



Leveraging Enterprise Content to Transform Business: *A Best Practice Guidebook*

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MARKET OVERVIEW

In today's digitized business environment, hyper connectivity through ubiquitous networks and device proliferation has enabled us to connect all manner of endpoints, unraveling a treasure trove of data. The ability to access this massive and growing amount of traditionally siloed information has opened up a lot of opportunity for businesses worldwide, but also comes with its share of challenges. Before an enterprise can even come close to extracting intelligence from that data, it needs to be able to manage this ever-growing repository and ensure the information is easily discoverable. Additionally, any company in any vertical today has much of its intellectual property (structured, semi-structured, unstructured data) residing in a digital asset. To ensure effective knowledge worker collaboration, managing transactional and case-related content, while also maintaining effective messaging with external stakeholders (partners, customers, prospects, etc.), enterprise-wide management of these digital assets becomes a strategic imperative.

The deluge of structured, semi-structured and unstructured content getting created and consumed across functions and applications is forcing enterprises to recognize the business-critical nature of effective content management and understand how it becomes the nerve center of any enterprise.

The term enterprise content management (ECM) has been used and misused over the years to describe a wide gamut of tools, methods and strategies spanning basic content repositories to highly integrated and complex platforms. In today's context, however, the term ECM no longer accurately reflects the comprehensive ways organizations create, share and interact with content and the true transformative nature of context- and content-centric solutions and processes.

In its early incarnation, ECM systems delivered much-needed centralized content repositories and core document and/or file management functionalities. With time, organizational needs have evolved and today's organizations don't need monolithic document repositories. Organizations are looking for holistic solutions that can aggregate content across many repositories, connecting disparate applications while providing business users as well as external stakeholders with all information relevant to their needs within a contextually aware and secure environment. An increasing amount of industry stakeholders today are using the term "content services" to describe the evolution of the ECM market and the set of services that support the use of content by all individuals, systems and applications.

A content services platform helps to unify traditional siloed and disparate systems into a seamless, secure, and highly searchable work environment that enhances collaboration, reduces costs, and optimizes workflows, while empowering organizations to repurpose resources and content, and maintain information ecosystems optimized for corporate governance and compliance.

Despite the critical need for content collaboration within the enterprise and with external stakeholders in a secure, seamless, scalable and contextual environment, too often content management solutions languish as point solutions within organizational silos. Enterprise content needs to be process-aware, and enterprise processes need to be context-aware. This intelligence comes from the ability to harness metadata—the foundational element of any good enterprise-grade content services platform—as well as analytics related to asset usage and performance.

This paper will discuss the value proposition while making the case for a decisive shift to using an enterprise-wide content services platform, instead of the sub-optimal use of point solutions.

GROWING PAINS

The perception of traditional ECM systems being complex and painful stems from the legacy of trying to stitch together various component modules to create one central system. For example, a typical system architecture with common components like a file server, database, and an application tied together may result in shockingly low uptimes, even with all individual components and the technologies linking them working at their maximum uptimes. A modular approach to complex software applications needs to factor in the various technologies used to provide the solution since this is usually only apparent once the solution is already paid for, deployed, and users are being trained on it. Low uptimes for such complexly woven together “Frankenstein” solutions are a persistent deterrent to adoption. Let us now quickly discuss some common pitfalls companies need to avoid as they digitally transform.

Rebooting Aging Workflows to Cope with Today’s Information Management Needs

A lot of challenges that companies have to deal with emerge from prevalent internal practices or a lack of any coherent content management practice. Large organizations are just coming to terms with the tremendous disconnect that exists amongst various internal divisions causing duplication of work, a lack of homogeneity in messaging, and delays in time to market—all costing the companies a tremendous amount of money. Many companies compound the problem by creating rigid workflows to accommodate the limitations of the content management system(s) at hand. This practice is counterproductive as the concept of managing content is to provide agility to the organization and knowledge workers.

Too often, companies focus on integration at the application level instead of integration at the data level, which can create another slew of problems as operations start scaling up. Loosely tied together, ad-hoc systems become increasingly cumbersome to handle as the amount of digital assets and formats increases. Further, the solution needs to be user friendly and easily integrated with the existing workflows and business processes, instead of having to re-architect the workflows and/or the business processes to fit the limitations of the solution. The solution must strive to reduce the lifecycle cost and maximize its impact on accelerating cycle time, and help the company react quicker to the dynamics of the market.

Some corporations have experimented with in-house solutions or have had different divisions using various content management solutions independently. When they decide to implement an enterprise-wide deployment, they face huge hurdles in terms of creating a common taxonomy for the content repository and archive. Often the task of merging multiple and different databases used prior to going for a single solution creates massive problems in terms of internal business practices as well as technology integration. Content needs to flow seamlessly within internal units of a company as well as to all necessary external users. An inability to do so with your technology choices creates internal resistance to adopt the technology, and the ROI for any project or investment becomes difficult to assess while adding unnecessary maintenance complexity.

Information Mismanagement Leads to Security Breaches

From corporate governance and compliance perspectives, information management is highly critical. Many organizations suffer because they lack content management practices and do not have risk mitigation capabilities when information breaches occur. Mismanaged information that is kept beyond mandated retention periods presents unnecessary security and litigation risks. Misgoverned information exposes private, protected customer and vendor data (Social Security numbers, account and credit card numbers) to users and hackers who should not have access to it.

Usability is Key

End users are rarely satisfied with the interface they get out of the box, and vendors struggle with trying to customize the interface on a limited budget. Customers always demand highly flexible and easy-to-configure user interfaces for stakeholder groups ranging from enterprise level to smaller business units and even extending out to partner channels and individual projects. The problem arises between the creative and noncreative asset owners at a client site, such as product marketing and product engineering—both requiring the interface to work differently. This, too, often leads them to get mired in nomenclature discrepancies that make content searchability cumbersome.

Traditional content management systems and homegrown solutions provide a certain degree of flexibility when it comes to configuring skins and branding, but are limited in their scope. Usability of a solution is one of the most important factors to assess the success of any investment in technology. Cumbersome systems always face push-back from workers who have to use them, and adoption remains spotty at best. Forced adoption requires extensive training classes and months of professional services, adding to the total cost of ownership. This defeats the very purpose of deploying a content management system, with knowledge workers never really adopting such complex and unintuitive systems. Further complicating things is the need to syndicate content across various delivery platforms such as the internet and mobile platforms to enable, for example, viral marketing and messaging.

TECHNOLOGY TO THE RESCUE

Future-proofing Your Technology Investment through Standards

People can only guess what the next big killer application will be. Companies need to future-proof their investments as best as they can so that they are nimble enough to proactively and efficiently adjust their business and technology processes to stay profitable and grow with iterative investments without having to re-architect everything from scratch every few months. Deploying solutions built on industry standards instead of proprietary technology is a time-tested way of ensuring tangible ROI on your technology investments. Using standard databases and standard data models along with standard file servers allows companies to model business processes independent of the technology vendor, enabling the scalability of the solution with minimal impact on future IT decisions.

Role-based Apps vs. Monolithic Suites

Companies should look at a standards-based modular approach instead of a proprietary monolithic approach for their digital workflows and business needs. The solution should be as unobtrusive as possible and adapt to the customers' business model—not the other way around. Companies should not have to rethink and change their business models to justify their technology investments. However, modularity should not equate to complexity, as explained earlier in this paper. Modular applications should not have interdependent nodes that could possibly sabotage the entire system. Role-based apps provide a streamlined interface and pre-built integration and automation specific to the user's business role. By exposing only the necessary and relevant functionality and information to each user role, they help improve productivity and adoption, and also reduce risk of exposure and data loss.

Service-oriented Architectures

By creating SOA-based interoperable “service” modules for each process, the manageability of complex workflows increases and the processes are repeatable and trackable. SOA allows for a better alignment of IT with business goals while allowing for the maximum reuse of IT assets. By exploring architectures like SOA and using web services, companies are now looking at eliminating workflow silos and bringing disparate systems and processes together in a collaborative environment with content services married to storage as the nerve center and collaboration hub for the enterprise.

Baby Steps to Deployment Success and Achieving Business Goals

Business managers need to work with content services vendors to initially focus more on deploying a pilot project and using a bottom-up approach for further deployment through the enterprise. By allowing customers to build familiarity with the product at a relatively low price tag through a divisional deployment, vendors working closely with their customers can help achieve early success in pilot projects and use that to get further buy-in within other divisions and steadily scale up toward full enterprise deployment in phases. This enables business managers to use successful divisional deployments as a benchmark for budgetary justification and create more awareness within the organization.

Beyond Search

Asset searchability is always top of mind for business managers looking at justifying an investment into a content management solution. Some vendors now provide deep indexing and search capabilities, which no longer look at just metadata to enable content searches, but a deeper probabilistic algorithm that provides contextual searches with the metadata now as one part of the entire algorithm. The system becomes more “intelligent” as it keeps getting used, providing more relevant search results as it learns to map relationships around varied asset groups. Such “organic” search capabilities add to the value proposition discussed earlier, making ROI realization that much easier. Data trending and faceted browsing enable “dynamic taxonomies” that are automatically generated and redrawn with each click. Further, a selective few next-generation platforms now use such predictive search capabilities to serve up relevant content based on the context of the business application the user is working with; in other words, the ability to retrieve information. This significantly simplifies locating the right assets and boosts productivity.

Widgets

In today’s technology environment, customizable dashboard-based applications or widgets are increasingly becoming the preferred UI for users. A few vendors are now rolling out their next generation of solutions using this very approach of a customizable dashboard with widgets to ease the usability of the solution across functional groups. Knowledge workers can use widgets now to easily grab content and send it for syndication across various platforms such as the web and mobile platforms or to collaborate within a workgroup with established role-based access and version control—a must for compliance and governance. Such widgets, when seen in the context of role-based apps discussed earlier, magnify the value proposition tremendously as they not only enable ease of use but secure accessibility as well.

Leveraging the Cloud

The cloud has not only catalyzed unprecedented content democratization, but also the ability to manage all manner of digital assets in a secure, hosted and collaborative environment. Users get the benefits that a content services platform provides as discussed throughout this paper and, in some cases, faster than through an installed deployment. Companies are also able to free up valuable internal IT resources to do other productive tasks. Extensive service-level agreements and negotiated contracts also ensure continued stability of the business process with guaranteed uptime and the ability to bring the solution in-house if needed. Most users, however, find themselves in a hybrid cloud environment, with some of their systems and data residing on-premises and others in the cloud. Regardless of the deployment option, the system needs to support connectivity to myriad cloud applications from CRM to customer portals and business productivity suites, where much of the content originates and resides.

SHOW ME THE MONEY

We can look at the value proposition that a content services platform brings to the enterprise from three perspectives:

Cost Reduction

- Cost savings on real estate
- Cost savings on maintenance of physical archives
- Elimination of the cost of lost or misplaced work
- Cost savings on delivery

By putting a content services platform to work, an organization migrates from physical storage to disk-based storage, eliminating the cost of expensive real estate to maintain physical archives and the expensive maintenance it demands. With a good metadata schema, companies can keep a well-indexed repository of all enterprise content for role-based access, enabling knowledge workers to search and retrieve relevant content and eliminate organizational silos. This reduces the cost of lost or misplaced work. Digital delivery through managed file transfers or CDNs allows companies to save on the cost of terrestrial delivery and insurance.

Workflow Optimization

- Cycle time acceleration
- Increased workflow collaboration
- Repurposing of content
- Repurposing of resources

Organizations can achieve time reduction in the business process through accelerated search and retrieval and increased real-time collaboration of assets. Further, content services integrated through web services with other workflow elements, such as dynamic publishing solutions and web content management tools, foster increased collaboration among knowledge workers while significantly reducing the time to market through every phase of the content lifecycle from creation to delivery.

Using content services integrated within the content workflow, companies can now easily repurpose content. For example, internal training collateral might just be some quick updating instead of re-creating it from scratch. The time saved by knowledge workers in searching and re-purposing content can be used toward more productive tasks, leading to increased productivity while lowering costs.

Targeted, Consistent and Engaging User Experiences

One key challenge surrounding all organizations is trying to manage the massive amounts of paperwork that include invoices, patient records, ledgers, etc., which at times can span decades worth of documents filed across a bewildering mix of electronic and actual paper filing systems languishing in dusty storage rooms. Maintenance of up-to-date, compliant information is critical and enables companies to present a consistent face to customers across markets and geographies while ensuring painless internal audits. Scanning and logging this enterprise information with robust metadata is just one step. Increasingly, enterprises are trying to leverage digital assets through content services platforms in conjunction with analytics and BI tools to personalize the experience for internal and external stakeholders. This streamlines content workflows by facilitating collaboration and simplifying approval processes for disparate workgroups. It also enables users to see the most recent version of the required information,

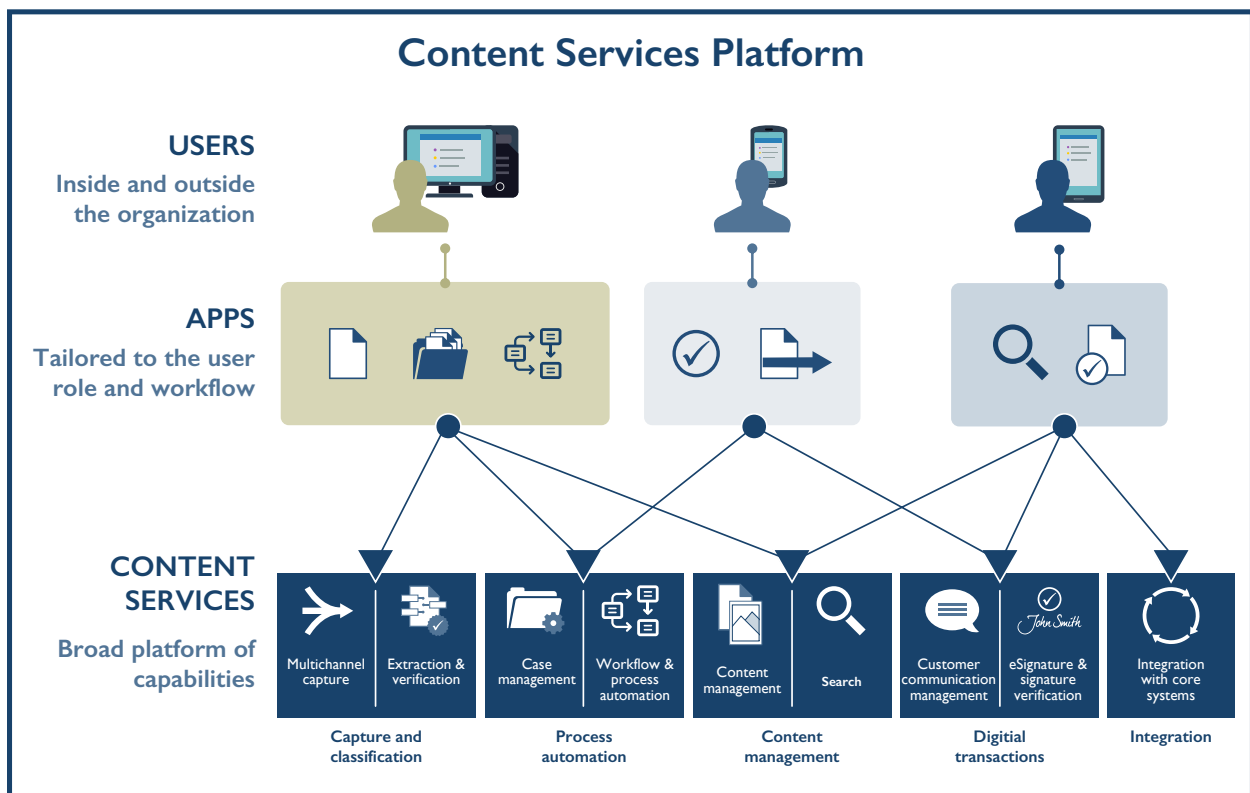
who has viewed it, and who has altered it. Built-in approval management notifies approvers and decreases cycle time—a huge benefit for time-strapped knowledge workers. Document expiry for critical information that may, for example, affect contract renewals is increasingly critical to monitor across multiple systems. Effective solutions help bridge these disparate systems and provide a single view with alerts for such scenarios.

Despite these obvious benefits and the proven ROI, along with an increasing amount of deployments each year, the market still lacks widespread enterprise-wide deployments. To further highlight the value proposition, let us investigate an actual use case of a content services platform deployment.

Information Management in Action

A Midwestern university with several outdated internal processes and disparate custom-coded applications was looking for a way to automate manual tasks and improve visibility across the institution without adding IT overhead.

The university needed a platform that could grow over time to solve challenges campus-wide, rather than continuing to add niche solutions to a disparate suite of technologies to manage. With a rapid proliferation of different systems across departments, users lacked visibility into assigned tasks, faced challenges reporting and gathering needed information, and struggled to manage tedious paper-based processes.



To overcome these challenges and meet needs across the institution, the university researched the market for available solutions and decided to deploy a hosted instance of Hyland’s OnBase enterprise information platform. After first deploying a solution in the Registrar’s Office to automate and improve the academic petitions process, the university began efforts to deploy the solution across the institution, building eight applications in 10 months.

The solution touches various departments and user roles campus-wide, including HR, the Registrar’s Office, IT and senior administration, and encompasses a range of content services. It includes:

- Seamless integration with line-of-business (LOB) systems, including its student information system;
- Automated workflow and intuitive, easy-to-configure electronic forms;
- Easily adjustable content routing process with flexibility for user role;
- Automatic email notifications with direct links to tasks for immediate access; and
- Replaced a portfolio of niche, dated, custom-coded applications by rapidly configuring on a low-code platform.

The university realized many benefits after deployment. It found that the combination of process automation and persona-based applications reduces duplicative manual steps and improves user efficiency. With increased visibility through more standardized processes, the institution ultimately has comprehensive reporting capabilities and increased insight into individual tasks and process performance. The solution also provides streamlined user experiences across devices and platforms while eliminating redundant systems.

Through all of this, leveraging a secure, hosted deployment is a bonus. Implementing solutions in the cloud means that faculty and staff reap the benefits of process improvements without extensive training, and the university can invest more in professional development rather than installing software on each user’s computer.

THE BOTTOM LINE

Effective content management is arguably the single most important issue for any organization that has embarked on its journey of digital transformation. The reality is that companies are at different levels of digital literacy and digital competence as they struggle to keep their head above the deluge of information. Through this paper we have seen how companies can move closer to becoming truly digitally transformative and have an impact not just on their bottom line through gained efficiencies, but also on top-line growth. We have seen how role-based apps provide a streamlined interface and pre-built integration and automation specific to the user’s business role that improves productivity and adoption, while reducing risk of exposure and data loss. We also discussed how solutions today have cognitive intelligence and enable knowledge workers to quickly gain access to contextually relevant information from a wide range of resources for faster and more informed decision making—even before they ask for it.

Before you set aside this paper, see if the following statements ring true or false to you:

	T	F
We have multiple versions of documents with little or no insight into which is the correct version.		
We have longer-than-usual cycle times as document discovery is tedious.		
Interoperability issues make inter-departmental collaboration challenging.		
Content access across devices is at best clunky, inconsistent and/or cumbersome.		

If you found any of these statements to ring true, you owe it to yourself and your organization to explore a vibrant ecosystem of solutions as exemplified by the Hyland case study in this paper. The technology is there to be exploited; ignoring it is not an option.

NEXT STEPS 

Schedule a meeting with our global team to experience our thought leadership and to integrate your ideas, opportunities and challenges into the discussion.



Interested in learning more about the topics covered in this white paper? Call us at 877.GoFrost and reference the paper you're interested in. We'll have an analyst get in touch with you.



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