Ready. Aiim. **Understand.**
Enterprise content management (ECM) is the strategies, methods, and tools used to capture, manage, store, preserve, and deliver content and documents related to organizational processes. ECM tools and strategies allow the management of an organization’s unstructured information, wherever that information exists.

ECM technologies, properly implemented, improve access to your content, enable the reuse of content, and can provide faster time to market. In short, ECM:

- guarantees business CONTINUITY, 24x7x365
- enables employee, partner, and customer COLLABORATION
- ensures legal and regulatory COMPLIANCE
- reduces COSTS through process streamlining and standardization

Information can be a competitive advantage, but you’ve got to manage it correctly so that the information is USABLE. Getting a handle on information and content is a daunting task for even small organizations. However, as the tools have matured and best practices have been identified, “It’s too hard” is no longer a good enough “reason” not to get started. So get started. Turn the page.
Unified Records Management:
A Necessity for Today’s Responsible Enterprise

TODAY’S ENTERPRISES FACE an explosion of business critical, unstructured data. It takes the form of emails, instant messages, portals, on pieces of paper, and electronic documents. All of this unstructured data requires an enterprise content management (ECM) framework, and that framework functions best on a foundation of records management. Unified records management sets the stage for more efficient management to provide greater responsiveness to customers and by enforcing compliance policy across the enterprise, reducing ediscovery costs and risk.

Unstructured business information needs to be organized as records. A record is all of the information managed, in context, which makes up an event or business transaction. This may include documents, emails, physical objects, meeting minutes, websites, intranet sites, IM conversations, and tasks. Given the high growth rate of business data and the fact that a record can be a relatively complex collection of documents, there are many problems that can occur if records are not carefully managed from the point of creation. These problems include an inability to find information, unreliable records, out of control costs, and slow performance and customer responses. Additional issues are high ediscovery risk and the associated cost of non-compliance and slow litigation responses.

THE NEED FOR GOVERNANCE
In today’s business environment, everything is discoverable. Every record is potentially critical, and needs to be authentic and accurate. It is a fact of today’s world that compliance is a significant business concern. Worldwide, there are over 20,000 compliance requirements that businesses may have to adhere to. Even if a company is not directly affected by a particular compliance or governance regulation, their suppliers and partners could be, so records must be discoverable and carefully managed.

Governance is everywhere, and it is clear that the number of compliance regulations will continue to grow. To prove compliance, enterprises must be able to produce evidence that they conducted business according to the rules. Even if the enterprise does not face industry specific regulations, they need to keep records to prove sound governance and to comply with the Sarbanes Oxley act or Federal Rules of Civil Procedure. For these reasons, it is critical that businesses manage records according to industry standards and best practices.

Not all of these regulations spell out how records must be managed, but all of them expect that they are. When kept, the most straightforward way to manage them is to follow the standards of ISO 15489.

GUIDANCE FOR RECORDS
When an enterprise selects a record management strategy that is built on the rules of ISO 15489, it ensures it can maintain the necessary characteristics of a record. The record, whether it is a folder containing multiple documents that describes a business transaction or a single document, retains authenticity, reliability, integrity, and usability should it be needed as evidence.

What is ISO 15489, and why is it the model for compliance best practices? The ISO 15489 standard prescribes four characteristics for a record:

1. Authenticity - requires that any alterations to a record are authorized, access is monitored, and users are authenticated. Audit trails recording access are a key component of this capability.
2. Reliability - records are an accurate representation of the transaction that they describe and can be depended upon in future transactions. This means that it should be compiled by the people involved in the business who know all the facts about a transaction. They are a trustworthy and dependable resource for future decisions.
3. Integrity - a record has to be kept as a complete set of all documents that represent the transaction. Retention rules must be consistent for all of the documents that comprise the record, and all of the record’s document s must be maintained until the prescribed destruction date of the complete record. Records can be found and viewed in the context of broader business activities.
4. Usability - records can be located, retrieved, presented, and interpreted over long periods of time. A server-side rendering engine can facilitate the rendering document into long-term storage formats for ease of visibility while maintaining the original document to ensure authenticity.

A unified records management system (URM) is critical to enforce compliance policy across the enterprise. URM lets you manage records generated in disparate systems spread across large geographical areas in a single, well structured solution. URM takes the view that records management needs to support the silos of information used in line-of-business applications by capturing the content in a central repository where records are managed; however the information remains fully accessible by the silo systems.

Without a unified records management strategy, many ediscovery risks increase. When different systems are used for data management, records management, and archiving, issues arise that increase ediscovery risk. Authenticity becomes a problem if there is no central security system as audit trails are not joined and records have different functional access controls. Reliability becomes an issue when records cannot be captured into a “common event” container, so after the fact assembly of the event-based record is unreliable.
Many problems can arise if records are not carefully managed from the point of creation: an inability to find information, unreliable records, out of control costs, slow performance and customer responses; not to mention elevated ediscovery risks and the associated cost of non-compliance and slow litigation responses.

Without reliability, records management integrity becomes a problem as no single view of folder records exists, so the record chronology is unclear. Usability is lost if the application is no longer available to read the document and it can’t be used as evidence.

Business problems can occur if there is insufficient records management. Examples of the potential problems include slow responses to legal or public inquiries, difficulty routing requirements needed for the Freedom of Information Act and other compliance regulations, reduced staff productivity due to information access inefficiencies, and a dearth of collaborative methods used for shared problems. These business issues are caused by:

1. No integration for line-of-business applications. For example, with unified records management, invoices from an SAP system can be saved as records and accessed through a central method, such as SharePoint.
2. Legacy data is not properly rendered and stored for long-term archive. With a unified records management system legacy records are maintained long after the functionality of the system that created them has been retired. This reduces the cost to maintain business-critical records for audit and compliance requirements.
3. Multiple copies of the same documents are stored on shared drives and desktops. With unified records management the problem of multiple copies are avoided, alleviating authenticity problems. Only one copy of a document is stored. It can be referenced with a link in multiple locations.
4. Paper documents cannot be easily searched and identified. A unified records management solution enables both electronic and physical records to be found with a single search.
5. SharePoint collaboration sites duplicate reference documents on multiple sites and have limited records management functionality. Once a document has been declared as a record in a URM, it is removed from the SharePoint library and transferred under the full control of the URM repository. A link to a single authoritative version of the document is placed in SharePoint so that the content can still be retrieved from the records management repository within the context of the SharePoint library.

The goal of a unified records management solution is to control the information explosion and manage regulatory compliance risks and the cost of ediscovery across the enterprise. The records management system provides the structure necessary to apply context to business information as it is created and captured, and enforce the compliance policy. These structures must be rigid enough to maintain record context over long periods of time, yet also be able to provide enough flexibility and scalability to manage a large range of business processes. A unified records management approach provides the foundation of an enterprise content management system for better business outcomes.

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Hewlett-Packard is a technology solutions provider. HP information management (IM) solutions can help you make better, faster decisions with improved business insight; meet compliance requirements; and reduce the cost of information management. In 2008, HP acquired TOWER Software, a leading records management software company, to strengthen its information management portfolio.
What Is It?

It’s not enough to “manage” content.

CONTENT AT WORK. Enterprise content management (ECM) is the technologies, tools, and methods used to capture, manage, store, preserve, and deliver information, content, and documents related to organizational processes. ECM tools and strategies allow the management of an organization’s unstructured information, wherever that information exists.

The ability to access the correct version of a document or record is important, but organizations must plan beyond this point. Content must be managed so that it is used to achieve business goals. Central to this strategy are the tools and technologies of ECM, which manage the complete lifecycle of content from creation to disposal. Use the following information as a starting point to review a common content lifecycle. Map a current process to see where you may find overlap and room for improvement for the applications and strategies that your business is developing. The following information only touches the surface of the complexity in any process that manages an organization’s content. You must match the technology tools to address your business needs. Technology can enable streamlined management of content; however, the underlying strategy must come first.

CAPTURE

Unstructured content enters an organization’s IT infrastructure from a variety of sources. Regardless of how a piece of content enters, it has a lifecycle. Electronic unstructured data includes email, instant messages, text documents, spreadsheets, etc. Structured data includes both electronic/paper forms and paper documents. Content can be captured by the following methods: scanning, document imaging, forms processing, and recognition (OCR, ICR).

Once content has been captured, develop an indexing scheme by creating metadata from scanned documents (e.g., customer ID number) so the document can be found. Indexing can be based on keywords or full-text.

MANAGE

Document management technology helps organizations manage the creation, revision, approval, and consumption of electronic documents. It provides key features such as library services, document profiling, searching, check-in/check-out, version control, revision history, and document security. Records are content of long-term business value, which can be managed according to a retention schedule that determines how long a record is kept based on either outside regulations or internal business practices. As the de
facto standard for business communication, email must be classified, stored, and destroyed consistent with business standards—just as any other document or record. Web content management technology addresses the content creation, review, approval, and publishing processes of Web-based content. Key features include creation and authoring tools or integrations, input and presentation template design and management, content re-use management, and dynamic publishing capabilities.

**STORE**
Content needs to “live” somewhere. Storage technology (optical disks, microfilm, repositories, etc.) provide options for storing content online (rapid access) or near or off-line for content that isn’t needed often. The key is to have information that can be found once it is placed in the system. Create a categorization/taxonomy system to ensure that content is properly stored. Taxonomy provides a formal structure for information based on the individual needs of a business. Categorization tools automate the placement of content (document images, email, text documents; i.e., all electronic content) for future retrieval based on the taxonomy.

** PRESERVE**
As storage media ages, migrate content to new media for continued accessibility. Develop a backup/recovery plan that outlines how content will be backed up in various formats and/or locations to ensure business viability in the face of a disaster. The archival of content must be saved to new media for continued accessibility. Content needs to “live” somewhere. Storing content online (rapid access) or near or off-line for content that isn’t needed often. The key is to have information that can be found once it is placed in the system. Create a categorization/taxonomy system to ensure that content is properly stored. Taxonomy provides a formal structure for information based on the individual needs of a business. Categorization tools automate the placement of content (document images, email, text documents; i.e., all electronic content) for future retrieval based on the taxonomy.

**DELIVER**
One of the greatest benefits of a strong ECM system is search and retrieval. With strong indexing, taxonomy, and repository services, locating information in your system should be easy. Content can be delivered via several tools such as print, email, websites, portals, text messages, and RSS feeds. This allows for the distribution of content for reuse and integration into other content, which can be recast to fit the needs and cultural mores of different global markets. By drawing on a taxonomy and based on established user preferences, various types and subjects of content can be delivered via user-defined preferences.

ECM is an ongoing and evolving strategy for maximizing how your content should be used. To drive understanding of these tools, highlighted below are the four key business drivers in which content and ECM is fundamental to the success of your organization: compliance, collaboration, cost, and continuity.

**COMPLIANCE**
The key to a successful compliance strategy is integrating the idea of compliance success into your business—not viewing compliance as a project that can be completed and then considered “finished.” Complying with regulations provides an opportunity to improve common business processes. You can limit the risk and cost by developing proactive ECM strategies within key areas, such as records management and business process management. Follow through on proper business practices by ensuring that content is properly captured, stored, managed, and disposed of at the appropriate and legal time in its lifecycle. Developing a compliance initiative will require several areas of expertise (particularly legal, IT, and records management), which all support the overall business objectives of the organization. While compliance is not always a technology problem, information technology and the massive growth of unstructured content contributes to corporate exposure. The tools of ECM, properly used, can help reduce the overall cost of compliance to the business.

**COLLABORATION**
Collaboration is the art of working together. The key to strong collaboration is utilizing the technologies (instant messaging, whiteboards, online meetings, email, etc.) that allow work to take place wherever and whenever needed. Collaboration allows individuals with complementary or overlapping areas of expertise to create better results faster than before. With today’s collaborative tools, business units and teams can work together anytime—whether in adjoining offices or in different countries. These technologies can now address operational objectives like saving time, streamlining processes, cutting costs, and improving time to market. With the many different types of collaborative tools available, organizations must be sure that they select the correct tool for their business need.

Functionality can be divided into three groups:
1. Communication channel facilitation: enables short-lived interaction such as chat, instant messaging, white boarding, etc.;
2. Content lifecycle management: manages content objects involved in a business process;
3. Project facilitation: organizes and simplifies the way that people work toward a common goal.

When using collaborative tools, you must be aware of records management, knowledge capture, and compliance requirements. For some industries, all customer communications must be kept. During a collaborative product design process, organizations must be sure that the results are kept as business records.

**COST**

While an ECM investment can be costly, consider the costs of poor content management. The cost of not implementing ECM tools is usually left unmeasured until too late. Factors such as the cost of long legal proceedings, the loss of repeat business through the inability to perform customer service interactions, and the cost of typical business process delays are easy to measure in hindsight. While the cost of these potential losses may justify investment in ECM technologies, the ROI of ECM is often difficult to measure. Set your key metrics for success up front and measure your success based on those expectations. For example, measuring the revenue based on improved information in the call center can be done as well as measuring the cost benefits of improvements in process speed for a loan application. The ROI of ECM tools could result in improved business processes, whereby making your organization more efficient while lowering the cost of doing business. These technologies provide value to your organization by more efficiently organizing information for its subsequent retrieval, use, and, ultimately, disposition.

**CONTINUITY**

Business continuity planning allows a business to operate around the clock. More than a disaster recovery plan, business continuity is the overall strategy for ensuring that operations continue in the event of any disruption—whether through cause of nature or human error. As a subset of business continuity, disaster recovery mainly focuses on getting an organization’s IT infrastructure going again. Today, electronic documents are the lifeblood of most businesses, and ECM plays a significant role in business continuity. ECM technologies provide centralized repositories where vital corporate information can reside. The method of storage will vary depending on the importance of the content. A strong continuity plan will demonstrate that not all content is critical. These are steps to keep in mind:

1. Prioritize content to determine how quickly content needs to be back online.
2. Determine mission-critical processes and the entities on which they are dependent.
3. Perform a business impact assessment to determine the impact of a disruption or loss of those processes.
4. Define what a business considers a disaster and explain how key processes will be recovered.
5. Establish a crisis operations center with procedures for chain of command and other roles.
6. Update and test the plan annually or as business needs change.

A sound continuity plan will enhance an organization’s ability to recover during a system failure and better define the priority of the business content while improving the overall ECM strategy.
Business Process Management (BPM)
Leveraging Competencies and Streamlining Processes to Achieve Operational Excellence

THE FOLLOWING IS excerpted from AIIM’s Market IQ on BPM from Q3 2008. The complete report is available at www.aiim.org/marketiq.

EXECUTIVE OVERVIEW
In developing this Market IQ, AIIM found that sophisticated users grasp how enterprise application integration (EAI), workflow, and other components have merged to form BPM, a practice that seeks to model, modularize, service-enable, monitor, and, ultimately, optimize business processes.

But a mere 25 percent of the survey takers said BPM was well-understood and addressed overall within their organization. Respondents identified this lack of knowledge as the number-one hurdle to BPM adoption.

In addition, nearly half (45 percent) said there was little to no BPM strategy in place at their company. Only about one quarter (23 percent) indicated having mostly or exclusively strategic BPM deployments.

Since BPM cuts across technological and intra-organizational boundaries, it is crucial that companies identify a clear leader to head a BPM strategy. Yet more often than not, respondents said their companies did not have a specific group in charge of BPM projects. Even with a proper team and strategy in place, BPM presents challenges—it is, after all, about changing the way an organization works, albeit it for the better.

Related pitfalls include derailment by internal political squabbles and scope creep. The latter factor’s severity can be tied to its success: As stakeholders see the positive impact of changes, they want more. It is crucial that organizations undergoing a BPM project effectively manage end-user expectations.

Such factors are likely why 62 percent of respondents said business got disrupted while new processes were deployed.

In addition to these more intangible factors, BPM implementation staff will need skills in process reengineering and a range of BPM tools.

Yet despite these challenges, the data collected suggests that BPM makes a substantial and speedy impact on a company’s bottom line: More than half of respondents who conducted a return on investment (ROI) study achieved a positive ROI in three years or less, and 70 percent of those same individuals cited direct cost savings as a benefit.
SECTION 1: DEFINING BUSINESS PROCESS MANAGEMENT

The automation and real-time monitoring of business processes are not new concepts to the AIIM community or the business community at large. Circa 1993, workflow became an integral part of the enterprise content management (ECM) solution set and lexicon.

The importance of these capabilities was best demonstrated by the formation of the Workflow Management Coalition in that year. But while workflow provides an easier way to connect people, tasks, and content, it still requires laborious and extensive programming work to connect applications. Furthermore, workflow solutions can suffer from incomplete or fragmented toolsets. While workflow delivers process automation, it can lack related functionality, such as integrated process modeling.

In a complementary fashion, EAI promised to simplify the integration of multiple standalone yet related processes. But EAI offered little means to route work among and between people, monitor personal work queues, or support interactive people-based tasks and decisions.

BPM is a convergence of workflow and EAI. However, BPM is more than just the automation of processes and simplification of application integration. BPM is a business management practice that encompasses process automation, process modeling and simulation, process modularization and service orientation, process monitoring, and process optimization.

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BPM is a convergence of workflow and EAI. However, BPM is more than just the automation of processes and simplification of application integration. BPM is a business management practice that encompasses process automation, process modeling and simulation, process modularization and service orientation, process monitoring, and process optimization. It is based on principles and methodologies such as process-centricity, process excellence, core competencies, and strategic approaches to outsourcing and modularization, including software as a service (SaaS) and service-oriented architecture (SOA).

BPM’s combined, greater capability is the focus of this Market IQ. The report’s definition and positioning of BPM is not based simply on the opinions of AIIM’s thought leadership, but is reinforced and validated by the survey audience, which defined BPM neither as the re-branding of workflow (only 2 percent of those surveyed defined BPM in this manner), nor the re-branding of EAI (only 1 percent of those surveyed defined BPM in this way).

The great majority of those surveyed, 67 percent, identified these strategic and comprehensive definitions: “Methods, policies, metrics, management practices and software tools to manage and continuously optimize an organization’s activities and processes” (50 percent) and “A management practice that provides for governance of a business process environment toward the goal of improving agility and operational performance” (17 percent).

But while our survey respondents had a broad, comprehensive understanding of BPM, the majority of them were AIIM members and/or subscribers to the...
Figure 1. Which of the Following Is Closest to Your Definition of BPM?

- 50% Methods, policies, metrics, management practices and software tools to manage and continuously optimize an organization’s activities and processes
- 20% A systematic approach to improving an organization’s business processes
- 17% A management practice that provides for governance of a business’ process environment toward the goal of improving agility and operational performance
- 5% Software for building integrated process-based applications
- 2% Just a buzzword
- 2% Re-branding of Workflow
- 2% Re-branding of Enterprise Application Integration
- 3% Don’t Know

Figure 2. How Well is BPM Understood in Your Organization?

- 25% Well Understood and Addressed
- 34% Vaguely Familiar
- 14% Not Sure How This is Different from Workflow
- 26% No Clear Understanding

Some 40 percent felt their organization has no clear understanding of BPM, or could not see how it differed from workflow. The remaining 34 percent felt their organization was only vaguely familiar with BPM. Indeed, survey respondents pointed to “lack of understanding” as the number one biggest obstacle to BPM in their organization.

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BUSINESS PROCESS MANAGEMENT - A FEW EXTRA NUGGETS OF RESEARCH

Not all of the data collected for the BPM Market IQ made the final report. This page contains a sampling of additional data collected for the report.

How Would You Characterize Your Organization’s EXPERIENCE with BPM?
- 44% We have not yet begun a significant BPM project, but plan on doing so in the next year.
- 28% We have undertaken one or more BPM projects at the departmental level.
- 12% We are currently integrating our BPM projects across departments.
- 16% We are deploying and implementing an enterprise-scale BPM capability.

How Long Did Your BPM Initiative ACTUALLY Take From Start To Finish?
- 14% < 6 months
- 20% 6 months - 1 year
- 30% 1 year - 2 years
- 19% 3 years - 5 years
- 18% > 5 years

At What Level Does Your BPM Strategy Apply?
- 45% Enterprise-Wide
- 30% Departmental Level
- 7% Application Level
- 18% Don’t Know
ECM Definitions
A short glossary of the technologies and concepts of enterprise content management.

**AGGREGATION** – The process of combining data inputs from different creation and authoring tools and other systems.

**APPLICATION SERVICE PROVIDER (ASP)** – Provider of applications via rental to customers via the Internet. Differs from software as a service in that ASP is a one-to-one customized solution delivered to a single customer.

**AUDIT TRAILS** – Log of changes or interactions with a record (or document) for accountability.

**BAR CODES** – Vertical rectangular marks and spaces in a predetermined pattern that are machine-generated and machine-readable representation of data.

**BITWISE CHECKING** – A technique to detect and correct corruption caused by media degradation. It relies on continual checking of copies against each other and the replacement of any copy found to an error with a fresh copy.

**BLOG** – Short for Web log. A Web-based publication and dialogue.

**BORN DIGITAL** – Created in electronic form rather than on a physical medium such as paper.

**BUSINESS INTELLIGENCE (BI)** – Encompasses a broad category of applications and technologies for gathering, storing, analyzing, and providing access to data for improving decision-making for businesses.

**BPM (BUSINESS PROCESS MANAGEMENT)/WORKFLOW** – Automation of business processes, in whole or in part, where documents, information, or tasks are passed from one participant to another for action, according to a set of rules. A business process is a logically related set of workflows, worksteps, and tasks that provide a product or service to customers. BPM is a mix of process management/workflow with application integration technology.

**CAPTURE** – Registration, classification, addition of metadata, and storage of an item of content in a system that manages content.

**CATEGORIZATION** – Organizing documents, Web pages, and other content into logical groupings, based on their contents.

**CD-ROM (COMPACT DISC READ ONLY MEMORY)** – Optical disc that is created by a mastering process and used for distributing read-only information.

**CHECK IN/OUT** – Ensures that only one person can work on a document at any time.

**CHECK IMAGING** – Specialized imaging and scanning tools for digitizing checks.

**CHECKSUM CALCULATION** – A technique to detect and correct corruption caused by media degradation. The technique relies on continual re-calculation of checksums and the replacement of any copy found to have an error with a fresh copy.

**CLASSIFICATION** – Categorizing data for efficient retrieval and use.

**COLD/ERM (COMPUTER OUTPUT TO LASER DISK/ENTERPRISE REPORT MANAGEMENT)** – Stores and indexes computer output (reports primarily) on magnetic disks, optical discs, and magnetic tape. Once stored, the reports can be retrieved, viewed, printed, faxed, or distributed to the Internet. Often used for Internet Billing applications.

**COLLABORATION** – Tools (collaborative authoring, video conferencing, shared whiteboards, etc.) that allow multiple users to work on the same content in a common environment.

**COMPRESSION** – Technique used to reduce the number of bits in a digital image file; JPEG and TIFF are two examples.
CONCEPT OF OPERATIONS – A high-level document produced at the start of an ECM implementation project, which lays out the broad vision of the ECM-enabled organization and some of its key components.

CONTENT ADDRESSED STORAGE (CAS) – Storage methodology designed for rapid access to fixed content.

CONTENT MANAGEMENT SYSTEM – The capability to manage and track the location of, and relationships among, content within a repository.

CONTROLLED VOCABULARY – A set of terms used to limit or validate metadata entered by users.

DATA CAPTURE – Extracts data from a business form.

DATA TRANSFORMATION – Mapping and conversion of data from one format to another.

DATA WAREHOUSE – Central repository for all, or most, of an organization’s structured data.

DATABASE – (1) Electronic collection of records stored in a central file and accessible by many users for many applications. (2) Collection of data elements within records or files that have relationships with other records or files. Relational databases are most common—data is stored in standard rows, tables, and columns. XML databases are a developing technology.

DIGITAL ASSET MANAGEMENT – a set of systematic strategies or workflows that engender the reuse of those assets and the integration of them into a given workflow.

DIGITAL RIGHTS MANAGEMENT – Enables secure distribution, and disables illegal distribution, of paid content (or any content that needs to be controlled).

DIGITAL SIGNATURE – Electronic signature that can be used to authenticate the sender of a message.

DISASTER RECOVERY – The strategy and process of maintaining and/or regaining access IT and other business infrastructure to resume critical business operations after a disaster.

DISCOVERY – The phase in a legal dispute when the opposing parties gather evidence and share it before the trial goes to court.

DISPOSITION – An action taken after a record is no longer needed for current business. Archival and destruction are two possible actions.

DISTRIBUTED CAPTURE – Strategy for getting documents into the business process in decentralized locations across a company rather than sending all documents to a central location for scanning.

DOD 5015.2-STD – Department of Defense is the standard for evaluating electronic records management applications used within the DoD. It has been endorsed by the National Archives and Records Administrations. Many RM products are certified to be in accordance with the standard.

DOCUMENT IMAGING – Process of capturing, storing, and retrieving documents regardless of original format, using micrographics and/or electronic imaging (scanning, OCR, ICR, etc.).

DOCUMENT MANAGEMENT – Software that controls and organizes documents throughout an enterprise. Incorporates document and content capture, workflow, document repositories, COLD/ERM and output systems, and information retrieval systems.

DVD (DIGITAL VERSATILE DISC) – 120mm optical disc on which digital video, audio, data, and images can be stored. Available in read-only, recordable, and rewritable formats.

ECM SUITE – Integrated set of products from a single vendor that includes (but not limited to) collaboration, document management, records management, capture, workflow/BPM, and Web content management functionality.

ELECTRONIC BILL PRESENTMENT AND PAYMENT (EBPP) – A process that allows electronic payment and presentation of statements, bills, invoices, and associated information.
EMAIL MANAGEMENT – Strategy and technology associated with ensuring that email is managed as a business record and archived/stored/deleted accordingly.

ENTERPRISE APPLICATION INTEGRATION (EAI) – Software that allows the integration of disparate computer applications.

ENTERPRISE CONTENT MANAGEMENT (ECM) – The strategies, methods, and tools used to capture, manage, store, preserve, and deliver content and documents related to key organizational processes.

E-FORMS/WEB FORMS – Forms designed, managed, and processed completely in an electronic environment.

FILE SYSTEM – The way in which files are named and where they are placed logically for storage and retrieval, most commonly in a hierarchical (tree) structure.


FORMAT OBsolescence – The inability to continue to use a file format because one or more of the many software components involved in the processing “chain” between the information stored in that format and the rendered information has changed, is no longer available, or is no longer supported by the supplier.

FORMS PROCESSING – The ability for software to accept scanned forms and extract data from the boxes and lines to populate databases. Software usually includes the ability to drop out the form so that recognition accuracy improves. Intelligent Document Recognition automatically identifies document types from the layout and structure of the document.

FULL-TEXT INDEXING AND SEARCH – All words in a document are indexed, enabling the document to be retrieved by words or phrases within the document.

GRAYSCALE – In electronic imaging, capability to display varying levels of gray and usually represented as a number such as 16 levels of gray. The gray levels are created by varying the strength of the electron beam. The higher the level of gray scale, the smoother the transition from light to dark.

HCR (HANDPRINT CHARACTER RECOGNITION) – OCR technology designed to turn images of handprint characters into ASCII code.

ICR (INTELLIGENT CHARACTER RECOGNITION) – Advanced form of OCR technology that may include capabilities such as learning fonts during processing or using context to strengthen probabilities of correct recognition or that can recognize handprint characters.

INDEXING – Identification of specific attributes of a document or database record to facilitate retrieval.

INFORMATION GOVERNANCE – The accountability for the management of an organization’s information assets (especially its records), in order to achieve business purposes, and compliance with any relevant legislation or regulations.

INFORMATION LIFECYCLE MANAGEMENT (ILM) – Strategy for managing information throughout its lifespan by migrating it to new media according to access requirements based on the business value of the information.

INFORMATION ORGANIZATION AND ACCESS (IOA) – Consists of a content preparation process and a content search and access process. Major concepts include content architecture, content intelligence, search and retrieval, and findability (enhancing access to the right information).

INPUT DESIGNS – Templates used to enable authors to more easily enter content into a system, typically customized, based on the type and format of content to be entered.

JPEG (JOINT PHOTOGRAPHIC EXPERTS GROUP) – Image compression format for storing color photos and images. There are multiple JPEG formats.
LEGAL HOLD – A status applied to records that must not be disposed of, as they are required, or may be required, in a legal case.

MAGNETO OPTICAL (MO) – Recording data using a combination of magnetic and optical means to change the polarity of a magnetic field in the recording medium. Data is erasable and/or rewritable.

MAGNETIC STORAGE – Hard disks on down to floppies.

MICROFILM (APERTURE CARDS, MICROFICHE, MICROFILM JACKETS, 16MM ROLL FILM) – (1) Fine-grain, high-resolution film used to record images reduced in size from the original. (2) Microform in the shape of a strip or roll. (3) To record microphotographs on film.

MIGRATION – Act of moving records from one system to another.

MULTI-FUNCTION DEVICE (MFD, OR MULTI-FUNCTION PERIPHERAL) – Machine that connects to either a PC or network and performs two or more of the following functions: print, scan, copy, or fax. Digital copiers, fax machines, and printer/scanner combinations are all examples.

NAS (NETWORK ATTACHED STORAGE) – Can be part of a SAN. Hard disk storage directly attached to the network to provide information access.

OCR (OPTICAL CHARACTER RECOGNITION) – Technique by which images of characters can be machine-identified, then converted into computer processable codes.

OMR (OPTICAL MARK RECOGNITION) – Detects presence, or absence, of marks in defined areas; used for processing questionnaires, standardized tests, etc.

OPTICAL DISC – Medium that will accept and retain information in the form of marks or density modulation in a recording layer that can be read with an optical beam.

PDF (PORTABLE DOCUMENT FORMAT) – Format developed by Adobe Systems for document publication.

PERSONALIZATION – Matching content to the individual.

PKI (PUBLIC KEY INFRASTRUCTURE) – Enables the secure exchange of content through the use of a public and a private cryptographic key pair that is obtained through a trusted authority.

PORTAL – Provides consolidated access to employees’, via a company’s intranet, applications (such as email, customer relationship management tools, etc.) and company information.

RAID (REdundant Array of Independent DISKS) – Storing the same data on multiple hard disks for improved performance and fault tolerance.

RECORDS MANAGEMENT – Enables an enterprise to assign a specific life cycle to individual pieces of corporate information from creation, receipt, maintenance, and use to the ultimate disposition of records. A record is not necessarily the same as a document. All documents are potential records, but not vice versa. A record is essential for the business; documents are containers of “working information.” Records are documents with evidentiary value.

RECORDS RETENTION – The process of determining how long an organization needs to keep its records, taking into account the operational business needs, legal, and/or regulatory requirements.

REPOSITORIES – Part of a Document Management system; specific functionality to control the check-in/out of material, version control, and look-up against defined attributes.

RETRIEVAL – Procedure for searching for and extracting database records or content.

SAN (STORAGE AREA NETWORK) – A high-speed network that connects computer systems and storage elements and allows movement of data between computer systems and storage elements and among storage elements.
SCALABILITY – The ability of a system to expand capacity and number of users.

SCANNER – Input device. Converts paper documents (microfilm scanners are also available) into a digital image of the document. Speeds range from 12 pages per minute to 200+ pages per minute.

SCANNER DRIVERS (ISIS OR TWAIN) – Provide communication between scanners and computers.

SERVICE-ORIENTED ARCHITECTURE (SOA) – Strategy for loosely-coupling applications together without the need to customize links between the applications to do so.

SOFTWARE AS A SERVICE (SAAS) – Renting access to an application over the Internet rather than purchasing software and installing that software within your IT infrastructure.

SYNDICATION – Supply of content for reuse and integration with other material, often through a paid subscription.

SYSTEMS INTEGRATOR – Business (or individual) that puts together software and hardware from multiple vendors to address a client’s business information needs.

TAPE – A magnetic storage media. Standard widths are 8mm, 1/8-inch, 1/4-inch, 1/2-inch, 4mm DAT (Digital Audio Tape), and DLT (Digital Linear Tape) in either rolls or cassettes.

TAXONOMY – Way to structure and categorize content. Usually hierarchical, categories (nodes) in the hierarchy progress from general to specific. Each subsequent node is a subset of the higher level node. There are three basic types of hierarchical taxonomies: subject, business-unit, and functional.

TIFF (TAG IMAGE FILE FORMAT) – Widely used image file structure that consists of a series of headers or tags, plus the image data. There are many choices among the tabs used, such as type of image, compression used, resolution, colors planes, bit sequences, and annotations. NOTE: All TIFF viewers should be able to interpret the tags, but may not all be able to use the image.

TRANSFORMATION – Changing content from one format to the needed delivery format.

VALUE-ADDED DISTRIBUTOR (VAD) – Intermediator between vendors and VARs/system integrators.

VALUE-ADDED RESELLER (VAR) – Offers customization of an existing product(s) and resells it as an integrated product or turn-key solution. The value can be a combination of integrating (software and/or hardware), customization, consulting, training, and implementation.

VERSION CONTROL – Procedures to identify the authorship and the sequence of different versions of a document.

VIEWING SOFTWARE – Allows documents of different formats to be viewed and annotated.

XML (EXTENSIBLE MARKUP LANGUAGE) – An established standard, based on the Standard Generalized Markup Language, designed to facilitate document construction from standard data items. Also used as a generic data exchange mechanism.

WEB CONTENT MANAGEMENT – A technology that addresses the content creation, review, approval, and publishing processes of Web-based content.

WEB SERVICES – Allow applications to be connected without deep integration.

WORM (WRITE-ONCE, READ-MANY) – Optical disk on which data is recorded by the user once (and is unalterable) and can be read many times.