Leading by example in enterprise content management

“With MATRIX 2 you instantly know where everything is — it’s our information management grid. It is probably the best EDRM system in central government.”

Karen Pile – CIO Director, Information Strategy & Services, Department for Business Innovation & Skills

Challenge

The Department for Business Innovation & Skills (BIS) is the UK government department responsible for building Britain's future economic strengths by creating a regulatory environment that encourages enterprise, skilled people, innovation, and world-class science and research. In 1998 BIS, formerly known as the Department of Trade & Industry (DTI) and subsequently Department for Business, Enterprise & Regulatory Reform (BERR), awarded Fujitsu a 10 year contract, subsequently extended to 2014, under which Fujitsu took ownership of the department's existing IT assets and related services.

One of BIS' most business critical applications is its Electronic Document and Records Management (EDRM) system, called MATRIX, which was originally implemented by Fujitsu in 2001 based upon the National Archive approved TRIM Captura software from Tower Software (now HP Software). Karen Pile, CIO Director, Information Strategy & Services, BIS, says, “BIS is a policy-making department, so it is a massive information factory and we have to be able to demonstrate how we came to make our recommendations. As a result, MATRIX is the hub of what is going on.”

As part of its management of BIS' infrastructure, Fujitsu is responsible for regularly refreshing the hardware and software in line with industry benchmarks. So, in 2005 BIS began preparing a business case to upgrade the MATRIX system to a new version. The aim was to provide enhanced functionality, a better user experience through much closer integration with the department's office systems, compliance with government legislation and overall improvements in service performance.

Solution

To ensure a smooth and successful transition to the new EDRM solution, called MATRIX 2, the project involved orchestrating a comprehensive change management programme. Aligned with this Fujitsu needed to provide the application design and configuration, infrastructure refresh, data migration, systems integration and testing and knowledge transfer services.

The application development work undertaken by Fujitsu for MATRIX 2 was not a straightforward upgrade as it involved a major integration and transition to a new set of tools, utilising an entirely different Oracle database schema and much closer integration with Microsoft Office. Karen Pile adds, “Changing over to a new application and data schema was technically very difficult, but it put us on a much better footing for the future.” In addition, Fujitsu worked closely with BIS users with particular requirements, such as the use of assistive technologies like speech readers/voice recognition, to ensure that all employees were able to use the system.

The project testing against nearly 160 requirements involved the development of almost 400 test scripts, with more than two man years of effort going into the functional and performance testing and the resolution of over 700 technical issues.

SUMMARY OF KEY FACTS

Organisation
Department for Innovation & Skills (BIS)

Services delivered
Application design and configuration, infrastructure refresh, data migration, systems integration and testing, information management and knowledge transfer services for a new Electronic Document and Records Management (EDRM) system

Key metrics
- Current user base of 3,800 BIS HQ Staff
- Current record base of 5.8 million records

Benefits
- Improved user experience – the intuitive interface means that 92% of employees now use the system
- Increased productivity – enables improved efficiency with faster information access and less duplicated work
- Ensured compliance – improved responsiveness to Freedom of Information (FOI) requests and compliance with prevailing document management regulations
- Enhanced collaboration – enables quicker and more informed decision making and policy/document production
- Improved performance – response times have improved service level agreement (SLA) has never been missed
- Achieved ‘green’ savings – helped to consolidate HQ functions into two offices, with flexible working, remote access and removal of document filing cabinets
- Reduced costs – less paper used and stored, less reworking of information and fewer staff to manage documents
- Enhanced operational agility – data is managed more flexibly to improve business continuity and disaster recovery

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CASE STUDY
DEPARTMENT FOR BUSINESS
INNOVATION & SKILLS

Karen Pile comments, “In the MATRIX 2 upgrade Fujitsu took the lessons learnt from the original implementation, about user engagement and performance, and applied them completely to the new release. In particular, there was a huge focus on performance testing, which was exemplary. We created a ‘model office’ so that we could see exactly what we were getting and practiced and tested everything in advance, which meant that we were never on the back foot and could hit the ground running.”

Fujitsu also undertook a complete refresh of BIS’ infrastructure and network across all environments in two main headquarters sites and ten regional sites across the UK. “The infrastructure refresh required a huge amount of work by Fujitsu,” adds Karen Pile, “especially in providing a remote access capability for the regions.”

All of the 5 million documents held on the MATRIX system needed to be migrated over to the new application, which amounted to around 1 Terabyte of data. Using the old system it would have taken 9 months to migrate the information, but Fujitsu identified a way to run multiple activities in parallel and completed the entire document migration process in just 9 days! To add further complication, the way that data was held in the departmental ‘Record Plan’ was also changed, which involved restructuring the metadata. However, Fujitsu still improved on the timescales for the metadata migration, which were reduced by 75% from 20 days to just 5 days.

While Fujitsu and BIS agreed to implement the new system using a ‘big bang’ approach, nothing was left to chance and the ‘go live’ stage was practiced three times prior to the actual event to ensure that it would not be disruptive to users. Karen Pile explains, “The system contained all of the department’s public records, so it had to work. However, the whole thing was very, very slick to the point where the ‘go live’ became a complete non-event.”

To ensure a successful service transition Fujitsu also worked closely with BIS to provide relevant training and the transfer of knowledge and skills to BIS’ support teams, so that the department could get maximum immediate and ongoing benefit from the new service. “The transition went very well. Thanks to the quality of service and knowledge provided by Fujitsu we have continued without missing a pulse,” says Karen Pile.

Karen Pile comments, “Fujitsu has provided BIS with a powerful tool to manage our information assets and knowledge. MATRIX 2 is embedded in how we work and has given us total visibility and access to our information in a modern, mobile and flexible way.”

Approach
In order to minimise any project risk, before starting on the application development and implementation, Fujitsu undertook a Performance Proof of Concept (PPOC) phase.

The PPOC highlighted that the existing application architecture would not be able to deliver the required performance. So, Fujitsu initiated an intensive six week project to improve the performance, working with Tower to fine tune MATRIX 2 to work optimally with an Oracle 10 database. This involved extensive redevelopment of multiple integration points and application components.

“Government is a big paper machine, but with MATRIX 2 you instantly know where everything is and it mirrors the way you work by integrating closely with the tools you use. As well as handling unstructured data in all sorts of formats, such as e-mails and presentations, and pointing to data held on other specialist systems, like our company contacts database, it can also manage our paper documents by referencing files using bar codes. That is why it is so impressive – it’s our information management grid. It is probably the best EDRM system in central government.”

Benefits
The MATRIX 2 solution developed and implemented by Fujitsu is enabling BIS to:

• Improve the user experience – the intuitive interface and close integration with the way people work means that 92% of employees now use the system, compared to 50% in the early days of MATRIX 1.

• Increase productivity – the system includes enhanced functionality, enabling improved efficiency with faster information access and less the time taken to produce policy/guidance by reusing intellectual capital.

• Ensure compliance – information can be found more quickly and consistently improving responsiveness to requests under Freedom of Information (FOI) legislation. A clearly auditable document access and decision-making process has also improved system security and is enabling compliance with prevailing document management regulations.

• Enhance collaboration – enables quicker and more informed decision making and policy/document production with a greater cross-team working capability even if staff are not physically together.

• Improve performance – general response times have been improved and live performance monitoring ensures that the service level agreement (SLA) has never been missed.

• Achieve ‘green’ savings – helped to consolidate HQ functions into two offices, with flexible working based on a shared seating ratio of 8 PCs to 10 staff, remote access from home and the removal of a significant number of document filing cabinets.

• Reduce costs – realised tangible savings with less paper usage and storage, less rework due to poor information and a resourcing model requiring significantly fewer staff to manage paper documents.

• Enhance operational agility – data assets can be managed more flexibly to ensure business continuity if the organisation changes and enhance disaster recovery.

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Expertise
With over 40 years experience on supporting the needs of customers, Fujitsu has a proven track record in providing complex systems integration and application development and management services that reduce costs, improve productivity and customer services and deliver a compelling return on investment.

“The secret of success in this project was a lot of matching of skills,” explains Karen Pile. “We identified the skills that were needed and ensured that we had a good quality team on both sides. It’s something that I have seen stumped on in other areas. Fujitsu gave us good people and its commitment to the project’s success was excellent, so we ended up working very much as one team.”