



Address The Complex ECM Landscape

by Alan Weintraub, Craig Le Clair, November 27, 2012

KEY TAKEAWAYS

Manage Rising Volumes Of Content By Focusing On A Content-Centric Approach

Enterprises struggle with increasing volumes of varying types of content and processes. When developing a content strategy, they should consider business, transactional, and foundational content functionality to support specific business use cases.

Evaluate Your ECM Deployment Options To Provide Maximum Business Benefit

The emergence of cloud computing as a viable deployment option has complicated the ECM solution implementation. Organizations must balance user needs with IT-desired controls.

SharePoint Proliferation Disrupts The ECM Market

The evolution of SharePoint's enterprise content management functionality has created a quandary for organizations looking to implement an enterprisewide content management solution. Microsoft-focused organizations need to understand how much of SharePoint's functionality meets their ECM needs.

Address The Complex ECM Landscape

Landscape: The Content Management Playbook

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with [Leslie Owens](#) and Emily Jedinak

WHY READ THIS REPORT

Information workers struggle under increasing volumes of varying types of content. Historically, enterprise architects have taken a product-specific approach to their enterprise content management (ECM) strategies: document management for office docs, web content management for online content, records management for corporate records, and so on. However, enterprises increasingly need to support multiple content types in different ways. To support this need, Forrester recommends a content-centric, user-centered approach to ECM strategy. This report outlines the current landscape for business, transactional, and foundational content management technology. It also covers the future disruption and opportunity brought on by cloud computing, Microsoft SharePoint, and smart process applications.

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For this report, we relied on data from our ongoing exchanges with enterprise clients. Data also came from Forrester's July 2011 Global SharePoint Usage Online Survey and the October 2011 Global Enterprise Content Management Online Survey.

Related Research Documents

[Develop A Content Management Strategy](#)
October 2, 2012

[Smart Process Applications Fill A Big Business Gap](#)
August 8, 2012

[Putting Together The SharePoint ECM Puzzle](#)
February 15, 2012

[Can Google Solve Your ECM Problems?](#)
July 28, 2011



THE BATTLE TO CONTROL RISING VOLUMES OF CONTENT RAGES ON

For most organizations, managing content is an ongoing battle. More content technologies, diverse content types, and regulatory and compliance pressure all add up to cost and complexity for enterprise architects. Further, employee demands for simple, usable content services only complicate matters for an ECM market known for delivering complex products.

While some enterprises still hold on to the ideal ECM vision — a set of applications sourced from a single vendor sitting on top of a unified content repository — most know that their ECM strategies will need to support complex scenarios across multiple software products. Enterprise architects must now manage multiple content types — such as videos, office documents, images, forms, and more — across multiple repositories, while creating a cohesive strategy for content ingestion, taxonomy, security, retention, archiving, and search.

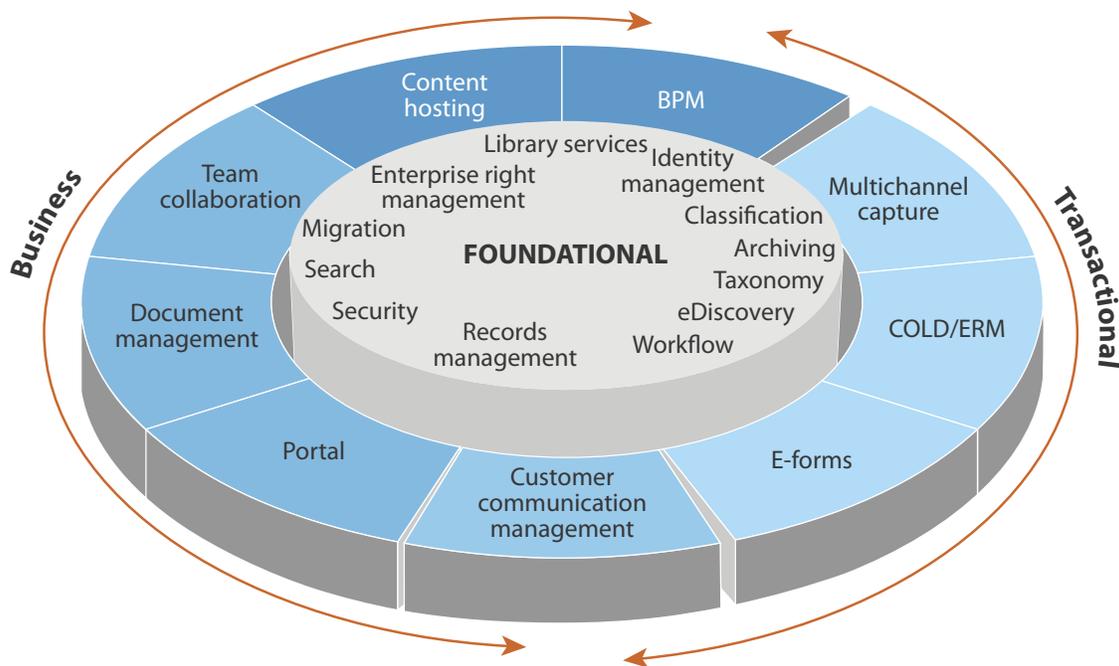
Forget The ECM Suite; Take A Content-Centric Approach To ECM Investments

Forrester has updated its definition of the enterprise content spectrum. Technology such as digital asset management (DAM) and web content management (WCM) is used in conjunction with web analytics and personalization tools to support customer-facing business activities.¹ So we now classify software that manages persuasive content across multiple customer touchpoints as a distinct category within the customer experience management landscape. Guidance on how to staff, budget, develop, and support digital experiences using persuasive content management technology is contained in Forrester's digital experience playbook.² The revised ECM spectrum has three major categories: foundational, business, and transactional (see Figure 1):

- **Foundational ECM provides basic content management functionality.** Foundational content technologies deliver a core set of required services. Foundational content technology includes library services such as check-in/checkout, permissions, archiving, and basic workflow. It also includes support for records and retention management, taxonomy, search, and eDiscovery. Applications that have not traditionally been content-based, such as customer communication management, increasingly feature foundational content functionality or integrate with ECM products that provide it.
- **Business content drives the day-to-day workplace experience.** Business content originates within the enterprise and helps workers to complete day-to-day tasks and share ideas. Business content includes familiar formats such as office documents, presentations, spreadsheets, and multimedia. This type of content serves a wide range of business processes, including structured (used in contract negotiations, for example), unstructured (used in product development), and employee self-service (used for employee training). Technologies that support business content needs include document management (DM) and team collaboration.

- **Transactional content drives back-office processes.** Transactional content generally originates outside of the enterprise from third parties such as customers and partners, and it relies on complex workflows or business process management (BPM) to drive processes. Formats include scanned faxes, print streams generated from back-office applications, and electronic records. Enterprises use transactional content to get insights such as “How many claims were received today?” or “What does mortgage volume look like by region?” Technologies supporting transactional content include multichannel capture, computer output to laser disc (COLD)/enterprise report management (ERM), and e-forms.

Figure 1 Content-Centric Technologies Supporting The Content Spectrum



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Source: Forrester Research, Inc.

Understand The Vendor Landscape For Content-Centric Technologies

Relatively few ECM vendors actually deliver functionality across the business, transactional, and foundational segments of the content management landscape. IBM, EMC, Oracle, and OpenText are among the few that do. However, even these vendors don't necessarily have best-in-class functionality in all segments. For example, vendors with strengths in transactional content may not support business content well at all, and vice versa. Content technologies that support high-volume transactions are markedly different than those necessary to support content within interactive, multichannel customer experiences. As a result, many enterprises find it necessary to source multiple ECM solutions to address requirements across the content spectrum (see Figure 2).

Figure 2 Representative ECM Vendors Provide Functionality Across The Content Spectrum

Vendor	Foundational	Business	Transactional
EMC	X	X	X
IBM	X	X	X
Oracle	X	X	X
OpenText	X	X	X
Microsoft	X	X	
Hyland		X	X
Alfresco	X	X	
Perceptive		X	X
iDatix			X
M-Files	X	X	
DataServ			X
Xerox	X	X	
ASG			X

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Source: Forrester Research, Inc.

MORE ECM OPTIONS EQUAL MORE ECM CHALLENGES

Organizations face many decisions in the process of selecting the right ECM vendor and technology. Not only do they have to decide on the content-centric technologies that meet the business requirements, but they are also faced with the challenges brought on by an increasing number of options, ranging from the proliferation of SharePoint to the emergence of cloud computing as a viable deployment option.

SharePoint Proliferation Disrupts Traditional ECM Strategies

SharePoint is a multidimensional product most often used for team collaboration and social business needs.³ Microsoft has strengthened SharePoint’s content management functionality in the latest version, SharePoint Server 2013, further solidifying it as a viable option for an enterprise ECM deployment. Microsoft SharePoint Server 2010 has seen rapid adoption for managing enterprise content.⁴ This success has resulted in SharePoint becoming a disruptive force when it comes to ECM strategy. Enterprise architects with existing ECM tools — for document management, records management, and more — find it particularly disruptive in three ways:

- **Packaging and pricing make SharePoint-created software overlaps tough to avoid.** Microsoft includes SharePoint in enterprise agreements, which leads to questions like: Why are we paying

maintenance to two or more ECM vendors? Can SharePoint meet our ECM needs? IT leaders, in their quest to cut costs, foresee potential redundancy between SharePoint's ECM functionality and the organization's incumbent ECM vendors' capabilities.

- **SharePoint's strengths lead to viral adoption among business users.** SharePoint makes creation of basic sites easy and provides mature features for business users to easily share content — the top-ranked business reason for investing in ECM technologies.⁵ Collaboration, sites, and intranet site workloads are highly deployed with high satisfaction rates and receive the lowest dissatisfaction ratings.⁶ This means SharePoint sites often see viral adoption among workgroups.
- **SharePoint 2010 made strides in ECM functionality.** Microsoft was identified as a leader for the business and foundational areas in the 2011 Forrester Wave™ evaluation of ECM vendors — based on clear improvements to SharePoint's support for foundational and business content-centric technologies.⁷ Improvements include advances in taxonomy management, enterprise deployment support, search, and retention policy management. This ranking makes SharePoint a credible alternative to traditional ECM vendors in two key areas: foundational and business content. While this is a positive development, it also means enterprise architects must begin evaluating the costs associated with migrating off of previously customized platforms.

Many organizations have discovered that SharePoint can meet most but not all of their ECM requirements, thus requiring an additional solution to enable critical functionality. Sophisticated requirements around document multi-authoring, metadata management, optical character recognition (OCR), or document assembly require integration with custom products. Several market-leading ECM infrastructure vendors and partners supplement the SharePoint offering in the following critical areas (see Figure 3):

- **Records management.** SharePoint 2010's basic retention services do not meet the DoD 5015.2 specification and require additional functionality to be compliant (e.g., file plans and chain of custody). Vendors such as Iron Mountain provide physical records management. Several ECM vendors integrate their ECM records management functionality with SharePoint to provide DoD 5015.2 certification and federated records management.
- **Large file management.** SharePoint currently supports the ability to store documents outside of SQL Server. Remote blob storage integration enables ECM repositories to become the native external store for SharePoint content, while letting SharePoint maintain control over the document. The remote blob storage capability accommodates files larger than 2 GB. Organizations can use this capability to store and manage a variety of file types.
- **Archiving.** Archiving services move old or defunct SharePoint sites, document libraries, and documents from the SharePoint SQL infrastructure to the ECM repository. These services also provide the capability to restore sites, document libraries, or individual documents. Microsoft

only supports full archiving and restoration of a SharePoint site collection. SharePoint archiving and backup partners fill an important implementation requirement for those organizations that implement SharePoint for team and project-based collaboration — where the number of sites and documents expands rapidly.

- **Governance.** Governance services automate policy-enabled SharePoint site deployment using predefined templates. Automated deployments streamline the new site request process by empowering the end user to self-provision SharePoint sites using an approved request process and standard site templates. This enforced standardization ensures compliance with the site's user interface and navigation. Enterprise architects seek an automated governance solution from companies such as OpenText to provide enforcement without bureaucracy.
- **Business process management (BPM).** ECM vendors support both the ability to sweep documents from the SharePoint into the ECM repository and the ability to trigger rules-based workflow tasks based on a document and workflow status in SharePoint. These actions include copy document, move document, initiate an ECM based workflow, or execute an ECM workflow step. For example, IBM's FileNet Content Manager enhances the SharePoint implementation with capabilities — such as BPM and records management — not supported in SharePoint.
- **Digital asset management.** SharePoint 2010 provides basic rich media management, including a new asset library template, the ability to produce content thumbnail previews, and new content types and columns specifically targeted at rich media files (e.g., image, audio, and video). Advanced digital asset management features, such as image and video rendering and metadata extraction, require the integration of a separate digital asset management tool (e.g., Adam Software).
- **Engineering drawing management.** Engineering drawing management requires the integration of computer-aided design (CAD) authoring tools to manage the engineering drawing and associated annotations in its native layers. SharePoint can only manage the native engineering drawing as a single entity. Engineering drawing management vendors, such as Brava DWG Viewer, Cadac Organice, and McLaren Group, provide integration with SharePoint that enables management and integration with CAD software for native drawing files, supporting layers, and annotations.
- **Electronic signature.** Moving from paper to electronic documents requires the ability to sign the electronic document in a non-reputable format, such as an electronic signature. SharePoint 2010 does not support electronic signatures. ARX and DocuSign provide add-ons to SharePoint to allow a user to electronically sign a document.

Figure 3 Current SharePoint Enterprise Content Management Gaps

Gap	Description	Gap impact	Representative partner solutions	Representative vendors
DoD 5015.2-STD records management	Providing DoD 5015.2 records management functionality	High	GimmelSoft	HP, IBM, OpenText, CA
Large file management	Ability to manage files larger than 50 MB	Medium	AvePoint, Metalogix Software	EMC, OpenText
Archiving	Archiving site collections, sites, and document libraries	High	AvePoint, Metalogix, Quest Software	Hyland Software, IBM, OpenText
Governance	Enforcing policy and managing the provisioning of new sites and archiving of expired sites	Medium	Varonis Systems, Titus Labs, SharePoint Solutions	Hyland, OpenText
Business process management	Graphical and rules-based workflow	Medium	K2, Nintex	Hyland, IBM, OpenText, Oracle
Image capture	Capturing paper-based information	Low	AnyDoc, Kofax, KnowledgeLake	EMC, IBM, OpenText
Digital asset management	Managing rich media files, such as images, audio, and video	Low	Adam Software, Equilibrium	EMC, OpenText
Engineering drawing management	Managing CAD drawings	Low	Brava DWG Viewer, Cadac Organice, McLaren	EMC, Hyland, OpenText
Electronic signature	Approving a document electronically	Low	ARX, DocuSign	EMC, HP

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Source: Forrester Research, Inc.

Smart Process Applications Bridge ECM Gaps

Organizations buy ECM to help eliminate paper and to serve as an electronic system of record for key business activities and transactions. But many organizations that have tried to enact top-down controls on how content is created and consumed have failed. In a world where employees, partners, suppliers, and customers frequently collaborate and interact, there's a need for a new category of application software designed to support business activities that are people-intensive, highly variable, loosely structured, and subject to frequent change.⁸ This new category of apps, called smart process apps, fills the gap between systems of record and systems of engagement.⁹

Smart process applications automate both structured and unstructured work activities in support of collaborative processes.¹⁰ This next generation of packaged apps will encapsulate current best practices in these collaborative business processes yet make it possible for the app to reflect continuous improvements in how collaboration can occur. Smart process applications bring

together both BPM and ECM technologies to deliver content-centric solutions with a defined set of success criteria. ECM vendors will need to abandon their technology-first direction and concentrate on developing repeatable solutions that solve real business problems. These solutions focus on automating the business process and providing content management capabilities that streamline the content capture to content action timeline. Auto lending and insurance claims processing are two examples of how a smart process application can be used to decrease processing time frames.

The ECM Skies Are Becoming Cloudy

The increasing number of vendors supporting cloud deployment options creates a quandary for IT in selecting the best method for implementing and deploying an ECM solution. Cloud deployment models promise simpler, faster content delivery at a more variable cost than on-premises deployments do. But concerns over security and control have slowed the adoption of cloud deployments. Do these reasons still hold up as a justification for not deploying a cloud-based ECM solution? With the introduction of cloud offerings from leaders such as Microsoft, EMC, and OpenText, along with startups such as KnowledgeTree, SpringCM, and Veeva Systems, we are seeing viable options that address most of the concerns. Both software-as-a-service (SaaS) and private cloud-based offerings have become commonplace. The decision whether to deploy in the cloud, deploy on-premises, or deploy in a hybrid cloud/on-premises model will depend upon the value and classification of the content being managed. The higher the value of the content, the more inclined the enterprise architect will be to implement an on-premises ECM solution.

CONTENT VALUE BRINGS CLARITY TO YOUR ECM DIRECTION

Choosing the right ECM vendor requires that the enterprise architect matches the content value with the breath of access to the content. Value can be evaluated by a number of factors: acquisition cost, cost to create, legal and regulatory requirements, and much more.¹¹ Access, on the other hand, relates to who or what groups within an enterprise need to use the content in the course of their work. Evaluating content on a scale of *value* to user *access* is one way to align ECM capabilities and governance oversight with organizational requirements (see Figure 4).

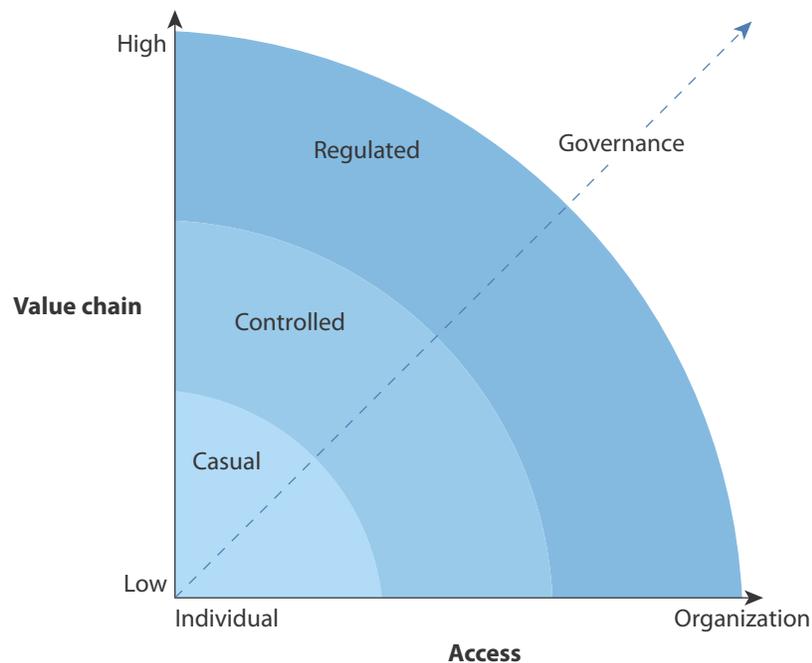
In this model, governance requirements increase for different types of content, classified as follows:

- **Casual.** With low value to the operations of the enterprise and access limited to individuals and small groups, casual content needs only informal management — it is stored in a repository and shared. Casual content includes team meeting minutes, a list of cell phone numbers for off-site attendees, or a presentation on the new phone system. Versioning is useful to a degree, and taxonomy is not necessary.
- **Controlled.** Moderate levels of value and access are the characteristics of controlled content. It is used normally by groups but can be used up to the organizational level. Human resource

policies and legal contracts are two examples of controlled content. Full library services, records management capabilities, and a taxonomy are necessary at this level.

- **Regulated.** Critical in value and used across the organization, this highly governed content is regulated by federal, state, or local jurisdictions and managed by a formalized process. Examples include compliance documents, manufacturing documentation, and standard operating procedures. This content requires advanced features such as library services, document management, workflow processes, search, archiving, and security.

Figure 4 Plot Content Value For Organizational Impact



RECOMMENDATIONS

LET CONTENT AND PROCESSES DRIVE YOUR ECM DECISION

Gaining an understanding of the business requirements, content types, and processes will lead to the selection of an ECM solution that will best fit the end user's needs to manage and use information. You should:

- **Let the business requirements drive the ECM direction.** A successful ECM implementation aligns the business requirements to content-centric technologies. Businesses must identify and prioritize their functions across the updated definition of the enterprise content spectrum, one that addresses foundational, business, and transactional content.
 - **Evaluate the cloud-based ECM deployment options for the best business fit.** Cloud deployment models promise simpler, faster content delivery at a more variable cost than on-premises deployments. The decision whether to deploy in the cloud, deploy on-premises, or deploy in a hybrid cloud/on-premises model will depend upon value and access for the content being managed by the ECM solution.
 - **Map your ECM requirements to SharePoint Server 2010 and SharePoint Server 2013.** For Microsoft-focused organizations, understanding how much of SharePoint's functionality meets the needs of the organization will provide awareness of any requirement gaps. Filling these gaps may require the addition of additional ECM solutions.
 - **Look for smart processing applications to connect the ECM dots.** Smart process applications are a new generation of applications that combine awareness data, analytics, collaboration, and content and business process management to improve these processes. These new applications provide the glue that delivers high value to the end user.
 - **Understand your content value to select the right ECM solution.** Defining the content's value to the organization will help categorize the content into the three buckets: casual, controlled, and regulated. These categories will help you understand what ECM functions are needed to manage the content.
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ENDNOTES

- ¹ For more information on DAM and WCM, see the August 10, 2011, "[Harnessing The Convergence Of Customer Experience Management Solutions](#)" report.
- ² For more guidance supporting digital experiences using persuasive content management technology, see the August 22, 2012, "[Unify The Digital Experience Across Touchpoints](#)" report.
- ³ Source: July 2011 Global SharePoint Usage Online Survey. For our assessment of SharePoint adoption, see the September 30, 2011, "[A SharePoint Custom-Development Strategy Is More Crucial Now Than Ever](#)" report.
- ⁴ SharePoint has been moving crisply through a major upgrade, from Microsoft Office SharePoint Server 2007 (MOSS 2007) to SharePoint Server 2010. SharePoint usage is strong in organizations of all sizes and in most industry sectors. For an in-depth analysis of current trends, see the September 30, 2011, "[SharePoint Adoption: Content And Collaboration Is Just The Start](#)" report.
- ⁵ In Forrester's October 2011 Global Enterprise Content Management Online Survey, 75% of ECM decision-makers said that content sharing was the most important driver for their organization's investment in ECM. See the February 15, 2012, "[Enterprise Content Management Emerges From An Economic Slump](#)" report.
- ⁶ Forrester fielded its July 2011 Global SharePoint Usage Online Survey to 510 SharePoint decision-makers. Respondents were asked whether they have deployed and levels of satisfaction with each of Microsoft SharePoint's six major feature groups: sites (portals and websites); communities (team sites, my sites, blogs, wikis, and communities); content (document and content management, information tagging); search; insights (dashboards, scorecards, Excel services); and composite applications (forms, workflow, data integration, custom web parts, etc.). Source: July 2011 Global SharePoint Usage Online Survey.
- ⁷ For the results of Forrester's 66-criteria evaluation of ECM vendors, see the November 1, 2011, "[The Forrester Wave™: Enterprise Content Management, Q4 2011](#)" report.
- ⁸ For more information on smart process applications, see the August 8, 2012, "[Smart Process Applications Fill A Big Business Gap](#)" report.
- ⁹ For more on the concept of systems of engagement and systems of record, please see Geoffrey Moore's "Systems of Engagement and The Future of Enterprise IT: A Sea Change in Enterprise IT." Source: Geoffrey Moore, "Systems of Engagement and The Future of Enterprise IT: A Sea Change in Enterprise IT," AIIM, 2011 (<http://www.aiim.org/futurehistory>).
- ¹⁰ For more information on smart process applications, see the August 8, 2012, "[Smart Process Applications Fill A Big Business Gap](#)" report.
- ¹¹ To launch (or simply build a case for) an information governance initiative, content and collaboration professionals need a map of what content is out there. Where do content risks and content opportunities lie? This report describes how to appraise the value of your enterprise content and optimize its use to support key business goals. See the October 20, 2010, "[Take Control Of Your Content](#)" report.

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