NJUG

NJUG CASE STUDY

CASE STUDY 25: Traffic Management Act project

The National Joint Utilities Group (NJUG) is the UK industry association representing utilities on street works issues. The 37 companies[1] we represent work to deliver gas, electricity, water and telecommunications to both individual consumers and UK plc.

NJUG members need to continue to drive forward further improvements. We have therefore developed the NJUG Vision for Street Works, which revolves around six main principles:

1. Safety is the number one priority
2. Damage to underground assets is avoided
3. Utilities work together and in partnership with local authorities to minimise disruption
4. Utilities deliver consistent high quality
5. Utilities maximize use of sustainable methods and materials
6. Street works in the UK are regarded as world class

This case study is an example of NJUG delivering on these principles and turning the vision into reality

Overview:

Thames Water is one of the largest promoters of street works in the UK and the single largest in London. When the revised TMA Codes of Practice were issued in July 2007, Thames Water recognised that these would significantly affect their business processes and any solution had to be implemented in less than 12 months for a strict May 2008 compliance deadline.

They decided on a strategy which involved undertaking extensive IT development and re-mapping of business processes to ensure compliance levels would be met, costs would be reduced and the IT solution was flexible and scaleable for the future. This was a high-risk approach since any slippage would lead to a period of complete non-compliance with a potentially huge financial risk from FPNs. However, it also yielded the biggest benefit in levels of management control through clear, timely reporting and monitoring tools, data quality, compliance, optimal operational costs and strategic and scaleable IT investment.

Following internal approval of scope and budget, the project delivered a full business and technical implementation on its target go-live date of 28 April 2008, which exceeded all defined success criteria.

<u>Case Study</u>

Technical Solution

The technical solution was based upon Service Orientated Architecture (SOA) principles, allowing Thames Water to extract further value from its legacy systems while ensuring an integration path with both an imminent SAP implementation and future DfT requirements. This option also provided a strategic

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[1] NJUG's current members are the Energy Networks Association (representing electricity and gas), Water UK (representing all water and wastewater companies), National Grid, Openreach, and Virgin Media. Our associate members are Clancy Docwra, Skanska McNicholas, Balfour Beatty, Morrison Utility Services, Morgan Est, NACAP, PJ Keary, First Intervention, Carillion, Enterprise, Laing O'Rourke and AMEC. Including members through trade associations, NJUG represents thirty-seven utility companies.

return on investment combined with the ability to rapidly develop and deploy changes without lengthy development and testing cycles, saving both money and time in the future.

Scope and Influence of the Project

An integrated business and technical project team was formed with Thames Water and Wipro Technologies staff working seamlessly together to develop and deliver an overall solution which included:

- Mapping all business processes around street works noticing (including those non-excavation activities which require to be noticed for the first time)
- Designing and building the SOA solution (requiring 50,000 hours of effort)
- Creating a dynamic reporting suite to support proactive operational management
- Testing and implementing the solution to over 750 field based users
- Training and educating over 1200 Thames Water and external staff on the legislation changes, new process and the technical solution
- Building and maintaining a constructive dialogue with all 54 Highway Authorities within our region to ensure coordination

Key Advantages Delivered

Thames Water's SOA solution made them one of the first utilities in the world to have a fully flexible Noticing and Work Management solution, reducing development time and costs and providing efficient use of our resources on behalf of our customers. The project team's technical expertise allowed them to assist those Highway Authorities struggling with their implementation of the TMA specification as their staff helped identify and resolve issues within the their own IT estates. This collaborative approach was key to delivering the goal of coordination and efficiency envisioned by the TMA and is the only constructive response to the challenges it poses.

Key Business Benefits

Thames Water was compliant with the new Codes of Practice on schedule and the level of legal compliance offset the risk of millions of pounds in FPNs and the damage to Thames Water's brand and reputation. By undertaking comprehensive process mapping across each impacted business unit, Thames Water was able to maximise noticing compliance whilst delivering training with minimal impact on service delivery and cost. Also the SOA solution has created a robust and flexible platform upon which Thames Water can adapt to changes in the DfT's codes of practice.

Key Stakeholder Benefits

Highway Authorities have benefited from reduced traffic disruption through efficient planning and co-ordination facilitated by integrated systems and processes producing high quality information. This, combined with a substantial and effective training and business change programme, has delivered a level of noticing compliance which is higher than ever before. Their customers have benefited from improved service delivery from increased operational efficiency and greater value for money from a reusable IT investment. Their employees have benefited too from process improvements, comprehensive training increasing their overall knowledge, ownership and engagement, combined with better IT tools with which to deliver a consistently first class service.