

**NUCLEUS
RESEARCH**

RESEARCH NOTE C18

ROI ANALYSIS YOU CAN TRUST™

ROI Profile: Microsoft Content Management Server CB Richard Ellis

THE BOTTOM LINE

CB Richard Ellis achieved a high ROI from its Microsoft Content Management Server deployment by reducing administrative overhead and decreasing the employee time needed to input and track Web site changes.

ROI: 384%

Payback: 3 months

THE COMPANY

CB Richard Ellis provides real estate services, including property sales, leasing, and management; corporate services, facilities, and project management; mortgage banking; investment management and capital markets; appraisal and valuation; and research and consulting. Headquartered in Los Angeles, California, CBRE has nearly 10,000 employees in more than 250 offices in 47 countries. The company reported net revenue of \$1.17 billion in 2001.

THE CHALLENGE

Having an up-to-date Web site is critical to accurately promoting CB Richard Ellis, its vertical service lines, and its international network of real estate professionals. In addition to providing corporate information, research data, and client tools, the site promotes the services of its 250 offices with dedicated Web pages. Personal profiles for each real estate professional and manager, individual sites for teams, and case studies are available for each location.

The company had decided on a distributed content model for its corporate Web site, which was first launched in 1999 using another content publishing solution. The software had to be installed on each Web publisher's computer and proved to be incompatible with the company's Microsoft Office environment, causing crashes when users tried to load images or attachments. Users were unable to use the workflow component provided, making approval tracking time and labor intensive. Urgent requests for content changes were often made through phone calls and e-mails to Web managers. Because new pages could not be previewed before publication, all content had to be reviewed and edited manually after publication, and often pages were approved in error.

CB Richard Ellis needed a stable platform that could accelerate the review, approval, and publishing process while maintaining control over the site's design and formatting. It also needed to enhance the site's internal search feature, be able to monitor Web site visitor traffic, and ensure that the site was indexed by Web crawlers and search engines so that it would be returned prominently in response to searches.

THE STRATEGY

The company considered separate vendors to supply document management and publishing technologies, but it chose the Microsoft

Content Management Server for both the external Web site and its intranet. Critical to CB Richard Ellis's decision was Microsoft's ability to offer rapid and efficient transfer of 8,000 pages of existing content to the new software templates — the company could not afford for the site to be down for months for content conversion.

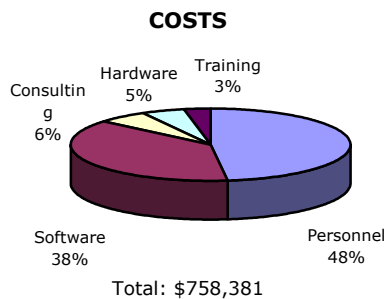
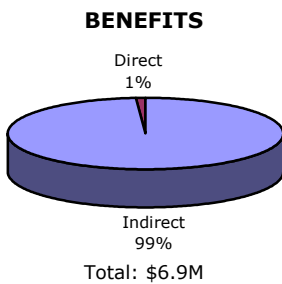
CB Richard Ellis used Microsoft consultants to transfer the existing content, to provide customized templates and a new workflow process, and to support training.

Two members of CB Richard Ellis's IT staff attended training in Redmond, and a Microsoft consultant was used on site to train additional trainers — the corporate Web staff and two divisional Web managers. These Web managers quickly rolled out training to 125 offices in the United States during a 2-week period and followed up with regional support calls and an intranet page for Web publishers that supplied manuals, FAQs, and style guides.

KEY BENEFIT AREAS

Deploying Microsoft Content Management Server to support its corporate Web site has enabled CB Richard Ellis to improve the quality and quantity of information on the site while reducing the time needed for content review and publishing. Key benefits it achieved include the following:

- Reduced administrative overhead. Customized and automated workflow and Web-based data entry reduced the need for a dedicated administrator to manage international content by allowing publishers in international offices to create and maintain their own content (installing the previous unstable software on computers in overseas offices was not an option).
- Increased IT staff productivity. Moving to a more stable content management system and a browser-based environment reduced system crashes and downtime and enabled IT staff to focus on other value-added projects.
- Increased Web manager productivity. Reduced time spent reviewing, approving, and declining Web content allowed for greater time to enhance site features.
- Increased Web publisher productivity. The performance, speed, and simplicity of the new software motivated Web publishers to produce content. Because they were able to preview pages, they focused on quality and reduced the amount of time spent submitting and revising content for the Web editors.
- Reduced recruiting efforts for publishers. The system's ease of use and limited training demands made it easier to recruit Web publishers, who perform the role as part of their existing duties without additional compensation.
- Increased visibility and access. Compatibility with Web crawlers and more effective internal search tools supported by the MCMS-based site better enable those accessing the site to find information they need.



KEY COST AREAS

Personnel made up the greatest portion of the company's investment in Microsoft Content Management Server, amounting to 48% of the 3-year cost of the project. Other cost areas were software, hardware, consulting, and training.

LESSONS LEARNED

Using a stable environment has helped CB Richard Ellis to recruit more publishers, motivate internal users, and reduce frustration for IT and Web services staff — while improving site functionality and usability. A better user experience will increase return visitors to the site.

CALCULATING THE ROI

Three main benefit areas were quantified in calculating the ROI from CB Richard Ellis's investment in the Microsoft Content Management Server: reduced administrative overhead, increased IT staff productivity, and increased general employee productivity. Reduced administrative overhead was a direct benefit; one person responsible for managing international content was eliminated. IT and general employee productivity savings were calculated based on the fully loaded employee cost. Nucleus calculated IT and general employee time savings associated with the new content management solution compared with the former one and multiplied that time savings by a correction coefficient to account for the inefficient transfer of time.

CB Richard Ellis

Summary

Project:	Microsoft Content Management Server
Annual Return On Investment (ROI)	384%
Payback Period (Years)	0.26
Net Present Value (NPV)	2,241,656
Average Yearly Cost of Ownership	252,794

Annual Benefits	Initial	Year 1	Year 2	Year 3
Direct	0	27,000	27,000	27,000
Indirect	0	2,279,729	2,279,729	2,279,729
Total Benefits Per Period	0	2,306,729	2,306,729	2,306,729

Depreciation Schedule	Initial	Year 1	Year 2	Year 3
Software	200,000	40,000	40,000	40,000
Hardware	24,000	4,800	4,800	4,800
Total Per Period	224,000	44,800	44,800	44,800

Expensed Costs	Initial	Year 1	Year 2	Year 3
Software	0	30,000	30,000	30,000
Hardware	0	4,800	4,800	4,800
Consulting	45,000	0	0	0
Personnel	64,000	100,000	100,000	100,000
Training	20,981	0	0	0
Other	0	0	0	0
Total Per Period	129,981	134,800	134,800	134,800

Financial Analysis	Results	Year 1	Year 2	Year 3
Net cash flow before taxes		2,171,929	2,171,929	2,171,929
Net cash flow after taxes		1,108,365	1,108,365	1,108,365
Annual ROI - direct and indirect benefits				384%
Annual ROI - direct benefits only				-11%
Net Present Value (NPV)				2,241,656
Payback (Years)	0.26			
Average Cost of Ownership (TCO/Years)		488,781	311,790	252,794
3-Year Cumulative ROI	876%			
3-Year IRR	380%			

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.