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Who is Sword?

As the North Sea's largest provider of digital services, Sword focuses on unlocking solutions to the industry's most critical business technology challenges by enabling our customers to capture, manage, and utilise data to make informed decisions. This is supported by the right level of technology and people adoption, together with modern ways of working to give confidence that the right decision is made each time.



Jared Owen, Chief Digital Officer
at Sword ITS

A global leader in technology transformation

RESPECT — RIGOUR — INVOLVEMENT

A DATA DRIVEN JOURNEY

Our UKCS energy industry has very clear strategic objectives. Health, safety and compliance, operational efficiency, and a managed energy transition all support a more sustainable future, improved competitiveness, and extension of the basin life.

There is now wide recognition that there is untapped potential in achieving these objectives by using data platforms, advanced analytics, machine learning and AI. However, it is also recognised that we are lagging several peer industries in our adoption of digital and our overall data maturity.

The UKCS Data and Digital Maturity survey in 2020 identified that *"Data is the foundation of digital. Governed, accessible and connected datasets provide the basis for digital to add value"*. In the same survey, respondents were asked to rank eight digital value drivers in order of importance: Increased availability and access to data, increase the quality of data and increase the level of insights from data coming out on top.

The industry has identified where it needs to start on its data-driven journey, at the foundation layer. However, we have been too quick to bypass this critical starting point and gravitate to the more interesting technology of AI, machine learning and advanced analytics. Too often we make the mistake of wanting to run before we can walk and look to engage data scientists and AI developers before data engineering, before data management and before any real digital governance.

Data Management is never going to be in a keynote speech for a CEO, however, becoming data-driven has been in several CEOs' keynote

speeches. The paradox is you can't become data-driven without strong data management and governance. We may be able to run several POC's or pilots on a small dataset, but we will never be able to scale to the benefits we are looking for without a strong data foundation.

To get to this point and scale the use of data, the industry is going to have to improve on its ability to capture and manage its data whether that be unstructured, structured or real-time before we start to utilise it in the right way.

For several years, Sword has been supporting organisations in the industry to take the next steps towards adopting the power of new technologies in becoming data-driven. To support our customers through the process, we break down the process into interlinked layers.

First, we start with understanding the data maturity of the organisation. We look to understand how data is used to support decision making processes in the organisation today, we then determine the maturity level according to recognised benchmarks such as Gartner.

Second, we look to determine the outcome the organisation would like to achieve, for most these are the insights that data-driven decisions can provide. The critical starting point here is that you must directly engage the business to understand their pain points, together with their wants and needs. You can't shortcut this process; you must hold key stakeholder interviews, conduct the workshops across various business lines, and prioritise the findings.

Third, we look to uncover how the organisation wants to capture, manage, and utilise data,

placing it at the heart of your decision-making through smart tools that span modern business applications and digital processes, alongside managed digital assets and data hubs.

Lastly, we look at your digital platforms to define and design a secure and compliant cloud environment to enable the smart tools specifically for your organisation. Microsoft has a secure, innovative and widely used cloud environment that is trusted in many regulated business environments. Sword has invested significantly in the skills and experience needed to use this technology to deliver a strong foundation on which to build your business solution requirements.

Once you have engaged in this interlinked approach, you will have a clear starting point from which Sword can help you to build your digital strategy and implement the roadmap to becoming data-driven.

For the Energy Industry to continue to evolve on its data-driven journey, we need to get the right data, check the quality, make it available and govern it. Once we have this right, more businesses can take the bold steps to become data-driven by maximising a combination of technology, processes and people for fact-based and experienced-based decision making at pace.

Over the past 18 months, through the use of modern data platforms powered by Microsoft synapse analytics fully utilising data and visualisation provided through Power BI, Sword's customers have realised the value of increased operational performance and flexibility from new data products and services, consolidating financial reporting, daily production, emissions and POB in as little as eight weeks.

In a similar project timeframe using Microsoft PowerPlatform products, we have worked with offshore teams to replace multiple systems of entry and paper-based processes for instrument reading, observations and maintenance planning. The result is greatly improved efficiency and system integration both offshore and onshore using a single point of data entry and utilisation of the right data.

Our industry, which is steeped in a history of innovation, is now realising the benefits of data at a greater pace. The next innovation boom in the UKCS and the wider energy industry is already here. How far we want to take it is up to us, and the data.

