management mindset of our industry, more aligned to manufacturing, lend itself to an agile approach?

Constantly Evolving

I've [discussed in the past](#) about the rapid changes we're seeing in Oil & Gas data management (DM); in particular the ability to apply new data analytics and data science techniques to address data management challenges at scale and speed. These approaches are more akin to science-based R&D or software development than the people-heavy, process-driven approaches of old. We are constantly finding and applying new tools and techniques to improve delivery and derive more value. The toolset is literally changing day-by-day as the underlying toolsets and algorithms improve and expand. The good news is this lends itself perfectly to an agile approach. In fact, it's probably the only way you can do it.

Our Clients Say They Want Agile...

Nearly all our clients are talking about agile. Some have already reengineered their internal IT and DM project delivery processes to take advantage of an agile approach, where the focus on an early realisation of value, continuous delivery and a mindset that accepts and embraces change. However, this is a massive shift in mindset from the days of 18-month+ project and budgeting lifecycles and waterfall project management that the industry has worked with for decades.

Many Fear the Leap

Many others say they want agile and all that it might deliver but can't get over the line when it comes to the detail. An agile mindset requires an acceptance that the outcome is unknown. You can't define the absolute time, effort and cost for an agile project. You can't define a GANTT view of the project before you start. You work one sprint at a time towards your goal, focusing on continual value delivery and learning and adapting as you go. It also requires the continual involvement of the client, with day-to-day feedback guiding the work. As the client, you must retain ownership of the solution, not farm it out and hope that in 6 months' time you have something of value back.

You try and narrow down the 'cone of uncertainty' as you progress through an agile project. You are always delivering value but there is always the chance you won't do everything you set out to at the start, unless to decide to extend the project. You might argue that's also the case with traditional project approaches, but it is baked in to agile. Change and uncertainty are core elements of the approach.

So, Are You Ready?

When it comes down to it, many say they want agile but really still want the (supposed) certainty of a waterfall approach to a project: a detailed scope & spec, a nice GANTT chart with lots of defined milestones and fixed estimates of cost, time and final deliverables.

Helping the UK Oil & Gas Industry deliver a digitised basin is going to take a conscious leap of faith to trust the relevance of an Agile approach to addressing the challenges in our industry.

Read more about Sword's data and information management solutions here.