Eliminate Information Silos and Unify Systems with Intelligent Information Management
Managing business information is more complicated today than ever. The amount of data and content organizations must cope with is exploding, and what further compounds the challenge is that this information is often scattered across a variety of different disconnected systems and repositories. This includes shared network folders, email, enterprise content management (ECM) and document management systems, file-sharing applications, CRM and ERP systems -- and the list goes on and on.

Generally, the larger the organization, the more information there is to be managed, and the more systems for storing and managing this information are in use across the enterprise. These “information silos” proliferate as more and more systems are deployed without the ability to connect and communicate with other existing systems and repositories.

This lack of integration across multiple information silos can cause a variety of problems. Employees struggle to not only quickly find the information they need, but also to verify if it’s the current and correct version. Duplication of content across information silos is common because information from one system typically cannot be used to enrich or add value to related information stored somewhere else.

Providing employees with quick and easy access to the information they need to do their job is crucial to productivity and to business success. But what’s obvious is that simply adding another repository is not the answer — nor is attempting to migrate all of the organization’s information into one system for everyone to use in a uniform fashion.

A new approach is needed.

The future of information management is all about putting content in context, and enabling businesses to manage information based on what it is, rather than where it is stored.

**So Many Information Silos, So Little Visibility**

While many companies recognize the value of their information, far fewer are able to effectively manage it when it is scattered across multiple, disconnected business systems and repositories, which can include:

- Shared network folders
- Business applications (e.g., CRM, ERP, HR, Accounting, etc.)
- Email
- Employee computers, smart phones and tablets
- Enterprise content management (ECM) systems, document management and information management solutions and content services platforms (e.g., OpenText, Documentum, M-Files, SharePoint, etc.)
- File sharing and collaboration systems (e.g., SharePoint, Box, Dropbox, Google Drive, OneDrive, etc.)
- Paper records and documents in filing cabinets and/or physical storage facilities

A global study of more than 300 business users conducted by M-Files in conjunction with Dimensional Research sheds further light on how the issue of information silos are affecting the workforce.

Twenty-four percent of survey respondents indicated that on a weekly basis they look for a document, but are not able to find it. Version control was another issue raised with 66% admitting to finding different versions of documents or files in different systems or locations, and more than 40% of the time it wasn't readily apparent which one was the most recent version. When asked how long it takes to find a document or file, only 21% of survey respondents answered, “less than one minute.” Forty-five percent of respondents said they spent three minutes or more looking for a file or folder and 15% spent up to 15 minutes.
Two-thirds (66%) of business workers are aware of the negative impact these data and file challenges have on their productivity and a significant percentage (35%) acknowledged that using an outdated or inaccurate document resulted in a negative outcome, such as lost deal, contract breach or customer satisfaction issue.

To make things worse, more and more employees are actively avoiding complex and difficult-to-use company-provided systems for managing information and instead use their own personal solutions to store and share content — including confidential and sensitive information. Forty percent of survey respondents said they used personal solutions such as Box, Dropbox or Google Drive to share and collaborate on work files because they found them easier to use than their company's solutions.

All of these data points suggest that information silos are having a serious negative effect on the ability for employees to quickly find the information they need to support critical decision-making and revenue-generating activities.

**Why Traditional Solutions and Approaches Can’t Solve Today’s Information Management Challenges**

It’s become clear that the “all content must reside in one system or repository” approach to information management is unrealistic. In the past, the only option available to companies was to invest in a monolithic ECM or document management platform that required a herculean effort to migrate content into that single system. The only way to get value from a traditional system like this was to move everything into it, so in essence the entire success of the deployment was contingent upon a successful migration process. This conundrum isn't limited to just older legacy systems -- even new services like Box and Dropbox require that information must first be migrated into them.

Furthermore, while it takes significant time and money just to move the information, deploying a new system also requires substantial effort to manage change. Many people don't want to change -- not because they're happy with the old system, but it's just easier than trying something new and unproven.

The aversion to change and the problems surrounding migration often leads to vendor “lock-in,” which shackles businesses to the fate of the vendors they've chosen at some point in the past. Furthermore, as new needs arise, rather than dealing with root causes of their information management issues (e.g., proliferation of information, lack of integration, low user adoption, etc.), a new system is purchased to address a specific requirement, which inevitably results in it becoming yet another information silo among the myriad of others within the organization.

**A Smarter Approach: Intelligent Information Management**

In the past few years, the impact of consumerization, cloud, mobile and the Internet of Things (IoT) — along with a growing frustration in the limitations of traditional ECM systems — have led to a shakeup signaling the end of the ECM era. In late 2016, Gartner announced that “ECM was dead.”

Knowing that the need for ECM capabilities isn't going away, what new technology is going to replace it?

John Mancini, Chief Evangelist at AIIM International, addressed this topic in his keynote at the AIIM Conference in 2017 and afterwards in a related article: “I think after a number of false starts, we are finally in the era of information management,” he says. “The new world is all about data and content, not data or content. We've operated in the past with a convenient dichotomy between data management and content management. If this dichotomy ever made sense, it makes less and less sense as time goes on. The kinds of customer-centric problems that must be solved require competencies and technologies from both the data management and content management worlds.”
Eliminate Information Silos and Unify Systems and Content Repositories with Intelligent Information Management

According to John Mancini at AIIM, “The new replacement term for ECM, will be intelligent information management, which is first and foremost the realization that a single content repository to store everything is -- and always will be -- a pipedream. Consolidation and simplification, yes, but ripping and replacing mission-critical content systems in the quest to get everything in one place is just not a reality for most organizations.”

Five Traits of Intelligent Information Management

The new intelligent approach to information management is system-neutral and unifies information across the enterprise based on context and need, not based on the system, site, library or folder in which the information is stored. This new paradigm allows content and data to remain in place, undisturbed, so that users of existing systems can continue to work uninterrupted and in the manner in which they are most comfortable, while also allowing information to be enriched for evolving needs and new use cases. For example, a single, unique contract can “show up” with other customer-related information for sales, and also with pending legal contracts, independent of customer, for the legal department — all without duplication of content.

Additionally, storing information in a pre-defined folder hierarchy is largely subjective. In other words, it depends on how the organization, or groups within the organization, choose to structure where and how information is stored, and that ends up being different for almost every company. For instance, should contracts could go in a folder for the customer or client they are related to, or should they go in a folder for pending contracts, or by project or date?

In contrast, this new approach is completely objective, not only across the organization, but across other organizations, and even industries. A contract is a contract whether it is in sales or the legal department, or in real estate or manufacturing. From this objective foundation comes precision, meaning people generally get it right, whereas that is often not the case when trying to decide where something should be stored. And what's more, it's conceptually intuitive; everyone knows “what” they are working on and what it's related to.

This revolutionary new approach is defined by the following five traits.

1. **Metadata-based architecture.** Metadata is the foundation of the modern information management architecture, defining what something is and what it's related to in an objectively precise and intuitive way. Once information is objectively defined, it can be decoupled from its location, and then an entirely new world of information management opens up. Search is federated, encompassing the notion of “enterprise search,” or the ability to crawl and index content and data in other systems and repositories for quick search and retrieval. This, as opposed to the old approach that typically only allowed searching one system or repository at a time (unless a specialized enterprise search solution was purchased and deployed). Information can be stored and managed in the cloud or on-premises, and in any system or repository, such as in Office365, in SharePoint online, in OneDrive, in a network file share, in Box or Dropbox, in CRM or ERP systems, and even in other ECM systems, for example OpenText or Documentum. Information in any of these systems can be accessed directly from a single user interface, reducing or eliminating the need for users to move from system to system and interface to interface in order to find the information they need.

2. **Intelligent.** This new approach leverages artificial intelligence (AI) to automate, simplify and assist the user with how they interact with information, particularly how metadata is generated and applied so that information is correctly and intuitively classified and organized. AI technologies include not only text analytics to find specific words, numbers or phrases that explicitly define attributes and relationships, but also natural language processing and understanding (NLP and NLU) to infer what the information is about and what it is related to, even if specific terms are not present. AI can also include machine learning and deep learning technologies to improve, adapt and recommend based on user behavior and preferences, delivering a Netflix-like experience.
3. **Value-based.** One of the key concepts behind this new approach is what can be referred to as “value-based information management,” which means that information is managed differently based on its value to the business. One aspect of this concept is based on the premise that the volume of information is so large and growing that it will eventually overload any system. The second is that some information is more business-critical than other information. For instance, a picture or image for a marketing brochure is less important than compliance, legal or financial information. When organizations are able to assign value to their content through intelligent information management, additional benefits can be realized. First, it makes it easier to remove or archive information that’s of little value (e.g., tax documents that are more than seven years old, old contracts from companies that are no longer in business, etc.). At the other end of the spectrum, intelligent information management enables companies to more easily prioritize their most relevant content and take appropriate action. For example, if a sales contract is about to expire, a salesperson can be notified to contact the customer in advance and begin the renewal discussion.

4. **System-neutral backend.** A system-neutral backend provides the ability to connect with other repositories and systems in a way that gives users visibility into each information silo without requiring that content be copied into a single, monolithic repository. Rather, through an open architecture that enables connections to other systems and repositories, including network files shares, office applications (e.g., CRM, ERP, email, etc.), file sharing services, other ECM systems, and so on, information is available via a single user interface while remaining in place without disturbing other systems and processes, as well as those who rely on them.

5. **Unified user experience.** Traditional ECM systems are typically complex and difficult to use, and each system requires its own learning curve. On the other hand, an intelligent approach to information management delivers a unified user experience via a consistent and familiar interface -- regardless of the original repository or system in which information is stored and managed. This enables simple, intuitive access from any PC or device, including native mobile apps for smartphones and tablets. Additionally, offline access is supported when an internet connection is unavailable.

### The Transition to Intelligent Information Management

The notion that one monolithic solution can address all of an enterprise’s information management needs is not realistic. Business requirements as well as the technology for managing information are rapidly evolving. As demand for anywhere, anytime access to content and data on mobile and cloud-enabled devices increases, end users expect their technology solutions employed at work to resemble those in their personal lives.

Today’s businesses require innovative solutions and approaches to eliminate information silos and break down the barriers between their information and their employees who need quick access to it. Rather than trying to funnel a growing amount of information into one giant repository, businesses must adopt an approach that provides visibility and access into multiple systems in a unified manner. Either that, or risk being left behind by forward-thinking companies already employing a more intelligent approach to information management.
About M-Files

M-Files provides a next generation intelligent information management platform that improves business performance by helping people find and use information more effectively. Unlike traditional enterprise content management (ECM) systems or content services platforms, M-Files unifies systems, data and content across the organization without disturbing existing systems and processes or requiring data migration. M-Files breaks down silos by delivering an in-context experience for accessing and leveraging information that resides in any system and repository, including network folders, SharePoint, file sharing services, ECM systems, CRM, ERP and other business systems and repositories. Thousands of organizations in over 100 countries use M-Files for managing their business information and processes, including NBC Universal, SAS, Elekta and. For more information visit www.m-files.com.