



“THANKS TO SYBASE TECHNOLOGY AND SUPPORT, WE ARE CONFIDENT THAT SPNET WILL CONTINUE TO DELIVER SUBSTANTIAL BENEFITS FOR THE TRUST AS WELL AS FOR OUR PATIENTS.”

— CHRIS SLATER, HEAD OF SUPPLIES, LEEDS TEACHING HOSPITALS NHS TRUST

THE  
ENTERPRISE  
UNWIPED.

## LEEDS TEACHING HOSPITAL—ONLINE PROCUREMENT

### Business Challenge

- Improve the efficiency and cost-effectiveness of supply procurement
- Provide management with real-time visibility into the procurement system

### Solution

SPNet developed with Sybase Enterprise Portal, Sybase EAServer, Apeon® for PowerBuilder® and Sybase e-Biz Impact™, and powered by Sybase Adaptive Server® Enterprise

### Results

- Overall cost savings of £2.6 million to date
- 92% reduction in total cost per order
- Reduction in time spent on supply issues from 20% to less than 5%
- Contract compliance and management improved by 30%
- Time between requisitions and purchase orders has been cut from 7 to 10 days to 3-4 hours
- Improved financial control to comply with audit requirements and management information, including key performance indicators (KPI) reporting
- Improved requisitioning capability and with integration to multiple systems

### Industry

Healthcare

The Leeds Teaching Hospitals NHS Trust is the largest trust in the UK. It provides acute services for the population of Leeds and is a regional center for the treatment of illnesses such as cancer and heart disease. The Trust employs more than 15,000 staff across eight sites and treats 125,000 inpatients, 65,000 day cases and 700,000 outpatients each year. Its annual budget is more than £580 million.

“As you can imagine, the provision of supplies is crucial to this huge organization,” explains Leeds information manager, Graham Medwell. “If we do not manage our procurement process efficiently

and accurately, we could place patients’ health at risk. To cut paperwork, increase efficiency, enforce contract compliance to realize the greatest discounts and to provide management with accurate and timely information on procurement, we embarked on an ‘e-commerce in action’ project.”

Prior to this project, Leeds’ procurement environment was a tangle of inflexible, disconnected systems (some electronic, some manual), a vast number of suppliers, and centrally and locally negotiated contracts. In addition, Leeds had no catalog management capability.

As a consequence, the procurement system was rife with problems. For instance:

- there was no recording of local stock levels
- the procurement process relied on paper requisitions that required manual approvals
- 70% of purchasing bypassed the supplies department
- 30% of purchasing was out of contract
- there was a two-week cycle time between ordering and receipt of goods
- 25% of paper invoices were inaccurate
- the cost of generating each order was £30

Thanks to Sybase technology, these and many other issues have been successfully addressed. The Trust is now realizing a number of dramatic benefits including cost savings of £2.8 million to date.

#### KEY REQUIREMENTS

After analyzing its existing procurement processes, Leeds determined it needed an eProcurement system based on a common item catalog that would work with its existing purchasing and finance systems—interfacing with them but not affecting their normal operational performance.

Among the key requirements for this system were:

- a simple, customizable, user friendly interface
- the ability to provide the necessary control of purchasing activities via tendering, contract compliance and requisitioning
- the ability to provide complete management information to all levels of the organization
- minimal system maintenance, freeing the Supplies Department staff to focus on getting the best contract prices for products and managing purchase authorizations
- the capability to consolidate and share management information from multiple NHS Trusts for use by strategic health authorities (SHAs) and purchasing confederations
- the capability to share and consolidate information from the different purchasing systems in use, without replacing them

Simply put, this meant the new system would have to provide a clean catalog, automatic checks on contract compliance, automatic electronic order status, electronic shipping notices and invoices, the ability to work with multiple Trusts and multiple purchasing systems, and mobile access for requisitioning.

Leeds' initial steps in its procurement reengineering project included the development of a catalog and a system to clean and maintain the catalogue data. The Supplies Department also developed a database, powered by Sybase Adaptive Server Enterprise, to provide management with access to procurement information. It then developed modules, using Sybase PowerBuilder, to enable online requisitioning, ensure contract compliance and manage its catalogue of a half a million items. The system also provides management information at all levels of the hierarchy from Trusts and Departments to SHAs and Confederations.

#### LEEDS AND SYBASE COLLABORATE TO WEB-ENABLE EPROCUREMENT SYSTEM

Building on this initial work, and in collaboration with Sybase Professional Services, Leeds expanded development to extend its eProcurement system to the wider Leeds Teaching Hospitals user community via the Web. This initiative led to the creation of SPNet.

“SPNet,” explains Medwell, “is a total eProcurement, management information and purchasing control system that provides automatic contract compliance, extensive management information capabilities, a user-friendly Web-based requisitioning module, a Trust and Confederation view of expenditures at all levels, integration of current systems, mobile functionality, an interface to tendering packages for contract generation and eTrading via XML, email and autofax options.

“We looked at a number of potential partners to commercially develop our in-house system,” Medwell adds. “The objectives of the partnership were to have greater reliability and move to a scalable e-portal solution that would not only link our legacy systems within the Trust, but also link multiple hospitals within a purchasing confederation or hub. Our decision to partner with Sybase was based on the company's 20-year track record of technology innovation, its commitment to open architecture solutions that provide the data management and mobility necessary for today's unwired society, and Sybase's extensive healthcare IT experience.”

**SPNET ARCHITECTURE BUILT WITH SYBASE TECHNOLOGY**

The SPNet eProcurement architecture delivers a fully integrated and personalized user interface. The solution gives multi-organization support from SHAs and Confederations to Trusts, sites and departments.

Figure 1 provides a functional schematic of SPNet.

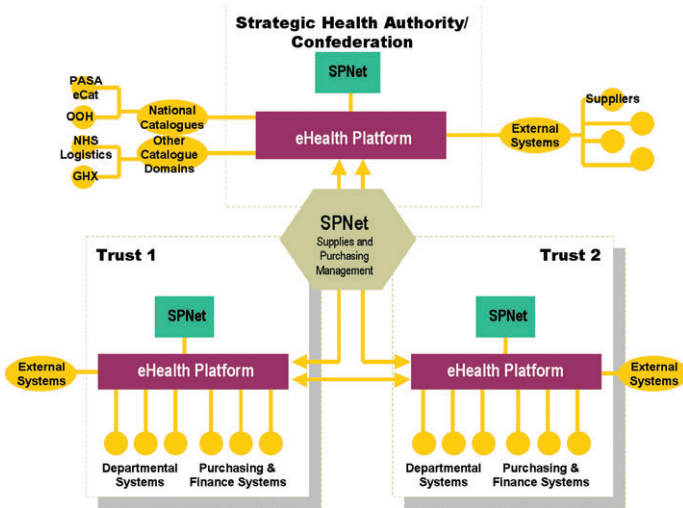


Figure 1: The SPNet eProcurement architecture.

The specific Sybase technologies used to create SPNet include: Sybase Adaptive Server Enterprise, Sybase Enterprise Portal, Apeon for PowerBuilder, Sybase EAServer, and e-Biz Impact.

From a technical perspective, SPNet is Web-based with XML support and integration to and from legacy systems via Sybase’s integration architecture as shown in figure 2.

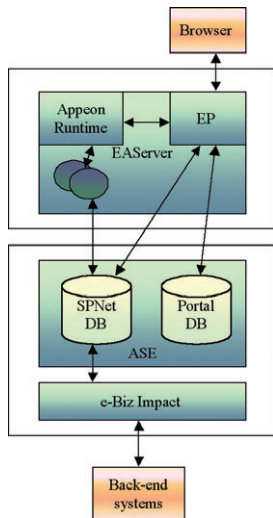


Figure 2: SPNet IT infrastructure

“Using SPNet, we can now roll out electronic requisitioning across the Trust using browser-based technology,” says Medwell. “In addition to rolling out SPNet reporting to budget holders, we are currently looking at how to make best use of the extra facilities the new system offers to link procurement to clinical legacy systems.”

These include linking electronic patient records to products used. A number of areas, such as Radiology, have already begun piloting the reporting of patient data and products used in procedures via SPNet as they happen.

“By linking patient data with the products used in a procedure,” says Radiology Superintendent, Kevin Peters, “SPNet will provide us with vital management information. We can also ensure that the item catalogue details are synchronized between SPNet and our radiology legacy system, eliminating the need for manual intervention in the requisitioning process.”

**SPNET DELIVERS DRAMATIC RESULTS**

SPNet has already delivered dramatic benefits across the NHS Trust supply chain. It has slashed the total cost per order by 92%, dramatically improved staff productivity, increased contract compliance and management and provided better control over spending across the Trust.

“SPNet is part of the future for us,” says Chris Slater, Leeds’ Head of Supplies. “We already use SPNet with other e-commerce initiatives and we’ll soon be using it to link patient legacy systems throughout the Trust as part of the organization’s comprehensive e-commerce strategy. It’s important that we implement solutions that work for us now and into the future, as our requirements and objectives evolve and mature. Thanks to Sybase technology and support, we are confident that SPNet will continue to deliver substantial benefits for the Trust as well as for our patients.”



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