

#### DIGITAL TALENT

Our COO, Kevin Moreton and CXO, Phil Brading discuss the challenges of the current digital skills shortage and how we solve our customer challenges whilst maintaining a strong, skilled workforce.

### GUARD YOUR

At a high level, cyber resilience is about understanding where risks can come from, how to protect yourself, and how to recover. We delve into the importance of understanding the data you hold before assessing security processes and solutions, to enable data driven decisions.

# THEREAL ASSETS

Our CPO, Catherine Froud-Williams, talks to us about the importance of a committed, proactive focus on our people to ensure organisations have the skills to meet demand.

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Our award-winning MDT Cancer Referral app has delivered a step-change in cancer care within NHS Greater Glasgow and Clyde. Learn more about the solution which has streamlined the referral process and improved treatment decision making.

### PUT YOUR GUARD UP!

At a high level, cyber resilience is about understanding where risks can come from, how to protect yourself and how to recover. Jonathan Smith and Craig Neilson explain the importance of understanding the data you hold before assessing security processes and solutions, to enable data driven decisions.

## INNOVATING FROM THE INSIDE

We know that technology is moving at pace, faster than workforces are being developed. With this at the forefront of our thinking, we've got to be more creative and pro-active in developing our skills in partnership with our customers to make the most of new technologies.

At Sword, we recognise that a company's growth and success is driven by a deep understanding of its business needs. Our focus is not solely on the technology deployed, but rather on providing tailored solutions that align with your specific business goals.

For us, it's never about technology for technology's sake; we're led by you, our customers. If we can't help your business realise the value to be returned from a technology investment, we won't suggest you do it in the first place.

What resonates most in conversation with our customers is the desire to upskill our on-site teams whilst delivering their day-to-day services. When the development of knowledge and skills comes from inside, it brings additional credibility alongside a solid business case that allows advances to be measured.

Our expertise in running critical infrastructure, deploying automated workflows, and managing information assets comes together to put the right data, in the right hands, at the right time. We can only do this successfully if we have a deep appreciation of the pressure our customers are under. We are responding to these pressures and are looking to continue significant investment in skills development over the coming years.

Kevin Moreton, COO Sword UK/US

SWEET DATA

CDO Jared Owen shares his insights on Sword Phusion's Pick 'n' Mix Software Suite. Designed by engineers for engineers, it allows customers to achieve data driven outcomes by placing data at the heart of their operational and project thinking.

THE ROAD TO NET ZERO

The energy industry is facing a critical task in delivering trusted carbon emissions and sustainability reporting as part of a managed energy transition to Net Zero. CDO Rob Mossop highlights the need to realise the full potential of our data.

FROM RUSTY TO ROBUST

Harnessing the value of legacy data and information is a key driver behind new software development. In this article we share our thoughts on how our team of expert software engineers develop solutions that help organisations to make data driven decisions.

# SPEAKING FROM EXPERIENCE

Alongside developing the digital talent of the future, a key priority for Sword is customer experience. We want to make sure our customers can easily access the platform, data, and apps capability they need from across our organisation to help deliver on their goals. This requires careful planning when designing and implementing new solutions to ensure they can be successfully supported in the long term.

There are three key principles that we are applying when thinking about customer

- We continuously align our work to customer
- We prove our success and value
- We empower our team to do their best work

These principles are for everyone in Sword. Whether you work in front-line operations or a supporting role, we are all influencing how our customers see us every day. I want all interactions to be positive and focused on building the trust that supports the long-term relationships we are rightly proud of in Sword.

At the core of our business is a commitment to listening to our customers. We value their feedback on what we excel at, as well as areas where we can improve. Our customers have also shared what kind of partner they need us to be in the future. Each conversation we have with a customer will guide what we do next and where I can help our teams focus.

Customers are telling us that critical digital skills are in short supply, that they face ever greater challenges to securing budget, and that they need their partners to be more active in guiding their own journeys. The question for me is, how can we help our customers answer these challenges.

#### A focus on customer goals

We need to work with our customers to make sure our services actively support their aims. We are never going to lead with technology on its own, instead we want to make sure we understand business needs first

This will involve putting effort into aligning our approach at the outset and being operationally consistent. By thinking in these terms, we can make successful outcomes more likely and build stronger cases for investment in the things that will really make a difference.

We cannot be complacent. We might think we have done a great job, but it is only by working with the customer and their business that we can truly identify the value of what we are delivering. By staying vigilant and having the right operating rhythm, we can align expectations and remain relevant. In this way, we can embed improvements and create new offerings in step with our customers' pace of change

#### Empowering our team

We want our teams to understand how they deliver value in their work and why it matters. We want to create greater meaning and purpose for staff at Sword so that they are more invested in the real-world outcomes we support. As an integral partner with our customers, we can take accountability for knowledge retention and give our teams more opportunities to develop their

I look forward to continuing the conversation. Our mission is to have the right skills available when our customers need them, supporting their evolution to the businesses they need to be in the future. By combining digital skills with relevant domain expertise, we can provide people who understand our customer's business and can quickly identify the key issues and propose relevant solutions



have the right skills available when our customers need them

**Phil Brading Chief Experience Officer** 

# CHANGE COMES FROM WITHIN

At Sword, we design, implement and support business technology solutions. Our model, is that of long-term partnerships with our customers. We value long-term relationships over short term gains and aim to bring confidence to our customers that we'll be there to support them through the journey.

#### A skills shortage

We are frequently seeing issues arise due to a lack of thought into how technology services are supported on a long-term basis. This creates skills gaps in operational support teams arising before organisations have had time to upskill and prepare for technology investments to be deployed. As a result, customers can face unforeseen expenses in securing additional skills from technology providers. Filling current skills gaps often leads to organisations making significant investments instead of looking to lower costs by furthering the skills of existing technology experts who can provide continual support.

Whilst a significant challenge, it is the best scenario for our employees to continually develop relevant skills without the need to leave the industry, losing domain expertise.

#### Delivering value

In our engagement with customers, we're often faced with a myriad of questions on topics including levels of innovation, increased efficiency. cost reduction and ultimately, how we deliver

By aligning domain and technology understanding, we create multi-disciplinary working groups. In conjunction with our technologists, these groups offer expertise and insight, comparing the successes (or otherwise) in adoption and deployment of technology across multiple sectors.

At Sword we firmly believe that the key is to understand the business needs, with the technology deployed being a secondary factor in the decision-making process. We listen to customers through a variety of activities including regularly hosting customer roundtables and consultative sessions with customers, pro-active account managers trying to help customers address their objectives, and engaging in conversations at relevant trade events and shows

Listening to our customers provides a solid foundation for us to deliver a combination of skills with relevant, sector specific and domain expertise to add significant value. In better understanding the jobs our customers undertake we help support the gains they are trying to create and the pains they are trying to alleviate.

#### Inside innovation

The majority of our customers are asking us to bring skills to their existing operational teams. In turn this leads us to question, can you swap out someone with another customer to bring in fresh skills? Yes we can, but most of your contemporaries are facing the same challenges. The truth is technology is moving faster than skills development can keep up.

#### Achieving upskilling

We have continued our journey in responding to customer's pressures on the lack of skills by appointing a Chief People Officer (CPO) to shape our people strategy. Additionally, we are establishing online communities to leverage the capability of our wider organisation, hosting forums with our internal SME's, providing access to a wider range of online training and external training. All this will require us to work with our customers to create space to train our workforces and will inevitably take commercial flexibility and innovation to support the solution.

In a fast-paced environment with a shortage of skills we recognise that our customers' investments need to work harder and smarter to enable intelligent, data driven decisions. We don't view this as a technology revolution. A modern and evolved managed service isn't about anything other than refreshing the skills of the existing competent teams that we already provide. A trained, motivated and loyal workforce is what we all strive to create. I look forward to updating you on our progress in subsequent editions.

The truth is technology is moving faster than skills development can

> **Kevin Moreton Chief Operations Officer**

keep up

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# OUR REAL ASSETS

## OUR COMMITTED, PROACTIVE FOCUS ON OUR PEOPLE



Catherine Froud-Williams, CPO

In a labour market with rapidly changing needs for skills, and organisations competing for the same pool of talent, it is vital that we have a committed, proactive focus on our people. It is increasingly challenging to have a single Employee Value Proposition (EVP) that meets the needs of everyone, so we can't be complacent and must adapt traditional models and be creative. Furthermore, as a new generation enters the workforce, employee expectations around growth, development and well-being have evolved. In my role as Chief People Officer, we are getting much closer to understanding the true needs of our talent. My ambition is for our people to reach their full potential, where they recognise the value they bring and be involved in our cutting-edge projects.

#### **Our People Strategy Journey**

We have been working hard to explore and articulate an authentic EVP that remains true to our values and delivers in practice. We face increasing demand on business transparency, accountability and trust. With evolving employment relationships, changing expectations and employee voice being at the heart of the relationship, we have invested heavily in our organisation to ensure it is fit-for-purpose for the future. A growing business is a great place to work, with opportunities for career progression, reward and fulfilment; but it's far more than that. We have embarked on a journey to be better equipped to

understand the changes we need to make to support our ambition.

Our business priority is to "Value and Develop our People", with a heavy emphasis on making everyone feel valued, recognised, and able to connect their role with successful customer outcomes. Early priorities have focused on upskilling, career development, reward, and increased opportunities for creative work.

We can all recognise that employee experience and expectations have changed in the post-pandemic era and

we have evolved with it. The latest CIPD Good Work Index 2023 (June 2023) highlights the latest trends in employee needs including;

- designing jobs to create an engaged and motivated workforce
- better opportunities for career development and
- the importance of work–life balance and flexible working
- the role of managers in strong interpersonal relationships and employee voice.

While we mirror these through our People Strategy, to ensure we are authentic to our own business, we have connected with our people to help shape our EVP. We want to maximise our employee experience to ensure it appeals to people who will thrive in our culture.

#### Discovery - Listening to our People

We know our team of exceptionally talented people is the foundation of our success. We have therefore been engaging and listening through various activities and forums, uncovering what our employees truly value when working with Sword, why us and what makes them stay. This has supported our retention plan and allowed us to leverage the benefit of positive employee experience to attract new, diverse talent.

#### Advancing the Sword Community and Knowledge Transfer

Our most authentic promoter comes from within, our people. We encourage our employees to showcase their employee experience and technical skills across the business, through our Communities of Practice, technical forums and Employee Resource Groups. By empowering our people and creating opportunities to learn and develop technical experience, we remain accountable and ensure we have the competencies and leadership qualities to deliver outstanding work for our customers, now and in the future.

#### Recognising it's more than a job

While flexibility, career progression, reward, leadership and culture have a clear impact on people staying with Sword, work now extends to being heard, included and valued as part of a collaborative team.

Our latest Employee Engagement Survey (April 2023) reaffirms our belief that we are doing the right thing for our people, with over 92% agreeing that we are balancing work and personal life and valuing diverse perspectives. We recognise it's essential that our people not only feel purpose in their work, but that it also provides intrinsic fulfilment. Communicating a wider vision that motivates in addition to our CSR (corporate social responsibility) strategy and supporting our local charities and communities with our technical skills, we are looking beyond traditional ways to reward, develop and engage. We never lose sight of the work we do with our customers that provides a positive impact on our wider society.

#### Celebrating the Diversity of our Workforce

One area we are championing is our long-term commitment to equality which is truly embedded in our People Strategy. Our latest Employee Resource Group "Women in Tech" is driven by our employees to provide peer support, promote inclusion, innovative thinking, and guidance with technical career paths. We are providing visible and inspirational role models and encourage a network of mentors and advocates across our organisation. The lack of females studying STEM (science, technology, engineering and maths) subjects at school is still a challenge and leads to concern of the future pipeline of women in our industry. Our team are actively working within education institutes to promote the tech sector as an exceptional career choice.

#### The Next Steps

We are on a journey and our commitment to our people is greater than ever. We are working closely with our customers, in providing ongoing engagement to ensure we anticipate and respond to trends, setting clear direction for current and future people initiatives. Our commitment to investing in our people gives the platform to continue to attract, develop, retain and engage the best digital skills of the future and help drive our growth ambitions. We are looking forward to what the next 12 months will bring for our talented team and ensuring Sword remains an exceptional place to work.

# DON'T STOP MOVING

THE ROLE OF REGULATORY COMPLIANCE IN THE E&P DATA LIFECYCLE

Liz Patock, Business Unit Director, Data

Compliance has historically been an afterthought, sitting out with the core data management lifecycle, side-lined in favour of operational activity and troubleshooting, prioritising demand on resource-constrained teams. Internal pressures often left the data and information lifecycle hanging, with the impetus and energy to close-out dwindling, likely driven by a lack of realisation of the value that compliance can derive when done effectively.

Times have changed, the data and information landscape has shifted with the realisation of the value that effectively-governed data sets can yield, focusing organisations to target data in the search for operational effectiveness, innovation, competitive advantage, and value realisation.

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It is imperative that organisations acknowledge compliance as a long-term investment which delivers cumulative value.

The UK Government, through the North Sea Transition Authority (NSTA), has a directive to maximise the value of UK energy assets and deliver future sustainability and security within the UK energy ecosystem. To support this push, it must ensure that the UK's digital energy assets are optimised and accessible to support hydrocarbon, alternative energy and decarbonising initiatives. Inevitably, the NSTA's desire to achieve its goals is being felt by UK Operators and their compliance teams.

#### The Regulatory Impact upon the E&P Data Lifecycle

Recent changes in regulatory requirements have driven the implementation of more structured and standardised workflows throughout the E&P data lifecycle, driving the innovative adaptation of existing processes for data collection, management, analysis, and reporting, to reduce time to insight. The development and widespread adoption of technology advances, specifically data mining, content analytics, cognitive search, GeoSpatial Analytics, and data visualisation within better integrated information architectures, have no doubt accelerated and streamlined compliance workflows.

Compliance specialists need to keep pace with evolving regulations and industry best practices, continually building on core data competencies, increasingly needing to combine digital skills (either their own or supporting teams), data engineering and low-code techniques to leverage the full technology capability on offer in the marketplace.

Regulatory compliance has further highlighted the value in our trusted digital data assets. Our data professionals must keep pace with change and adapt their reporting behaviours to suit an evolving audience.

### The role of the Information and Samples Coordinator (ISC)

It is imperative that organisations acknowledge compliance as a long-term investment which delivers cumulative value. Encouraging positive behaviours, developing, and supporting robust processes and a governance-minded culture throughout a business drives the ongoing cost of compliance down.

The ISC's role is diverse, covering a wide range of responsibilities from managing information and physical samples to ensuring precision and excellence. In addition to coordinating communication and enhancing processes, they also drive the behavioural adoption and change required to integrate compliance best practice into an organisation's 'business-as-usual'.

Sword provides experienced compliance and information managers to perform the ISC role for our clients, equally importantly we provide the support that ISC's require to ensure the demands of the role are met, especially during periods of peak activity, such as the infrastructure submissions and looming UK NSTA calls for data.

#### **Compliance Driven-Value**

Transparency, clarity and domain understanding are essential to determining a company's regulatory stance and their compliance deficit. Navigating the enormity of an organisations digital and physical assets to "plug" the deficit can be a daunting prospect. Known for providing the expertise and knowledge required to shape and deliver compliance services, Sword specialises in delivering achievable, sustainable technical solutions to support all aspects of managing compliance and the broader data and information domain.

Whether leveraging data science and machine learning to automate data mining, classification, and data extraction of unstructured data, or delivering GeoSpatial environments to transform the way you present and connect your data with external information sources to support an integrated digital infrastructure, Sword enables you to fully realise the value of your data.

The compliance landscape is no longer static, it is continually evolving, accelerating towards supporting sustainable integrated energy systems, which will require an equally integrated, aligned and compliant data ecosystem. Recognising the demand and anticipating the change are essential to ensuring we maintain the trust and realise the value in our digital data assets.

The West of Scotland Cancer Network (WSCN) manage the development of patient cancer care through Multi-Disciplinary Teams (MDTs). The teams meet regularly to discuss how to help patients achieve the best outcomes possible through treatment and support. The coordination of these meetings, management of decisions and actions was formerly a highly manual process with data consistency and quality issues, plus limited visibility of activities and actions outside of meetings. Funded by WSCN, and led principally by eHealth and NHS Greater Glasgow and Clyde Health Board (NHS GGC), an initiative was created to develop a modern solution that would present benefits to clinical and care teams, and for the patients themselves. After an initial pilot, Sword were engaged to design and implement a modern app, that would deliver more efficient and effective MDTs.

#### The Need for an Optimised Solution

The referral process for cancer pathways and the coordination of MDT meetings are crucial for providing optimal care to patients. However, these processes often face hurdles due to the complexity of managing multiple disciplines and collating consistent and accurate clinical information to ensure the right cases are discussed, and that they are discussed with a trusted and complete set of data in place. NHS GGC wanted a more streamlined approach to facilitate improved decision-making for treatments. By engaging Sword to develop their MDT Cancer Referral app, the team at NHS GGC aimed to create a solution that could act as a beacon for the wider region and eventually function as a mechanism for managing all cancers, ensuring a standardised, efficient and more effective approach to patient care.

#### Developing an Affordable, Intuitive and Award-Winning Solution

Creating an affordable, intuitive, and sustainable MDT management solution was the primary goal for NHS GGC - and one shared by Sword as a key Public Sector partner. From the outset it was clear that maximising the benefits of existing technology investment in Microsoft 365 was crucial; it was already part of the NHS Scotland Digital Strategy and elements had been adopted by clinical teams. By understanding the requirements of NHS GGC, Sword worked to meet the challenge of developing a solution using Microsoft cloud capabilities already available, advising on technical and capability limitations, and guiding key decision-making. The resulting app provides a cost-effective system that empowers healthcare professionals with an intuitive solution, simplifying the management of cancer referrals and facilitating collaborative decision-making on the basis of trusted clinical data. It has been recognised with a prestigious 'Celebrating success excellence' award.

#### Leveraging Microsoft's Power Platform with Agile DevOps

To ensure a scalable and manageable solution, Sword maximised the use of Microsoft 365, SQL, and Power Platform capabilities, allowing the solution to be based on a standardised and easy-to-manage platform. NHS GGC have been able to minimise their support burden and provide a secure and seamless pathway for future upgrades and developments. By leveraging existing investments in Microsoft licensing, the solution is more cost-effective and sustainable for NHS GGC.

Sword implemented a highly collaborative and adaptable delivery approach through our Agile DevOps framework. Kevin Burton, a gynaecological oncologist at NHS GGC and key project sponsor, praised the team at Sword noting that "There was a strong collaborative approach from the outset working hand-in-glove with the team at Sword. The right skills and expertise were delivered using a high quality DevOps approach, and we felt that there was genuine common cause in our objectives. Sword spent considerable time upskilling our eHealth team, making it a much more cost-effective solution, and allowing us to create more solutions ourselves in the future."

#### The Impact of the Solution

Healthcare professionals and patients have seen the transformative impact of Sword's MDT Cancer Referral App. Kevin Burton, again, noted that "The MDT app has provided an innovative solution to work across traditional health service barriers, providing an easy-to-access referral app that can then take that referral seamlessly through to an outcome, that standardises input and outputs for the referral."

In more practical terms, the number of cases requiring a full discussion has reduced by a third as a result of more accurate data. Meetings themselves are more likely to reach a positive outcome with clearly assigned actions and ownership due to easier management of pre-meeting workloads and smarter task allocation, all cases now having proper radiology reviews undertaken in advance. The solution greatly reduces administrative burden and increases immediate access to data flowing out of the MDT meetings as outputs can be sent directly to electronic patient records, and distributed immediately to primary and secondary care providers to advance patient care plans.

#### **Future Expansion and Sustainability**

The MDT Cancer Referral App has already been scaled out to meet the needs of two new cancer areas – head and neck, and the newly formed molecular tumour board. With its scalable design, the solution can accommodate the growing needs of NHS GGC and regional health partners, potentially extending to other healthcare organisations across Scotland and beyond.

This award-winning MDT Cancer Referral app has delivered a step-change in cancer care within NHS Greater Glasgow and Clyde. By partnering with Sword to deliver an accurate, secure, affordable, intuitive, and sustainable platform, the operations of cancer MDT teams has been hugely improved, resulting in optimised planning and review meetings. The solution's ability to streamline the referral process, coordinate MDT meetings, and collate necessary clinical information has significantly improved treatment decision-making. The cost-effectiveness of the solution ensures that NHS GGC can maximise its resources while delivering high-quality cancer care.

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The number of cases requiring a full discussion has reduced by a third as a result of more accurate data.



The reality now is that it is no longer 'if' you have a security breach but 'when'. With an ever-changing threat landscape, it is more important than ever before to protect your data and have suitable plans in place to recover efficiently.

#### **Changing landscape**

With the rapid pace of change in technologies and growing challenges, many organisations are striving to find the balance between simplifying technology and designing technology solutions. As we continue to face different pressures in an already complex and diverse landscape, we must continue to evolve our environment to maximise the benefits of secure digital and data driven solutions.

#### The importance of cyber resilience

The National Institute of Standards and Technology (NIST) specifies the definition of Cyber Resilience as "the ability to anticipate, withstand, recover from, and adapt to adverse conditions, stresses, attacks or compromises on systems that use or are enabled by cyber resources." Due to the breadth of diverse data sources, high data velocity and greater data veracity, we must stay on top of utilising cyber resources and solutions to be prepared for the increasing potential of cyber-attacks.

#### **Driving Cyber Resilience**

At Sword we utilise recognised cyber security frameworks and fit-for-purpose security solutions to assist our customers in their cyber resilience planning such as cyber risk awareness and planning, attack surface awareness, lifecycle management and cloud security. Without appropriate cyber-resilient solutions and recovery plans organisations will face extended downtime at increasingly high costs.

Organisations today must look at what type of data they hold, whether its internal business, customer data or business critical data. Data today provides significant opportunities to run your business but also exposes organisations to many risks should that data be compromised or breached.

What loss would you experience from downtime or GDPR implications? What reputational damage may impact ongoing or future business?

These implications are only touching the surface of what needs to be considered on a continuous basis.

#### Mitigating risks to data

As part of mitigating risk it is advised to start with understanding and identifying risks to your organisation. Going through a risk assessment, treatment and prioritisation plan allows organisation leaders to make decisions based on the probability and impact they may have.

Understanding your attack surface and how many access points to your business exist, allows for the beginnings of a cyber resilience plan to be created. It has long been the focus for many organisations to concentrate on virtual data perimeter security utilising firewalls to create boundaries between data and external threats.

With the constant threat and risks to organisations, there must be a constant focus on security practices, threat playbooks and immutable backups and recovery.



#### The reality now is that it is no longer 'if' you have a security breach, but 'when'

Additionally, it is vital that organisations ensure employees are up to date with the latest end-user security training available to them.

#### The future of cyber resilience

To focus on the energy industry for example, over the past three years, the industry has been rapidly progressing with digital transformations whilst continuing the road to net zero and maximising operational efficiency. With this transformation additional challenges arise with digital adoption and ensuring staff are up to date with training. Sword work with customers to provide an array of security solutions to ensure organisations can continue achieving business outcomes without the burden of potential cyber threats and the damage that will inevitability be caused by these threats.

#### Being cyber resilient to be data driven

If we are to achieve data driven outcomes, we need to ensure that data is placed at the heart of our operational and project thinking. The only way we do this is by ensuring our data sits in a reliable and secure environment and is protected with sustainable security plans to maintain a high level of cyber resilience.

Words by: Jonathan Smith, Cyber Resilience Technical Lead and Craig Neilson, Sales Lead for Sword



#### Jared Owen, Business Unit Director, Applications

Complex engineering information is a core asset of our energy sector. As new technologies enable the digitisation of legacy information and modernise current data collection methods, it is vital that infrastructure is integrated to connect engineering and operational data.

Ensuring data is configured for integration with internal and external systems is becoming increasingly important as regulatory guidance requires industry collaboration and modernisation. Standardising approaches to data management is a fundamental element in organisations leveraging new technologies and techniques.

We now see organisations focusing on becoming data driven to better access complex engineering information and apply intelligent solutions to turn data into a powerful, trusted, and valuable asset. These organisations can apply new technologies to modernised ways of working and make informed decisions that support future efficiencies by having standardised, usable and clean data.

#### **Identifying Intelligent Solutions**

With a myriad of technical solutions available, organisations are faced with investment decisions about which best fits their needs. From bespoke applications to commercial-scale, off-the-shelf solutions, the prospect of one system fulfilling all the answers is often a pipe dream.

Traditional legacy systems which often incur heavy initial investments, can unfortunately slow down progress towards data driven goals. At Sword we are regularly asked to help overcome frustrations with technology underperforming in line with expectations, and the outcome is often to customise a solution with a modular approach to fit their unique challenges.



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With a focus on helping the energy industry to reduce costs, reduce health and safety risks, and fast-track their contribution on the journey to net zero, Sword have developed easy to use, cost effective, intelligent software solutions to bring a single source of truth for connected engineering data that underpins progress towards meeting strategic organisational goals.

#### Software Pick 'n' Mix

In helping organisations to become data driven, we often need to sieve through paper data, silos and big archaic systems which hold unstructured data hostage. Our role is to turn it into verified, accurate and trusted structured data. With decades of experience, Sword have a software suite designed 'by engineers for engineers' that includes 6 modules to support various stages of the information management lifecycle: Collect, Data Manager, Navigator, Pick & Link, Intelligence and Generator.

Our **Collect** module is commonly utilised by EPCs (engineering, procurement and construction) or owner/operators in large capital projects to facilitate data collection and handover. The **Data Manager** module looks at the content and standardises it in line with ISO classifications, and then our **Navigator** software provides the accessible method of visualising data.

Our **Pick & Link** software module ensures the relationships between data is clearly identified by providing the ability to view, create and manage these complex models. Our **Intelligence** module uses Microsoft's Power BI which provides the capability to build detailed reports from structured data and visualise the model. Finally, our **Generator** app can be used to create structured, validated and approved breakdowns for elements such as tag numbering.

#### **Intelligent Software Solutions in Action**

Our software modules have been used to help deliver multiple global projects. In one such project, 1.6 million assets were collected and validated across 30 countries and with the involvement of 8 EPCs.

Big archaic systems often hold unstructured data hostage, we turn it into verified and trusted structured data

Jared Owen
Business Unit Director,

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Our Collect tool allowed the accumulation of the data from multiple suppliers and combined this with the software's reporting and analytics functionality and our Pick & Link tool which enabled the retrieval of the engineering data and documents.

The benefits of a combination of Sword's software suite included the establishment of a single source of truth, standardisation of data, and access to a user-friendly tool with appropriate support and guidance to provide well informed data driven decisions throughout the delivery of their project and beyond.

#### **Becoming Data Driven**

To achieve data driven outcomes, we need to place data at the heart of our operational and project thinking. We have the longevity to support future evolutions of the solutions and services and remain on hand to maintain software evolutions and provide guidance and support. Enabling our customers to rely on their data as a single source of truth is a cornerstone in building strong data foundations, embedding digital technologies that includes 6 modules to support various stages of the information management lifecycle.

# THE ROAD TO NETZERO

# CARBON EMISSIONS REPORTING AND THE POWER OF REAL-TIME ANALYTICS

Rob Mossop, CDO, Sword

The energy industry faces a critical task in delivering trusted carbon emissions and sustainability reporting, as part of a managed energy transition to Net Zero. Without robust data and clear reporting practices, we may misinterpret the key insights that allow us to make better decisions. We need to maximise the industry's potential to provide more sustainable energy production and ensure we collectively meet our regulatory requirements whilst delivering transparent stakeholder engagement.

The energy sector today is harnessing new solutions based on advanced analytics, machine learning and artificial intelligence capabilities. These combine to be key in unlocking the full potential of carbon emissions and sustainability reporting.

#### Key Challenges in Carbon Emissions and Sustainability Reporting

Data collection and quality pose significant hurdles, with many operators using static files and disparate information sources. Collating accurate and reliable data on energy consumption, emissions, and other sustainability factors can be complicated. Data often spans multiple sources and data silos, so careful definition of the scope and boundaries of reporting is needed.

Shifting regulations and standards present continuous monitoring and compliance challenges. Staying up-to-date with changing requirements, reporting frameworks, and disclosure guidelines, demands ongoing effort. Having to make changes to reporting practices on a regular basis to comply with new standards, or to adapt sets of data for different regulatory environments, can be time-consuming and resource-intensive.

Managing diverse stakeholder engagement and communication is vital for successful reporting. Different sets of reporting requirements mean that energy companies must address stakeholder needs, while ensuring transparent and constructive communication.

#### Improving Sustainability Reporting with Innovation

Set up and built correctly, technology can help address reporting challenges. The advanced analytics capabilities provided by modern analytics platforms can support organisations in putting the right data, in the right hands, at the right time. This means we can extract meaningful insights to make better decisions around sustainability and carbon emissions management. These insights unveil hidden patterns, inefficiencies, and opportunities for improvement. By leveraging real-time data processing, energy providers and the wider supply chain can proactively identify environmental risks and deviations from sustainability targets, enabling prompt action and mitigation.

Cloud-based reporting and visualisation tools enable transparent and accessible reporting. Interactive dashboards and reports provide stakeholders with real-time information, fostering engagement and trust. This transparency can enhance organisational reputation and demonstrate commitment to a sustainable energy transition.

We help our energy customers to accelerate their technology progress and help avoid common pitfalls. Sword has helped our customers make significant advances by coupling advanced analytics and reporting technologies with our own Modern Data Framework, Tillit. Supported by a stack of Microsoft tools, a modern data framework connects trusted data to streamline reporting and informs decision making.

We bring experience and expertise to accelerate design and implementation by engaging key business stakeholders early in the project.

As a Microsoft Solutions partner, we promote sustainable technology adoption when choosing your digital partners. Suppliers of technology software and hardware are increasingly open about their own environmental commitments. Microsoft's commitment to sustainability and to become carbon negative by 2030 is an additional factor to consider when selecting technology for building new solutions. By leveraging Microsoft's cloud capabilities, energy providers and the wider supply chain can align themselves with a partner that shares their environmental values, fostering a culture of sustainability.

#### **Improving Future Performance**

Embracing cloud capabilities to advance your carbon emissions and sustainability reporting offers numerous benefits. By enhancing your operations through digital technology, we can make key decisions based on the insights that these analytics deliver, and optimise our energy-intensive operations. This will aid in the reduction of carbon emissions and minimising operational waste. These efforts not only align with environmental goals but can also lead to substantial cost savings and operational efficiencies. Better decision-making based on trusted and consistent data enables you to develop true sustainable practices and drive long-term business value.

We can partner with you to get a head-start on the knowledge and expertise necessary to implement and optimise technology capabilities and build a better data culture. We listen to your needs and guide you in selecting the right tools and data platforms, integrating data sources, and developing innovative solutions that deliver against business objectives and enable data driven decision making.

To bring to fruition and realise the full potential of our data, many may need to go back to basics; cleaning and rationalising data to ensure you can trust it is a critical step. With this trust you can rationalise and make data driven decisions and start to unlock the potential of real-time data and analytics capabilities into emissions and sustainability reporting

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# FROM RUSTY TO ROBUST

#### Jared Owen, Business Unit Director, Applications

Organisations are increasingly evolving to become data driven, harnessing the power of their data to make informed business decisions. However, we all know that decisions are only as robust as the underlying data and the systems used.

There is an astonishing amount of old software and products that have become business critical but lack the capability and resilience that modern technology brings today. Increasing focus on getting the right foundations in place is helping forward-thinking organisations to become data driven.



At Sword, we help our customers avoid the 'garbage in, garbage out' trap by ensuring the right data is collected, structured, accessible, and in the right shape to make informed business decisions. We often develop new applications (apps) to integrate into all aspects of a business when off-the-shelf software solutions don't quite fix a customer's precise problem, from legacy issues bringing unwelcome risk into operations, to inefficient processes making everyday tasks complicated or prone to human error.

#### **Connecting Legacy Information**

**EDGE** Issue 2

Harnessing the value of legacy data and information is a key driver behind new software development. Many legacy systems over the years become business critical but are no longer reliable or understood by current employees. Often the individuals who built or managed these systems have moved on, therefore the ability to support them becomes a challenge. Reliance on unsupported legacy systems can introduce risk into operations, that could ultimately impact on downtime and operational efficiency.

By auditing systems and their dependencies, we then make recommendations for technical upgrades, consolidation and can build new apps to replace those creaking at the seams.

We can help take legacy systems from rusty to robust, well-engineering solutions that stand the test of time.

Information frequently resides in disparate, on-premise, aging systems that are unable to connect without manual intervention, which organisations identify as missed opportunities in the drive to be data driven. We help link legacy systems together with modern technology, building bespoke solutions that unlock useful information from a myriad of systems. This enables legacy information to be used in real-time to bring new insights that inform business activity.

#### **Process Improvement**

Another key driver behind software development is the implementation of digital processes to improve operational efficiency. As organisations grow, internal office processes

suited to an SME, such as simple payroll or invoice systems, don't always scale to suit evolving business requirements without active intervention.

Microsoft Excel is a great tool, but heavy reliance on it for business-critical activity can become a hindrance to decision making as organisations grow. For example, sales pipelines are often managed in Excel, but as businesses expand, multiple spreadsheets can exist for each region or business unit. Organisations gradually realise that it's difficult to get a real-time view of forecast revenue, or that there are missed opportunities from the inability to generate insight from sales trends, which mean basing recruitment decisions on this data could be subjective.

We can capture data in systems that are designed to fit your needs, enabling organisations to find trends and base decisions on solid foundations, such as investing in people with special skills when the data shows a clear upward trend in demand for that skillset. It is also common for organisations to recognise the need to replace paper-based processes and modernise ways of working.

Reaching out to a professional, experienced organisation to fix a problem plaguing progress, provides a consultative approach with clear plans, roadmap, and visualisation of the solution.

Organisations can only become data driven with the right foundations, by investing in solid fit-for-purpose platforms that integrate across office functions and operations.

Insights and analytics from reliable systems enable informed data driven decisions to be made on everything from recruitment investments to pinpointing precise drilling locations in the energy industry or informing a joined-up approach to patient treatment in the public sector.

We can help take legacy systems from rusty to robust, well-engineering solutions that stand the test of time.

Business Unit Director, Applications



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