Web Content Management with Microsoft Office SharePoint Server 2007
Executive Summary

Over the last few decades, Web technologies have dramatically changed the way that companies conduct business with their customers, partners, and employees. What began as a static store for public information has become a dynamic, evolving environment for managing customer relationships, collaborating with partners, and communicating with employees. Because of the explosive growth of online channels, companies are struggling to manage Web sites and applications, especially in terms of managing content targeted for different audiences in a global environment. As the reliance on Web content has increased, so has the demand for a solution that empowers both business and IT users with the tools they need to efficiently and effectively manage multiple, complex Web sites.

As a result of this explosive transition in the marketplace, the technologies used to create and manage Web sites are evolving to meet the dynamic needs of the business. Web Content Management (WCM) is the discipline of managing and controlling large, dynamic collections of Web material, such as HTML documents and their associated images. WCM technologies facilitate page control, auditing, editing, and lifecycle management to enable business users to manage Web content without relying on IT resources to perform administration tasks. Although WCM technologies are not new to the marketplace, the last several years have seen an increased focus on providing a unified solution that can provide end-to-end capabilities for managing the Web content publication lifecycle in support of globalization and localization of sites.

Microsoft has responded to these changes by delivering a WCM solution that combines the rich features of a traditional content management system with a unified, enterprise WCM platform—all delivered with the usability of Microsoft® Office SharePoint® Server 2007.
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Microsoft Office SharePoint Server 2007 WCM Overview

Microsoft® Office SharePoint® Server 2007 is the foundation of an optimized business productivity infrastructure—the first comprehensive approach to solving the problems that people encounter in the unstructured world of work. Rather than treating information management and access, collaboration, and people-driven processes as isolated challenges, Office SharePoint Server 2007 encompasses the whole continuum of unstructured work as a single set of related issues that demand a single, strategic approach. This offers the following significant benefits:

- **Simplicity** for end users, who can leverage their familiarity with Office-based applications and the browser environment for all their information-work activities, regardless of their role or task.
- **Value and governance** for IT, which only needs to support a single set of technologies to enable comprehensive capabilities across the enterprise.
- **Speed and flexibility** for the business, which can customize and extend the platform quickly and easily at a variety of levels from personalization to enterprise application development.
- The **security and scalability** of a platform built for the enterprise.

The Microsoft® Web Content Management solution included in Office SharePoint Server 2007 helps businesses communicate, collaborate, and interact with employees, partners, and customers around the globe by providing a unified enterprise platform for enabling individual agility. By helping customers to project a consistent corporate brand and to put publishing power into the hands of business users, organizations can improve the effectiveness of the online channel while dramatically decreasing the cost associated with managing multiple Web sites.

Responding to Our Customer’s Evolving Needs by Integrating Content Management Server 2002 into Office SharePoint Server 2007

Over the last few years, there has been a trend in large organizations to simplify their technology footprint of enterprise applications while...
maintaining an equal or improved level of features and functions provided to users. Microsoft has responded to this need by integrating the capabilities of Content Management Server (CMS) 2002 directly into the Office SharePoint Server 2007 framework.

See the Appendix of this document for a detailed list of CMS 2002 to Office SharePoint Server 2007 resources.

**WHY WEB CONTENT MANAGEMENT?**

Although there has been some fluctuation in market attention to the Web, the last few years have seen a major resurgence of Web-based solutions. Organizations have a renewed focus on online channels to drive revenue opportunity; develop customer intimacy; and improve customer, partner, and employee satisfaction. With this renewed attention comes the realization that existing WCM solutions may be unable to accommodate the dynamic needs of the enterprise.

As organizations respond to these demands, Web sites are becoming increasingly large and complex. The sheer volume and continuing rapid growth of Web content create tremendous organizational and efficiency challenges for Web site managers and IT resources. A typical business environment has multiple intranet, extranet, and internet sites, and in many cases, they must deliver the same content targeted towards specific user needs. To make things more complex, this content must portray a consistent brand image in its online presentation, but it must also be dynamic enough to be delivered in multiple languages and for mobile devices.

**Web Content Management Challenges**

Because of this increasing complexity, many organizations are experiencing challenges with managing their existing Web sites and applications, for example:

- **Disparate solutions for managing Web content.** Many organizations have multiple, disconnected systems for managing their Web content and then publishing that content to intranet, extranet, and Internet sites. This results in significant inefficiencies and costly management of WCM solutions.
- **More demands on the Web publishing process.** Today, more demands than ever are placed on the Web publishing process. Web managers must often work with highly diverse content sources, pulling text and images from databases and file systems around the company. At the same time, there is pressure from the business to publish faster and eliminate webmaster bottlenecks while continuing to enforce corporate standards.
- **Difficulty enforcing brand standards across sites and content.** It can be difficult to enforcing brand standards across sites and content types.
- **Poor user adoption of WCM solutions.** WCM solutions have traditionally been difficult to use. Content authors are required to learn a new toolset, resulting in...
long learning curves and increased frustration. Because of complex user interfaces and a lack of integration with common tools, organizations are experiencing poor user adoption of WCM solutions.

- **Lack of integration with Web-related platforms.** Disconnected tools and platforms for managing internal and external Web sites result in increased costs and duplicated content assets. Lack of integration with other Web-related platforms results in missed opportunities for enabling business solutions.

- **Outdated, inaccurate Web content.** Companies are not managing their WCM with the same rigor as their other content. This results in a major content quality problem where customers, partners, and employees are accessing inaccurate, stale content on corporate Web sites.
A Unified WCM Platform for Enabling Individual Agility

Successful WCM solutions provide a unified platform for streamlining IT management while enabling individual agility for business users. Because WCM is an integrated part of the Office SharePoint Server 2007 platform, Web-based solutions can leverage a single storage architecture, common ECM services, and be accessed using familiar interfaces. This unified platform provides numerous efficiencies and enhanced functionality for developing and managing intranet, extranet, and Internet sites within the Office SharePoint Server 2007 framework.

Components of the unified architecture include:

- **User Interface**: All ECM functionality, including WCM, is made accessible through familiar tools such as Web browsers, Office-based applications, and third-party applications.

- **Common Services**: The unified Office SharePoint Server 2007 platform makes a rich set of functionality available consistently across various components.

- **Unified Content Storage Architecture**: The unified storage architecture provides IT resources with a consistent way of deploying and managing content repositories regardless of the solution or type of content.

By leveraging a unified architecture, common services, and consistent user interfaces, IT organizations can dramatically increase both the efficiency and effectiveness of Web solutions. Specifically, the value of the unified Office SharePoint Server 2007 WCM platform is that it helps organizations achieve the following:

- Establish an enterprise platform for Web Content Management.
- Increase IT manageability and efficiency of Web solutions.
- Simplify the content publication lifecycle.
- Integrate and extend WCM solutions.

Each of these areas is critical to the success of Web Content Management implementations. By balancing enterprise-level stability with business agility,
organizations are developing meaningful Web solutions that meet the evolving demands of their business.

**ESTABLISH AN ENTERPRISE PLATFORM FOR WCM**

There are basic functions that every WCM platform needs in order to be considered an enterprise ready system. The platform must be scalable in order to meet business volumes and be able to grow as the business does, it must make it easier for employees to participate in compliance activities, and it must enable efficient content globalization.

**Establish a Scalable Solution**

Scalability is a major concern for large organizations. When it comes to WCM solutions, companies want to know that their technology platform can safely and securely accommodate their current enterprise needs as well as future growth scenarios. Office SharePoint Server 2007 provides the scalability required for successful WCM solutions that not only meet today’s needs but can accommodate tomorrow’s evolving priorities. With Web content volumes growing at an exponential rate, the ability of Office SharePoint Server 2007 to handle millions of pages and users is critical to meeting your organization’s evolving needs.

**Multi-tiered publishing for enterprise-level Web Content Management.** A multi-tiered publishing model is the cornerstone to establishing a scalable WCM solution. The Office SharePoint Server 2007 architecture accommodates the authoring, staging, and publication of Web content through content deployment, which allows content authors to leverage distinct authoring and staging environments for optimal control and quality assurance.

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Komatsu Australia
Reduces Risk and Improves Compliance with Reliable Internet and Intranet

As the Internet becomes the preferred method of communicating and doing business, consumers increasingly judge companies on the quality and reliability of their Web sites. Mining, forestry, and construction equipment distributor Komatsu Australia was struggling with an underperforming Internet and intranet management system. The application was increasingly unstable and difficult to support, which made it hard to change Web site design, stifled staff collaboration, and did not support online marketing campaigns.

Microsoft partner Unique World worked with Komatsu to build a promotional Web site for a new Komatsu product on Microsoft® Office SharePoint® Server 2007. Independent analyst BearingPoint found that by migrating its entire online environment to the Microsoft product, Komatsu could reduce its risk profile, improve compliance, increase the availability of its Web site and improve its look and feel. This would enable the company to improve customer service, increase market penetration and ensure the availability of online collaboration tools. More Information...
The purpose of content deployment is to manage environments where distinct authoring and production are required. Content deployment is modeled around the idea that a single source site collection can deploy content to one or more destination site collections. The source and destination can be in the same server farm, or in different server farms. A content deployment path defines the relationship between a source and a destination site collection, and a site collection can have many outgoing paths. Each path has one or more deployment jobs that define the schedule and scope of individual deployment operations, giving administrators a high degree of flexibility over how deployment is accomplished. By default, deployment jobs operate incrementally, copying only content that has changed since the last successful deployment.

**Leverages advanced caching capabilities.** Advanced caching is essential to managing Web sites with large volumes of highly volatile content. Office SharePoint Server 2007 uses output caching technology native to ASP.NET 2.0 to manage when and how page content is served. When output caching is used, it can improve throughput and user response time significantly. Office SharePoint Server 2007 supports caching of page items, such as navigation data and data accessed through cross-list queries. Caching page items reduces the need to retrieve field data from the database each time a page is rendered. The caching system also caches complete field data for a page, excluding data for any Web Part controls on the page. Because of this, Office SharePoint Server 2007 has the ability to manage millions of pages and users across many types of content.
Enforce Corporate Compliance

Organizations struggle to strike the right balance of allowing IT to enforce compliance with corporate policies and standards while providing business users with the flexibility and agility that they need. The Office SharePoint Server 2007 WCM solution provides key technology enablers to help enforce these critical policies—branding, security, navigation, content management—while empowering users to manage the content publication lifecycle. This balance ensures that your WCM solution can scale across the enterprise while maintaining controlled consistency and compliance with corporate standards.

Master pages help enforce consistent site branding. Consistent branding on internal and external Web sites is essential to any business. Traditionally, the responsibilities of enforcing brand standards have fallen to IT resources. With Office SharePoint Server 2007, IT organizations are able to empower business users to manage content but remain confident that these standards are being enforced in a uniform way.

By separating the content from the page layouts, Office SharePoint Server 2007 enables centralized control of look and feel while enabling users to focus only on creating the best possible content. At the time of publication, Office SharePoint Server 2007 automatically combines the content with the layout to generate the final page to be displayed. Because users will need multiple templates with different features (for example, a product page that always requires an associated image versus a press release page that never requires an image), Office SharePoint Server 2007 supports multiple page layouts to allow for different page types and content to be published into a fixed layout, with appropriate navigation infrastructure and styles.

Web content policies can be easily enforced. While enforcing branding standards is critical to Web Content Management, there are many other policies that contribute to the overall quality of Web solutions. In order to maintain fresh, relevant information on Web sites, this content should be subject to the same level of rigor and control as other types of enterprise content. Office SharePoint Server 2007 helps organizations ensure the quality of the content they publish by enabling easy compliance with enterprise standards. Organizations can define and use information management policies on Microsoft Office SharePoint Server 2007 sites to enforce compliance with corporate business processes, quality control, or legal or governmental regulations for the management of information.

Auditing and reporting tools simplify policy compliance. Understanding how your organization is executing against policies and standards is critical to enforcing corporate compliance. Auditing enables administrators to keep a reliable log of what is happening with important Web content on a site collection. Administrators are able to retrieve the entire history of actions taken by a particular user and can also retrieve the entire history...
of actions taken during a particular date range. These reports can be viewed in Microsoft Excel and are kept in a specified document library for easy access.

**Expand Global Reach with Localized Content**

As businesses become increasingly global, the problem of managing Web content becomes increasingly complex. Companies need to create and publish content in multiple languages, in multiple locations, and optimize it for viewing on a mobile device, all while still maintaining a consistent brand. Office SharePoint Server 2007 contains out-of-the-box translation management workflows and automatically optimizes pages for use on a mobile device.

**Site variations for managing multilingual sites in distinct locations.** In the global marketplace, most organizations need to be able to deliver their Web content in multiple languages for use in distinct locations. Office SharePoint Server 2007 supports a feature known as site variations for companies that need to duplicate a site's content for translation into multiple languages or for targeting different types of rendering devices. For example, imagine you have configured variation support for German, French, and Spanish. Office SharePoint Server 2007 maintains a parallel structure across these three different sites with respect to pages and subsites. When a content author adds a new page to the master variation site maintained in Spanish, Office SharePoint Server 2007 automatically adds the same page into the structure of the other sites as well. Office SharePoint Server 2007 can also be configured to create a Windows SharePoint Services task marking the required translation as a to-do item for a language translator. While Office SharePoint Server 2007 will not actually convert your content from one language to another, it does keep multiple sites in sync with respect to their content structure.

**Workflows support multilingual site synchronization.** Workflow is a powerful tool to ensure that multilingual sites remain in sync in order to maintain consistency of published content. Site owners define a series of site variations (multilingual sites) and mark one as the primary variation. When changes are made to the primary site they are automatically or manually propagated to the other multilingual sites. To enable integration with third-party translations services, Office SharePoint Server 2007 supports the import and export of content. When translation is completed, updates can be sent for final approval through workflow.

**Sites are automatically optimized for viewing on a mobile device.** Office SharePoint Server 2007 also automatically optimizes Web pages to be viewed on a mobile device using out-of-the-box functionality. Every page on a Web site managed by Office SharePoint Server 2007 automatically has a version created optimized for Web viewing. Changes made to the page are automatically rendered in both formats.
**INCREASE IT MANAGEABILITY AND EFFICIENCY**

Most organizations struggle to provide their business users with meaningful Web solutions in an efficient way. In some cases, IT resources must maintain separate point solutions for managing Web content. In other cases, their WCM platforms require extensive development and customization to enable the rich features the business needs. The WCM solution included within Office SharePoint Server 2007 is designed to help IT organizations efficiently deploy and maintain Web solutions while delegating administrative content management activities to the business.

**Reduce Reliance on IT for Managing Web Content**

Maintaining Web sites has traditionally been a significant drain on IT resources. Most companies have too many resources focused on administrative activities involved in the content publication process. By empowering users to create and manage their own Web content, Office SharePoint Server 2007 enables organizations to reduce reliance on IT and increase the speed at which information can be shared with customers, partners, and employees.

**Empower business users to manage the creation, approval, and publication of Web content.** Office SharePoint Server 2007 is built on the familiarity of the Microsoft® Office platform for easy management of Web content. The use of these familiar tools allows much of the Web publishing to be done by the individual user, which reduces the reliance on specialized IT skills. Web content can be easily authored, edited, approved, and published within the Microsoft Office interface or Web browser. Office SharePoint Server 2007 also leverages the Windows Workflow Foundation component to automate business processes, such as approval of Web content, so that users can concentrate on their core functional roles. Quick Deploy capabilities empower users to publish content themselves.

**Tools available to establish appropriate balance of governance and empowerment.** Every company has its own unique needs and priorities for its Web sites and applications, so each organization needs to identify the right balance of control and empowerment for their business. Companies in highly regulated industries, such as government and health care, need to have extensive control over all content that gets published to their sites. Other companies may value agility of their business communities above strict corporate compliance. Establishing the right level of governance for Web solutions should be based on organizational priorities and business needs rather than by limitations of WCM tools. Office SharePoint Server 2007 provides a flexible platform and enabling tools—master pages, content types, workflows—that help companies determine the balance of control and empowerment for their organization.
Efficient Administration

The administration of business applications and technology platforms has become a significant drain on IT resources over the last decade. Past technology trends have led to a proliferation of point solutions that require IT administrators to learn and support multiple technologies. Office SharePoint Server 2007 is designed to lessen the burden on these resources by providing a unified platform with consistent tools for managing administrative tasks.

**Consistent UI for all ECM and Office SharePoint Server 2007 administrative tasks.** Office SharePoint Server 2007 provides a familiar interface for conducting administrative tasks. The same UI is used to administer all of SharePoint capabilities, including collaboration, all enterprise content management capabilities and search.

**Delegate management tasks without granting central administrator access.** Not every administrative task needs to be performed by central IT. With Office SharePoint Server 2007, many tasks can be completed by departmental IT staff without granting them permission to conduct central administration tasks. For example, a business unit IT person can create a search content source for their department and manage department information, such as Web Content Management workflows and forms.

**Manage a single set of shared services for multiple farms.** Server administrators can package custom modifications to Office SharePoint Server 2007, such as applications or features, and consistently deploy them as a solution to a farm or single site. The administrator UI displays where solutions have been deployed. A solution can be rolled out to a farm, rather than having to be installed on every server individually.

**Establish a unified content store for content types.** A unified content store allows all enterprise content to be organized in a centralized location and follow the same policy enforcement procedures. This ensures that all business data is backed up on a regular schedule and that it is all indexed for search.

Efficient Deployment

Developing and deploying Web sites can be time consuming, which puts strain on IT resources and creates long delays for meeting business demands. Office SharePoint Server 2007 provides a number of features that can streamline the deployment of both sites and content, providing significant benefits for both users and IT resources.

**Out-of-the-box functionality streamlines deployment.** Quick Deploy allows authors to immediately move content from staging to production without requiring emergency help from IT. This capability is particularly useful for content such as breaking news which needs to be published immediately.
Solution deployment provides consistent application and feature deployment tool. Solution deployment is a multipart framework that lets administrators deploy custom solutions in a straightforward, safe, and consistent manner. Specifically, deployment refers to the process of distributing, unpacking, and installing solution (.wsp) files to front-end Web servers.

The following are the main components of solution deployment:

- **The solution store**: A centralized collection of all SharePoint solutions for the server farm. The first step in deploying a solution is to add the solution to the store.
- **Deployment**: Distribution, unpacking, and installation of the solution to the front-end Web servers. After adding a solution—whether it is a new solution or an upgrade for an existing solution—to the server farm solution store, it must be deployed uniformly to the front-end Web servers.
- **Synchronization**: Process of taking a new front-end Web server, or a damaged or inconsistently performing front-end Web server, and synchronizing its state to that of the other front-end Web servers.

**Simplify the Content Publication Lifecycle**

In order to ensure that Web sites are dynamic, it is essential that the right business users stay engaged in the content publication lifecycle. By providing simplified tools and interfaces, Office SharePoint Server 2007 helps ensure that WCM tools are adopted by business users and content stays fresh. Office SharePoint Server 2007 provides streamlined authoring, management, and publication of Web content, all within the familiar Microsoft Office interface. This means users can author content using the in-browser WYSIWYG editor or Microsoft Word, and can streamline efficiency by using out-of-the-box workflow and other standard content management capabilities.

**Simplify the Authoring of Web Content**

The first step in the content publication cycle is the authoring of Web content. Whether business users work within Office applications or leverage WYSIWYG templates, they can author Web content without needing to learn any specialized tools.

**Multiple options for creating Web pages, including individual and collaborative authoring.** Office SharePoint Server 2007 offers multiple options for authoring Web content, both in an individual and team environment. Having multiple authoring options allows the user to choose what works best for their personal style and purpose.

**Office integration for authoring content and Web pages.** Users can also choose to author content from within the familiar Microsoft Word environment. Office SharePoint Server 2007 contains an out-of-the-box converter for Word documents and provides a framework for plugging in other types of converters.
**WYSIWYG editor.** The Microsoft Web Content Management solution has a rich, Web-based WYSIWYG (what-you-see-is-what-you-get) editor with support for tables, and tools for checking spelling and choosing images. Authors can link to high-value, reusable HTML fragments that serve as the building blocks that allow Web-design novices to easily assemble pages. Users can author content within the context of the Web page, which allows them to view the content layout as they edit it.

**Simplify the Management of Web Content**

Once the content is authored, it is important that business users have the ability to maintain that content to ensure that users are able to access the best information in the simplest way. Office SharePoint Server 2007 also simplifies the process of managing Web content by providing pre-configured workflows and navigation controls, as well as by enabling the rich content management capabilities of the Office SharePoint Server 2007 ECM solution.

**Pre-configured workflows for creating and approving Web content.** Out-of-the-box workflow supports multi-step parallel and serial approval, and notifies participants about tasks through e-mail alerts. Workflow allows content creators to enable the desired level of scrutiny on content and to preview it before it goes live to the site. Additionally, users can specify a window during which content is active using the Page Scheduling System.

**Configurable global and section navigational controls.** Navigation controls are provided out-of-the-box, and their behavior can be customized to meet specific needs. For instance, users can modify the navigation configuration user interface to configure whether or not a site inherits its global navigation or section navigation from its parent Web site, what sorting mechanism will be used for the sub-items of the Web site, and whether or not to include pages in the set of objects shown in the navigation controls.

In addition to displaying the site’s logical Web hierarchy as navigation, it is often useful to be able to display authored links, which are one-off links that a Webmaster or author added manually. To support this, the system provides a means to create one or more authored links that will show up as additional navigation links. Completely customizable cascading style sheets (CSS)-based styling of all aspects of the site provides further control over the look and feel.

**Standard content management capabilities.** Because WCM is provided on a unified Office SharePoint Server 2007 foundation, all of the standard content management features and functionality are available for simplifying the management of Web content. For example, library functions are available to users to allow them to check in and check out Web pages to ensure that only one person is working on a particular Web page at a time. Versioning is also enabled to facilitate collaborative creation of quality content.
Simplify Publication of Web Pages

Office SharePoint Server 2007 provides a consistent mechanism for publishing content to various types of sites, whether they are divisional or enterprise portals, extranets, or Internet sites. Tight integration with portal functionality in Office SharePoint Server 2007 ensures a straightforward publishing experience. Authors, site managers, and IT administrators have a common set of tools for creating and managing content for these different types of sites and do not have to deal with disparate systems.

Multistage publishing model enables automatic deployment of content. In addition to being a critical component of a scalable WCM solution, the multistage publishing model provides users with increased simplicity and usability. This model provides authors with a simple way to publish content to multiple Web sites. Site managers can set up automatic publishing of pages to the Web site from the staging system at regular intervals.

Quick Deploy capability. Authors can immediately move content from staging to production without requiring emergency help from IT. This capability is particularly useful for content such as breaking news which needs to be published immediately.

Site Manager for performing batch actions. A new Site Manager console provides a File Explorer–like view of the site content. Site managers can use this console to perform batch actions (such as, submit a page for approval in a workflow) on a large number of items, as well as run reports across multiple sites in a particular site collection (for example, to see what content is currently checked out). The console is also the place to administer site settings, and to move or copy content between sites.

INTEGRATE AND EXTEND WCM SOLUTIONS

As the trend towards building dynamic Web solutions continues, many organizations will need to extend and integrate Office SharePoint Server 2007 WCM to create targeted business application. In addition to providing rich WCM features, the Microsoft solution can be extended by customizing WCM components, leveraging additional Office SharePoint Server 2007 capabilities, or integrating with third-party technologies.

Leverage Additional Microsoft Office SharePoint Server 2007 Capabilities

Deploying a WCM solution that is a part of the Office SharePoint Server 2007 platform allows access to the many other robust capabilities that Office SharePoint Server 2007 provides. In many cases, organizations want to extend the content publication cycle to include the collaborative development of content as well as ensuring the retention of
certain Web pages. In other cases, advanced analytics on usage trends may be important for continually improving Web-based marketing campaigns.

**Office SharePoint Server 2007 collaboration enables shared content authoring capabilities.** Teams often collaborate on content that will be displayed on a Web page. Because the Microsoft WCM solution is a part of the broader Office SharePoint Server 2007 platform, teams can take advantage of the productivity enhancing collaboration capabilities that SharePoint Products and Technologies provide. These capabilities allow for easier sharing of information through wikis and blogs, keep track of team tasks and due dates, and make it easy to work with team members outside the organization.

**Integrate with workflow capabilities.** Workflow can be applied to any WCM task, including creation and modification of new pages, translation processes, and deletion of content. The following workflows are provided out-of-the-box with Office SharePoint Server 2007:

- **Approval:** Routes a document for approval. Approvers can approve or reject the document, reassign the approval task, or reject changes to the document.
- **Collect feedback:** Routes a document for review. Reviewers can provide feedback, which is compiled and sent to the document owner when the workflow is completed.
- **Collect signatures:** Gathers signatures needed to complete a Microsoft Office document (started from within an Office client application).
- **Disposition approval:** Manages document expiration and retention by allowing participants to decide whether to retain or delete expired documents.
- **Three-state:** Manages business processes that require organizations to track a high volume of issues or items.
- **Translation management:** Manages the manual document translation process by creating copies of the document to be translated and assigning translation tasks to translators.

An organization may choose to design and develop workflows that are unique to the business processes in that company. Developers can create workflows that are started by people who use a site, or they can create workflows that start automatically based on an event, such as when a list item is created or changed. There are two ways in which custom workflows can be created for Office SharePoint Server 2007:

- **Microsoft® Office® SharePoint® Designer 2007** is for Web designers to create no-code workflows for use in a specific list or library. These workflows are created from a list of available workflow activities, and the Web designer who creates the workflow can deploy the workflows directly to the list or library where they will be used.
- **Microsoft® Visual Studio® 2005 Extensions** for Windows Workflow Foundation is for professional software developers. These workflows can contain custom code and workflow activities. After a professional developer creates custom workflows, a server administrator can deploy them across multiple sites.

Music Company Builds Interactive Web Site to Support Fashionable Image

Compilations and singles record label Hed Kandi forms part of Ministry of Sound (MoS) music group. Its stylish image is reflected in the clientele who attend Hed Kandi club nights and events and the people who visit its Web site.

Hed Kandi’s close relationship with its members is key. Developing a more interactive Web site was a priority for James Bacchus, Chief Technology Officer at MoS. “Hed Kandi members are quite vocal,” he says. “We wanted to give them a site that provided more of a sense of community and belonging.”

Bacchus had recently deployed the 2007 Microsoft® Office system to support track listings management, so he knew that Microsoft Office SharePoint® Server 2007 supports blogs and forums for members and offers built-in Web content management functionality. “It made sense to use this technology to broaden the reach of the MoS Web platform,” he says.

The IT team benefits from simplified site administration through the new Web content management features. Bacchus says, “Administrators can reuse information stored in central document repositories.” With versioning control, content editors can roll back to a previous version of the page if they make a mistake. “It’s easier to use, so they can concentrate on developing eye-catching content and let the technology handle consistency of layout and brand image,” he adds.

Bacchus is confident the new site will mirror Hed Kandi’s community-based image. He also plans to take advantage of its potential for future development. “We will make other MoS products more accessible to people by integrating the site with our new downloads service,” he says. More Information...
**Provide robust search capabilities for Web content.** Office SharePoint Server 2007 is the Microsoft enterprise search solution for organizations that want to increase productivity and reduce information overload by providing their employees, partners, and customers the ability to find relevant content in a wide range of repositories and formats. For WCM, this means that organizations are able to locate subject experts and find relevant documents and information to streamline the content creation process.

**Extend Core Features for Optimal Agility**

Agile enterprises often require customized solutions in order to meet evolving business needs and changing marketplaces. Although Office SharePoint Server 2007 WCM provides a rich set of features out-of-the-box, these organizations may wish to extend the core functionality in order to create solutions that are more targeted towards their business environment. Office SharePoint Server 2007 provides an extensible framework that enables power users and developers to customize WCM solutions.

**Customize Web site look and feel without writing code using SharePoint Designer.** Microsoft Office SharePoint Designer 2007 is for creating and customizing Microsoft SharePoint Web sites and building workflow-enabled applications based on SharePoint technologies. Office SharePoint Designer 2007 provides professional tools for building interactive solutions on the SharePoint platform without writing code, for designing custom SharePoint sites, and for maintaining site performance with reports and managed permissions.

**Use InfoPath to extend workflow.** InfoPath forms can be used to collect key business data throughout the steps in a workflow using the document information panel built with InfoPath. For example, the owner of a Web page can be identified when the page is created. Additionally, key business data, such as a customer’s address, can be automatically populated from the Business Data Catalog as a step in the workflow.

**Develop Custom Composite Applications**

A composite application is a collection of software assets that have been assembled to provide a business capability. These assets are artefacts that can be deployed independently, enable composition, and leverage specific platform capabilities. In order to enable composite applications in your organization, your Web Content Management platform must have the ability to manage the four tiers necessary to create these applications, as shown in the following graphic. Office SharePoint Server 2007 provides this structure out-of-the-box, and enables integration with other line-of-business applications.
Use Visual Studio to create targeted business applications. With Office SharePoint Server 2007, organizations have the platform structure necessary to create composite applications. Using Visual Studio, developers can bring together key business data from many sources, such as a Business Data Catalog or a Microsoft® SQL Server™ database, and present the information in one picture. For example, a map can be created showing sales data by region. To create this, the customer names and addresses would be pulled from Business Data Catalog, and sales data would be pulled a sales database, such as SQL Server.

Interoperability with line-of-business, business intelligence, and custom applications, as well as third-party eCommerce tools and product catalogs. Office SharePoint Server 2007 provides a list column type called Business Data, which is available to SharePoint lists in Office SharePoint Server 2007. The business data column type enables users to add data from business applications that are registered in the Business Data Catalog to lists. You can integrate information from business applications such as SAP, Siebel, and SQL Server into the collaborative environment of Office SharePoint Server 2007 by adding the business data column type to a list. This way, you have a list of items that use a combination of columns from a SharePoint site and from an external business application.

Conclusion

The Office SharePoint Server 2007 Web Content Management solution is uniquely positioned to help your organization succeed with its WCM goals. By providing the robust features of the unified Office SharePoint Server 2007 platform, your company can provide a unified WCM platform for enabling individual agility, which delivers value to the business.
Appendix A: MCMS 2002 to Office SharePoint Server 2007 Resources

- MSDN Webcast: The Evolution of Web Content Management in the 2007 Version of Microsoft Office
- Whitepaper: Migrating a Content Management Server 2002 Website to SharePoint Server 2007
- MSDN: SharePoint Server 2007 for MCMS 2002 Developers
- MSDN: Upgrading an MCMS 2002 Application to SharePoint Server 2007 (Part 1 of 2)
- MSDN: Upgrading an MCMS 2002 Application to SharePoint Server 2007 (Part 2 of 2)
- MSDN: Mapping MCMS 2002 APIs to SharePoint Server 2007
- MSDN: Assessing and Analyzing Your MCMS 2002 Application for Migration
- MSDN: CMS Assessment Tool