



Heart of England NHS Foundation Trust

Before:

Reliance on offline Excel based reporting systems

Many Microsoft SQL Server databases and Access based reporting systems

Limited possibilities within existing Oracle finance system

Knowledge required to extract useful data tended to be high, with SQL skills and data dictionary knowledge

Much clinical information only available on a monthly basis

After:

Single Business Intelligence portal

Automated data extraction

All information available on demand

Enhanced meaningful reliable information

Heart of England NHS Foundation Trust is one of the largest hospital Trust in England, with a provision of over 1,400 beds and 10,500 staff serving 1.5 million people across North and East Birmingham Region. The Trust has become well known for its specialist treatment of heart and kidney disease, cancer, HIV and AIDS as well as respiratory conditions like Cystic Fibrosis. The Trust is one of the highest performing in the UK, voted Acute Trust of the Year in the 2006 Health Service Journal Awards and in the Nursing Times' Top 10 Places to Work in 2005. In order to support the Foundation Trust requirements Heart of England needed a new management information system in order to drive efficiency.

One particular area identified at an early stage was to the need to demonstrate a high degree of financial management capability. The Trust was an experienced user of its existing Oracle financial system. The forward-thinking Finance Directorate recognised that a data warehousing solution, drawing data from the Oracle system initially, would provide more flexible reporting for staff across all functions and the foundation of high value Business Intelligence strategy.

The Trust also required a way to bring together information from different sites; at the time the Trust consisted of three hospitals with the potential of a fourth to be brought in, and so there was a clear need to ensure data from disparate sources could be combined for accurate reporting and decision-making.

The initial objective was to achieve significant efficiency gains by reproducing the Finance Committee Papers, Monthly Budget Reports, KPIs and Dashboards electronically via the new system, whilst at the same time increasing the accuracy, timeliness and value of the information they delivered.

With extremely tight timescales and the desire to use a simple, intuitive interface to the complex data structures, Heart of England selected Data Academy® provided by reseller Insource supported by their consultancy services, to deliver a high-value, robust and scalable data warehousing solution. Within just 12 weeks the Heart of England team created, tested and released to the business its first Key Performance Indicators, which allowed users to view current statistics regarding Length of Stay, Readmissions and Waiting Times and decide where performance improvements could be made.





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Technical Director
Insource IT Consultancy

Timeline

Project commenced January 2007, with end-user training delivered just four weeks later

Automated Trust Board Monthly Reports delivered just eight weeks after project commencement

Rolled out to 500 users Trust-wide within three months including:

- Financials
- Contract & Monitoring
- Admissions & Discharges
- Waiting Lists
- Deaths
- Accident & Emergency

Users increased to 1,000 in January 2008 for Consultants Data Quality reports

Web-based applications and clientless technology saved deployment time

Through the ease of use of Data Academy, the team has since expanded the scope of the Business Intelligence system dramatically, with little need for external support.

In less than 12 months the Trust's internal development team of just two staff has evolved the initial implementation into a significant data warehouse in excess of 136Gb in size, with 25 data loaders and 26 data spaces. The entire implementation operates in a 'lights out' environment, feeding accurate and time critical information to the myriad number of reports and indicators now used to drive performance across the campus.



In under six months of first starting Heart of England began to see a number of benefits from their data warehouse project including;

- Heightened financial control and greater transparency
- Operational Managers have relevant information on desktops, which influences how they run their respective departments to improve the delivery of clinical care
- Improved reporting of A&E performance
- Improved Admissions & Discharge ratios
- Perceived improvements to bottom line following faster, more accurate detailed information to managers desktops

"When we looked at what HEFT wanted to achieve and the somewhat aggressive timescales they were setting themselves, we knew there was only one product combination that could assist them in meeting their delivery, and that was Data Academy and SQL Server. The productivity gains and maintainability delivered by Data Academy has been the cornerstone for HEFT in achieving their objectives", explained Peter Stevens, Technical Director of Data Academy reseller, Insource IT Consultancy.

The Future

For the future the Trust is looking to see how it can bring more innovative uses of its technology resources. Already a pioneer in the ability to track financial information to original submissions the Trust is also looking to incorporate more diverse data sources to help clinical and commercial staff be able to make better, more informed decisions for the benefit of patient care.



Business Intelligence
Data Management Solutions
ISV/Software Solutions
SOA and Business Process

About The Data Academy® Solution

Data Academy is a data warehouse builder which leverages the functionality of Microsoft SQL Server 2005. Data Academy builds robust, reliable and expandable data warehouses and data marts in a fraction of the time it takes when using conventional native SQL. Data Academy is a powerful application with an intuitive .NET web-based interface and a full administrative console. Data warehouses built using Data Academy are built to standards encouraged through the Data Academy development interface, a transparent tool that is readily maintainable by trained Data Academy data warehouse development technicians. This reduces the dependency on individuals involved in the original development.