Modernization of ECM

Why the time is right for a new approach to enterprise content management

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I. Introduction

Content is the currency that moves business. So many of the insights and decisions that drive corporate activity are stored in electronic files and documents—even everything from business plans and product specifications to customer lists, sales agreements, and financial projections.

The way we work—the way we access, use, and share that business content—is undergoing a massive transformation. People are more mobile. Projects are more collaborative. Enterprises are more diversified, with information and processes crossing organizational boundaries. What’s more, the rise in consumer file sharing services has created new expectations for ease of use—and new headaches for IT and compliance officers.

Traditional enterprise content management (ECM) systems simply can’t keep pace. Many legacy ECM systems have been in place for a decade or more, and most are overdue for major upgrades or replacement. Architected for a different era, these outdated applications have been left behind by modern working and computing environments.

This whitepaper takes a strategic look at how ECM systems must evolve to meet the needs of the modern enterprise. We examine some of the major trends IT leaders should consider when evaluating or refreshing their ECM strategies. We also introduce a new approach to ECM, one that has opened the door to next-generation systems that address new mobile and cloud use cases, while bringing more content back under corporate control.

II. Why a New Approach to ECM is Needed

Enterprise content management is in a state of disruption. The rate of digital innovation has significantly outpaced the capabilities of legacy ECM platforms. These first-generation systems, built on twenty-year-old technologies for twenty-year-old computing environments, are being left behind as new content management challenges emerge.

There are four major trends reshaping the requirements for modern ECM:

1. New ways of working
2. Emergence of the extended enterprise
3. Explosion of digital content
4. New IT infrastructure

Let’s look at how each of these trends drives the need for a new approach to ECM.

1 New Ways of Working

The world of work is undergoing a dramatic transformation. The rise of mobile, social, and cloud technologies has changed not only where we work, but how we work. People want to be productive anytime, anywhere, from any device or application.
New Expectations
IT organizations are under tremendous pressure to support a new class of connected, tech-savvy employees whose expectations for ease of use have been shaped by consumer web services. Today’s employees want to find and share business documents just as easily as they can browse and buy a book online. They also want content management technologies to support remote and collaborative working styles.

New Generation
The working world is being further transformed by an influx of Millennials, who by 2020 will make up roughly 75% of the global workforce according to BPW Foundation. These digital natives—born in 1983 or later—grew up on intuitive, modern apps like Instagram, Snapchat, and Uber. Millennials are highly mobile, very connected, and want IT solutions that allow them to work regardless of location, network, or device. Their expectations for ease of content access intensify the pressure on IT organizations to modernize their ECM strategy.

Legacy ECM Systems Left Behind
Many ECM projects fail due to poor user adoption. Employees don’t buy in because the systems are cumbersome, non-intuitive, or lack support for B2B sharing and remote access. Users aren’t going to change, which means the approach to ECM must.

Figure 1. Trends driving the need for a new approach to ECM. Sources: IDC

Emergence of the Extended Enterprise
The modern enterprise is being reshaped by an exponential growth in connected activity and information flow. Businesses are no longer stand-alone entities. Instead, they are often an inter-connected web of companies, contractors, suppliers, resellers, employees, and customers. This makes the ability to share content and process across the extended enterprise an imperative for modern ECM.

Extended Collaboration is Critical
Organizations across every sector are extending their value chains, using external collaborators for everything from product design and development, to marketing, sales, and service. They are also
increasingly reliant on remote and contract workers, and want to engage with customers through the
Internet of Things. Underpinning all these connections is the need for controlled, two-way information
flow across organizational boundaries.

**Beyond the Firewall**
From an IT perspective, the enterprise is commonly defined by its firewall. This construct doesn’t
work for the modern enterprise, which isn’t bound by the limits of its IT infrastructure. In fact, locking
content and process behind a firewall can severely impede productivity and growth. Mobile workers
struggle with VPN issues, and external partners don’t have access to the information they need to
collaborate effectively and efficiently.

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**Legacy ECM Systems Left Behind**
Legacy ECM systems were architected at a time when users and content stayed behind the
firewall, on servers and PCs. The extended enterprise requires a new approach to ECM, one that
supports the easy, controlled sharing of content and process both inside and outside the
organization.

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**Massive Explosion in Digital Content**
All companies are dealing with a data deluge. IDC predicts a mind-boggling 50x growth in digital
content from 2010 to 2020, with 90 percent of it unstructured information like e-mails, documents,
and video. Big Data is making the content management challenge a lot larger and much more
complex.

**More Types of Content**
The baseline requirement for content management has gone well beyond office documents, PDFs,
and CAD/CAM files. The rise of social media and collaboration tools has created a new class of
enterprise content that now includes assets like the Google doc that’s shared with a supplier, the
video of a failed piece of equipment and its geo-location data, and the photograph of a competitor’s
shelf display and resulting comment thread. All of this new content needs to be properly stored,
managed, and governed.

**More Context Around Content**
With so much content, it can be harder than ever for business users to find the information they
need quickly. To work smarter, people increasingly want to understand and use the context of their
content. Today, the contextual richness around content includes not just title and author, but also
comments, preferences, geo-location data, and unique attributes such as customer name or invoice
number. The most successful companies are using contextual data to drive business processes that
move content to the right person at the right time within the right business application.
Legacy ECM Systems Left Behind
Legacy systems are ill-equipped to handle both new and traditional types of enterprise content. What’s more, a new approach is required that puts content in context so that people and processes work more efficiently and effectively.

The New IT Infrastructure
Enterprise IT has been transformed by successive technology waves. First, cloud computing changed everything. Now, it’s mobile devices that are re-writing the rules of corporate IT. The realities of today’s enterprise architecture demand a new approach to ECM that is in sync with how IT supports the modern business.

Hybrid Enterprise Content Management
To better support mobile users and external partners, many companies are moving some of their business content to the cloud. Leading analysts like IDC and Forrester predict a major shift to hybrid enterprise content management. This next-generation approach involves storing content both on premises and in the cloud, with seamless syncing between the two locations. Hybrid ECM meets IT’s need for control and compliance, while freeing business users and external collaborators to be more productive.

Flexible Deployment Options
A look inside any modern data center confirms that one size does not fit all. Today’s ECM systems need to support traditional on-premises deployments, virtualized environments, private cloud deployments, full-fledged public-cloud SaaS deployments—and everything in between. IDC estimates that by 2020, 13% of all data will be stored in the cloud, 61% will be stored on premises, and the remainder will be “touched by the cloud” (i.e., processed or transmitted). Flexible implementation options are required to support traditional ECM use cases, like document management and records management, and new use cases made popular by consumer services, like B2B collaboration and mobile content access.

Legacy ECM Systems Left Behind
Legacy ECM providers are trapped in software architectures made for an earlier time. Their platforms are generally not built for cloud scale and offer only limited mobile support. A new approach is needed that puts companies in charge of their content strategy and provides flexible, hybrid deployment options to support their needs.

III. The Risks of Relying on Legacy ECM Platforms
Old IT isn’t the solution to new content management challenges. In fact, old IT is often the problem. There are many downsides to remaining on a legacy platform rather than adopting a modern approach to ECM. Here are some of the biggest risks:
Shadow IT
Many corporate systems have been slow to deliver mobile and collaborative capabilities. As a result, frustrated users have bypassed company-sponsored IT and adopted consumer-grade cloud services to meet their productivity needs. A recent survey by data security firm Stroz Friedberg found that nearly 75% of information workers in the U.S. share corporate data via cloud file sharing or personal email accounts. These shadow IT solutions often lack the level of control, security, and compliance required for valuable business content.

Content at Risk
A poorly adopted legacy ECM system puts high-value, business-critical content at risk. Content isn’t adequately managed, governed, or secured because it’s “in the wild,” spread across network drives, SharePoint sites, mobile devices, laptops, email, USB sticks, and consumer file sharing sites. This lack of content control raises security, compliance, operational, reputation, litigation, and other types of business risk.

Lack of Agility
All too often, outdated ECM technology prevents companies from undertaking new revenue-generating initiatives. The situation is most common when ECM is a critical part of the new initiative for workflow, content storage, collaboration, or integration with line-of-business systems. Legacy ECM systems can pose a challenge for mergers and acquisitions, new partnerships, and the delivery of new products and services.

Information is Locked Away
Legacy ECM applications were often positioned as large dumping grounds; store all content in these hulking systems and—presto!—a company’s compliance concerns are covered. In practice, many organizations ended up creating multiple content silos that are disconnected from each other and core business applications. These islands of information severely limit opportunities to reuse content across the business, including for activities such as selling or serving customers.

Productivity Suffers
Legacy ECM systems can stifle productivity at multiple levels. Workers may be less productive because too much time is spent searching for content, dealing with version issues, or trying to collaborate on files through email. At the business level, productivity falls short of potential because content is trapped in silos, or processes take too long. And when the extended enterprise is considered, outdated ECM systems don’t support the collaboration required to integrate and optimize the entire value chain.

IV. Alfresco: A New Approach to ECM
Alfresco was founded by ECM veterans who wanted to take a new approach to content management. Now a recognized leader and visionary in ECM, Alfresco offers the only modern ECM platform that is built for today and ready for tomorrow. We’ve overcome the limitations of legacy ECM systems by leading the industry in our commitment to:

• Open technology
Open Technology
When we started Alfresco, we set out to create a new architecture for ECM that could adapt to changes in enterprise computing. We also wanted to eliminate the vendor lock-in imposed by proprietary products.

The Alfresco platform is built on open technology. Our unmatched support for open standards (CMIS, CFIS, etc.) makes it easy to integrate Alfresco into existing IT environments and to adapt the system as new business needs and technologies emerge. In addition, there is tremendous power in our open source model. The Alfresco Community includes more than 30,000 developers who actively customize and extend our technology. Their contributions dramatically accelerate the pace of innovation, especially when compared to closed products.

Hybrid ECM
Mixed cloud/on-premises IT environments are here to stay. Our approach is to use each environment to its best advantage. A true hybrid ECM system, Alfresco gives enterprises a strategic platform for meeting the often conflicting needs of users—who want to work remotely and with people outside the organization—and IT which must ensure that content is secure and managed in accordance with governance and compliance policies. Organizations determine for themselves which content is appropriate for sharing in the cloud and which should remain on premises behind the firewall. Syncing between cloud and on-premises sites eliminates content silos and enhances collaboration.

Maximizing Content Value
Alfresco innovates at the intersection of content, process, and collaboration. The Alfresco platform can serve as the content backbone for an extended enterprise, seamlessly connecting people with the information and workflows they need to make better decisions and do great work together. Organizations can maximize content reuse and value because Alfresco is readily integrated with customer and third-party enterprise applications like SAP and Salesforce. Business flows faster, and companies can be more responsive to their customers and changing market conditions.

Simplicity for Users
Poor user adoption is often the biggest roadblock to ECM success. The Alfresco approach is to embrace the applications and devices people use every day rather than force a new way of working. We’ve also taken cues from consumer apps so that the user experience is modern, engaging, and intuitive.

V. How the Alfresco Approach Matches Up to Today’s ECM Challenges
The Alfresco platform is an entirely new, completely modern approach to ECM. In this section, we revisit the four trends reshaping ECM to see how Alfresco meets contemporary content management needs.
Alfresco and New Ways of Working

Requirement
Modern ECM solutions must enable user productivity from any device, anywhere, and meet rising expectations for convenience and ease of use.

Alfresco
Alfresco allows people to work where and how they want. Alfresco is simple for users, so users can simply be productive.

- Familiar Applications — Alfresco integrates seamlessly with the productivity applications that business users “live in,” including Microsoft Outlook, Microsoft Office, and Google Docs. People can edit and save documents while version control and file-locking happen in the background.

- Mobile Devices — The free Alfresco mobile app (iOS and Android) allows users to securely access content on their smartphones and tablets. Mobile synchronization keeps content up to date while people are on the go. Companies can use the Alfresco Mobile SDK to integrate or build their own mobile apps for specific business requirements.

- Remote Access — Alfresco eliminates the VPN issues that can frustrate users who need to access content when working remotely. Alfresco enables secure access to content stored in the cloud, with updates automatically synced with an on-premises repository behind the firewall.

- Intuitive Interface — Alfresco Share is an easy-to-use web-based application for retrieving, sharing, and organizing content. It provides a socially-rich, consumer-style experience, allowing people to tag content, specify favorites, and add comments.

Alfresco in Action

Managers at Estrella Galicia can review and approve invoices anywhere, any time, thanks to a mobile workflow enabled by Alfresco.

Eurostar employees use Alfresco’s intuitive interface to easily locate the latest engineering documents from the trains.

The University of Westminster uses Alfresco to deliver “truly mobile working” for its distributed workforce, which can access content remotely.

“Alfresco scored highly with users from the outset. They liked the look and feel of the interface and found it highly intuitive and simple to use. From a user adoption perspective, people have taken to it naturally, with little or no training.”
Claire Smith, Information Systems Business Relationship Manager, Eurostar
Alfresco and the Extended Enterprise

Requirement
Modern ECM solutions must enable information and process flow across the extended enterprise, including employees, contractors, consultants, suppliers, resellers, and customers.

Alfresco
Alfresco powers business beyond the firewall. Organizations can work effectively with external partners and better serve customers through the secure, controlled sharing of content and process.

- Content Sharing and Syncing — Users can share content with partners inside and outside the organization with complete control and security. Alfresco eliminates content silos and reduces the reliance on shadow IT solutions by enabling convenient B2B collaboration.

- Collaboration Tools — Teams can set up dedicated project areas for content sharing and invite collaborators with a simple email. Tools like wikis, blogs, forums, and calendars enhance collaboration and keep team members on the same page.

- Social Features — People can enrich content with social context. Features such as “likes,” activity streams, and comments enhance collaboration and enable interactions similar to those on popular social networks.

- Process Integration — Hybrid workflow allows process synchronization out to business partners in the cloud. Content moves efficiently across the extended enterprise to streamline business processes like claims handling or invoice approvals.

- Security and Control — Content and processes always remain fully under IT control. Syncing can be protected with approval steps or restricted based on content type or user. External users access only authorized content, and user access can be turned off at any time.

Alfresco in Action

Genesys makes thousands of documents available to its customers through Alfresco, raising service levels and saving thousands in infrastructure costs.

Harris Grant improves project delivery by using Alfresco to power collaboration for internal teams and a global network of partners.

Scania uses Alfresco to extend knowledge sharing across its global offices as well as with external partners like distributors and dealers.

“Alfresco has made it possible for us to manage large, complex supply chains and participate with ease in global projects where interfacing with large corporations is a must.”
Neil Grant, Managing Director, Harris Grant
Alfresco and the Explosion in Digital Content

Requirement
Modern ECM solutions must be able to handle a content management challenge that is getting exponentially bigger in scope and scale.

Alfresco
Alfresco allows organizations to deal effectively with information overload while integrating new content types and richer contextual data into their ECM strategy.

- Powerful Search — Alfresco features powerful, consumer-like search capabilities to help people quickly find the right content. Users are presented with dynamic search results as they type and can refine their search with filters and tags. Real-time analytics increase the relevance of search results.

- Rich Context — Alfresco can drive more efficient business processes and greater levels of insight with its support for new and custom types of metadata (such as opinion and preference information). For example, Alfresco offers industry-leading support for mobile metadata. Geo-location data and tags can be captured from photos and videos taken with mobile devices and used to initiate new types of workflow or collaboration.

- Content in Business Context — Integrating Alfresco with enterprise applications, like an HR or ERP system, allows companies to surface the right information to the right person within the right environment. Processes run more smoothly and people can quickly complete the task at hand.

- New Content Types — Alfresco supports social media content and rich media file formats (images, video, and audio) in addition to typical business file formats. Customers can publish content directly to social networks and websites, with an audit trail automatically generated.

- Massive Capacity — Alfresco is a highly scalable, enterprise-grade solution built for demanding environments and business-critical content. On average, Alfresco manages more than 100 million content assets per organization.

Alfresco in Action

Carlson Rezidor Hotel Group relies on Alfresco for instant access to hotel policies and procedures with a “Google-like” search experience across more than 150,000 documents.

Salespeople and resellers at Dorfman Pacific can quickly search and find a specific product image, a process that previously took up to 30 minutes.

With more than 19 million documents in Alfresco, UK Power Networks meets a variety of business objectives, including streamlining operations and better serving customers through its website.
“Users can easily search and find the documents they need and we can set controls to ensure that the appropriate content is visible to individual users.”
Tim Johnson, Team Lead, Information Technology Development, Carlson Rezidor Hotel Group

# 4 Alfresco and the New IT Infrastructure

Requirement
Modern ECM solutions must offer deployment options that address the new realities of IT infrastructure, including increased use of cloud and virtualized environments.

Alfresco
Alfresco’s open, modern architecture provides the flexibility IT needs to support a wide range of delivery options, integration requirements, use cases, and business objectives.

• Flexible Deployment Options — Organizations can use Alfresco on premises, in a private cloud, in a multi-tenant public cloud, or in a hybrid on-premises/cloud configuration. Alfresco can be deployed in virtualized containers and is optimized for deployment in Amazon Web Services.

• Ease of Integration — Alfresco is readily integrated with back office applications and runs on top of both open source and proprietary stacks. Companies can also connect a cloud-based content repository with other cloud services, such as Salesforce and Office 365.

• Broad Use Case Support — Alfresco is ideally suited to both traditional ECM use cases (like document management, records management, workflow, and collaboration) and new mobile and cloud use cases. Alfresco supports the use cases made popular by consumer file sharing services, but with the extra control and security businesses demand.

• Long-Term Agility — In contrast with proprietary legacy ECM systems, the Alfresco platform is built on open technology and open standards. This modern architecture allows IT to meet unique and evolving content management needs with considerably less effort and expense.

Alfresco in Action

Amnesty International Netherlands
uses Alfresco in the cloud to reduce the administrative burden on IT and improve content access for field workers.

CPG migrated to Alfresco to achieve greater flexibility following frustrations with a legacy system that was too rigid for its changing requirements.

It took VIS just three months to customize the data model and APIs contained in Alfresco to the insurance provider’s exact needs.
“Having a content platform that is secure, flexible, and can integrate with our other systems is essential to our business. Alfresco provides us with a modern architecture for managing all our content and can easily adapt to business and regulatory changes.”
Andrew Sosa, Director, Content Solutions, Church Pension Group

VI. Conclusion
ECM systems are a strategic IT investment. They play a vital role in storing, managing, and controlling the content that keeps companies moving. The best ECM solutions allow business to flow faster and empower people to do and share great work.

First-generation ECM systems haven’t kept pace with changing content management needs. These outdated technologies have been left behind by massive shifts in work habits, enterprise models, content types, and IT infrastructure.

The Alfresco platform has an open, modern architecture that is ideally suited to today’s working and computing environments. With its unmatched support for mobile and cloud use cases, the Alfresco solution is truly the standard-bearer for hybrid ECM. With Alfresco, people can work more productively, IT can regain control over vital corporate content, and businesses can drive growth and collaboration across the extended enterprise.

Whether you’re establishing a new ECM initiative or replacing an aging or end-of-life system, it’s time to consider a new approach to ECM. We invite you to learn more about the Alfresco approach to ECM at alfresco.com.