

## Natural Resources Wales uses CRM to modernise the legacy

The Welsh Government sponsored body has worked with Civica to use commodity software in streamlining legacy processes and creating a single view of permitting activity across the country.

Organisational changes always produce practical challenges, not least in streamlining legacy IT. These changes often involve the development of new bespoke systems, but the experience of Natural Resources Wales (NRW) shows that off-the-shelf software can produce a common platform that is equally effective and less expensive.

In this case, NRW has brought together the processes for licensing and permitting previously run by three organisations into a unified system and begun to integrate these processes with other commodity elements to meet the demands of the business as well as any bespoke system.

NRW was created in 2013, bringing three different environmental organisations together. Initially the organisation continued to work with the permitting systems provided by the legacy bodies, but this was expensive and operated in silos, making it impossible to get a complete picture of landowners' activities.

In 2015 it was decided to bring the processes together within the Microsoft Dynamics CRM platform that had been installed for NRW's contact centre, with the aim of providing a unified approach, a single view of all customer data and moving to a cloud system.

### Workflow strength

NRW was aware of Dynamics' strength as a workflow engine, and began to see it could be used as a common platform for customer engagement whilst managing the permitting processes. These processes include activities such as producing and storing hazardous waste, discharge into water courses or onto land, and extracting water from rivers and bodies of water.

Online services and Dynamics CRM specialist, Civica, was brought onboard to support the transition, which involved scoping the similarities and differences to create a single process, talking with service users in defining requirements, and cleaning the data from the legacy systems. They took an agile approach, treating the process for each permit as a separate project and reviewing the iterative build as it took place.

Richard Frost, the project manager for NRW, says: "When we were looking at bringing in new systems we wanted to take a more customer-focussed approach to finding a solution.



**Improved data quality** to support improved regulation and risk analysis



**Reduced costs** with automated interactions and **cheaper cloud solutions**



**Connected intelligence** across teams with mobile access and **flexible working**

"Using plain software that is a known quantity with a well publicised service life and support model can fit the bill."

Greg Lawrence, NRW Lead Technical Architect

This is why the people doing the day-to-day processes were involved in detailing the requirements. We would then have inception with Civica that would come up with a design and, after the first instance, we were doing things that were repeatable.”

“Every two weeks we would have a sprint review and refine requirements as we went through the build. Then they would do the testing at the end.”

Each different permitting regime involved the NRW team spending six to eight weeks setting the low level requirements, followed by two to three months of working with Civica on the configuration of the processes within Microsoft Dynamics. This involved some coding and integration with APIs, the databases for the processes and the Azure cloud platform.

The work began in September 2015, and by April 2016 it had been completed for three processes – on waste handling, installations and using water resources and abstraction. It has created a platform for permitting, and work has begun on a fourth process, for water discharge activity. Looking forward there are plans for migrating the billing, compliance and returns processes to the CRM.

### Logical extensions

Greg Lawrence, lead technical architect for NRW, says: “We’ve cautiously avoided over-engineering the custom elements – and the bespoke entities we’ve created are logical extensions to what the CRM already does. It’s really a case of tuning the online service that Microsoft Dynamics provides to our specific organisational needs.”

NRW is looking forward to re-using elements of the workflow for other parts of the business – exploiting the common platform for multiples purposes that Dynamics provides. Lawrence says the use of open standards will be a major feature in the work.

“We encourage the use of open standards in exchanging data internally and externally,” he says. “It applies within the workflow of our systems – for example, as CRM interfaces with the ERP, via open publishable APIs, we are introducing a standard that can be readily re-used if additional integration elsewhere in the enterprise is perceived to be necessary.”

NRW has a management service to control the release of APIs, and this could open up new possibilities in the future such as linking NRW data to that of local authorities in Wales, or making open data available for other developers. There is also a potential to create interfaces with satellite or LiDAR (light detection and ranging) data from the organisation’s geographical information system. This would make it possible to see anything of interest close to the area for which a permit is being processed.

“Dynamics CRM is one of a small number of key technologies that underpin major parts of the business, and we will use whichever of those that fit best for a given function and focus development on lightweight integration between them,” says Lawrence.

### Business benefits

NRW foresees a number of business benefits from the migration, including the creation of master records of customers, permits and parcels of land; providing better quality data to support a risk based approach to regulation; serious savings from using cloud rather than in-house systems; and laying the ground for more automated interactions with customers. In addition, the easy interface between Microsoft Dynamics and Office365, which is used as a central collaboration suite, gives employees access to data in the CRM and supports mobile and flexible working.

In addition, it is possible for them to pull data into Power Query for Excel or a Power BI dashboard for any business analysis purposes.

Lawrence says that Dynamics has met NRW’s demands as well as any bespoke system, and that it shows that using an off-the-shelf software is a good move for a public sector organisation.

“As long as the business function is enabled, the supporting technology should be lightweight and flexible, with more emphasis placed on the interfaces between systems as opposed to the capabilities of individual elements. Any business system is like a patchwork quilt, which is made of a lot of little pieces but when properly stitched together will keep you warm.”

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