DEV4

DEV4 CASE STUDY

PROJECT

TEMS-CALC

CLIENT

Turnkey Environmental Services Ltd.

INDUSTRY

Offshore Fluids Management & Compliance Solutions

CASE STUDY

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BACKGROUND

TEMS approached DEV4 in 2017 seeking bespoke software to meet their specialised service offering within the environmental engineering industry.

TEMS existing methods of recording and storing their project & sample data was spreadsheet based with associated electronic and hard copy filed reports.

Seeking to move to a more flexible and secure platform, TEMS engaged DEV4 to design & build a Cloud based solution.

THE REQUIREMENTS

1. Single, secure point of engineering data for the company
2. Cloud based application *to include*;
3. Centralised calculation algorithms
4. Improved User data validation
5. Reporting templates
6. Multi-platform support
7. System & component security
8. High levels of system availability

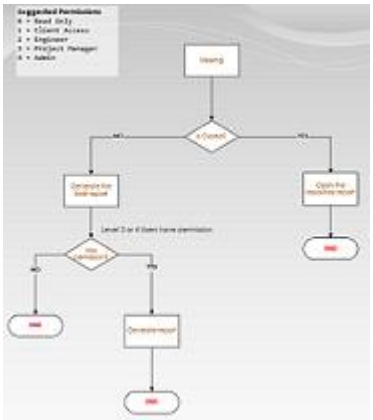
OUR APPROACH

DEV4 worked with TEMS to understand their business & engineering processes in order to meet the specific functional requirements of the new application.

By analysing the existing file-based systems, we designed & built a robust database structure for optimal storage and a secure application business layer.

Moving quickly to produce early interface prototypes, we worked alongside TEMS Management & Senior Engineers in the application design process.

TEMS-CALC was operational **18 weeks** after project commencement.



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THE SOLUTION

DEV4 designed and developed TEMS-CALC - a Cloud based application providing global access to Project information for TEMS Management and Engineering personnel.

Designed and built primarily using Microsoft .NET technologies, the system is secure, robust and compatible with several devices and browser platforms.

TEMS-CALC provides real-time data for Clients and engineering staff World-wide.

THE SOLUTION **One secure data location** ✓

Designing from a flat file system gave us the opportunity to create logical datasets which could be stored efficiently within a database structure.

Our team developed a secure SQL Server database, which provides one source of data for the system.

THE SOLUTION **Cloud based application** ✓

Developed on Microsoft .NET technologies, TEMS-CALC was deployed as a Cloud application on the Microsoft Azure platform.

THE SOLUTION **Centralised calculation algorithms** ✓

There are numerous sample types handled by TEMS-CALC which the system combines and processes against a centralised calculations module.

This module is a valuable system component and was developed as a stand-alone, secure repository.

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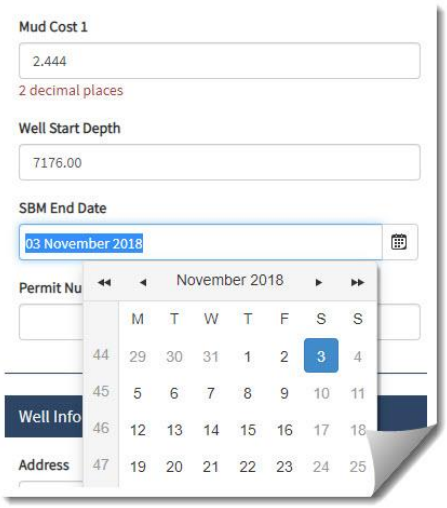
THE SOLUTION User Data validation ✓

Mapping business and application processes, our team designed, documented and implemented the required validation models which provided data consistency throughout TEMS-CALC.

Protecting the quality of the data entered into the system mitigates data type errors and helps improve business logic and application consistency.

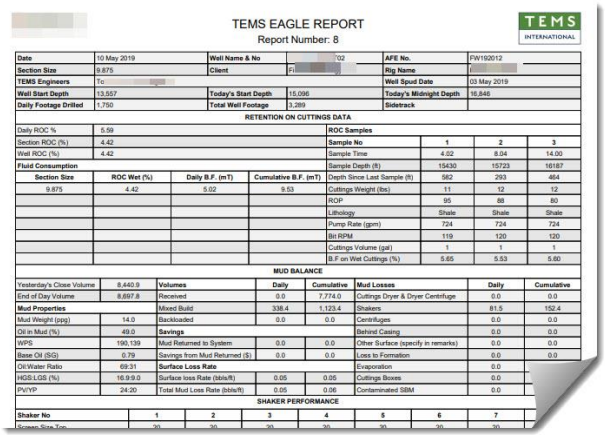
Simply; validation enhances the accuracy of the TEMS-CALC project information and reporting mechanisms.



THE SOLUTION Reporting Templates ✓

TEMS-CALC provides daily and End of Well project reports which can be accessed securely by TEMS Clients.

Additionally, data exports are available throughout the system.



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THE SOLUTION **Multi-platform support** ✓

Using responsive design techniques, TEMS-CALC is accessible via devices such as a PC, laptop, tablet or mobile phone.

TEMS-CALC supports the latest versions of Google Chrome, Microsoft Edge, Firefox and Safari browsers.

THE SOLUTION **System & component security** ✓

Database security | Application security | User management

All our Client security frameworks are confidential for obvious reasons.

What we can tell you about TEMS-CALC;

Our team designed numerous security layers within the TEMS-CALC architecture including User & permission management modules, data encryption, code injection safeguards, business object & enterprise authentication.

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THE SOLUTION **System Availability** ✓

Hosting the solution was an easy decision with the availability of the Microsoft Azure global platforms, delivery points and data centres.

Among several benefits of Azure is the flexibility to deploy or host data and software for specific global regions.

Compliance, Disaster Recovery and Analytical support services are also significant key differentiators for DEV4 and our Clients.

Microsoft's fail over strategies provide very high levels of availability, averaging 99.9% within the Azure networks.

DEV4 system maintenance and updates are straightforward with our Microsoft aligned technologies and approach.

PROJECT TECH

TEMS-CALC utilises a range of design, development, testing & hosting technologies.

Microsoft SQL Server

ASP.NET MVC

Bootstrap

JavaScript

LINQ

Windows Azure

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ABOUT DEV4

SOFTWARE | PLAN | DESIGN | BUILD | MANAGE

DEV4 Online Ltd. have provided solutions in various industries such as financial, engineering, quality assurance, logistical, inventory control, training and human resources.

Our Team has extensive engineering systems experience, particularly within the Oil & Gas sector.

From bespoke projects to off the shelf offerings, we have assisted many businesses resolve, create and plan for future growth.

Contact us at info@dev4.online to discuss your project ideas & requirements.