East of scotland water

Business



Company: Indus InternationalCustomer: East of Scotland WaterSubmitted by: The itpr PartnershipDate: October 2000New European legislation is opening up the UK's water industry to competition. While not a privatised company, unlike the English and Welsh Water Companies, East of Scotland Water faces new competition in its region this year.

Underpinning its business development is the authority's implementation of EMPAC, enterprise asset management (EAM) software from Indus International. Since the implementation the company has reduced stock levels by ten percent and attained key benefits in the areas of work management and purchasing. The authority is focusing its attention on providing cost effective services – maintaining high levels of quality but reducing costs by improved asset management and maintenance to reduce operational overheads. Using the inherent asset management functionality, East of Scotland Water is looking to deliver significant financial benefits through extending the life of assets throughout the enterprise, releasing money for capital reinvestment.

The Business Challenge

East of Scotland Water (ESW) is a public Water Authority formed in April 1996 as a result of local Government reorganisation in Scotland. It assumed control over the delivery of water and wastewater services, previously provided by four Regional Councils and the Central Scotland Water Development Board and now provides water and waste water services to households and commercial customers in Edinburgh, Lothians, Borders, Forther Valley and Fife. The authority serves 1. 58 million people with water and 1. 43 million customers receive waste water services across over 10, 000 sqkm, supplying around 723 million litres (159 million gallons) of water every day of the year. Once founded, expectations from both customers and industry regulators was that the new, larger business unit would deliver enhanced quality of product and service whilst reducing unit costs. The authority therefore focused on improving customer service, business efficiency and water quality standards as well as maintaining and improving assets.

THE EAM Imperative

The initial hurdle for the authority was to integrate the disparate systems and culture of the five organisations.

Underpinning that integration was a three to five year IT investment valued at £25million. Says Raymond Smith, ESW Operations and Projects Administrator, " As a business formed from five organisations there were a number of systems in use." The five organisations included up to 12 major sites, as well as satellite stores and depots. Each organisation had its own working practices, data collecting, recording and reporting procedures. He says, " Before we could begin to deliver ESW's core objectives we had to create a unified approach to operations management. It was clear that a new Enterprise Asset Management solution (EAM) would deliver business benefits and facilitate the drawing together of the business with a single set of processes and procedures," he confirms.

ESW needed a total solution which could complement its change management strategy and help achieve the corporate goals, including

efficiency savings of a 25 percent reduction in operating costs over three years. ESW has in excess of 39, 000 assets and over 1, 100 staff in operations alone and, says Smith, required a solid asset management and work management system. He adds, " We have an annual expenditure of £15-£20 million on material and services, so supply chain functionality was also an essential system requirement. The EAM solution had to deliver the functionality to reduce, plan and control stock and extend the life of our assets."

EMPAC – the Best Solution

ESW's IT strategy is based on best of breed solutions that run on Unix, Oracle and NT. The EAM had to be able to support up to 1, 300 PCs on a wide area network.

Having assessed the market, the company opted for EMPAC from Indus International, which provides the core Asset Management, Work Management, Stores and Purchasing and Supply Chain Management functionality. Says Smith, " Most applications fell short on the width of functionality. EMPAC handles the interaction between modules well and had good job costing and maintenance scheduling." He adds, " Critically, EMPAC could integrate both with Oracle Financials and a range of applications that we use in ESW." EMPAC is tightly integrated with Oracle Financials, which is ESW's corporate accounting application. Costing information from Asset Management, Work Management, Stores and Procurement module feeds through to Oracle Financials. Additionally, the capital spend cost elements are passed to the Cascade Capital Investment application. Following training from Indus International, 20 ESW staff began the implementation across the organisation, which was delivered on time. EMPAC went live across ESW in June 1998. The software is now being used by 700 people across ESW, from storemen controlling and issuing stock to requisitions, quotes and contracts as well as operations people overseeing work management. In addition, the time sheets of over 1, 000 staff, including contract staff, are handled by the system.

Delivering Business Benefits

One immediate benefit of the implementation has been the ability to consolidate stock to a central store. Using EMPAC to monitor and manage stock levels to support maintenance throughout the region, ESW has been able to gain significant cost reductions. Says Smith, " Over the past two years we have reduced stock by at least ten percent which is a significant saving on an annual stock spend of £6 – £8 million." Using the EMPAC Work Management functionality, ESW is able to track and report actual costs versus estimated costs, enabling close monitoring of material and labour throughout the organisation. Says Smith, " We have also been able to roll out requisition responsibility to hundreds of users via EMPAC.

We have built a hierarchy of approvals. Using workflow to drive the purchasing process, there are now no delays." He continues, " As a result, we can ensure the right equipment is available to carry out maintenance and repairs as scheduled without overstocking." In addition to improving efficiency, the solution is enhancing the company's customer service levels. EMPAC is also integrated to the Smallworld GIS system which, in turn, links to the AddressPoint customer service application.

This solution provides customer service personnel with map based information on both scheduled and emergency work, enabling them to immediately respond to customer queries. Information from the system is also used to co-ordinate planned work with other Scottish utilities to minimise road traffic impact.

Asset Management

ESW is now concentrating its effort on further exploiting this EAM platform. A key area of focus is asset management. Says Smith, " We have already begun to use features of EMPAC to plan maintenance, schedule inspections and monitor costs.

However, we need to take an enterprise view of asset management and that requires business process re-engineering." The necessary cultural and procedural changes are now being put in place and, says Smith, ESW is expecting significant benefits. " Taking an enterprise view to asset management will enable us to run our assets more effectively. By proactively managing the assets we can give them a longer life, get a better return on investment and cut down requirements to spend on capital replacement, freeing up resources for strategic projects," he concludes. To further improve efficiency, ESW is currently undertaking a pilot project using mobile technology to deliver EMPAC and GIS to engineers in the field. " The solution provides work orders and maps and enables engineers to fill in time sheets and record jobs," he says. " By providing online updating of work orders on EMPAC we will improve efficiency and offer customer services more up to date information to support customer queries." Additionally, the organisation is working closely with Indus on the development of new releases. " We have been involved in the review of EMPAC v 9," says Smith. " And we are looking forward to exploiting the new functionality from Indus." Smith concludes, " The implementation of EMPAC has had a significant impact on ESW. Having one system has helped to draw the previously fragmented business together.

We are changing and this provides the platform for change. Our market will become increasingly competitive, with good asset management we can deliver reduced costs to the business, support our goals of continual improvements to customer service and maintain our market position."