

**NUCLEUS
RESEARCH**

RESEARCH NOTE B28

ROI ANALYSIS YOU CAN TRUST™

ROI Profile: Microsoft SharePoint — Children's Hospital

THE BOTTOM LINE

In a content-rich environment that is rapidly changing, such as a research hospital, giving authors control over content has clear advantages. Children's Hospital recognizes benefits from reduced need for skilled gatekeepers to maintain content as well as increased information sharing and collaboration.

ROI: 409%

Payback: 3 months

THE COMPANY

In 1869, a 20-bed facility was established in Boston for the medical treatment of children. Over the past 132 years, Children's Hospital Boston has grown to become the largest pediatric medical center in the United States, the primary pediatric teaching hospital of Harvard Medical School, and the world's largest pediatric research facility. Through the years, scientists at Children's have set the pace in pediatric research, identifying treatments and therapies for many debilitating childhood diseases, including polio, measles, leukemia, and sickle cell disease.

Children's Hospital Boston is a 325-bed comprehensive center for pediatric health care. The hospital's clinical staff includes approximately 800 active medical and dental staff, 700 residents and fellows, and 3,300 full-time employees as well as 850 volunteers. Children's records approximately 18,000 inpatient admissions each year, and more than 150 outpatient programs care for more than 300,000 patients annually.

THE CHALLENGE

Although Children's Hospital had deployed a document-publishing environment years ago, the hospital was lacking in facilities for on-line documentation and collaboration. Children's document management system was outdated — a fact that was made clear by the system's lack of support for Office 2000 — and the hospital wanted to find a system that would both replace its functionality and give its users more in terms of document management and collaboration support.

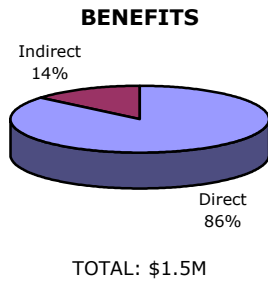
The hospital needed a system that could support a large volume of different types of documents, including clinical practice guidelines, regulatory compliance information, human resources documents, and nursing guides. It also needed to have easy-to-use management tools so that content owners could maintain their documents themselves. The hospital hoped to open some of its documents to external research associates and organizations.

THE STRATEGY

Children's looked at a number of document-management products, including Documentum and Expedio as well as Microsoft SharePoint. The company chose SharePoint because it incorporates well with Microsoft Office 2000 and end users will be able to continue to develop documents in Microsoft Word and Excel without additional training. The

collaborative functionality of SharePoint would enable users to collaborate as well.

Children’s Hospital chose Microsoft Consulting to support deployment and knowledge transfer in the initial weeks of the project. All of the documents published in Children’s old document management system were maintained in Word format, so they can be rapidly ported into the SharePoint environment. As the hospital already has a large NT cluster that is underutilized, part of that environment supports the SharePoint application.

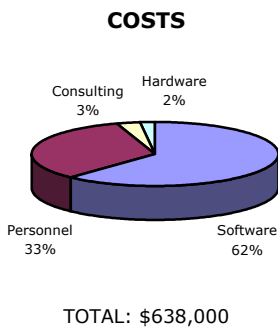


KEY BENEFIT AREAS

Moving from a document publishing environment to a SharePoint environment will enable the hospital to better support its collaboration and information sharing goals — and devolve maintenance of content from the IT department to individual authors and departments.

Children’s Hospital will experience a number of key benefits from SharePoint, including the following:

- Improved technology management. The hospital is able to limit the number of IT personnel it would need to hire in the future to support growing document management and content maintenance needs while increasing the amount of information available via the Web using current personnel.
- Reduced paper and printing costs. Availability of information on line will enable the hospital to reduce the number of documents printed annually, at a significant direct savings.
- Improved information sharing and collaboration. Over time, adoption of SharePoint will enable users to improve productivity and increase document-based collaboration without the need for additional training.



KEY COST AREAS

Initial costs were moderate and included costs for personnel and software. Software costs made up the greatest percentage of the total, in part because of the relatively low costs for hardware and consulting.

LESSONS LEARNED

In a content-rich environment, such as a hospital focused on research and education, adoption of the technology by individuals will be key to gaining benefits from SharePoint. It is likely that both productivity benefits and direct printing savings not calculated here will drive greater long-term benefits for the organization as different departments become aware of the availability of SharePoint.

Personnel currently tasked with editing and updating content can move on to other higher-level tasks such as mentoring users on document development and information organization — while the hospital can dramatically increase the amount of information it makes available to users via a simple-to-use Web interface.

CALCULATING THE ROI

Nucleus included software, hardware, consulting, and personnel costs in its analysis of the three-year costs of SharePoint for Children's Hospital. Key returns quantified in this analysis included a reduction in the need to hire additional IT staff to maintain content and a conservative estimate of savings in document printing costs. Nucleus included figures for savings in document printing to be recognized by only the technology department — one small area of the organization. It is likely that these savings, as well as gains from productivity, will increase over time as SharePoint is adopted across the organization.

Children's Hospital

Summary

| | |
|-----------------------------------|-----------------------------|
| Project: | Microsoft SharePoint |
| Annual Return On Investment (ROI) | 409% |
| Payback Period (Years) | 0.25 |
| Net Present Value (NPV) | 332,358 |
| Average Yearly Cost of Ownership | 212,667 |

| Annual Benefits | Initial | Year 1 | Year 2 | Year 3 |
|----------------------------------|----------|----------------|----------------|----------------|
| Direct | 0 | 434,500 | 442,900 | 451,468 |
| Indirect | 0 | 70,000 | 70,000 | 70,000 |
| Total Benefits Per Period | 0 | 504,500 | 512,900 | 521,468 |

| Depreciation Schedule | Initial | Year 1 | Year 2 | Year 3 |
|-------------------------|----------|----------|----------|----------|
| Software | 0 | 0 | 0 | 0 |
| Hardware | 0 | 0 | 0 | 0 |
| Total Per Period | 0 | 0 | 0 | 0 |

| Expensed Costs | Initial | Year 1 | Year 2 | Year 3 |
|-------------------------|---------------|----------------|----------------|----------------|
| Software | 60,000 | 112,000 | 112,000 | 112,000 |
| Hardware | 0 | 4,000 | 4,000 | 4,000 |
| Consulting | 20,000 | 0 | 0 | 0 |
| Personnel | 0 | 70,000 | 70,000 | 70,000 |
| Training | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 |
| Total Per Period | 80,000 | 186,000 | 186,000 | 186,000 |

| Financial Analysis | Results | Year 1 | Year 2 | Year 3 |
|--|-------------|---------|---------|----------------|
| Net cash flow before taxes | | 318,500 | 326,900 | 335,468 |
| Net cash flow after taxes | | 159,250 | 163,450 | 167,734 |
| Annual ROI - direct and indirect benefits | | | | 409% |
| Annual ROI - direct benefits only | | | | 321% |
| Net Present Value (NPV) | | | | 332,358 |
| Payback (Years) | 0.25 | | | |
| Average Cost of Ownership (TCO/Years) | | 266,000 | 226,000 | 212,667 |
| 3-Year Cumulative ROI | 931% | | | |
| 3-Year IRR | 397% | | | |

Basic Financial Assumptions

| | |
|----------------------|-----|
| All Government Taxes | 50% |
| Discount Rate | 15% |

All calculations are based on Nucleus Research's independent analysis of the expected costs and benefits associated with the application profiled in the accompanying case.