RAISING THE BAR OF EXCELLENCE IN CUSTOMER SERVICE & PERFORMANCE

YORKSHIRE WATER

Yorkshire Water expands its highly successful Integrated Customer and Operations Management (ICOM) program by fully integrating key service partners on a common enterprise workforce management (EWF M) solution.

Yorkshire Water’s vision to be clearly “the best water company in the UK” has been the driving force behind the company’s strategies and investments in recent years. Despite numerous challenges (e.g., economic turbulence, an extremely harsh winter, start of a new Asset Management Plan, and reduced water and sewerage rates), the utility continued to deliver extremely high levels of operational and customer service. The roots of this success can be traced back to a major internal reorganisation completed in 2008 to ensure the company continues to deliver industry-leading levels of financial, operational and customer service in the future.

Yorkshire Water’s success in customer service and enterprise workforce management (EWF M) continues with the vital inclusion of key service partners on a common EWF M solution. Today, technicians from four different service partners use the same software tool as Yorkshire Water technicians to effectively manage work in the field.

DRIVERS FOR CHANGE

During the 1990s, Yorkshire Water was facing harsh price reviews, the threat of imminent competition, increasing customer expectations and, to top it off, a 1995 UK-wide drought that drove customer perception of the company to an all-time low. From an operational standpoint:

- Field teams were "depot-based."
- Maps and network drawings were all paper-based.
- Technicians organised their own schedules.
- Frequent trips were made back to the depot.

These combined factors pushed Yorkshire Water to make a firm commitment to turn around the situation and strive to become clearly the best water company in the UK.

Early on, the company realised the difficulty in delivering the desired service objectives without changing the way it operates. Yorkshire Water’s paper-based and voice-dispatched communications systems lacked the ability to provide field technicians with up-to-the-minute customer information. At the time, work group queue managers did not have the lead-time to plan and allocate the right resources for repair work, monitor the completion of the tasks, or provide feedback to customers, directly or via the contact centre, on the status of tasks. In addition, Yorkshire Water had a heavy backlog of work,
which lacked priority or timely feedback on progress and work completion. This meant that technicians would simply choose which work they could perform and at what time.

Furthermore, reactive work, comprising 68 percent of Yorkshire Water’s orders, did not provide enough lead-time to plan and allocate the appropriate resources in response to immediate customer requests. It was particularly challenging since emergency orders (requiring a maximum two-hour response time) accounted for 23 percent of that reactive workload, and the remaining 32 percent was planned work.

**CUSTOMER-CENTRIC STRATEGY**

With a vision of superior levels of customer service resulting from high standards of drinking water, environmental quality, and operational efficiency, Yorkshire Water initiated a change program in 1999 to reengineer its key business processes and to invest in extensive new IT infrastructure, including a wireless EWFM system. The overarching program became known as “Integrated Customer and Operations Management,” or ICOM.

The fundamental desires voiced by its customers formed the basis of the company’s customer service strategy: reliability of service, responsiveness to needs, and efficient problem resolution. To meet those needs, Yorkshire Water required a solution that incorporated enterprise-wide changes, a single view of all customer contacts, and visibility into all work details affecting the customer. A key component was a proven, integrated EWFM solution. After a rigorous selection process, Yorkshire Water selected Ventyx’s Service Suite based on its ability to meet Yorkshire Water’s requirements and its proven track record in the utility industry across North America.

**MOBILE ENTERPRISE WORKFORCE MANAGEMENT: SERVICE SUITE**

To meet both its operating efficiency and customer service objectives, Yorkshire Water had to fully reengineer its business processes to be customer-centric, which could only be accomplished with true end-to-end integration of employees, technology, and process—and, eventually, partners. Yorkshire deemed Phase I as the drive to improve customer service; Phase II would consist of launching an “intelligent asset performance management” system.

Yorkshire Water’s Service Suite solution interfaces with several SAP™ Utilities™ modules, which had also been chosen in connection with Yorkshire Water’s change program. Field technicians use “rugged” laptops with built-in radio modems to receive and send completed orders and timely status updates over the GPRS network. Work group queue managers have visibility into field operations, and order status information can be automatically and immediately viewed by contact centre call-takers who, in turn, can provide reliable, up-to-the-minute information to customers. To ensure continuous service to its customers, Yorkshire Water selected the high-availability feature, whereby a master server provides switchover capability to a standby system in the event of a hardware failure. In the event of a catastrophe, a disaster recovery site at a separate location houses Service Suite to keep enterprise workforce management operations functioning.

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With Service Suite, Yorkshire Water was able to meet its main objectives for implementing a EWFM system: the ability to prioritise work, automate certain operations, and plan resources more effectively. Other achievements included:

- Completing both reactive and planned maintenance work in a timely manner
- Reducing travel time resulting from dynamic scheduling
- Visibility into operational work, enabling the call centre to provide feedback to customers on the status of their orders in real time
- Maximising calls closed on contact
- Early identification of emerging incidents

From a personnel standpoint, Yorkshire Water initially rolled out the ICOM structure to approximately 450 technicians in the clean and wastewater business units. The company made a point to include field workers in everyday changes by delivering a quarterly newsletter, facilitating regular face-to-face team meetings, and allowing them to evaluate and select the new mobile devices. Management was also very diligent in providing hands-on training in the field. This approach led to significant appreciation of the new technology, and because of this proven success, Yorkshire Water has extended the footprint significantly.

**ENHANCED SCALABILITY WITH FULLY INTEGRATED PARTNERS**

Yorkshire Water has continued to expand the success of the ICOM program by extending the footprint even further with the vital inclusion of key service partners.

After a painless upgrade to Service Suite 8.0 in June 2009, the new version’s scalability enabled Yorkshire Water to integrate technicians from several different key service partners. These key partners perform the repair and maintenance of Yorkshire Water’s clean and wastewater networks and comprise a significant portion (around 20 percent) of the workforce. They also provide integral status updates and streams of information to the larger organisation. As partners’ multistage work tends to be longer in duration and quite complex work, Yorkshire Water considered it vital that they possess the same integrated technology used by its own employees.

These service partners now have full access to the Service Suite system, and they can schedule work right down to the level of the individual technician. In addition, utilizing the new version of Service Suite provided a number of features of great benefit to Yorkshire Water:

- New dispatcher view provides a graphical Gantt chart of the shifts worked by each mobile user and the orders assigned to those shifts.
- Fast Transfer between operational and historical databases supports display of assigned work orders and locations of techs on external solutions.
- Highly usable and effective functionality improves shift management.
Notably, the upgrade also allowed Yorkshire Water to discontinue some previous customizations to the solution, greatly facilitating the incorporation of future enhancements.

Due to the adoption of EWFM by additional teams, meter readers, tankers, process engineers, and incinerator operators are now managed by the Service Suite EWFM solution. In addition, E&M staff were brought in-house from one of the partners, bringing the total number of Yorkshire Water technicians licensed for Service Suite up to 1,390. This expansion followed a strategic review, which concluded that E&M workers on the common Yorkshire integrated platform would benefit from a unified view of all customer-facing work. Since these workers already enjoyed a close relationship with Yorkshire, integration was straightforward.

All of the service partner technicians were enthusiastic about coming into the Yorkshire Water business. For a number of years, they had worked alongside Yorkshire Water technicians and had seen how they successfully used technology. To further ensure integration, Yorkshire Water committed significant time and effort into coaching and training technicians in order to effectively bring them up to speed.

These efforts bore fruit almost immediately. In the extended severe winter weather of 2009/2010, the number of calls and burst water mains never swamped the organization’s ability to cope, due to the integration of teams and the shared technology platform. A winter with terrible conditions, such as freezing and thaws, became a non-event due to how Yorkshire Water processed the work in Service Suite.

Furthermore, in accordance with Yorkshire Water’s Company Vision, the utility and its partners now enjoy a non-adversarial, collaborative partnership supported by a technology that allows them to work together at maximum efficiency. In fact, service partner gang (crew) utilization/productivity has improved from five installations per day up to eight.

Additionally, day-to-day costs have been significantly reduced in the following areas:

- Yorkshire Water are now able to offer lowest-cost appointments through better geographically clustered work, and the dispatcher Gantt view is helping them ensure that shifts are fully utilized and technicians are prevented from travelling all over the county to fulfil orders.

- Service partners can now process orders from start to finish and back again with NO human intervention—ensuring that service for certain work types and work groups is delivered for the lowest cost possible.

- All orders and technicians are now assigned a latitude/longitude geocode, thereby allowing Yorkshire Water to take advantage of the reduced travel time offered by Service Suite Workforce Optimization for geo-coded orders.

“The service partners didn’t need heroes; Service Suite did it for them. There was nothing that did not work. … The project definitely helped to develop a win-win-win outcome for all company, partner and customer.”

- Mike Scott-Paul, Business Change Manager (Partners)
PROACTIVE ASSET MANAGEMENT FOR EXEMPLARY COMPLIANCE

An additional component of the Program that has been crucial to its success is Yorkshire Water’s implementation of an integrated, proactive asset management process to fully understand asset performance and the company’s regulatory compliance. Here, Yorkshire Water is utilising Service Suite to house a number of data points, including sample measurements and comprehensive compliance information. These regular data feeds are used as the basis for managing ongoing asset performance, historic trending of condition and performance, as well as for valuable training and insight.

Being the best also means exemplary compliance with environmental and regulatory parameters. By monitoring cyclical work (noting asset failures and shortfalls in performance) and having a record of scheduled (and completed) work, it is much easier to evaluate how an asset is performing before it becomes a failing asset or larger issue. Whereas previously several assets needed to be fully manned, now a mobile technician can visit a site three times a week. S/he can also receive data that may be indicative of larger problems and then make the necessary decisions or remote adjustments faster (e.g., a burst may cause low pressure at a number of properties; a water quality problem may affect an entire zone; sewage treatment issues may cause environmental impacts, etc.).

Service Suite, as part of the ICOM structure, is already helping Yorkshire Water expand into more complex work, and move from a reactive schedule to a proactive one. In one example, Yorkshire was able to more effectively resource plan, particularly for an out-of-the-ordinary event. When recent flash floods hit, it created multiple disturbances, which Yorkshire was able to address by mobilising technicians within the hour. Being on Service Suite enables Yorkshire to better prioritize work, whereas “four years ago, we’d’ve been completely swamped and overwhelmed. Today, we can rebound from these issues more quickly.”

KEY AREAS OF GROWTH

Yorkshire Water’s Capital Investment Programme of more than £360m per year is focused on improving asset performance and evaluating components for upgrade, replacement, or expansion. Foundational to this challenging programme is feeding intelligent asset data into the decision-making process. Service Suite’s mobile application is the source of information upon which these infrastructure decisions are, and will be further, based.

Just as Yorkshire pushed to be recognized as a “service powerhouse,” it wishes to flip the current paradigm of reacting to work to that of “planned” work. In short, Service Suite updates will provide the foundation for a dedicated service team to:

- Further automate work allocation (minimising costs when assigning orders by taking into account travel, skill, wage, etc.)
- Ensure compliance with planned schedules for key and peripheral sites
- Provide more accurate job costing for future project planning (down to

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the plant item level)
  ● Better manage and monitor equipment to ensure zero customer-impacting supply interruptions by:
    ○ Detecting deteriorating pressure and automatically raising a work order
    ○ Using mobile devices to capture valve status in real time
    ○ Defining affected customer area and proactively communicating actions to be taken

Over the next five years, Yorkshire Water have a goal to minimize human intervention. The utility must replace 250,000 meters over five years, and they have a finite budget with which to perform this work. Coming in under budget on the project will allow the utility to apply the excess funds to other investments. Success will have a direct effect on the bottom line. Yorkshire Water is going forward in trust that it can rely on its integrated key service partners, and on the support of the Ventyx team and Service Suite product, to ensure that this work is performed as efficiently as possible in order leverage all possible savings.

RESULTS
Today, Yorkshire Water delivers significant business benefits through the efficient management of approximately 1,400 field workers who are engaged in clean and wastewater management, waste recycling, and water production and distribution. The solution has given Yorkshire Water the opportunity to realise major operational efficiencies, deliver enhanced service to its customers, and expand into new areas of improvement.

Yorkshire Water has gone from being the bottom-ranked water utility in the UK to consistently “top two”; in addition, Ofwat, a regulatory body that monitors water and sewage companies in England and Wales, notes Yorkshire Water as the most efficient water company in the sector, as judged by Ofwat’s four key areas of business efficiency. A sampling of Yorkshire Water achievements include:
  ● Appointments met within two-hour window >98%
  ● Customer call-back commitments within 30 minutes >95%
  ● Calls closed on contact >80% (all calls including billing inquiries, and 40% for operational calls)
  ● Greater than 50% reduction in unnecessary field jobs
  ● Decreased written complaints by 60%, resulting in lowest number of written complaints from Customers in the sector
  ● Operational customer contacts reduced by 20%
  ● Repeat calls from customers reduced by 20%
  ● Extended opening hours from 37 to 85 hours (i.e. technicians available to undertake evening and weekend customer appointments and routine service work)
  ● Benefits per annum: ~£12m, resulting from manpower efficiencies in the field and other key work groups, process efficiencies and right-first-time asset performance

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From its performance improvements, Yorkshire Water has been the recipient of a number of UK and international awards:

- Voted IT Department of the Year at the 2010 UK IT Industry Awards
- In 2008, Yorkshire was recognized as the “Best IT Department to Work for in the Country” by Computer Weekly.
- “Utility of the Year” in 2004, 2005, and 2006 by Utility Week, which is an accomplishment that had never been done before.
- “UK Utility Industry Award for Customer Care” in 2003.
- “European Excellence Award” for Customer Relationship Management (CRM) by Gartner Inc.
- Rated at the top of the Ofwat Table of UK Water Companies.
- Additionally, and for the third year running, Ofwat has judged Yorkshire Water to be the most efficient water company in the UK in all areas of its responsibility.

In turn, Ventyx is proud to be the trusted advisor and solution provider of such a great vision. Yorkshire Water is not only class-leading in most areas of business performance, but continues to push the boundaries for utility performance. Ventyx Service Suite has played an integral role in turning around Yorkshire Water’s customer service and operational performance. The changes it has made to its business processes and its commitment to making the best use of technology made that shift possible.