



MANAGING CONTENT
APPLICATION INTEGRATION
PROCESS IMPROVEMENT

DEVELOPING AN ENTERPRISE VISION FOR CONTENT MANAGEMENT

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EXECUTIVE OVERVIEW

The amount of content organizations create, use, and archive is growing at a rapid pace. An IDC whitepaper from May 2009 provided research that showed a 5 x growth in digital information by 2012 resulting in approximately 2,502 Exabytes of information globally. This is causing problems for organizations as they struggle to manage growing content needs and the introduction of new types of content including instant messaging, blogs, and other electronic files. Not to mention the mountains of paper already existing in the organization that have never been categorized or effectively managed.

Enterprise content management (ECM) provides organizations with a platform to house unstructured content and deliver it in the proper format to multiple enterprise applications. This allows organizations to manage and use their content to facilitate business transactions, build content-rich business applications, integrate content services with business applications, and effectively control the life cycle of the content to meet compliance regulations. ECM helps to decrease costs, automate processes, improve transaction processing times, facilitate content distribution, minimize lost documents, and mitigate risk.

ECM deployments have traditionally focused on specific departmental needs, and then slowly expanded across the enterprise. This is still common practice today to lower initial implementation costs, however, industry consolidation has resulted in several solution offerings that encompass the breadth of organizational content from paper documents to web pages and manage the entire life cycle from creation to destruction.

The goal of modern ECM deployments is to develop a unified ECM approach that provides the full array of content management functionality, including document and image management, web content management, digital asset management, and records and retention management, on one platform. The unified approach provides a greater ROI in a shorter time frame. Consolidating the overall architecture on a single code base, security model, and API eliminates “Band-Aid” integrations, leverages a common IT infrastructure, and minimizes application development and support costs, thus lowering costs; improving user experiences; and enabling simple upgrades, maintenance, and training.

INTRODUCTION

The early days of content management faced several challenges preventing rapid widespread adoption. One of the pervasive barriers was trust in the technology. People were uncomfortable letting go of the paper and relying solely on digital images on a server. PC's crashed, networks failed, and if out of the office, access was limited. Fortunately IT infrastructures improved, web technology improved, and reliability increased. With that, people's expectation of access to information also increased and so did trust in digital media. Content management technology is now seeing widespread adoption across the enterprise and across nearly all industries. This white paper provides foundational knowledge of content management systems and a vision for enterprise implementation of ECM solutions.

THE CONTENT PROBLEM

Content in an organization exists in many forms and often resides in multiple locations. These documents include Microsoft Office documents, scanned images, graphics, video, and e-mail which are usually stored on shared network drives, Web sites, FTP sites, or





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even on hosted servers. The result is increased corporate storage requirements and no way to control the many versions that will be spawned from the original. Access to information is also difficult as there is no efficient way to search these repositories with any certainty.

With content spread across the organization and virtually no control over how many copies or versions exist; organizations struggle to efficiently deliver content to those who need it with any degree of reliability or accuracy. This also makes it difficult to control information that is shared through customer or vendor portals, provide employees with self service access to information, and establish a one source of truth for corporate information.

The modern workforce is a very mobile workforce and many have the ability to work from home or a remote office. This mobility also causes problems for corporate control and access of information. It is inefficient and costly to ship copies of documents to many locations. For many project teams, a change to a key project component results in new plans that need to be shared to team members across the country. Even the collection of daily sales orders from multiple offices can result in a tremendous expense for an organization. The cost of moving documents across the country can cost millions of dollars for some organizations.

Consideration must also be given to the changing business climate. The Enron scandal of 2001 was probably the most recognizable event that began a rapid change in the business community. Resulting legislation including the Sarbanes-Oxley Act have put additional requirements on organizations and how they must manage corporate information.

Not just legislative changes but technology changes will also impact the future for ECM. Social networking sites such as Facebook and LinkedIn provide an interface for communication. Instant Message technology is also used by thousands in their daily work roles, not just personal conversations. Web conferencing, VOIP technology, and video conferencing are also adding layers of complexity to the ECM discussion.

ENTERPRISE VISION FOR CONTENT MANAGEMENT

The recent and ongoing consolidation in the content management industry is a direct result of the market's demand for a more unified and enterprise approach to the problem.

The 'Big 3' in content management, Oracle, EMC, and IBM have all made acquisition a part of their content management strategy, striving to provide a true creation to destruction solution for enterprise content. Even the term enterprise content now has a new meaning. The term enterprise used to imply a solution had the ability to scale to handle large volume. Now, the term enterprise content management implies web pages and old paper HR files, commercials (video) and IM, scanned images and email, and everything in between. Enterprise now refers to breadth as well as depth. Look for this trend to continue as organizations will continue to bring new technology to broaden their offering as well as develop specializations for various vertical markets such as manufacturing or healthcare.

In addition to adding more technology to the offering, true ECM visionaries will build and develop strategies to bring content to the user on the user's terms. This will include more elegant integrations with ERP and CRM systems, enhanced access through mobile devices, and content presentation through portals and other user defined interactive spaces.

BENEFITS OF ENTERPRISE CONTENT MANAGEMENT

The fundamental benefits of ECM are not hard to identify:

- Reduce Paper storage
- Improve access to and control of information to drive operational efficiency
- Facilitate corporate compliance initiatives through access and destruction policies





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ENTERPRISE VISION FOR CONTENT MANAGEMENT-CONT'D

The only real reason any organization to invest in ECM is because they believe the ECM solution will provide a return greater than the cost of investment. How that return is measured by the organization can be as varied as the solutions themselves. For some it is risk mitigation and compliance – the investment is offset by the fines and penalties that will be avoided by having the solution. For others it is cost reduction – the investment is recovered by eliminating headcount because of increased process efficiencies.

ECM technology has seemingly limitless uses. Creative solutions exist for most any business problem relating to content. The challenge for organizations is to continue to expand the use of ECM technology throughout the organization and not stop after the initial project.

For most organizations there are dozens of benefits used to construct the business case for and ECM project. Working with a qualified implementation team or systems integrator will greatly increase the reliability realize corporate objectives for an ECM implementation.

THE INTEGRATION APPROACH TO CONTENT MANAGEMENT

As stated earlier, content management solutions in the 1990's typically addressed a specific problem for a specific department and involved a hard coded integration to that department's line of business (LOB) application. Growth and scale could be achieved; however, it often required integrations with other applications, more servers to handle the load and of course more services to support these changes. Additionally, these applications were for managing specific content types. Some were specific to scanned documents, some to web content and others for digital content and collaboration. Records management systems were considered related technology and could manage content from each of the previous solutions as well as physical paper records. Because each of these business problems was so different, the solutions likely came from different vendors all with their own technology and support requirements.

As the content management industry matured, customers demanded more out of existing software implementations, so vendors began acquiring other complementary technologies to complement their own offering. Imaging vendors acquired document capture technology, collaboration solutions added scanning functionality, and many content solutions looked to add records management capabilities to their offering. This allowed end-user organizations to consolidate applications from different vendors onto one platform. ECM – Enterprise Content Management - was starting to live up to its name.

The downside to this consolidation, at least initially, was that these now very robust solutions, required higher consulting and implementation costs. The software solution set may have included licenses for broad based functionality, but the individual products had not yet been completely integrated. Eventually standards based integrations between applications built on one platform would emerge, allowing customers to more-quickly implement their content management-based applications.

Smaller niche solutions will continue to exist and will eventually offer broader solution functionality. It is important that every organization critically consider their requirements and find the right solution for their unique set of business problems and business objectives. Don't think of simply the problem you are trying to fix today, think about how the organization can use content in the future. This information is critical the existence of the organization and it should be protected and managed properly. ECM should be considered a strategic investment and change the way the organization thinks about and uses content. It should not be thought of like a finger in the dam of corporate information.





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CREATING A UNIFIED CONTENT MANAGEMENT PLATFORM

Earlier we mentioned the different types of content management solutions from document imaging (scanned images), to web pages, to digital assets. Essentially each of these different types of solutions are doing the same thing; storing a piece of content in a digital format, attaching some index to the file, and providing access to users. Since the essences of these different solutions are the same, shouldn't we try to consolidate the products to reduce the operational costs of supporting multiple platforms? That's how the major influencers in the industry see the future of content management.

It is true that each type of content requires some unique functionality—web page requirements are different than invoice processing or content conversion and display requirements for some digital files—these independent content management systems all share a common set of services and functionality. Unified ECM strategy provides the core functionality (collection, index, storage, and retrieval) for all content types. The content type specific functionality can be configured as needed or even installed separately but leveraging the core services of the original installation.

Unified ECM provides complete ECM functionality—including document and imaging management, Web content management, digital asset management, and records and retention management—on one platform and reduces the requirement for integrations between various ECM components. The unified approach yields greater ROI in a shorter timeframe, especially if more than one application functionality is used.

IMPORTANCE OF A CONSISTENT USER EXPERIENCE

Successful ECM implementations require broad based user acceptance. Users should not be concerned with the type or origin of the content; they simply want access to the content they need to complete their job function. Whether they're adding content to a Web site or collaborating on a presentation, the functions they need stay constant—the ability to easily find content, use content, and store content to complete a business objective. A unified architecture offers user interfaces with a common look and feel—easing training and improving usability.

For end users, a unified approach provides:

- Ease-of-use through a common interface
- common content-related functions in one place
- Higher adoption rates, making the system more valuable for everyone

CONSIDERATIONS OF THE CONTENT PLATFORM

Consolidating the overall architecture on a single code base, security model, and API eliminates integrations that serve as only a temporary solution, leverages a common IT infrastructure, and minimizes application development and support costs.

For IT departments, the benefits of a unified approach include

- Dramatically reduced implementation and setup time compared with rolling out separate or integrated systems
- Simpler upgrades because all occur on a single platform
- Ability of administrators and developers to focus on meeting user requirements rather than getting the various application components to work together in the first place





CONCLUSION

There is no doubt that content management systems are critical to business operations in the modern business world. Even as the types of content grow and change, the fundamental problem of gathering and controlling this information stays the same. Left unchecked, the volume of information and data can grow and spread like wildfire. The proper application of ECM technology and strategy can ensure corporate information and content is an asset, not a liability to the organization.

Traditional deployment strategies in a department by department, component by component methodology have been dictated by the fact that no one vendor could provide the full set of components necessary for a true enterprise deployment. The consolidation in the ECM space has now produced organizations that can supply the vision of a single architecture, single repository, and core functional components, with the ability manage all types of content from its creation to eventual disposition.

As technology changes, the demands on content management systems will also change. New requirements will emerge, new content types will be created, and the uses of that content will continue to be as varied as the organizations that use them.

The successful ECM implementation will grow and change as the organization changes. The leaders in this space will continue improve the functionality for the end user while providing the architecture to support enterprise class operations. The focus will be on reducing costs for the organization through employee productivity and IT support requirements. Integrations will continue to be critical as users will continue to push for the availability of content wherever they work, but the integration method will change from hard-coded integrations to more SOA based and codeless integrations.

The volume and amounts of content will continue to grow. Finding the right solution for your organization will be as important as choosing the right ERP or CRM solution. Consider the enterprise. Consider the consumers of the content.

For more information, please contact us at (336) 346-1580 or visit our website at www.dtiibs.com.

