SWORD

UPGRADE *YOUR* BUSINESS

INSIGHTS

Delivering Business & Operational Intelligence

via a Modern Data Platform

Enabling a Data Driven Organisation in Oil & Gas

CONTENTS

SUPPORTING YOUR JOURNEY TO BECOMING DATA DRIVEN

Data lies at the heart of successful digital transformation. At Sword, we are passionate about helping our customers realise the benefits of becoming a data driven organisation and have invested heavily in our people, skills and technology to become a strategic partner for our customers on the journey to becoming genuinely data driven.

To be able to confidently utilise data to augment your experience and make confident business decisions, requires a fundamental level of trust in your data. In our view, trusted data and confident business decisions utilising data involves the following key components:

- Data driven leadership
- Democratised data
- Data literacy
- Data quality and lineage

We have developed our Tillit framework to reflect the Norwegian origins of it's name: Confidence, Faith, Trust. Our passion and commitment to utilising best in class technology combined with empathy and strategic vision to support the evolution of people and processes provides a clear and proven roadmap to help our customers navigate towards success.

Yours sincerely
For Sword IT Solutions

Greg Anderson
CTO

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PART I – AN OVERVIEW

Delivering Business & Operational Insights via a Modern Data Platform for an Oil & Gas Operator

THE CLIENT
One of the largest independent oil and gas operator focused on North Sea production, appraisal and development activity. They have grown through a combination of acquisitions and new field developments and now have a high quality, diverse portfolio of assets.

THE CHALLENGES
The client has a range of data sources and systems of record some with duplicate functionality.

Siloed, difficult to find data was causing inefficiency in the business and inconsistency in reporting. They also had multiple reporting tools with their associated license and running costs.

Data migration from multiple systems is costly and time consuming, however a consolidate view of trusted data is key to their desired business outcomes.

THE SOLUTION
Sword's Tillit framework delivers increased business and operational insight providing data as a trusted asset. Working in close collaboration with users Sword Consultants use Tillit to deliver the three pillars of Strategy, Platform delivering and operating model:
- ❖ A modern data platform which is scalable, limitless, and cost effective using the Microsoft AZURE technologies stack.
- ❖ A self service BI hub providing insights derived from trusted data.
- ❖ Adoption under a supportive business model.

THE BENEFITS
- ✓ Trusted data on which to base future BI and AI
- ✓ Delivery based on business need and priorities
- ✓ Faster time to value for new products and services
- ✓ Simplifying legacy and new system integration
- ✓ Increased operational performance and flexibility
- ✓ Improved user experience and satisfaction

DEEPER INSIGHT
This Case Study provides deeper insights into the challenges, scope and methodology applied to deliver this successful project. These solutions are entirely replicable. If you would like to learn more we would be pleased to help. We have a range of insights that can be shared.

Or if you would like to discuss any of the solutions in delivering this project, our Director of Digital Services; Jared Owen, would be pleased to speak to you.

Please email Jared.Owen@sword-group.com
Or call **+44 (0)7920 587989.**

"A framework that prioritises business outcomes"

Delivering Business & Operational Intelligence via a Modern Data Platform - Oil and gas operator

THE PROJECT IN CONTEXT

The Modern data platform program began with our client in July 2020 with a successful eight-week long Phase 1, designed to deliver three outcomes.

Establish fundamental Microsoft AZURE technologies stack.

❖ Deliver a set of financial reports from multiple systems of record; rendered in PowerBI.
❖ Prove the effectiveness of the Sword Tillit framework when applied to the client's challenges.

The program has now evolved to deliver insight across many disciplines within the Client's business from corporate functions to production operations and HSE. The Sword team and the client continue to work in close collaboration to deliver the desired program outcomes.

Use cases delivered to date include:

✓ Consolidated Finance Reporting
✓ Daily Production Reports
✓ Loss Reporting
✓ "What if" forecasting aligned to loss repetition & planned shutdown
✓ Full emissions dashboard
✓ Weekly and monthly production summary
✓ HSE – POB/flight planning

THE CLIENT

The client is one of the largest independent oil and gas operator focused on North Sea production, appraisal and development activity. They have grown through a combination of acquisitions and new field developments and now have a high quality, diverse portfolio of assets.

The client's strategic goal is to deliver sustainable growth underpinned by operational excellence and financial discipline. Implementing a modern data platform to support self-service BI drives them to becoming a data driven organisation and supports their goal well.

THE BACKGROUND

The way this client has grown has resulted in a wide range of systems of record, with duplication in some functions and siloed data causing gaps and inconsistency from a business insight context.

Different cultures; resulting from acquisitions are evidenced by different approaches to systems, data and governance. Unifying these into a single "new data organisation" was believed to be a significant and costly task by the client.

The Client in conjunction with Sword has developed a long-term program to provide a modern data platform that can support self-service BI and extend data insight across the business driving insight from trusted data.

Benefits so far include:

✓ Delivery based on business need and priorities
✓ Trusted data on which to base future BI and AI
✓ Faster time to value for new products and services
✓ Simplifying legacy and new system integration
✓ Significant reduction in software costs through application rationalisation
✓ Increased operational performance and flexibility
✓ Empower business users with the skills and confidence they need to make better use of their data
✓ Improved user experience and satisfaction

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THE SOLUTION OVERVIEW

Sword have developed IP over the course of many successful projects to inform the Tillit framework. Tillit provides a structured, repeatable approach driving business insights from trusted data. Supporting your journey to becoming a data driven organisation.

Tillit establishes 3 key pillars for the business; Strategy, platform and operating model and is proven to make data a trusted asset.

Our framework enables integration of new and legacy systems without decommissioning systems of record and utilises a cost-effective, scalable and limitless platform which supports evolving business needs.

Tillit is proven to reduce time to insight by up to 50%.

"This is how a business should be run".
Client CEO
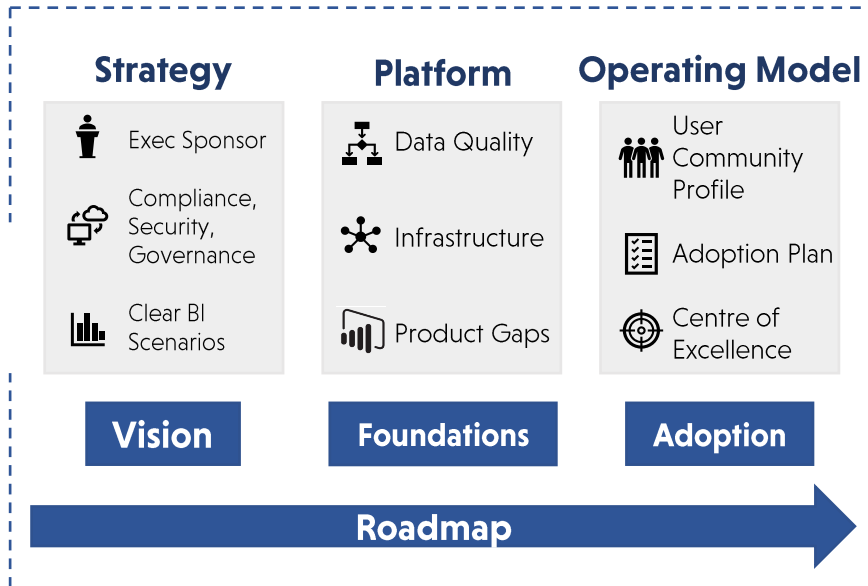
APPLIED SOLUTION

Framing

Tillit is based on the principle that you must start with the business outcome in mind. The solution is much wider than technology; it provides a supportive operating model and training and knowledge transfer to ensure sustainability with the Client. To embed this message from the start Sword supported the IT Lead to frame the program with his Business Leaders.

Identifying an Executive Sponsor and dedicated Program Lead from the client base further guarantees success by ensuring messaging support, business buy in and access to domain experts and key users is efficient and timely.

"Starting with the users in mind we identify specific desired outcomes. We bring our experience and approach to deliver value rapidly."

Phil Brading,
Energy Sector Director

Applying

Business team engagement is key, starting with focussed sessions to explore the outcome they wished to drive and what insights they needed from data. We avoid spending time with these users on the underlying technology. We work with them to identify the type of data they required and then we work with IT and data managers to source the data.

The technical infrastructure is enabled rapidly, cost effectively and fully documented in parallel with the user engagement activities and completed in conjunction with your IT team.

Our Agile, iterative approach uses Show & Tell and live demos to drive common understanding and ensures the users can access the right functionality rapidly. We deliver a solution that is scalable, limitless, and cost effective, with common and reusable data sets, focussed reports, and dashboards. Our approach to data transformation also ensure transparency of data lineage.

Each set of outcomes is delivered in eight week-long phases via Agile sprints. We are providing better visualisation tools and easy access to relevant, high quality business data supported by a consolidated business glossary.

Strategy
- 👤 Exec Sponsor
- 🖥 Compliance, Security, Governance
- 📊 Clear BI Scenarios

Platform
- 🔀 Data Quality
- ✳ Infrastructure
- 📊 Product Gaps

Operating Model
- 👥 User Community Profile
- 📋 Adoption Plan
- 🎯 Centre of Excellence

Vision | **Foundations** | **Adoption**

Roadmap ➡

Outcomes

Trusted data on which to base future AI and BI

Increased operational performance and flexibility

Improved user experience and satisfaction

Faster time to value for new products or services

Simplifying legacy and new system integration

Prioritised delivery programme based on need

WHAT ABOUT ROI?

Immediate return has been through cost saving from application rationalisation. Mitigation of spend by eliminating the need to migrate data into sanctioned application portfolio. These two elements have resulted in a cost neutral program.

Future ROI from increased efficiency, risk mitigation and improved performance is expected and is now being actively tracked.

IS THIS SOLUTION REPLICABLE?

The solution is based on our "Tillit Framework" – this is repeatable IP and utilises a cost-effective, scalable and limitless platform which supports evolving business needs.

WHY DID THE CLIENT CHOOSE SWORD?

Sword's experience of delivering business insights from trusted data in multiple Public Sector and Financial Services clients meant this oil & gas client was able to rapidly mobilise the Program with confidence.

We demonstrated an understanding of the challenges at a deep level and articulated a tried and tested solution.
By describing "what success would look like at the end of a Sword project delivery", and demonstrating the path to that success, we gave them the same confidence we had ourselves in the outcome.

The Client chose Sword because we showed clearly that we would only deliver capability when we understood how that capability would provide benefit to their business. Our Tillit framework showed that we would work to support the Client's agenda, not one of our own, and that we would take nothing for granted in a complex and complicated working environment.

"The Head of IT and Digital for the Client provided an excellent level of support and enablement which really contributed to the success of the Program so far"

**Lise Parker,
Data & AI Practice Lead**

The Sword team were able to articulate the costs of the new capability to the client and demonstrate early savings by eradicating spend on other; now redundant, tools and software that would make the project cost neutral.

Sword brought a great combination of proven digital capability, tried and tested in financial services and public sector together with our deep oil & gas domain experience.

WOULD YOU LIKE TO KNOW MORE?

Would you like to know more about this project or about our Tillit Frameworks? Perhaps you would like to discuss some of the challenges in this project with the Team.

Please email

Jared.Owen@sword-group.com or

call +44 (0)7920 587989,

we would be pleased to share our experience with you.

Introduction: This is an adapted extract from an internal Sword sharing session where the Client's name has been replaced with the word "Client" and commercially sensitive and IP restricted comments have been removed. The remaining content is intended to provide additional insights into the project.

Q: Are there pre-requisites advised?

A: Azure Synapse workspace is used to manage and build the implementation. An appropriately configured Azure Landing Zone and subscription are assumed to be available including an Azure AD tenant with users synchronised and licensed appropriately. Sword can assist with this set up if the client does not have Azure in house capability.

Q: How is security handled?

A: Data access is managed through Azure Active Directory. Row Level Security is implemented where required within the model and to Power BI datasets.

Q: Is there any flexibility in reporting tools?

A: Power BI is our preferred tools due to its flexibility, wide availability and ease of use. However, other tools can be used if the client has a strong preference.

Q: What IS resources are required from the client to ensure success?

A: IT leadership will be required to dedicate some of their own quality time and allocate a knowledgeable resource to be the Data Analytics who he shall be required to support the project on an average of ~ 2 days per week.

Q: What are the Key components of the Tillit framework

- Common and Reusable Data Sets
- Focussed Reports and Dashboards
- Supportive Operating Model
- Training & Knowledge Transfer
- Structured Change Management and Adoption approach
- Underpinned by Azure Synapse Analytics and Azure Data Lake

Q: How will my data be governed to provide data lineage transparency?

A: Azure Purview is a unified data governance service that allows you to manage, classify and govern data from disparate sources and shall enhance your ability to surface useful and trusted data.

Q: What Business resources are required from the client to ensure success?

A: Senior Business Sponsorship is very valuable, however not essential. Timely access to domain SMEs in any area of business hooping to benefit is essential as our process is predicated on co-creation.

Q: What project delivery approach do you use for Tillit?

A: Agile has proved to be the most effective approach. We run the program in Phases. Each Phase is 8 weeks in duration and comprises 4 Sprints.

Q: What access system privileges will Sword Consultants require?

A: Sword consultants will need to be provided with the necessary access privileges including accounts on client's Azure portal.

Q: What type of skills can we expect provided by Sword?

A: The Sword core team skills include Solutions Architect, Data Engineering., Data Science, Project Management, O&G Domain knowledge and Change and Communications.

Q: How is evergreening handled post initial project?

A: How the Platform and BI Hub are managed post project depends on the size and nature of the client. You may have internal capability to manage this internally post hand over to support.

However, to ensure running costs are managed optimally an experienced team of Azure resources are essential. Sword can also offer a range of services to ensure the service remains cost effective, reliable and evergreen.

End of Q&A Extract - further information can be obtained from Jared Owen at Jared.Owen@sword-group.com.

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For further information on this project and on other projects we have undertaken, please contact Jared Owen, Director of Digital Services on **+44 (0)7920 587989** or by email at **Jared.Owen@sword-group.com**.

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