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ROI Evaluation Report Microsoft Content Management Server

THE BOTTOM LINE

Organizations can use the Microsoft Content Management Server to improve the quality and timeliness of Web site content while reducing both content creation and publication and Web site development and management costs.

KEY BENEFIT AREAS

- Information organization and access
- Publishing process management
- Technology management

KEY RETURN AREAS

- Increased productivity
- Reduced administrative overhead
- Reduced IT costs
- Reduced brand management costs
- Reduced printing and communication costs
- Reduced training costs

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Microsoft Content Management Server enables organizations to create, deliver, and manage Web site content across Internet, intranet, and extranet sites. Based on technology Microsoft acquired from Ncompass in 2001, Microsoft Content Management Server provides a platform for Web site development, content creation, and content delivery to a variety of Web devices.

Key functionality of Microsoft Content Management Server includes the following:

- Content creation and updating. Templates and browser-based content tools enable nontechnical users to rapidly create and update content.
- Content review and approval. Integrated workflow, revision tracking and history, and publication scheduling support internal content approval processes.
- Site development and management. Content and navigation templates, integration with other Microsoft products, and an open API enable developers to rapidly develop sites and evolve them over time. Dynamic server caching and unified user management support high performance and low ongoing maintenance.
- Content delivery. Dynamic page assembly, support for wireless device delivery, and personalization and targeting support content delivery to different audiences and devices.

Strategies for maximizing returns from a Web site have evolved from simply publishing existing marketing and informational materials to taking advantage of the dynamic nature of the Internet. Web-savvy companies use their Web site to complement existing information and transaction channels with personalization and targeting, interactive selling, and e-commerce functionality.

Many organizations have made a significant investment in e-commerce software, but still rely on an individual or team of Web masters to manage information on the corporate Web site — by translating Word documents or publishing them from a document management system. Others have used Web teams in each department, or allowed individuals to publish Web sites based on their area of expertise — and found that the quality and timeliness of material on each site depends on the few people who know the system and their continued ability to support it.

As the volume of Web site content and the need to change that content grows, so does the cost of managing a Web site. In an ideal world, content about the business is the responsibility of the business users who create it; the Web site and infrastructure that deliver that content is the responsibility of IT. The labor-intensive nature of other options — Front Page development, extraction from a document management system, or custom Web page development — creates financial and departmental barriers to keeping Web content current. Content management lets content owners update and change information as business needs and objectives change.

There are many content management solutions available with various price points and development and support requirements, from document-management based solutions such as Documentum to complex content

management solutions such as Vignette and Broadvision. Choosing the right solution depends on the specific business needs of the organization and on the sources of content. If the sources of content are business users, a solution that is easy to learn and easy to use is critical to achieving a positive return on investment. If the sources of content are other applications, the solution must support rapid integration and flexible evolution as business needs change. In both cases, rapid development and deployment and low ongoing management and support costs are important factors that influence ROI.

This Nucleus Research report explores the benefits and costs associated with a Microsoft Content Management Server deployment. The associated Nucleus Research financial modeling tool can be used to calculate the ROI, TCO, payback, and risk of a Microsoft Content Management Server deployment in a specific user environment.

KEY BENEFIT AREAS

Nucleus Research has identified a number of key areas where organizations are likely to achieve benefits from a Microsoft Content Management Server deployment, including improved information organization and access, improved publishing process management, and improved technology management.

Improved Information Organization and Access

Intranets and extranets, portals, and Internet Web sites are becoming key channels for providing information to employees, customers, and partners. A coherent content management strategy — and the appropriate technology to support it — allows organizations to make the most of their Web presence. Nucleus Research has found the average company can increase employee productivity by 5 to 7 percent by using an effective portal for searching and accessing information — provided that information is well organized and up to date.

On the customer and partner side, an effective Web site makes the company easier to do business with and increases satisfaction by enabling users to rapidly find the information they need about corporate products and services. Effective content management enables organizations to rapidly update content based on the changing business environment and quickly change information on the Web site to react to changing customer or partner requirements. Access to up-to-date information reduces user frustration and can support an enhanced relationship without the need for additional investment in marketing, brand building, and more expensive communication efforts.

Microsoft Content Management Server supports improved information organization and access by allowing companies to develop a standard set of objects and templates that can be easily reused by different business users. A repository for managing logos, boilerplate information, other corporate-standard material, and standard page design templates reduces the time and cost of searching for or redeveloping corporate information and the likelihood that erroneous or irrelevant content will be published. Browser-based authoring templates allow business users to rapidly author and edit Web site content as business needs or demands for information change.

Other key features of Microsoft Content Management Server that support information organization and access include the following:

- Dynamic page assembly. Because Web page components (content, templates, images) are stored separately on the server and assembled when called by the user, the same content can be used and re-purposed based on specific user needs or business goals.
- Template switching. Template switching enables either the content author or template designers to specify what information will be delivered and in what format when a user accesses the site. For example, if the user is accessing the site with a wireless device, the information is automatically delivered in a format appropriate for that device, or users with a specific profile can receive information presented in a specific way that best meets their information requirements.

Key returns from improved information organization and access include the following:

- Reduced printing and communication costs
- Reduced marketing costs
- Reduced brand management costs
- Increased productivity
- Reduced administrative overhead
- Reduced employee training costs

Improved Publishing Process Management

Allowing different groups within an organization to be responsible for creating Web site content is a key benefit of a content management system such as Microsoft Content Management Server. Most organizations still want to ensure that content is reviewed and approved before it is published on a corporate Web site. Nucleus Research has found that manual review and approval processes can often slow new content delivery by up to 70 percent, and have a significant impact on productivity as employees spend time determining where their content is in the approval process.

Microsoft Content Management Server includes a customizable workflow component that enables an organization to delegate authoring responsibilities while supporting review and approval of content as needed. Administrators are responsible for designating the roles and rights of individuals and groups. Individuals can be named as authors (who create content), editors (who review and modify content), or moderators (who have final approval of content and can set publication and expiry date). Individuals can also be assigned to one of many groups; for example, finance, marketing, or public relations. Group assignment determines what templates and Web sites individuals can access — and what content they can contribute. Authentication of individuals and groups is handled by Windows NT groups or 2000 Active Directory services.

When an author creates new content, the content is automatically directed to the appropriate person or group for approval. All users can view status of content items in their group within Microsoft Content Management Server, and Microsoft Content Management Server can be customized to provide e-mail notification of waiting or approved items.

Microsoft Content Management Server workflow can also be customized to support multiple levels of review, author-defined review, or other processes, or integrated with third-party workflow tools using the standard API. Microsoft Content Management Server allows users to rapidly create content and automatically direct it to the appropriate people or groups for approval. Because the progress of content through the approval process can be viewed by all parties involved, content creators and editors can focus on the content instead of on process management.

Key returns from improved publishing process management include the following:

- Increased productivity
- Reduced administrative overhead

Improved Technology Management

A content management system such as Microsoft Content Management Server separates the content creation tasks from the Web site management tasks, enabling IT staff to focus on Web site architecture and performance and other activities instead of Web publishing and content management. The magnitude of potential returns from improved technology management will depend on how manual or IT-intensive the current Web site publishing process is. Organizations should consider three different areas in determining potential returns from improved technology management through Microsoft Content Management Server: site development and deployment, site management, and content management.

Site Development and Deployment

Nucleus has found organizations can reduce the cost and time to develop Web sites by using Microsoft Content Management Server instead of custom development.

Standard Microsoft tools and wizards for installing software, designing site architectures, and setting user access enable developers to rapidly deploy Microsoft Content Management Server without learning a proprietary language or doing any coding. Customizable templates are provided for common presentation and navigation formats, and developers can use any HTML editor to build or customize templates.

Site Management

Nucleus has found organizations moving from a decentralized Web site support environment to a centralized Microsoft Content Management Server-managed solution can reduce site management and, often, hardware maintenance costs while increasing site performance. All content created in Microsoft Content Management Server (presentation templates, objects and images, and text content) is stored in a SQL database. A server-based object cache allows the appropriate objects to be delivered when accessed (called) by a browser. Dynamic page generation and Microsoft Content Management Server clustering capabilities enable administrators to ensure a high level of site performance.

Content Management

Organizations moving from a manual Web content publishing process to Microsoft Content Management Server can eliminate IT staff time needed to design and publish content, reduce routine Web site maintenance such as link checking, and reduce both IT and business user time to manage the Web publishing process. The separation of content from templates enables users to change specific content elements as needed over time and reuse existing content across departments and Web pages without IT staff intervention. Organizations will maximize returns from Microsoft Content Management Server's reusable template approach by planning and creating a standard set of design templates that can be reused frequently by a large number of users.

The Microsoft Content Management Server approach enables developers to rapidly design a site and then turn over content evolution responsibility to business users. Key returns from improved technology management include the following:

- Reduced site development and launch cost
- Reduced content conversion cost
- Reduced site and link management cost
- Reduced help desk cost
- Increased IT staff productivity

KEY COST AREAS

Nucleus Research has identified a number of key cost areas organizations should consider to determine the ROI and TCO associated with a Microsoft Content Management Server deployment: software, hardware, consulting, personnel, training, and other.

Software

Organizations considering an investment in Microsoft Content Management Server should calculate the cost of Microsoft Content Management Server software licenses and maintenance as well as the cost of other supporting software needed to run Microsoft Content Management Server. Microsoft Content Management Server production server licenses are priced on a per-CPU basis, with a list price of \$42,999. Organizations will also need to purchase Microsoft Content Management Server developer licenses (at a list price of \$2,799 per developer) if they are not subscribers to MSDN Universal (which provides users with free Microsoft Content Management Server developer licenses).

Microsoft Content Management Server requires Windows 2000 server with IIS 5 and SQL Server 7 or 2000, so organizations without existing licenses for those products will need to make an additional software investment. Other additional software investment required may include firewall software or HTML editor software if it is not already owned.

Hardware

Server hardware needed to support Microsoft Content Management Server will depend on the volume of data and the organization's Web site performance demands. Most organizations will need more than one production server to support scalability and failover, and Nucleus has found many organizations take advantage of Microsoft clustering technology to ensure a high level of reliability. Organizations should

consider the need for at least one development server and one server to support content creation — as well as servers to support database devices and content QA management if necessary.

Consulting

Nucleus Research has found some investment in consulting for initial development of design templates is likely to accelerate deployment and return on investment. Organizations seeking to redesign their Web presence as well as implement content management may find an upfront investment in design support is critical to determining the appropriate templates and resources to be developed in Microsoft Content Management Server. Consulting charges associated with integration, migration of existing Web content, or future development should also be considered.

Personnel

Organizations considering an investment in Microsoft Content Management Server should consider both the business personnel needed for content development and approval and the IT personnel needed to customize, deploy, and support the application.

Most organizations will find the need for a development environment to develop templates and Web site architecture as well as an environment to review content before it is deployed to the production server. The Microsoft Content Management Server Site Deployment Manager enables administrators to transfer objects from one server to another in the form of XML packages.

For organizations considering migrating their current Web site to Microsoft Content Management Server, estimation of the IT staff investment required to move current content to Microsoft Content Management Server should be included in calculating the total costs of the deployment. Migration can be performed either by creating a script to transfer content directly between the two applications or by cutting and pasting the existing content into new templates. The best option will depend on the volume and structure of the existing content.

The IT staff investment required to integrate Microsoft Content Management Server with other applications should also be considered in the cost of the project. Microsoft Content Management Server includes out-of-the-box integration with Microsoft SharePoint Portal and Commerce Server, to enable developers to leverage existing resources and reduce integration time. Integration with other applications can be completed using the COM API.

Organizations should also consider the ongoing cost of IT staff to manage and support the application. Nucleus Research estimates one administrator per 500 users is usually sufficient to support the application. For management of content outside the Microsoft Content Management Server environment, Microsoft Content Management Server Site Stager supports transfer of content to non-Microsoft Content Management Server Web servers.

Training

The browser-based interface and template design of Microsoft Content Management Server authoring tools make the application fairly intuitive for business users; however, some training may be necessary to ensure adoption and effective use. Organizations considering an investment in Microsoft Content Management Server should include trainer and training location costs as well as the fully loaded cost of employees' time spent in training to determine the training costs associated with a Microsoft Content Management Server deployment.

Other

Organizations should include any other costs associated with a planned Microsoft Content Management Server deployment, including travel and user incentives, in the other category of the cost section of the financial modeling tool.

DEPLOYMENT STRATEGIES

Microsoft Content Management Server can be deployed as a standalone content management solution to enable business users to rapidly publish and update Web content; however, integration of Microsoft Content Management Server with other technologies and applications can also deliver returns.

Microsoft Content Management Server Integration with Microsoft SharePoint Portal Server

Microsoft Content Management Server features integration with Microsoft SharePoint portal server. Microsoft Content Management Server can be integrated with Microsoft SharePoint portal server to support content publishing to Web portals. Microsoft Content Management Server content publishing templates and workflow processes enable rapid development and approval of information to be published; when published to a portal such as Microsoft SharePoint portal server, the information can be rapidly searched and accessed.

This deployment strategy is most likely to produce positive returns when it can be used to link the publishing processes for different corporate Web sites and portals, resulting in reduced duplication of content and increased efficiency of Web publishing.

Microsoft Content Management Server Integration with Microsoft Commerce Server

Microsoft Content Management Server features out-of-the-box integration with Microsoft Commerce Server. Microsoft Content Management Server can be integrated with Microsoft Commerce Server to support integrated dynamic content in e-commerce Web site applications such as catalogs. Microsoft Commerce Server provides the application framework and analytical tools to measure the effectiveness of specific Microsoft Content Management Server content and target its delivery for specific user groups.

This deployment strategy is most likely to produce positive returns when it can reduce manual development of content for commerce sites such as catalogs, and when targeting content for specific users can result in greater revenues. Out-of-the-box integration of the two

applications should result in comparatively low development and deployment costs.

Microsoft Content Management Server Integration with Other Applications

Microsoft Content Management Server can also be integrated with other applications where there is a need for dynamic content delivery. The COM API supports integration development between applications. This deployment strategy is most likely to produce positive returns when it can reduce manual development of content for use in another application such as an e-commerce application or portal.

CONCLUSION

Microsoft Content Management Server enables organizations to rapidly build and deploy Web sites that support dynamic content delivery. Standard templates and a Web-based content authoring interface enable business users to develop and update content that relates to their business expertise, and integrated workflow ensures a consistent content approval process.

Organizations currently managing Web site content updates manually are likely to gain the greatest returns from a deployment of Microsoft Content Management Server. However, those finding that their current document management-based Web publishing system or content management system limits the ability of business users to rapidly update content — or those that find the IT management burdens of their content management system costly — may also achieve a positive ROI from moving to Microsoft Content Management Server. Organizations considering an investment in Microsoft Content Management Server should use the associated Nucleus Research financial modeling tool to identify and quantify the potential ROI from Microsoft Content Management Server in their environment.